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# **Old Age in Europe** A Textbook of Gerontology



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# Old Age in Europe

A Textbook of Gerontology



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### Foreword

Everybody knows that the world is ageing, but Europe got there first (along with Japan). Therefore Europe has much to show the world, as well as itself, about the ageing process. This textbook sets out to do that and it will be a valuable source of reference for students of gerontology across the globe. The disciplinary approach provides easy access to the key dimensions of ageing which the editors knit together in their opening and concluding chapters.

Like the first such survey of ageing in Europe (Walker and Maltby 1997) this book's central message is one of heterogeneity. This 'unequal ageing' takes two forms. First, there are huge differences in the experience of ageing between European countries, on both the north/south and east/west axes. At their bluntest these differences are revealed in the very expectation of life. For example healthy life expectancy at age 65 is 3 years for both men and women in Estonia compared to 13 years for women and 14 for men in Denmark. Second, there are inequalities within countries with regard to life expectancy, healthy life expectancy and a wide range of indicators of economic, social and psychological well-being. These inequalities are created by social and economic forces, not biological ones, and are commonly expressed in terms of gender, age, social class, race and ethnicity (Cann and Dean 2009). For example in all European countries women are more likely than men to be poor in old age and in some countries, much more likely.

Thus, as this book demonstrates, we cannot understand the meaning of ageing in Europe without confronting unequal ageing. In practical policy terms this means that simplistic, one size fits all, approaches are likely to fail. Instead more sophisticated policy instruments are needed to recognise and then prevent or ameliorate inequalities. At the European level key policy goals, such as active ageing, have to be tailored to reflect the differences between and within countries in the experience of ageing. Only then can we claim to have a truly inclusive approach. This book will help in that endeavour, by drawing on the best current scientific evidence and using it to illustrate the meaning and importance of ageing for Europe and its citizens.

> Alan Walker Department of Sociological Studies Sheffield University Sheffield, UK

#### References

Cann, P., & Dean, M. (Eds.) (2009). *Unequal ageing*. Bristol: The Policy Press. Walker, A., & Maltby, T. (1997). *Ageing Europe*. Buckingham: Open University Press.

## Preface

Europe is currently the oldest continent of the world and it is still ageing. For us as gerontologists, this fact seems obvious and it guides many of our considerations. It also is at the forefront of our minds when we talk to people working in other scientific disciplines. In our experience, population ageing is a fact found entrance into the discourses of many disciplines. How it is discussed, however, differs across disciplines. Every time we talk about population ageing with people working in a different discipline, we learn something new. New perspectives and new angles open themselves up to us. We want to share this experience and, therefore, devised this book.

With this book, we also tried to tell the European narrative about ageing. In previous collaborations and during previous research visits, we realized that the narrative of ageing differs across countries and continents. This does not only concern the number, situation, and perception of older people—it also concerns how ageing is scientifically explained and explored. The same phenomenon might be interpreted in different ways by scholars from different countries. We found this fact striking, especially because many introductory books on gerontology are written by American authors, targeting a U.S. audience. While those books can provide European readers with a basic understanding of the situation of older people, they cannot paint a concise picture of the situation in Europe today. We, therefore, decided to put this volume together, which explicitly portrays the situation and discourse in Europe.

In conceptualizing this book, we were able to draw on the expertise gained in the "European Masters Programme in Gerontology" (EuMaG). EuMaG has been developed and delivered by a core network of 5 universities, and lecturers from more than 20 European universities were involved in teaching. Its curriculum is multidisciplinary with a strong emphasis on international comparison. The programme was coordinated by the Department of Sociology at VU University Amsterdam, The Netherlands, where the first editor used to work, and the second still does, and it has been managed by Marja Aartsen for many years. Several contributing authors in this book have also been involved with the EUMAG programme. To round things off, we would like to thank a number of people. First, we thank all the contributors for their excellent and hard work on the book. It was a great pleasure to work with a multidisciplinary team of European experts and we learned a lot from the different contributions. Second, we thank the students and teachers in the EuMaG programme, who inspired this book and helped to shape it. Finally, we would like to thank the participants of the SHARE user conference in Venice, Italy, in June 2012, who agreed to a spontaneous focus group that clarified some questions about the final structure of this book.

Kathrin Komp Marja Aartsen

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# Abbreviations

| AAL         | Ambient Assisted Living                                    |
|-------------|--|
| EC          | European Commission  |
| ES          | Elective Selection   |
| EU          | European Union   |
| EUROFAMCARE | Services for Supporting Family Carers of Elderly People in |
|             | Europe: Characteristics, Coverage and Usage                |
| fQOL        | Functional Quality of Life                                 |
| GDP         | Gross Domestic Product                                     |
| GPS         | Global Positioning System                                  |
| ICT         | Information and Communication Technologies                 |
| ISSA        | International Social Security Agency                       |
| LS          | Loss-based Selection                                       |
| OECD        | Organisation for Economic Co-operation and Development     |
| oQOL        | Objective Quality of Life                                  |
| PPP         | Purchasing Power Parities                                  |
| QOL         | Quality of Life  |
| SEIQoL-DW   | Schedule of Evaluation of Individual Quality of Life—      |
|             | Direct Weighting   |
| SHARE       | Survey of Health, Ageing, and Retirement in Europe         |
| SOC         | Selective Optimization with Compensation                   |
| sQOL        | Subjective Quality of Life                                 |
| SST         | Socio-emotional Selectivity Theory                         |
| SWLS        | Satisfaction with Life Scale                               |
| UK          | United Kingdom   |
| UN          | United Nations   |
| WHO         | World Health Organization                                  |

## **Chapter 1 Introduction: Older People under the Magnifying Glass**

#### Kathrin Komp and Marja Aartsen

Europe is greying. In the beginning of the 21st century, Europe already was the oldest continent of the world, with every sixth European being 65 years or older. Researchers predict that older Europeans will become even more numerous in the future, with every fourth European being 65 years or older in 2050 (United Nations 2009). This development has far-reaching consequences for the citizens of Europe and for European societies. For example, when we sit in cafes, we will see older people at the tables next to us more often. Shop-keepers will include more products for seniors in their assortments, and public transportation will have to be even more accessible to handicapped individuals. Moreover, pension schemes and longterm care schemes might have to restructure their financial basis, considering that there will be an increasing number of individuals benefiting from these schemes. Those few examples already show that Europe's face is changing. This change raises a number of fundamental questions, such as: What will Europe look like in the future? Which European countries and which parts of society are most affected by population ageing? And how can we best react to the demographic change? The scientific discipline of gerontology provides answers to these questions.

#### 1.1 What is Gerontology?

Gerontology is the study of human ageing, which draws from many scientific disciplines such as sociology, economy, biology, psychology, and epidemiology. The word 'gerontology' is derived from the Greek words 'geron', which means 'old man', and 'gerh', which means 'growing up, maturing, or aging' (Philippa et al. 2009). It, therefore, refers to the state of being old as well as the process of ageing. The term 'gerontology' itself was probably first used by Ilya Metchnikov, a Russian microbiologist who lived from 1845 until 1916. Despite the new terminology,

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the interest in gerontology persisted throughout history. For example, Marcus Tullius Cicero, a Roman philosopher, already wrote about ageing in the first century BC. In 'De Senectute', he held an impassioned plea against the established ideas of his time that age is nothing more than a withdrawal from work, a reduction of physical strength, lack of sensual pleasure and the approach of death.

#### 1.2 What is Old Age?

When you ask around what it means to be old, you will often hear descriptions of physical change, such as greying hair, wrinkles, hearing problems, walking difficulties, and memory loss. Yet, old age is more than a mere biological phenomenon—it also is a social one. Society influences how we see ourselves, what opportunities we have, and how our lives are structured. For example, mandatory retirement laws lead people to withdraw from paid work at a certain age, which usually lies around 65 years in Europe. From this age on, people were often considered 'old'.

For a long time, the social and the biological understanding of old age went hand in hand. People often experienced health problems from around their retirement age on, which made the age of 65 a marker for both, health problems and retirement. However, during the last decades this situation changed. People started to retire earlier, while they also remained healthy until an increasingly old age. Consequently, age 65 nowadays is a poor marker for both, health problems and retirement. This raises the questions when old age starts and what exactly it is.

Current gerontological discussions stress the diversity of the ageing experience. These discussions work with different understandings of old age side by side: some state that people become old as early as 50, while others state that people only become old once they reach 75 years. A common solution for handling the diversity of old age is as a sequence of two separate and distinct periods of life. These periods are called the third and the fourth age, respectively the young-old and the old–old (Baltes and Smith 2003). The third age is characterized by a period of relative freedom and good health. People no longer have the responsibility for the upbringing of their children, nor are they obliged to participate in the labour force. The fourth age is characterized by accelerated decline of physical and mental health, and the number of losses in physical health and social relationships exceed the number of gains. All the different understandings of old age have their advantages and disadvantages, and their usefulness depends on the context. In this book, you will therefore also see different understandings of old age, depending on which topic is discussed.

#### **1.3 How Grey is Europe?**

Europe is a study object par excellence for anybody interested in old age. Europe is the oldest continent in the world, which means that there we encounter many older people and we can easily observe how societies change when populations age. Moreover, Europe is heterogeneous in many respects. There are clearly visible differences within Europe in how old people are and in how individuals deal with old age. Remarkable, these differences do not only exist between countries, but also within countries (Walker and Maltby 1997). Consequently, we need to look into within- and between-country differences to understand how population ageing transforms Europe. To be able to adopt such a perspective, we first need to understand what dimensions population ageing has reached. We will therefore continue with a description of Europe's age-profile—stressing the uniqueness of Europe as well as differences within it.

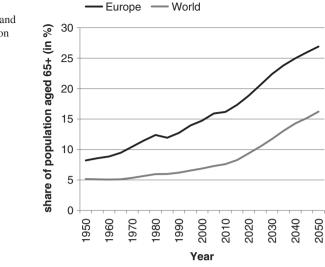
In a global comparison, Europe shows a distinct age-profile. Table 1.1 reveals that Europe is older than any other region of the world. It is closely followed by Northern America, which is only slightly younger than Europe. The age-wise counterpart of Europe is Africa, which is the youngest continent of the world. Table 1.1 shows that the median age in Europe in 2009 was 40 years, which is 12 years more than the median age in the world and 21 years more than the median age in Africa. In 2009, 16 % of the European population were aged 65 years or older, which means that about every sixth European was in that age group. For comparison, only every 33th African was in the same age group in that year. The share of Europeans aged 80 years and older seems still low (4 %) in 2009, but we can expect to see this share increase over the next decades (Christensen et al. 2009).

Even though Europe's population already is comparatively old, it will probably continue to age in the near future. Figure 1.1 shows us the progression of population ageing in Europe. It shows us how many Europeans were aged 65 years and older between 1950 and 2010. It moreover shows us a forecast for how the share of Europeans in that age group will develop until 2050. Finally, it also gives us the respective information for the entire world population, as a point of reference. Figure 1.1 shows that less than 10 % of Europeans were aged 65 years or older in 1950. Until 2010, this share increased to 16 %. The projection shows that this share might continue to increase to 27 % until 2050. This means that by 2050, every fourth European would be aged 65 years or older. If this projection is

|                                 | Median age | Percentage of population aged |                    |  |
|---------------------------------|------------|-------------------------------|--------------------|--|
|                                 |            | 65 years and older            | 80 years and older |  |
| Europe                          | 40         | 16                            | 4                  |  |
| Northern America                | 37         | 13                            | 4                  |  |
| Oceania                         | 32         | 11                            | 3                  |  |
| Asia                            | 28         | 7                             | 1                  |  |
| Latin America and the Caribbean | 27         | 7                             | 2                  |  |
| Africa                          | 19         | 3                             | 0                  |  |
| World                           | 28         | 8                             | 2                  |  |

Table 1.1 The age-profile of world regions, 2009

United Nations (2009)





correct, then the share of Europeans in that age group will have more than doubled within a century. For comparison, only 5 % of the world population was aged 65 years and older in 1950. This share increased to 8 % by 2010, and it is assumed to further increase to 16 % by 2050. This means that every sixth person living in this world would be at least 65 years old by then.

The information just presented show how population ageing progresses in Europe. Even though the numbers describe the European continent in its entity, the basic information also holds true for the individual European regions and countries. All European regions and countries are ageing, and the number of older people in them will reach considerable proportions in all of them in the future. The speed at which populations age and the level of population ageing reached, however, differs across Europe. In the 1950s, Northern and Western Europe were the oldest regions in Europe, while Southern and Eastern Europe were the youngest ones. In Northern European population ageing progressed comparatively slowly, while the Southern Europe will have shifted by 2050. By then, the oldest populations in Europe will be in the West and the South of the continent, while the North and the East will hold the youngest populations (United Nations 2011a, b).

Today, the age-gradient within Europe is changing. We can no longer see the northwest to southeast gradient that prevailed in the middle of the 20th century. However, we also cannot yet see the southwest to northeast gradient that is predicted to emerge by the middle of the 21st century. The pattern we see today is less crisp, as Fig. 1.2 portrays. This figure shows the median age in the individual European countries in 2010. It shows whether this median age is low (35 years or below), intermediate (36–40 years), or high (41 years or above). Figure 1.2 reveals that there is a small and geographically dispersed group of countries with

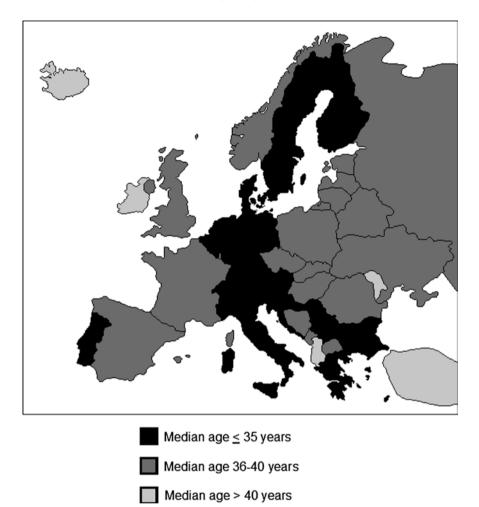


Fig. 1.2 The median age in European countries, 2010 (based on Eurostat 2012b; United Nations 2011a)

a comparatively low median age in Europe. This group of "young countries" consists of Iceland, Ireland, Albania, Moldova, and Turkey. The second group of countries, where the median age is on an intermediate level, shows a geographical pattern. This group of countries forms a belt running from the North to the South of Europe, thereby separating the West from the East. This belt starts with Sweden and Finland in the North, continues via e.g. Germany and the Czech Republic, and ends in the South with Italy and Greece. Portugal, which is situated in the southwest of Europe, is a geographical outlier in this group. The third group of countries, which has the highest median age in Europe, finally, is dispersed over the entire continent. Many of these "old countries" are in Eastern Europe,

others are in the North, South, or West of the continent. Examples for such countries are Estonia, Spain, Norway and France.

The portrayal of demographic differences within Europe shows that Europe is indeed greying—but instead of simply becoming grey, it is taking on different shades of grey. There are marked country-differences in how fast population ageing progresses and in how far it already progressed. This means that even though all European countries deal with the phenomenon of population ageing, this phenomenon has different levels of urgency and visibility for them. When we zoom in even further, then we discover that the shades of grey do not stop at the country level. Rather, they also co-exist within countries, because the populations within countries do not age homogeneously. There are marked differences between population groups when it comes to how fast population ageing progresses. For example, there are more women than men in the higher age groups (Stuart-Hamilton 2011), and the population in rural areas often ages faster than the population in cities (Destatis 2011; Walford and Kurek 2008). Moreover, factors such as migration patterns and local cultures can create within-country differences in how population ageing progresses.

Summing up, Europe is ageing and this process will continue for the decades to come. The ageing of the European population, however, does not progress evenly. There are marked differences between and within countries when it comes to the age-profile of Europe's population. We, therefore, need to have a closer look at the individual European countries and at the different population groups within them, if we want to better understand how Europe is ageing.

#### **1.4 What Are Older Europeans Like?**

The older European does not exist. Even though older Europeans resemble each other to some degree, there are also marked differences between them. On the one hand, this variation is caused by country-characteristics. Europe houses a range of political constellations, reaching from the (former) communistic East to the liberal-democratic West, and religious orientations, reaching from the mainly protestant North to the mainly catholic South. On the other hand, variation in Europe's older population is also due to differences between the individuals within a country. These individual differences align, for example, with gender, socioeconomic status, living arrangement, marital status, and religious affiliation. Taken together, older Europeans present themselves as a rather diverse and colorful group of people (Walker 2005).

One of the most obvious differences between older Europeans is their gender. While there are about as many men as women in Europe, this gender-ratio is slightly different in the older age groups. Among Europeans aged 65 years and older, we find slightly more women than men. The difference is marginal in countries such as Andorra, Iceland, and Macedonia. In Eastern European countries such as Latvia, Estonia, and the Ukraine, however, two out of three older people are female (Eurostat 2012a). The gender-difference is the result of two factors. First, women live longer than men. As a result, women are over-represented in the older age-groups (World Health Organization 2012). Second, mostly men fight as soldiers in wars, which means that war-related deaths are particularly common among men. This fact further reduces the number of men in the generations that lived through World War II and similar conflicts (Destatis 2011).

Another important difference between older Europeans concerns their social networks, meaning their connections with friends and kin (Bourdieu 1986). Such connections are important for older people, because they enhance their wellbeing and health, and they are an important source of support in times of crisis (Berkman 1995; Cantor 1979). Although modernization processes led to a loosening of kinship ties during the last decades (Cantor 1979), those ties still persist to various extents throughout Europe. In the Nordic countries there is extended de-familialization, meaning that friends and associations become more important. Also, the highest levels of memberships of clubs and voluntary organizations are common in Scandinavian countries and The Netherlands. In the South and East of Europe, in contrast, family ties are still very important (Höllinger and Haller 1990; Pichler and Wallace 2007).

A third dividing line between older Europeans is their socio-economic status. A person's socio-economic status describes the position he or she has in society because of wealth, educational level, and occupational prestige (Shaw et al. 2007). The wealth of older Europeans is comparatively high in continental European countries such as Belgium, Switzerland, and France, and comparatively low in Eastern European countries such as the Czech Republic and Poland (Christelis et al. 2008). The educational level is higher in Continental and Northern Europe, e.g. in Denmark and Austria, than in Southern European, e.g. in Spain and Greece (Borsch-Supan and Mariuzzo 2005). Older people's occupational prestige, finally, is higher in Northern and Continental Europe than in Southern Europe (Komp et al. 2010).

A final important difference between older Europeans is their health status. The inhabitants of the Nordic countries (Sweden, Norway, Denmark, Finland) report to be in better health than the inhabitants of Southern (Portugal, Spain, Greece and Italy) and Eastern European countries (Czech Republic, Hungary, Poland and Slovenia). Moreover, men generally have higher levels of self-perceived health than women (Olson and Dahl 2007), whereas women have higher life expectancies (United Nations 2007). These health differences are partly due to life-style, partly to health care systems.

Generally speaking, in Eastern Europe the circumstances to age healthy and well are least favourable. Eastern Europeans have the highest prevalence of obesity and smoking and the lowest levels of economic resources for health care. Western and Northern Europe, in contrast, have the highest level of economic resources and the lowest level of risk factors for diseases. For example, the highest proportions of obese people exists in Eastern Europe (23 %), followed by Southern (22 %) and Northern Europe (21 %), with the lowest percentage existing in Western Europe (18 %). However, there is large variation within these regions. The highest and lowest percentage of obese men can be found in Eastern Europe, with the Czech Republic having the highest (31 %) and Moldova the lowest percentage (10 %). The highest proportion of obese women can be found in the Russian Federation (30 %), and the lowest one in Switzerland (11 %) (World Health Organization 2011).

A more detailed insight into the situation of older Europeans can be gained when focussing on individual countries. In the following sections, we will therefore describe the situation in three European countries that differ dramatically when it comes to how far population ageing has progressed. First, we will describe Italy, which is one of the oldest countries in Europe. Then, we will look at Sweden, which has an average share of older people for European standards. Finally, we will look at Slovakia, which is one of the youngest countries in Europe.

#### 1.4.1 Country-Profile: Old Age in Italy

If Europe is greying, then Italy represents a dark shade of grey. Italy currently is the second oldest country in Europe, after Germany, and the third oldest country in the world (United Nations 2009). Researchers and policy-makers, therefore, often look at Italy when they want to know how societies change when a population ages. In other words, studying today's Italy can help us understand what will happen in other European countries in the next decades.

In the beginning of the 21st century, 6 % of the Italian population were aged 80 years and over—which is a higher percentage than in any other European country. Correspondingly, seven of the ten European regions with the highest proportion of people aged 80 years and older living in them can also be found in Italy (Eurostat 2011a). This overrepresentation of the very old age groups is reflected in the ideas about old age that Italians hold. When they were asked when they thought old age started, Italians named an average age of 68 years. This is one of the highest ages named in Europe (European Commission 2012).

The activity pattern of older Italians is quite distinctive in that they have a comparatively low level of engagement in productive activities. For example, the employment rate of Italians aged 55–64 years was 37 % in 2009, which is one of the lowest percentages within Europe (Destatis 2011). Another example, older Italians are among the older Europeans least often participating in voluntary organizations, sports and social clubs, religious and political organizations (Sirven and Debrand 2008). The Italians themselves explain this comparatively low engagement level in community activities with older people's strong engagement within their families, where they e.g. help to hold those families together and often also look after their grandchildren. Therefore, they are not necessarily less engaged than other older Europeans, they might simply engage in a different context (Komp 2010).

One of the biggest challenges in ageing Italy is to organize care provision for frail older people. Public care services are comparatively scarce and their availability differs widely across Italy, which leaves most of the care work to family members. Italians often support these family carers, which are mainly women, by hiring migrant care workers ("badanti"). The badanti usually live with the persons they provide care to and help them in their daily lives. Because of migration- and working-regulations, badanti alternate between working as a care-giver in Italy for several months and returning to their home countries for several months. While this model gives older Italians access to affordable care, it also raises questions about the working situation of the badanti (Bettio et al. 2006; Da Roit 2007).

#### 1.4.2 Country-Profile: Old Age in Sweden

Within the European context, Sweden stands out for example because of the labour market situation of older people. In 2009, 70 % of the Swedes aged 55–64 worked for pay. That is the highest share within Europe, surpassing the European average by a whopping 24 % (Destatis 2011). Consequently, Sweden can be seen as a country where population ageing has comparatively little effect on the labour market and on pension schemes.

Sweden represents the European average when it comes to population ageing, although the meaning of old age in Sweden differs from the typical European one. In the early 21st century, the median age and the state of population ageing in Sweden were identical with the European average. However, Swedes live longer than the average European does and they stay healthy until a remarkably old age: once Swedes reach an age of 65 years, they can expect to still spend 14 more years in good health, and then 5 more years in poor health (Eurostat 2011b). Swedes also perceive old age to start comparatively late. When they were asked when they thought old age started, they named a value of 67 years, which is 3 years above the European average (European Commission 2012).

Their exceptionally good health status allows older Swedes to be active until a late age, and they do seize this opportunity. When we look at the Europeans aged 50 years and older, we see that Sweden has one of the highest shares of volunteers in this age group. Similarly, Swedes aged 50 years and older are also more likely to provide care and help than most other older Europeans. Some researchers therefore conclude that older Swedes are still productive to a comparatively high degree, engaging in various activities that benefit society, the community, and their families (Hank and Stuck 2008). In other activities, such as the participation in religious organizations, however, older Swedes are less active than most of their European counterparts (Sirven and Debrand 2008).

The Swedish government tries to enable its citizens to lead an active, independent live and be socially included as long as possible. For this purpose, it provides e.g. pension schemes, health and social services (Svensson and Iwarsson 2009). Interestingly, it also facilitated activities in old age by establishing the right to work until age 67, that is 2 years past the mandatory retirement age, if the older individual wishes to do so (International Social Security Agency 2010). As a result of this right, the average Swedish man currently retires at an age of 66 years, which is one year after the mandatory retirement age (Organisation for Economic Co-operation and Development 2011).

#### 1.4.3 Country-Profile: Old Age in Slovakia

Slovakia is one of the youngest countries in Europe. In 2010, the median age there was 37 years, which is 4 years lower than the European average (Eurostat 2011a). Slovakia is, therewith, a country that has the chance to learn from its older European neighbours and prepare for the aging of its population.

The relative youthfulness of Slovakia's population is visible in many ways. Slovakians aged 65 years, for example, could expect to live only three more years in good health and then 13 more years in poor health. This means that their further life-expectancy in good health is 5 years below the European average and even 11 years below the one in Sweden. Similarly, the total life-expectancy in Slovakia is 3 years below the European average. As a consequence, we see older individuals in Slovakia less often than in other European countries (Eurostat 2011b). The Slovakians themselves also have a more youthful understanding of old age than their European neighbours. When they were asked when they thought old age started, they named an age of 58 years. This age is the lowest one named in any European country, being 6 years below the European average (European Commission 2012).

The living situation of older Slovakians is quite distinct. In 2009, the average Slovakian retired at age 58. This is one of the lowest effective retirement ages in Europe, and it is even 4 years before the mandatory retirement age in Slovakia (Organisation for Economic Co-operation and Development 2011). Similarly, Slovakian pensioners are less likely to volunteer than other European pensioners. Only 14 % of them volunteered or did community work in 2008, which is 20 % less than the European average. These low levels of engagement in paid work and volunteering might be due to the early health deterioration in Slovakia. Fortunately, older Slovakians seem socially integrated despite the comparatively low engagement levels and the health decline. In a survey from 2007, the vast majority of older Slovakians stated that they felt integrated in society (Eurostat 2011a). Moreover, the at-risk-of-poverty rate of older people in Slovakia was among the lowest ones in Europe in 2008 (Destatis 2011).

The Slovakian government tackles the phenomenon of population ageing through various strategies. Two Slovakian ageing researchers identified health and social care as central issues in Slovakian old age policies. Those researchers stated that the Slovakian government has been regulating social and health care for older people throughout the last decades. However, they also criticized that such policies and regulations did not always put the emphasis on the situation of older Slovakians (Hegyi and Krajcik 2009). This emphasis might change as the Slovakian population continues to age.

#### 1.5 This Book ...

The remainder of this book will describe the situation, causes and effects of population ageing across Europe. The following seven chapters will each adopt the perspective of one scientific discipline for these explanations, and the concluding chapter will then reflect on discussions in this book.

The first disciplinary chapter in this book discusses the question how ageing changes our bodies. To answer this question, Joel Ankri and Bernard Cassou use insight from bio- and health gerontology. They explain what health is, describe physical changes during the ageing process, and discuss how health care systems can help older Europeans.

The second disciplinary chapter then focusses on psychological development during the ageing process. In this chapter, Mike Martin, Nathan Theill, and Vera Schumacher discuss how mental functioning and perceptions change as people age. They, moreover, explain dementia, one of the most important mental health problems in old age.

The following chapter views older Europeans in their social context. Christina Victor draws from the social sciences, especially from sociology, when adopt this view. She explains older people's role in society as well as their activities and social networks.

The subsequent chapter turns to the discipline of political science. In this chapter, Kathrin Komp spells out why population ageing is relevant for states. She does this by discussing older people's voting behaviour and their role in welfare states. Moreover, she reflects on how policy-makers could help older people to remain active.

Then, a chapter is dedicated to the perspective of economics. Jolanta Perek-Bialas and Joop Schippers adopt this perspective to explore older people's roles as consumers and workers. Furthermore, they discuss how the current economic crisis might affect older Europeans.

The next chapter investigates how technology can help people as they age. Harald Künemund and Nele Tanschus describe such technologies and critically reflect on their potentials and drawbacks. They also discuss whether technologies can help to support caregivers in ageing populations.

The last disciplinary chapter reflects on old age from a cultural perspective. In this chapter, Ricca Edmondson explores how older people are perceived and valued in Europe. She, moreover, ponders whether older people can act as a source of inspiration nowadays.

#### References

Baltes, P. B., & Smith, J. (2003). New frontiers in the future of aging: from successful aging of the young old to the dilemmas of the fourth age. *Gerontology*, 49(2), 123–135.

Berkman, L. F. (1995). The role of social relations in health promotion. *Psychosomatic Medicine*, 57(3), 245–254.

- Bettio, F., Simonazzi, A., & Villa, P. (2006). Change in care regimes and female migration: the 'care drain' in the Mediterranean. *Journal of European Social Policy*, *16*(3), 271–285.
- Borsch-Supan, A., & Mariuzzo, F. (2005). Our sample: 50+in Europe. In A. Borsch-Supan, A. Brugiavini, H. Jurges, J. Mackenbach, J. Siegrist, & G. Weber (Eds.), *Health, ageing and retirement in Europe. First results from the survey of health, ageing and retirement in Europe* (pp. 30–34). Mannheim: Mannheim Research Institute for the Economics of Ageing.
- Bourdieu, P. (1986). The forms of capital. In J. C. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.
- Cantor, M. H. (1979). Neighbors and friends: an overlooked resource in the informal support system. *Research on Aging*, 1(4), 434–463.
- Christelis, D., Jappelli, T., & Padula, M. (2008). Real and financial assets in SHARE Wave 2. In A. Borsch-Supan, A. Brugiavini, H. Jurges, A. Kapteyn, J. Mackenbach, J. Siegrist, & G. Weber (Eds.), *First results from the survey of health, ageing and retirement in Europe* (2004– 2007). *Starting the longitudinal dimension* (pp. 285–290). Mannheim: Mannheim Research Institute for the Economics of Ageing.
- Christensen, K., Doblhammer, G., Rau, R., & Vaupel, J. W. (2009). Ageing populations: the challenges ahead. *The Lancet*, 374, 1196–1208.
- Da Roit, B. (2007). Changing intergenerational solidarities within families in a Mediterranean welfare state: elderly care in Italy. *Current Sociology*, 55(2), 251–269.
- Destatis. (2011). Older people in Germany and the EU. Wiesbaden: Federal Statistical Office of Germany.
- European Commission (2012). Active ageing. Report. Special eurobarometer 378. http://ec. europa.eu/public\_opinion/archives/ebs/ebs\_378\_en.pdf. Accessed February 01, 2012.
- Eurostat (2011a). Active ageing and solidarity between generations. A statistical portrait of the European union 2012. Luxembourg: Publications Office of the European Union.
- Eurostat (2011b). *Healthy life years and life expectancy at age* 65, *by gender. Excel-file.* http://epp.eurostat.ec.europa.eu/tgm/download.do?tab=table&plugin=0&language=en&pcode=ts dph220. Accessed February 01, 2012.
- Eurostat (2012a). *Population on 1 January by broad age group and sex. Excel-file.* http://epp.euro stat.ec.europa.eu/portal/page/portal/population/data/database#. Accessed June 13, 2012.
- Eurostat (2012b). Population on 1 January: structure indicators. Excel-file. http://appso.euros tat.ec.europa.eu/nui/show.do?dataset=demo\_pjanind&lang=en. Accessed January 29, 2012.
- Hank, K., & Stuck, S. (2008). Volunteer work, informal help, and care among the 50+ in Europe: further evidence for 'linked' productive activities at older ages. *Social Science Research*, 37(4), 1280–1291.
- Hegyi, L., & Krajcik, S. (2009). Slovakia. In E.B. Palmore, F. Whittington, & S. Kunkel (Eds.), *The international handbook on aging. Current research and developments* (pp. 467–473). Santa Barbara: Praeger.
- Höllinger, F., & Haller, M. (1990). Kinship and social networks in modern societies: a crosscultural comparison among seven nations. *European Sociological Review*, 6(2), 103–124.
- International Social Security Agency (2010). Country profile: Sweden. Reforms. http://www.issa. int/Observatory/Country-Profiles/Regions/Europe/Sweden/Reforms2. Accessed February 03, 2012.
- Komp, K. (2010). The young old in Europe—burden on or resource to the welfare state?. Amsterdam: Ipskamp.
- Komp, K., Van Tilburg, T., & Broese van Groenou, M. (2010). Paid work between age 60 and 70 years in Europe: a matter of socio-economic status? *International Journal of Ageing and Later Life*, 5(1), 45–75.
- Olsen, K. M., & Dahl, S.-A. (2007). Health differences between European countries. Social Science and Medicine, 64(8), 1665–1678.
- Organisation for Economic Co-operation and Development (2011). Average effective age of retirement versus the official age, 2004–2009. Excel-file. http://www.oecd.org/dataoecd/3/2/3 9371902.xls. Accessed February 01, 2012.

- Philippa, M., Debrabandere, F., Quak, A., Schoonheim, T., & Van der Sijs, N. (2009). *Etymologisch woordenboek van het Nederlands [Etymological Dutch dictionary]*. Amsterdam: Amsterdam University Press.
- Pichler, F., & Wallace, C. (2007). Patterns of formal and informal social capital in Europe. European Sociological Review, 23(4), 423–435.
- Shaw, M., Galobardes, B., Lawlor, D. A., Lynch, J., Wheeler, B., & Smith, G. D. (2007). *The handbook of inequality and socioeconomic position. Concepts and measures.* Bristol: Policy Press.
- Sirven, N., & Debrand, T. (2008). Social participation and healthy ageing: an international comparison using SHARE data. Social Science and Medicine, 67(12), 2017–2026.
- Stuart-Hamilton, I. (Ed.). (2011). An introduction to gerontology. Cambridge: Cambridge University Press.
- Svensson, T., & Iwarsson, S. (2009). Sweden. In E.B. Palmore, F. Whittington, & S. Kunkel (Eds.), *The international handbook on aging. Current research and developments* (pp. 521– 537). Santa Barbara: Praeger.
- United Nations. (2007). *World population prospects. The 2006 revision*. New York: United Nations.
- United Nations. (2009). World population ageing. New York: United Nations.
- United Nations (2011a). World population prospects, the 2010 revision: median age of population. Excel-file. http://esa.un.org/unpd/wpp/Excel-Data/DB02\_Stock\_Indicators/WPP2010\_ DB2\_F06\_MEDIAN\_AGE.XLS. Accessed January 29, 2012.
- United Nations (2011b). World population prospects, the 2010 revision: population by age groups—both sexes. Excel-file. http://esa.un.org/unpd/wpp/Excel-Data/DB03\_ Population\_ByAgeSex\_Quinquennial/WPP2010\_DB3\_F1\_POPULATION\_BY\_AGE\_ BOTH\_SEXES.XLS. Accessed January 27, 2012.
- Walford, N. S., & Kurek, S. (2008). A comparative analysis of population ageing in urban and rural areas of England and Wales, and Poland over the last three census intervals. *Population*, *Space and Place*, 14(5), 365–386.
- Walker, A. (Ed.). (2005). Growing older in Europe. Maidenhead: Open University Press/McGraw Hill.
- Walker, A., & Maltby, T. (1997). Ageing Europe. Buckingham: Open University Press.
- World Health Organization. (2011). World health statistics 2011. Geneva: World Health Organization.
- World Health Organization. (2012). World health statistics 2012. Geneva: World Health Organization.

## Chapter 2 Bio- and Health Gerontology: How Ageing Changes Our Bodies

Joel Ankri and Bernard Cassou

#### 2.1 Summary and Learning Goals

Bio- and health gerontology investigate physical change during the ageing process. While biogerontology focusses on the physical mechanisms of ageing, health gerontology discusses health status in old age and health care for older people. Among older Europeans, cardiovascular diseases, cancer, diabetes, and dementia are common ailments. Fortunately, most European countries have well-developed health and long-term care systems, that help families support care to frail older people.

After reading this chapter, you should be able to:

- Give two different definitions of health
- Name three strategies to facilitate healthy ageing
- Name the four most common diseases among older Europeans
- Give a short overview of formal and informal care arrangements for frail older Europeans

#### 2.2 What are Bio- and Health Gerontology?

Ageing is a complex process involving biological, social, psychological, environmental and spiritual components. Gerontology is the study of these components and their interrelations, with the sub-disciplines bio- and health gerontology focussing on physical processes.

Biogerontology is the scientific field of biologists and biochemists who study the ageing process on a molecular level, and who explore how this process affects organs and consequently the entire body. Typical questions raised and answered by biogerontologists are how caloric restriction contributes to a longer life, why human cells die, how organs maintain homeostasis—that is the stabilization of health and function—and how free radicals affect our life-expectancy. Biological aging of the

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body is seen as the result of the appearance and disappearance of the cells of all organs. Cells die and are replaced by new cells, which is part of the normal functioning of organs (Lafontaine 2009). Aubrey de Grey, a contemporary biogerontologists from Great Britain, conducted a series of studies on the free radical theory and the role of mitochondria and, based on his research, concludes that ageing should be seen as a disease. He states that "...as medicine becomes more and more powerful, we will inevitably be able to address ageing just as effectively as we address many diseases today" (De Grey 2006: 66). This might, according to De Grey, happen in the near future, because "the first person to live to 1.000 might be 60 already" (De Grey 2006: 67). However, this statement might be overly optimistic. Biogerontologists use animals such as flies, worms, or rats for their studies, and it is, consequently, unclear whether the study results can be generalized to humans. Some other gerontologists, therefore, remark that even though De Grey proposes different approaches to postpone ageing, "none of these approaches has ever been shown to extend the life span of any organism, let alone humans" (Warner et al. 2005: 1006).

Health gerontology is the scientific field of doctors, who do clinical research, and epidemiologists, who study populations either cross-sectionally or longitudinally. It is closely linked to the social and environmental aspects of human ageing. Health gerontology focuses on bodily changes with age, the consequences of this change for daily living, and the use of health care services. Some of its guiding questions are how one can increase the healthy life expectancy, and how one can help people to live longer and remain active. When studying these questions, health gerontology pays attention to social inequalities, for example between different income groups and between different educational levels. Moreover, it underlines two levels of health-related intervention. Intervention at the individual level might, for example, focus on health promotion and disease prevention. Intervention at the level of populations, in contrast, might e.g. focus on poverty prevention, housing conditions, and the organization of health and social care systems.

#### 2.3 Central Theories and Concepts in Bio- and Health Gerontology

Europeans live longer than ever before. However, not all of the added live years are healthy ones. Indeed, old age often goes hand in hand with diseases and discomfort. But where does health end and disease start? This question is hard to answer, because health can be understood in different ways. The next paragraphs explain what health can mean and how one can promote it.

#### 2.3.1 What Is Health in Old Age?

In its traditional understanding, health is the freedom from disease. As individuals age, their health deteriorates, and they develop diseases. In other words, old age and good health were traditionally seen as mutually exclusive states.

The perceived opposition between health and old age can be explained with the concept of senescence. The term "senescence" describes the process of biological ageing. With senescence, bodies react to changes more slowly and, consequently, recover from illnesses and accidents with more difficulty. Therefore, health declines in old age and diseases become more common (Ricklefs 2008). Brody and Schneider (1986) pointed out that there might be two different reasons why older people have more health problems. The first reason is that ageing itself causes health to decline. This is the case for e.g. coronary heart disease, which can lead to strokes. The second reason is that diseases are not caused by the ageing process itself, but simply require a longer period of time to develop, which means that they can only manifest in older ages. This mechanism is discussed for e.g. certain types of cancers (Masoro 2006). Brody and Schneider's differentiation raises an important question: Which bodily changes in old age are normal processes and which ones signal diseases? Unfortunately, this question cannot be answer conclusively.

Thanks to medical progress, many health problems can nowadays be cured. Especially acute health problems, e.g. in the aftermaths of accidents or infections, can often be treated to recovery. Chronic health problems, such as rheumatism and diabetes, on the other hand, cannot be treated to recovery. Only the symptoms of these health problems can be managed, which can allow the affected individuals to lead a normal life in spite of the chronic disease (Clark 2003). Due to senescence, especially older people are prone to suffer from chronic diseases, often even from multiple ones at the same time. Older people might, therefore, find it difficult to carry out everyday activities.

The crucial question, however, is how older people think about their health status. The mere presence of diseases or disabilities does not necessarily mean that older people consider themselves in poor health. In fact, older people sometimes describe their own health status as good, even when they were diagnosed with several diseases (Kelley-Moore et al. 2006). This fact suggests that we need to also pay attention to older people's perceptions and self-assessments when we discuss health in old age.

#### 2.3.2 A More Positive Approach

The World Health Organization (WHO) recognized that health is more than just a physical state, and therefore suggested a broader understanding of this term. In its constitution of 1948, the WHO defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO 1946). The important difference to previous definitions of health is that the WHO also includes the subjective aspect of social well-being in its considerations.

But what exactly is social well-being? Gerontologists equate it to a good quality of life, and therefore consider health in old age as a question of quality of life. They, moreover, argue that quality of life has two dimensions. The first dimension is health-related, referring to e.g. discomfort, pain, and energy level. The second dimension is not health-related, and it refers to personal resources such as the capability to form friendships, appreciate nature and find spiritual satisfaction (Albert 2004). The dual nature of well-being suggests that there also are two ways to maintain good health in old age: preventing diseases and enhancing personal resources. If strategies promoting healthy ageing want to be successful, then they need to consider both ways to main good health.

The expanding healthy life-expectancy further contributes to give old age a positive image. This positive image led to the development of new concepts of old age, most notably the concepts of "active ageing" and of "successful ageing". According to the WHO (2002: 12), "active ageing is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age. It allows people to realize their potential for [...] well being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance". This idea about ageing currently receives broad attention in the media and in political debates, and the European Commission even named 2012 the "European Year of Active Ageing and Solidarity between Generations" (see the chapter on political gerontology in this volume).

Even though "successful ageing" resembles the concept of "active ageing" in some respects, it received a much more critical reception. Rowe and Kahn (1997) described successful ageing as a combination of three elements: absence of disease and of risk factors for disease, maintenance of physical and cognitive abilities, and engagement in productive activities. Like active ageing, also successful ageing underlines the activities of older people. Unlike active ageing, however, it does not draw attention to quality of life. Instead, it gives the discussion on how to age a normative undertone: If people can age successfully, then they can just as well age unsuccessfully. But what exactly does it mean to age unsuccessfully? Does it mean that people can fail in the process of ageing? And what are the criteria to determine whether one succeeds or fails in the process of ageing? Baltes (1996) suggested that the concept "successful ageing" might even be an oxymoron, because it implies that people age successfully if they do not age at all. For these reasons, discussions on healthy ageing preferably focus on active ageing and quality of life.

#### 2.3.3 How Can We Facilitate Healthy Ageing?

The previous explanations showed that individuals who want to age healthily have many possibilities to reach this goal. The three most important approaches for them are: attempting to slow down the ageing process, learning from health promotion strategies, and utilizing the potentials of preventive medicine.

The first approach to facilitate healthy ageing is to slow down the ageing process. Ageing is a life-long process that starts at birth, and possibly even earlier during the gestational age, in a developmental approach. Likewise, healthy ageing is a life-long process for which the foundations are laid during ones childhood and youth (Ferraro and Shippee 2009). Adopting a healthy life-style at a young age, therefore, is a central component of strategies that try to slow down the ageing process. Besides life-style changes, also anti-ageing medicines are considered a potential means for slowing down ageing. These medicines can be very different in nature, because they can be based on e.g. vitamins, hormones, or herbal components (Stuckelberger 2008). However, there is no convincing evidence that the administration of any anti-ageing medicine actually slows down the ageing process. It, therefore, seems advisable to focus on maintaining a healthy life-style, which e.g. comprises sufficient physical activity.

The second approach to facilitate healthy ageing is to learn from health promotion strategies. The goal of health promotion strategies is to reduce the risks leading to four diseases in particular: cardiovascular disease (including stroke), lung diseases, diabetes and cancer. These diseases are currently the most common ones among older Europeans (Niederlaender 2006). To prevent these diseases, a combined strategy of not smoking, moderating alcohol intake, maintaining a responsible diet, and engaging in physical activities seems promising (WHO 2011a). Additionally, a stable psychological and social situation seem important, because such a situation helps people cope with the challenges of old age, such as the loss of loved ones (Baltes 1996).

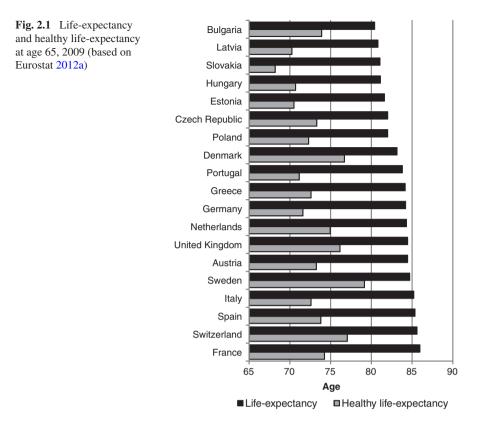
The third approach to promote healthy ageing is to utilize the potentials of preventive medicine. Preventive medicine targets healthy individuals who did not yet fall ill. It strives to avoid that these healthy individuals develop diseases, which would make curative medicine dispensable (Rose 1992). In its efforts to prevent diseases, preventive medicine makes use of the two approaches to healthy ageing just described: slowing down the ageing process, and learning from health promotion strategies. In addition to these approaches, preventive medicine also places great importance on an early diagnosis of diseases, because early diagnosis allows for more effective treatments and higher chances of recovery. Early diagnoses can, therefore, help to ensure good health in old age.

# 2.4 What Do Bio- and Health Gerontology Tell Us about the Current State of Europe?

Health-related information gives us important insight into the current state of Europe. It allows us to grasp the living situation of older Europeans, and it gives us an impression of families and governments might react to population ageing.

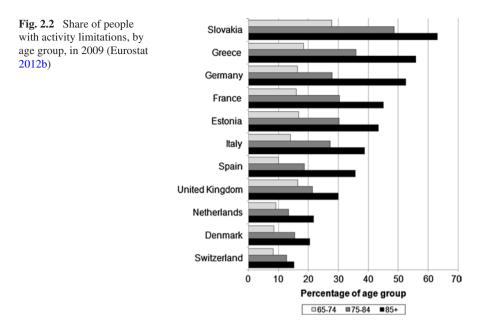
#### 2.4.1 The Health Status of Older Europeans

The health status of older people differs widely across Europe. Figure 2.1 illustrates this fact by displaying information on the life expectancy and healthy life expectancy across Europe. Europeans who had reached the age of 65 years in 2009 could



expect to live for 15–21 more years, depending on the country in which they saw the light of day. They, therewith, reach an age of 80–86 years. The countries with the highest remaining life expectancies at age 65 are geographically dispersed, lying in Continental, Northern and Southern Europe. The countries with the lowest life-expectancies at birth, in contrast, are geographically concentrated in Eastern Europe. Like the life-expectancy, also the healthy life expectancy at age 65 varies considerably between countries. The lowest remaining healthy life expectancy is 3 years in Slovakia, the highest one 14 years in Sweden. The countries with the lower healthy life expectancies are concentrated in Eastern and Southern Europe, the ones with the higher healthy life expectancies in Continental and Northern Europe.

Like the life expectancy, also the capabilities of older people vary across Europe. When older Europeans were asked whether they were severely limited in their everyday activities, several of them confirmed. Generally speaking, the number of people with limitations in their activities increases with age. Figure 2.2 shows that this increase is common in all countries. How many people are limited and how quickly the limitations progress with age, however, is country-specific. In Switzerland, Denmark, and the Netherlands, for example, comparatively few older



people are limited in their everyday activities. Moreover, the age-differences in the limitations are comparatively small in these countries. In Slovakia, Greece, and Germany, on the other hand, comparatively many older people are limited in their everyday activities, and the numbers of people with limitations increase quickly with age. However, when it comes to capabilities, there is no clear geographical pattern like the one in life expectancies.

The country-differences in life expectancies and in older people's capabilities are caused by a combination of many health problems and diseases. The corresponding state in which older people are especially vulnerable to have accidents, fall ill, or even die prematurely, is called "frailty" (Fried et al. 2001). They stated that frailty should be considered a disease in three or more of the following criteria are present: unintentional weight loss (4.5 kg in the past year), self-reported exhaustion, weakness (grip strength), slow walking speed, and low physical activity. In 2004, seven per cent of female and three per cent of male Western Europeans aged 50 years and over were frail (Romero-Ortuno et al. 2010). Two important life-style factors are often held responsible for frailty, diseases, and premature death: smoking and a lack of physical activity. Smoking is particularly common among European men with low income, while a lack of physical activity is particularly common among European live, the more physically active they are (Börsch-Supan et al. 2008).

Diseases related to the heart and blood vessels ("cardiovascular diseases"), cancer, and diabetes, play particularly important roles in older age. Cardiovascular diseases have been the leading cause of deaths in developed countries for several decades, with them being responsible for almost every second death in Europe in 2008 (WHO 2011b). Among Europeans aged 65 years and older, ischaemic heart diseases, such as heart attacks, and cerebrovascular diseases, such as strokes, are the most common cardiovascular diseases. The second most important cause of death in Europe is cancer. Europeans aged 65 years and older are particularly affected by cancer of the lungs, breasts, prostate glands, and the colon (Buchow et al. 2012). Another common disease in Europe is diabetes. In 2010, around 7 %of the Europeans suffered from this disease. Because diabetes is a chronic disease, its prevalence will probably increase as populations age. In Europe, the number of individuals aged 60 years and over with diabetes will probably increase by one third within the next two decades (Shaw et al. 2009).

In additional to physical ailments, older people often also suffer from mental health problem. Late-life depression, for example, is common among older Europeans (Reker 1997). In 2004, every third to every fifth older European was depressed. This share increases from Northern to Southern Europe (Ladin 2008). Possible causes are social isolation, the death of loved ones, health problems, and financial problems (Cole et al. 1999). A second common mental health problem in later life is the decline in cognitive function, e.g. because of dementia. Individuals who are affected by dementia lose several of their cognitive capabilities, e.g. the ones responsible for memory, language, and problem solving (Launer et al. 1999). In 2010, about 7 % of Europeans aged 65 years and older suffered from dementia (Mura et al. 2010). This share will probably increase as the European population ages.

#### 2.4.2 Care for Frail Older Europeans

The previous explanations show that the health profile of Europe changes as the European population ages. As a consequence, care arrangements also need to change. Older people benefit from two kinds of care arrangements: informal and formal ones.

Informal care arrangements are situations in which individuals habitually provide unpaid care to friends of kin. Usually, it is women who provide this care to their partners, parents, in-laws, or children. As populations age, the share of older family members increases. Consequently, women might have to provide care to a higher number of parents and in-laws. This increasing need for care to older persons might be hard to juggle with labour force participation and with childcare. However, population ageing also entails that the share of children in families decreases. This lowers the amount of childcare that needs to be provided, which might ease the situation of informal care-providers. Finally, individuals stay healthy until a later age, which means that older family members might also provide informal care. They, for example, care for their frail spouses, and sometimes they also look after their grandchildren. These activities of older people can further ease the situation of middle-aged women in informal care arrangements (Hinterlong 2008; Komp and Van Tilburg 2010).

| Table 2.1 The informal help                    | Country     | Older person                 |                             |  |
|--|-------------|------------------------------|-----------------------------|--|
| and care arrangements of older Europeans, 2004 |             | Received help or care (in %) | Gave help or care<br>(in %) |  |
|  | Spain       | 15                           | 14                          |  |
|  | Italy       | 17                           | 23                          |  |
|  | Switzerland | 19                           | 38                          |  |
|  | France      | 20                           | 33                          |  |
|  | Netherlands | 24                           | 41                          |  |
|  | Greece      | 25                           | 20                          |  |
|  | Austria     | 27                           | 25                          |  |
|  | Germany     | 28                           | 33                          |  |
|  | Sweden      | 28                           | 42                          |  |
|  | Denmark     | 28                           | 48                          |  |

(Attias-Donfut et al. 2005)

Table 2.1 gives an overview of the informal care arrangements of older Europeans. On the one hand, it shows us how many older Europeans receive informal help or care. This percentage ranged from about 15 % in Spain to 28 % in Sweden, Denmark, and Germany. Generally speaking, the percentage increases the further north an older person lives. On the other hand, Table 2.1 also shows us how many older Europeans provide informal help or care. This percentage ranges from 15 in Spain to 48 in Denmark. Also here we can roughly identify an increase from the South to the North of Europe. When comparing the receipt and the provision of informal help and care, one interesting fact becomes obvious: in many countries, older Europeans help out more than they receive help. This finding underlines that old age nowadays indeed becomes a time of good health and activity for many people.

European policy-makers are aware of the prevalence and importance of informal caregiving, and they, therefore, try to support caregiver in informal care arrangements. For example, they introduced financial incentives in France and Sweden, advisory services for informal carers in the United Kingdom, and they enabled caregivers to become employees of home help services in Sweden (OECD 2011b). These and similar support efforts might make it easier for families to cope with the health-related challenged of population ageing.

The second kind of care arrangement for frail older people is the formal one. Formal care arrangements are situations where paid professionals provide care either in institutions, such as nursing homes, or in the homes of frail persons (OECD 2011a). These professionals sometimes belong to the health care sector, sometimes to the social care sector. In a few European countries, such as Germany, Luxembourg, and the Netherlands, these professionals might even belong to a separate long-term care sector (OECD 2011b). This sector specializes in the provision of care over longer periods of time, which is often necessary with older service users whose health has deteriorated beyond recovery. These older users usually suffer from several health problems, and their care needs change over time. Consequently, they need services from different health and social care providers.

Guaranteeing a suitable combination of care services is another challenge that social and health care services in ageing populations have to meet (Billings and Leichsenring 2005; Hofmarcher et al. 2007).

Table 2.2 presents information on formal care arrangements for older people in Europe. First, this table shows how much different European countries spend on health care and on long-term care. The public health care expenditure in 2009 ranged from 4,500 to 1,000 purchasing power parities (PPP) per capita. Countries with high public health care expenditures are located in Northern and Continental Europe, whereas the countries with the lower public health care expenditures are the Eastern European ones. A similar geographical pattern emerges when we look at public long-term care expenditures. Here, the expenditures range from 4 to 0%of the gross domestic product (GDP). Second, the table presents information on long-term care facilities. The number of beds for long-term care increases from the South to the North of Europe. In Sweden, there are 81 beds per 1,000 individuals aged 65 years and over. In Spain, in contrast, there are only 31 beds for the same amount of older people. Concerning long-term care workers, the North of Europe has much higher numbers than the rest of the continent. In Norway and Sweden, for example, there are 13 long-term care workers per 1,000 individuals aged 65 years and over. At the other end of the scale are France, the Slovak Republic, the Czech Republic, and Hungary. In these countries, there are only 2 long-term care workers per 1,000 individuals aged 65 years and over. For more information on the long-term care system, see the chapter on political gerontology in this volume.

| Country         | Public expenditures per capita |   | Long-term care facilities (per 1,000 individuals aged 65 years and older) |         |
|-----------------|--------------------------------|---|---|---------|
|                 | on health care<br>(in PPP)     | on long-term<br>care (as share of<br>GDP) | beds  | workers |
| Norway          | 4,500                          | 2   | 63  | 13      |
| Netherlands     | 3,900                          | 4   | 69  | 8       |
| Denmark         | 3,700                          | 3   | 51  | 9       |
| Austria         | 3,300                          | 1   | 41  | 3       |
| Germany         | 3,200                          | 1   | 50  | 4       |
| France          | 3,100                          | 2   | 73  | 2       |
| Sweden          | 3,000                          | 4   | 81  | 13      |
| Finland         | 2,400                          | 2   | 75  | 3       |
| Spain           | 2,300                          | 1   | 31  | 4       |
| Czech Republic  | 1,800                          | 0   | 48  | 2       |
| Slovak Republic | 1,400                          | 0   | 54  | 2       |
| Hungary         | 1,000                          | 0   | 57  | 2       |
| Estonia         | 1,000                          | 0   | 42  | 8       |

Table 2.2 Formal health and long-term care in Europe, 2009

(OECD 2011b)

*Note* PPP = purchasing power parities; GDP = gross domestic product

#### 2.5 Current Debate in Bio- and Health Gerontology: Is a Longer Life Desirable?

Europeans live longer than ever before, and their life-expectancy will probably continue to increase in the future. Policy-makers and health care professionals celebrate this development as a success and they intend to push it even further. But putting the medical possibilities aside—is it even desirable to live longer?

To decide whether longer lives are desirable, we cannot only look at the number of life years gained. Instead, we also need to focus on the quality of these additional life years. A central question in this context is whether the newly gained live years are healthy or disease-ridden ones. Scholars discuss two competing hypotheses about the relation between health problems ("morbidity") and longer lives: one of these hypotheses describes a compression, the other one an expansion of morbidity. The "compression of morbidity" hypothesis states that the most severe health problems are concentrated in the last years of life. In other words, if we live longer, then we experience more years in good health, and health problems are postponed until a higher chronological age. The "expansion of morbidity" hypothesis, in contrast, states that the number of life years in poor health increases with an increasing life-span. Phrased differently, if we live longer, then we also spend more years battling health problems (Fries 1980; Nusselder 2003).

Empirical evidence shows that both hypotheses might be partly accurate. The most severe health problems indeed seem to be concentrated in the last years of life, while the years before that seem to be characterized by chronic diseases which do not necessarily need to lead to disability (Parker and Thorslund 2007). People who can cope with chronic diseases can, therefore, have a pleasant and satisfying old age, even when the life expectancy continues to expand. Policy-makers and health care professionals should, consequently, consider attitudes and social factors in addition to medical progress when they strive to prolong lives. With suitable medical care, a well-developed social network, and the right attitude, longer lives can indeed be something to look forward to.

#### Check Your Progress: A Quiz on Bio- and Health Gerontology

Question 2.1: What are definitions of *health*? (multiple answers possible)

- (a) When you did not visit a doctor for at least 8 months
- (b) When you do not have any diseases
- (c) When you experience physical, mental, and social well-being
- (d) When your breathing is normal and you can sleep through the night
- (e) When your body mass index is below 25

Question 2.2: What are strategies to facilitate healthy ageing? (multiple answers possible)

- (a) Make sure diseases do not even start
- (b) Slow down the ageing process
- (c) Move to a big city, so that you have access to many hospitals and doctors
- (d) Learn from health promotion strategies
- (e) All of the above

Question 2.3: What is the main criticism of biogerontology?

- (a) It focusses on biology only and does not pay enough attention to the social aspects of ageing
- (b) It makes absolute statements about ageing, but ageing is subjective
- (c) It mainly studies animals, but it is not clear whether we can generalize the results of such studies to humans
- (d) It is a young discipline and, therefore, still needs a few more decades to develop
- (e) It mainly works with quantitative studies, but we also need qualitative studies to properly understand ageing

Question 2.4: In which part of Europe do governments spend the least amount of money of health care?

- (a) Southern Europe
- (b) Northern Europe
- (c) Continental Europe
- (d) Eastern Europe
- (e) There are hardly any differences within Europe

#### References

- Albert, S. M. (2004). Aging, public health and application of the quality of life paradigm. In S. M. Albert (Ed.), *Public health and aging: an introduction to maximizing function and wellbeing* (pp. 195–248). New York: Springer.
- Attias-Donfut, C., Ogg, J., & Wolff, F.-C. (2005). European patterns of intergenerational financial and time transfers. *European Journal of Ageing*, 2(3), 161–173.
- Baltes, M. M. (1996). Successful ageing. In S. Ebrahim & A. Kalache (Eds.), *Epidemiology in old age* (pp. 162–168). London: BMJ Publishing Group.
- Billings, J., & Leichsenring, K. (Eds.). (2005). Integrating health and social care services for older persons. Aldershot: Ashgate.
- Börsch-Supan, A., Brugiavini, A., Jürges, H., Kapteyn, A., Mackenbach, J., Siegrist, J., et al. (Eds.). (2008). First results from the Survey of Health, Ageing and Retirement in Europe (2004–2007): starting the longitudinal dimension. Mannheim: Mannheim Institute for the Economics of Ageing.
- Brody, J. A., & Schneider, E. L. (1986). Diseases and disorders of aging: an hypothesis. *Journal of Chronic Disorders*, 39(11), 871–876.
- Buchow, H., Cayotte, E., & Agafitei, L. (2012). Circulatory diseases—main causes of death for persons aged 65 and more in Europe, 2009. Statistics in Focus: Population and Social Conditions, 7/2012. Luxembourg: Eurostat.

- Clark, N. M. (2003). Management of chronic disease by patients. Annual Review of Public Health, 24, 289–313.
- Cole, M. G., Bellavance, F., & Monsour, A. (1999). Prognosis of depression in elderly community and primary care populations: a systematic review and meta-analysis. *American Journal* of Psychiatry, 156(8), 1182–1189.
- De Grey, A. (2006). We will be able to live to 1000. In H. R. Moody (Ed.), *Aging: concepts and controversies* (pp. 66–68). London: Sage.
- Eurostat (2012a). Healthy life years and life expectancy at age 65, by sex. Excel-file. http://e pp.eurostat.ec.europa.eu/tgm/download.do?tab=table&plugin=0&language=en&pcode=ts dph220. Accessed 18 June 2012.
- Eurostat (2012b). Self-perceived limitations in daily activities (activity limitation for at least the past 6 months) by sex, age and activity status (%). Excel-file. http://appsso.eurostat.ec. europa.eu/nui/show.do?dataset=hlth\_silc\_06&lang=en. Accessed 28 May 2012.
- Ferraro, K., & Shippee, T. P. (2009). Aging and cumulative inequality: how does inequality get under the skin? *The Gerontologist*, 49(3), 333–343.
- Fried, L. P., Tangen, C. M., Walston, J., Newman, A. B., Hirsch, C., Gottdiener, J., et al. (2001). Frailty in older adults: evidence for a phenotype. *Journal of Gerontology: Medical Sciences*, 56A(3), M146–M156.
- Fries, J. F. (1980). Aging, natural death, and the compression of morbidity. New England Journal of Medicine, 303, 130–135.
- Hinterlong, J. (2008). Productive engagement among older Americans: prevalence, patterns, and implications for public policy. *Journal of Aging and Social Policy*, 20(2), 141–164.
- Hofmarcher, M. H., Oxley, H., & Rusticelli, E. (2007). Improved health system performance through better care coordination. Health working papers nr. 30. Paris: Organization for Economic Co-operation and Development.
- Kelley-Moore, J. A., Schumacher, J. G., Kahana, E., & Kahana, B. (2006). When do older adults become "disabled"? Social and health antecedents of perceived disability in a panel study of the oldest old. *Journal of Health and Social Behaviour*, 47(2), 126–141.
- Komp, K., & Van Tilburg, T. G. (2010). Ageing societies and the welfare state: where the inter-generational contract is not breached. *International Journal of Ageing and Later Life*, 5(1), 7–11.
- Ladin, K. (2008). Risk of late-life depression across 10 European Union countries: deconstructing the education effect. *Journal of Aging and Health*, 20(6), 653–670.
- Lafontaine, C. (2009). The postmortal condition: from the biomedical deconstruction of death to the extension of longevity. *Science as Culture*, *18*(3), 297–312.
- Launer, L. J., Andersen, K., Dewey, M. E., Letenneur, L., Ott, A., Amaducci, L. A., et al. (1999). Rates and risk factors for dementia and Alzheimer's disease: results from EURODEM pooled analyses. *Neurology*, 52(1), 78–84.
- Masoro, E. J. (2006). Are age-related diseases an integral part of aging? In E. J. Masoro & S. N. Austad (Eds.), *Handbook of the biology of aging* (pp. 43–62). London: Elsevier.
- Mura, T., Dartigues, J.-F., & Berr, C. (2010). How many dementia cases in France and Europe? Alternative projections and scenarios 2010–2050. *European Journal of Neurology*, 17(2), 252–259.
- Niederlaender, E. (2006). Causes of death in the EU. Statistics in focus: population and social conditions 10/2006. Luxembourg: Eurostat.
- Nusselder, W. J. (2003). Compression of morbidity. In J.-M. Robine, C. Jagger, C. D. Mathers, E. M. Crimmins, & R. M. Suzman (Eds.), *Determining health expectancies* (pp. 35–58). Chichester: Wiley.
- Organisation for Economic Co-operation and Development (OECD). (2011a). *Health at a glance 2011: OECD indicators*. Paris: Organisation for Economic Co-operation and Development.
- Organisation for Economic Co-operation and Development (OECD). (2011b). *Help wanted? Providing and paying for long-term care*. Paris: Organisation for Economic Co-operation and Development.
- Parker, M. G., & Thorslund, M. (2007). Health trends in the elderly population: getting better and getting worse. *The Gerontologist*, 47(2), 150–158.

- Reker, G. T. (1997). Personal meaning, optimism, and choice: existential predictors of depression in community and institutional elderly. *The Gerontologist*, *37*(6), 709–716.
- Ricklefs, R. E. (2008). The evolution of senescence from a comparative perspective. *Functional Ecology*, 22(3), 379–932.
- Romero-Ortuno, R., Walsh, C. D., Lawlor, B. A., & Kenny, R. A. (2010). A frailty instrument for primary care: Findings from the Survey of Health, Ageing and Retirement in Europe (SHARE). *BMC Geriatrics*, 10(1), 57–68.
- Rose, G. (1992). The strategy of preventive medicine. Oxford: Oxford University Press.
- Rowe, J., & Kahn, R. (1997). Successful aging. The Gerontologist, 37(4), 433-440.
- Shaw, J. E., Sicree, R. A., & Zimmet, P. Z. (2009). Global estimates of the prevalence of diabetes for 2010 and 2030. *Diabetes Research and Clinical Practice*, 87(1), 4–14.
- Stuckelberger, S. (2008). Anti-aging medicine. Myths and challenges. Zurich: Centre for Technology Assessment.
- Warner, H., Anderson, J., Austad, S., Bergamini, E., Bredesen, D., Butler, R., et al. (2005). Science fact and the SENS agenda. What can we reasonably expect from ageing research? *EMBO Reports*, 6(11), 1006–1008.
- World Health Organization (WHO). (1946). *Preamble to the constitution of the World Health Organization*. NewYork: World Health Organisation.
- World Health Organization (WHO). (2002). *Active aging: A policy framework*. Geneva: World Health Organization.
- World Health Organization (WHO). (2011a). Action plan for implementation of the European strategy for the prevention and control of noncommunicable diseases 2012–2016. Copenhagen: World Health Organization.
- World Health Organization (WHO) (2011b). Causes of death 2008 summary tables. Excel-file. http://apps.who.int/ghodata/#. Accessed 28 May 2012.

#### **Recommended Readings**

Börsch-Supan, A., Brugiavini, A., Jürges, H., Kapteyn, A., Mackenbach, J., Siegrist, J., et al. (Eds.). (2008). First results from the Survey of Health, Ageing and Retirement in Europe (2004–2007): Starting the longitudinal dimension. Mannheim: Mannheim Institute for the Economics of Ageing.

This publication gives an overview of the health status of older Europeans, among other topics.

Organisation for Economic Co-operation and Development. (2011). *Help wanted? Providing and paying for long-term care*. Paris: Organisation for Economic Co-operation and Development. *This book describes long-term care provisions in Europe and beyond*.

## Chapter 3 Gerontopsychology: Ageing is All in Your Head

Mike Martin, Nathan Theill and Vera Schumacher

## 3.1 Summary and Learning Goals

Gerontopsychology explores the effects of ageing on the brain and on personality. It explores how cognitive functions change with ageing and how individuals can cope with such change in order to maintain a high quality of life. An important age-related cognitive change is dementia, which is a disease that causes people to lose their memory and their capabilities. This chapter describes how common dementia is across Europe and it discusses what we can do to prevent it.

After reading this chapter, you should be able to:

- Explain what fluid and crystallized intelligence are
- State how fluid and crystallized intelligence change with old age
- Name four explanations for age-related changes in fluid and crystallized intelligence
- Explain why older people can have a good quality of life even when their cognitive health declines
- Describe what people can do to prevent dementia

## 3.2 What is Gerontopsychology?

Gerontopsychology is the field of psychology which investigates stability and changes of behaviour and experience of human beings in their later life. It assumes that processes of development and change in the course of ageing are not necessarily unidirectional decline processes, but rather can be multidirectional or stable. This is in contrast to the time gerontology became established as a discipline, when declines were the defining features of ageing or senescence. In contrast, gerontopsychology focuses on the developmental potentials of ageing individuals'

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personal and environmental resources. Thus, there is a shift in research from pathological to healthy ageing.

#### 3.3 Central Theories and Concepts in Gerontopsychology

In the following, the basic concepts and theories of gerontopsychology will be discussed, concentrating primarily on aspects of cognitive ageing. Two major concepts in this area are the concepts of cognitive health and of quality of life. Both terms refer to functional concepts of competence, i.e., they describe and explain how elementary cognitive and non-cognitive processes are actively managed by individuals to achieve stability in such complex functional outcomes as cognitive health and wellbeing. Cognitive health refers to "not just the absence of disease, but rather the development and preservation of the multidimensional cognitive structure that allows the elderly to maintain social connectedness, an ongoing sense of purpose, and the abilities to function independently, to permit functional recovery from illness or injury and to cope with residual functional deficits" (Hendrie et al. 2005, p. 1). Quality of life (QOL) refers to the "... integration of multiple subjective representations of the functionality of ones' resources. That is, OOL ... is higher, the more strongly individuals represent their resources as being principally functional to perform complex activities that serve individually central life or goal domains" (Martin et al. 2012, p. 35). Thus, both concepts are situated in the individual and environmental context and imply that next to the characteristics of individual resources, influences such as the integration into social structures and the adaptation to different environments and situations have to be taken into consideration when measuring performance.

Cognition is composed of multiple abilities which demonstrate different developmental courses (multidimensionality), and the mean levels of most cognitive abilities decline differentially across adulthood (Park et al. 1996). Cognitive abilities can generally be categorized into two types of intelligence. In fact, a multitude of studies have reported age-related declines in measures of fluid intelligence such as speed of processing, working memory, cued and free recall, reasoning, or verbal fluency. In contrast, performance in tests of crystallized intelligence (Horn and Cattell 1967), i.e., experience—and culture-dependent non-speeded performances such as vocabulary normally increases quickly after mastering language and then more slowly across the lifespan well into very old age (multidirectionality). That is, despite the general tendency of a decrease in cognitive abilities, some individuals maintain or even increase their cognitive abilities in old age. More generally, cognitive ageing can be characterized by interindividual differences, generational differences, multidimensionality, and multidirectionality (Baltes and Schaie 1976).

Currently, four main theories are used to explain the differential age-related changes in measures of fluid and crystallized intelligence. Salthouse (1991, 1996) proposed the processing speed theory which assumes that the age-related differences in performance are the consequence of a general decrease in speed

of performing mental operations. According to Salthouse's theory the slowing in processing speed is related to all aspects of cognition whether they have a speed component or not (Park 1999). A similar theory is the one developed by Craik and Byrd (1982). They argue that the age-related decline in cognitive functioning is due to reduced processing resources. Processing resources describe the ability to self-initiate processes and to manipulate and process information and are best measured by working memory tasks. Although both theories explain age differences in more complex cognitive performances requiring the integration of multiple elementary cognitive processes, it is only speed that accounts for the variance in less effortful memory tasks such as spatial memory (Park et al. 1996). Hasher and Zacks (1988) see the decline in inhibitory control, i.e., the ability to suppress currently irrelevant informations or behaviours, as cause for cognitive deficits associated with age. According to this theory, older individuals have more problems to inhibit prior information from working memory, thus reducing the "work space" for new material (Glisky 2007). Another approach is to relate changes in sensory functions such as visual and auditory acuity to age-associated changes in cognitive function. Lindenberger and Baltes (1997) found that both, visual and auditory functions together can account for a large amount of the variation in intellectual functioning. These findings were the base of the their "common cause hypothesis" stating that sensory function, as a general marker of the intactness of the neurobiological architecture is fundamental for all cognitive functions and has, when it declines, a generally negative effect on all cognitive abilities (Park 1999).

All cognitive ageing theories can account for age differences in cognitive abilities. However, they differ in focusing on basic mechanisms such as processing speed or sensory functions that are closely linked to age-related changes in neuronal structures or in focusing on complex performances such as inhibitory control that allow the use of task-specific compensatory strategies and processes. Whereas the former can be influenced by large amounts of practice, but show hardly any transfer to untrained tasks (e.g., Willis et al. 2006), the latter can be improved through strategy trainings and adaptive interventions needing relatively small amounts of practice and promising a transfer to untrained tasks (e.g., Borella et al. 2010).

### 3.3.1 Multidimensionality, Multidirectionality, Individual Differences and Generational Differences

Schaie (1974) proposed that most of the age differences in the performance of cognitive abilities result from cohort differences rather than age differences and that "… presumed universal decline in adult intelligence is at best a methodological artifact" (Schaie 1974, p. 802). This suggests that factors other than age and practice in specific cognitive skills such as generational differences in schooling or use of technology should also be considered when looking at the development of cognitive abilities across the lifespan (Schaie 2005).

#### 3.3.2 Cognitive Health

A concept which gained more and more interest in gerontopsychological research in the last few years is the concept of cognitive health. The term refers to individuals' ability to adapt their cognitive performance to changes in the environment and focuses on the ability to stabilize cognitive functioning. Whereas most existing cognitive ageing research focuses on the prediction of cognitive decline or on interventions aiming at improving impaired cognitive performance, cognitive health research examines which factors may support stable levels of cognitive functioning.

An important term in conjunction with cognitive health is plasticity. As healthy cognitive development is characterized by successful adaption to an individual's environment, successful adaption of a person in turn leads to behavioural as well as neuronal plasticity. Hence, the concept of cognitive health and cognitive plasticity are closely interconnected. Willis et al. (2009) define cognitive plasticity as individuals' latent cognitive potential or individuals' cognitive capacity under certain specified conditions. Since there is a close relationship between neuronal activation and cognition for specific cognitive abilities, cognitive plasticity should be observable in both neuronal as well as behavioural data. However, the exact relationship between them is still unclear. Some researchers have demonstrated that in older people there are only small or even negative effects between cognitive performance and the reductions in cortical volume (Rodrigue and Raz 2004). According to Stern (2002), for instance, cognitive plasticity can exist despite the fact that neuronal plasticity has been compromised (cognitive reserve).

In contrast to the passive models of brain reserve which see reserve as the result of brain size and synapses, the theory of active cognitive reserve states that the brain actively copes with or compensates for pathology. Concerning plasticity this means that the brain is able to utilize brain networks more efficiently or acquire new compensatory brain networks. This phenomenon has been observed in individuals with higher levels of intelligence and educational and occupational achievement. Whereas people with lower intelligence demonstrate functional deficits after brain damage, people in the same situation with a higher level of intelligence can maintain their performance level. This concept of cognitive reserve can be transferred to non-pathological ageing. Since the brain is subject to various age-associated decomposition processes, an active lifestyle can build up cognitive reserve, which allows long-term plasticity even in old age (Stern 2002).

## 3.3.3 Quality of Life

Quality of life (QOL) is increasingly suggested as the central outcome variable in research on health-improving or preventive interventions in old age (e.g. Garratt et al. 2002). This is based on the observation that objective improvements in resources, performances, and functioning often do not lead to similarly large improvements in levels of self-reported life satisfaction, wellbeing or QOL (e.g., Clark et al. 2012), and that low levels of resources alone do not necessarily motivate individuals to use available and affordable interventions and respite services (e.g., Martin et al. 2009).

Although by now a large number of instruments measuring QOL or contributing factors have been developed (see Ettema et al. 2005), there is still no firm consensus on the exact definition of QOL. The WHO attempt (The WHOQOL Group 1995) to define QOL as a broad, metadisciplinary construct encompassing medical, psychological, and sociological aspects is helpful in that it gathers different conceptual strands into a shared framework. However, such a broad definition does not clearly separate QOL from similar—but distinct—constructs such as life satisfaction (Diener et al. 1985) and wellbeing (Ring et al. 2007).

There are currently two main approaches to determine QOL in old age: (a) the sOOL approach to measure the subjective evaluation of an individual's overall life situation and QOL, and (b) the oQOL approach to infer QOL of an individual from the outside, e.g., by measuring health impairments. The former approach rests on the assumption that OOL is by definition a subjective state and, consequently, must be measured through subjective statements. Here, the reported sOOL is often understood to reflect the discrepancy between an individual's current life situation and some subjectively ideal or optimal life situation. Examples of such measures are the SWLS ("Satisfaction with Life Scale"; Diener et al. 1985), the SEIOoL-DW ("Schedule of Evaluation of Individual Quality of Life-Direct Weighting"; Hickey et al. 1996) or the EUROHIS-QOL (Power et al. 2005). The instruments differ in determining sOOL either on the basis of global life satisfaction items (SWLS), or, via domain-specific satisfaction items (EUROHIS-QOL, SEIQoL-DW). However, the type and amount of domains that are used to define sOOL (e.g., physical health, environment, social relationships, autonomy, or spirituality) depend on the particular instrument and the population to be examined, thus making direct comparisons between different instruments difficult.

The second approach, which uses objective measures of QOL, is based on the assumption that oQOL is higher, the better—or less impaired—the given resources of a person are (independent of any subjective judgement). This way, oQOL can be determined more reliably, without individual report biases, and without requiring a statement from the person whose oQOL is being measured, such as in the case of dementia. However, it hardly takes into account interindividual differences in the functionality of available resources to achieve individually meaningful goals. What is more, the combined measurement of resources or resource impairments, is often positively labelled "quality of life" when in fact it is no more than a combination of resource impairment measures.

The fQOL model (Martin et al. 2012) defines QOL as the integration of multiple subjective representations of the functionality of ones' resources. That is, it assumes that fQOL is higher, the more strongly individuals represent their resources as being functional to perform complex activities that serve individually central life or goal domains. This model can be distinguished from the existing approaches: First, despite using subjective assessments, these are not satisfaction judgements, but rather functionality judgements. That is, a person can have similar levels of sQOL with either high or low levels of objectively measured resources as long as the current levels of resources are represented as equally functional to achieve personally meaningful goals. If, for example, physical abilities are declining, one may no longer be able to run a farm to serve the goal of being close to nature, but one may be able to plant a small garden to achieve the same goal. If individuals manage to represent their physical abilities as equally functional to achieve the desired goal (and not to perform the same activity as before), their fQOL is stable.

#### 3.3.4 Individual Coping Strategies

Cognitive health and QOL of a person depend strongly on the personal and environmental resources and on individuals' ability to adapt to different environments and situations. One self-regulatory mechanism to achieve a successful and healthy personal development and adaption is the selective optimization with compensation (SOC) strategy (Baltes and Baltes 1990). Selection refers to the process by which individuals choose tasks that are of high individual importance and that match their abilities. It is furthermore subdivided into elective selection (ES) which is guided by preference or social norms and loss-based selection (LS) which refers to a shift in personal goals due to a loss of internal or external resources. This means that the process of selection leads to a narrowing of alternative options so that persons concentrate on a reduced range of achievable goals. Because of the loss of resources in old age, the number of achievable goals usually decreases with increasing age (Baltes 1997). To achieve a selected goal, persons have to optimize their strategies by acquiring, refining and deploying resources. Optimization can be realized through training, learning new skills and high motivation (Staudinger and Bowen 2010). Compensation refers to acquisition and utilization of alternative means to reach given goals and keep performance at desired levels in face of actual or anticipated decreases in resources (Marcoen et al. 2007). A correct utilization of the SOC strategy should lead to better health, successful ageing and improved relationship quality (Freund and Baltes 2002).

Another self-regulatory approach related to the SOC concept, but more specifically related to cognitive functioning is the concept of resource orchestration. It assumes that performance in complex cognitive tasks such as job performance or problem solving requires the use of multiple cognitive abilities to various degrees in the course of performing the task. It requires the dynamic orchestration and timing of multiple skills. Therefore, the maximum performance level in a specific ability is hardly related to performance in a complex behaviour and, thus, improvement in elementary abilities, a typical goal of cognitive interventions, is unlikely to lead to large improvements in the complex, integrated behaviour or to transfer. Interventions using this approach instead define individually meaningful goals, identify the relevant abilities and focus on improving the orchestration process itself, i.e., helping to identify goals, helping to identify relevant abilities, and optimizing decisions when to use particular strategies to achieve the best possible match between variable environmental demands and individual goals (Zöllig et al. 2010).

# **3.4** What Does Gerontopsychology Tell Us about the Current State of Europe?

The demographic trend of the next years and decades in the more developed regions of the world shows an increasing life expectancy with older adults being the fastest growing group of the population (Dlugosz 2011; UN 2009). Europe currently has the highest median age of the population compared to all other parts of the world (Wancata et al. 2003). This involves numerous challenges for the society, the pension insurance, and the health care systems. One of the biggest challenges is the increase of the prevalence of dementia. Dementia is a disease that causes people to lose their cognitive ability faster than it would occur during the normal ageing process. As a result, people lose their memory, and later also their physical functioning. Between 5.9 and 9.4 % of all individuals aged 65 and older in Europe currently suffer from dementia (Berr et al. 2005) compared to less than 0.1 % in younger individuals (Harvey et al. 2003). Consequently, there is an increase of the prevalence of dementia with advancing age (Jorm and Jolley 1998; Ritchie and Kildea 1995). On average, the estimated prevalence of dementia in the population aged 60 and over in Europe is currently 6.2 % (Alzheimer's Disease International 2010), 60–70 % of those patients suffering from Alzheimer's disease (Berr et al. 2005; Bickel 2000). This prevalence rate is comparable to those of other more developed regions like North America or Australia, but is higher than those of other regions like Asia or Africa (Alzheimer's Disease International 2010). This is not surprising, since the more developed regions are characterized by longer life expectancies. Therefore, the average prevalence rate in Europe reflects the high prevalence of countries in Western Europe (7.2 %), which also have the highest life expectancy, whereas the rates in Central Europe (4.7 %) or Eastern Europe (4.8 %) are lower.

Estimations for the year 2050 assume that the number of dementia diseases in Europe is going to double, and the number in less developed regions is going to more than triple (Alzheimer's Disease International 2010). Here it becomes important that the life expectancy as well as the prevalence of dementia in Europe and other more developed regions is already comparatively high and in contrast to these regions, the population of the less developed regions is generally going to increase in the next decades, whereas in Europe only those parts of the population aged 60 and more is going to increase and the other parts of the population are expected to decrease. As a result, the ratio of older to younger individuals, especially those at working-age, will considerably increase in Europe. The same also applies to the ratio of demented persons. Were there still 69.4 persons in working-age per one demented person in 2000, this ratio will decrease until 2050 to 21.1 persons (Wancata et al. 2003). Currently, dementia costs in Europe reach 238 billion USD annually, 210 billion in Western Europe alone (Alzheimer's Disease International 2010). Therefore, it is important to investigate and determine the factors that could contribute to a successful cognitive ageing process and people being able to maintain their functional level up to an old age without developing a dementia disease. On the other hand, it is just as important to arrange for adequate care provisions for those already suffering from dementia and to allow them a self-determined and independent life as long as possible. For that reason, we discuss how individual and environmental resources can contribute to maintaining this functional level and how an adaptation of the environment provides possibilities to live a mostly independent life despite dementia.

# **3.5 Current Debate in Gerontopsychology: Can We Stop Dementia?**

The process of normal ageing generally involves a decline in cognitive abilities, but this does not imply that eventually everyone is losing his or her cognitive abilities or developing dementia. The majority of older adults are able to maintain their functional level up to very old age. To understand why some people suffer from dementia whereas others keep a functional level despite some losses, one must answer the question which individual or environmental resources may support successful cognitive ageing without developing dementia or help to compensate in case some cognitive abilities decrease. Although there are declines in many physical or cognitive resources, social resources and cognitive resources such as knowledge or strategic skills may increase with age. What is more, most resources can be improved through training interventions (Martin et al. 2011). When concerned with cognitively healthy ageing, the focus should, therefore, be on identifying these resources, the way they interact, and the factors that could contribute to strengthen them. Only this way is it possible to determine how the environment can be adapted to be adequate for different states of cognitive health or impairment.

#### 3.5.1 Individual and Environmental Resources

Which are the specific resources and factors and how could they be influenced in a positive way? Clearly, cognitive resources are most relevant and engaging in cognitively demanding tasks should therefore represent one of the most promising strategies. Indeed, it has been shown that cognitive and intellectual stimulation seems to contribute to a cognitively healthy ageing process and prevent dementia (Qiu et al. 2001; Verghese et al. 2003; Wang et al. 2002; Wilson et al. 2002). Education itself is often reported to have a protective effect on dementia (Fratiglioni et al. 2007; Qiu et al. 2001). However, it is not clear if education is able to prevent dementia diseases or if educated people only are clinically diagnosed at a later date because of their capabilities and strategies to compensate for losses for some time. On the other hand, there are also physical conditions such as the absence of diabetes or even nutritional factors that are reported to have a protective effect on dementia (Fratiglioni et al. 2007; Ritchie et al. 2010), just as socially and physically stimulating activities (Fratiglioni et al. 2007; Laurin et al. 2001). However, most of the reported effects are based on retrospective data, whereas causal effects require intervention studies. There are a number of cognitive training intervention studies that could show benefits of training, mainly on the targeted cognitive ability in healthy older adults (Willis et al. 2006). Cognitive trainings are supposed to have a positive effect not only in cognitively healthy older adults but also in risk groups or individuals with mild cognitive impairment (Belleville 2008; Mowszowski et al. 2010) and even in patients already suffering from dementia or Alzheimer's disease (Buschert et al. 2010). In addition to cognitive training interventions, a series of studies investigated the effect of physical training interventions on cognitive abilities and the progress of dementia. In general, they could show a positive effect of physical trainings on cognitive abilities in older adults (Colcombe and Kramer 2003). Even in individuals with cognitive impairment or dementia physical training improves cognitive function (Heyn et al. 2004), and, therefore, may protect against cognitive decline and dementia (Rolland et al. 2008).

Most training interventions involve a single target domain such as for example physical or cognitive ability. However, it is well established that global cognitive stimulation is more effective than training of specific cognitive functions (Sitzer et al. 2006) and that enriched environments allowing to engage in activities that activate different mental, physical or social skills has been shown to be more beneficial than in one of those activities alone (Karp et al. 2006). Moreover, strengthening of different resources could allow individuals to better adapt and compensate in case of losses in particular domains. Unfortunately, there are only few studies that have investigated the effect of combining cognitive and physical trainings. They have reported a potential long-term effect of combined training interventions on cognitive performance in healthy older adults that is superior to the single trainings (Fabre et al. 2002).

Although there are some additional benefits when training different resources separately, to gain an optimal effect on the functional level of older adults it is not sufficient to improve all these resources separately. In daily life, multiple cognitive and motor resources are often engaged simultaneously. Situations involving the simultaneous recruitment of cognitive and physical resources are usually more difficult to manage for older adults (Theill et al. 2011). Therefore, to maintain or even improve the global functional level, one would have to train different resources simultaneously for the training to correspond with demands in everyday life (for an example see Schaefer and Schumacher 2011). Future research in this area of simultaneous multiple ability trainings that can be integrated into everyday life will be most informative about interventions that may help to maintain high levels of functioning and by definition protect against declines or dementia.

We have argued that cognitive health and Quality of Life as concepts of functional competence are complementary to single ability deficit-oriented models of ageing. Both assume that active ageing can orchestrate the stability of important goal functions of health, productivity, and wellbeing, and that their individual and subjective representation of the goal-relatedness of their behaviour drives the adaptive use of individual and social resources. Evidence for the effectiveness of interventions aiming at simultaneously supporting multiple resources that are dynamically related to complex performance and the stabilization of cognitive health and Quality of Life is now needed to develop interventions that can truly be considered relevant for the everyday lives of ageing individuals.

### 3.5.2 Adaptation of the Environment

The previous section has demonstrated that even patients with dementia can benefit from cognitively, physically or socially stimulating activities, as they could be able to positively influence the progress of disease. Strengthening these resources should, therefore, be a substantial part of treatment, since patients with dementia are especially at risk to reduce their activities and become socially isolated. But older adults with dementia also have specific housing and care needs due to their physical and cognitive status (Van Hoof and Kort 2009). Depending on the available resources, the environment has to be adapted so that an optimal person-environment fit provides adequate care and allows a self-determined and independent life for as long as possible. However, for an optimal person-environment fit one always has to consider the individual resources and goals of a person concerned, such as general mobility or the current social context situation, but also the presence of other physical or mental diseases that require treatment and care. Only with an individual adaptation a maximum wellbeing of patients can be guaranteed. Which are the care provisions in Europe and do they meet the requirements for an optimal adaptation of the environment?

There are huge differences in the offers for care provisions depending on the country across Europe. On the one hand, there are countries especially in Southern Europe like Greece, Italy or Spain, where the family predominantly provides care (Van Hoof et al. 2009). In this situation, the family usually makes the adaptation of the environment by supporting and taking care of their relatives suffering from dementia. The patients are therefore less frequently institutionalised, but in turn they are often not able to benefit from professional care and the situation could be a burden for the relatives and, as a consequence, for the patients as well. On the other hand, in most of the Western European countries, a collective responsibility exists for people who require intensive forms of care (Van Hoof et al. 2009). Here, although dementia is the major cause for institutionalisation in old age (Aguero-Torres et al. 2001), in the Western European countries the majority of patients with dementia are still cared for at home (De Vugt et al. 2006). Most European governments promote the construction of lifetime homes and different forms of non-institutional living in the own dwelling or assisted-living facilities (Van Hoof et al. 2009). However, in many cases institutional care is inevitable and the goal should then be to arrange these institutions as homelike as possible. One possibility for such care provisions are small-scale living or group living arrangements which can be found in the Netherlands, Belgium, France, Germany, Sweden, or the United Kingdom (Verbeek et al. 2009). These accommodations are characterized by a comparatively small size of six to eight people, and

provide 24 h-care and surveillance by one or two staff members (Van Hoof et al. 2009). Some of the rooms are shared such as the kitchen, living room, and in most cases the sanitary units, whereas there are also private areas with patients' own furniture and goods (Van Hoof et al. 2009). Such living arrangements are advantageous because they provide a homelike living community in combination with intensive professional care and treatment, which can be optimally adapted to the individual needs of the patients. Therefore, care provision should generally provide the adaptation of the environment to the individual needs and available resources of the patients, which in turn leads to different forms of interventions and care, but always support independence and a maximum perceived control for the person concerned.

#### **Check Your Progress: A Quiz on Gerontopsychology**

Question 3.1: How is the kind of intelligence called that is related to speed of processing and reasoning?

- (a) Advanced intelligence
- (b) Crystallized intelligence
- (c) Crystalline intelligence
- (d) Fluid intelligence
- (e) Soft intelligence

Question 3.2: How does intelligence usually change when people age?

- (a) Fluid intelligence stays the same, crystallized intelligence declines
- (b) Fluid intelligence increases, crystallized intelligence declines
- (c) Fluid intelligence declines, crystallized intelligence declines
- (d) Fluid intelligence declines, crystallized intelligence remains the same
- (e) Fluid and crystallized intelligence remains the same

Question 3.3: Which of the following is *not* a reason for age-related changes in intelligence?

- (a) Sensory function decreases, which impacts cognitive function
- (b) Vitamin deficiencies impact cognitive functioning
- (c) Older people lose some of their cognitive processing resources
- (d) All cognitive process slow down with age
- (e) Older people suppress irrelevant information less effectively

Question 3.4: What is quality of life?

- (a) It is the same as wellbeing
- (b) It is the same as life satisfaction
- (c) It describes the absence of diseases
- (d) It describes a state where older people can do what they consider important
- (e) It describes a state where older people can do everything they also could do as a youth

Question 3.5: Which of the following does *not* help to prevent or balance out dementia? (multiple answers possible)

- (a) Do mentally demanding things
- (b) Do sports regularly
- (c) Drink enough water
- (d) Get help from family members
- (e) Spend time in warm climates

#### References

- Aguero-Torres, H., Von Strauss, E., Viitanen, M., Winblad, B., & Fratiglioni, L. (2001). Institutionalization in the elderly: The role of chronic diseases and dementia. Cross-sectional and longitudinal data from a population-based study. *Journal of Clinical Epidemiology*, 54(8), 795–801.
- Alzheimer's Disease International (2010). World Alzheimer Report 2010. London, United Kingdom.
- Baltes, P. B. (1997). On the incomplete architecture of human ontogeny. Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist*, 52(4), 366–380.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). Cambridge: Cambridge University Press.
- Baltes, P. B., & Schaie, K. W. (1976). On the plasticity of intelligence in adulthood and old age: Where Horn and Donaldson fail. American Psycholologist, 31(10), 720–725.
- Belleville, S. (2008). Cognitive training for persons with mild cognitive impairment. *International Psychogeriatrics*, 20(1), 57–66.
- Berr, C., Wancata, J., & Ritchie, K. (2005). Prevalence of dementia in the elderly in Europe. European Neuropsychopharmacology, 15(4), 463–471.
- Bickel, H. (2000). Demenzsyndrom und Alzheimer Krankheit: Eine Schätzung des Krankenbestandes und der jährlichen Neuerkrankungen in Deutschland [Dementia syndroms and yearly incidence in Germany]. Gesundheitswesen, 62, 211–218.
- Borella, E., Carretti, B., Riboldi, F., & De Beni, R. (2010). Working memory training in older adults: Evidence of transfer and maintenance effects. *Psychology and Aging*, 25(4), 767–778.
- Buschert, V., Bokde, A. L., & Hampel, H. (2010). Cognitive intervention in alzheimer disease. *Neurology*, 6(9), 508–517.
- Clark, F., Jackson, J., Carlson, M., Chou, C., Cherry, B. J., Jordan-Marsh, M., Knight, B. G., Mandel, D., Blanchard, J., Granger, D.A., Wilcox, R.R., Lai, M.Y., White, B., Hay, J., Lam, C., Marterella, A., & Azen, S.P. (2012). Effectiveness of a lifestyle intervention in promoting the well-being of independently living older people: Results of the well elderly 2 randomised controlled trial. *Journal of Epidemiology and Community Health*, 66(9), 782–790.
- Colcombe, S., & Kramer, A. F. (2003). Fitness effects on the cognitive function of older adults: A meta-analytic study. *Psychological Science*, 14(2), 125–130.
- Craik, F. I. M., & Byrd, M. (1982). Aging and cognitive deficits: The role of attentional resources. In F. I. M. Craik & S. Trehub (Eds.), *Aging and cognitive processes* (pp. 191–211). New York: Plenum Press.
- De Vugt, M. E., Jolles, J., van Osch, L., Stevens, F., Aalten, P., Lousberg, R., et al. (2006). Cognitive functioning in spousal caregivers of dementia patients: Findings from the prospective MAASBED study. Age and Ageing, 35(2), 160–166.

- Diener, E., Emmons, R. A., Larson, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49(1), 71–75.
- Dlugosz, Z. (2011). Population ageing in Europe. Proceedia Social and Behavioral Sciences, 19, 47–55.
- Ettema, T. P., Dröes, R.-M., de Lange, J., Mellenbergh, G. J., & Ribbe, M. W. (2005). A review of quality of life instruments used in dementia. *Quality of Life Research*, 14(3), 675–686.
- Fabre, C., Chamari, K., Mucci, P., Masse-Biron, J., & Prefaut, C. (2002). Improvement of cognitive function by mental and/or individualized aerobic training in healthy elderly subjects. *International Journal of Sports Medicine*, 23(6), 415–421.
- Fratiglioni, L., Winblad, B., & Von Strauss, E. (2007). Prevention of Alzheimer's disease and dementia. Major findings from the Kungsholmen Project. *Physiology and Behavior*, 92(1–2), 98–104.
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82(4), 642–662.
- Garratt, A., Schmidt, L., Mackintosh, A., & Fitzpatrick, R. (2002). Quality of life measurement: Bibliographic study of patient assessed health outcome measures. *British Medical Journal*, 324, 1–5.
- Glisky, E. L. (2007). Changes in cognive function in human aging. In D. R. Riddle (Ed.), *Brain aging: Models, methods, and mechanisms* (pp. 3–20). Boca Raton: CRC Press.
- Harvey, R. J., Skelton-Robinson, M., & Rossor, M. N. (2003). The prevalence and causes of dementia in people under the age of 65 years. *Journal of Neurology, Neurosurgery and Psychiatry*, 74(9), 1206–1209.
- Hasher, L., & Zacks, R. T. (1988). Working memory, comprehension, and aging: A review and a new view. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 22, pp. 193–225). San Diego, SA: Academic Press.
- Hendrie, H.C., Albert, M.S., Butters, M.D., Gao, S., Knopman, D.S., Launer, L.J., & Yaffe, K. (2005). Report from the critical evaluation study committee of the cognitive and emotional health project. http://trans.nih.gov/cehp/CriticalEvaluationStudyReport.pdf. Accessed on 16 June 2012.
- Heyn, P., Abreu, B. C., & Ottenbacher, K. J. (2004). The effects of exercise training on elderly persons with cognitive impairment and dementia: A meta-analysis. Archives of Physical Medicine and Rehabilitation, 85(10), 1694–1704.
- Hickey, A. M., Bury, G., O'Boyle, C. A., Bradley, F., O'Kelly, F. D., & Shannon, W. (1996). A new short form individual quality of life measure (SEIQoL-DW): Application in a cohort of individuals with HIV/AIDS. *British Medical Journal*, 313(7048), 29–33.
- Horn, J. L., & Cattell, R. B. (1967). Age differences in fluid and crystallized intelligence. Acta Psychologica, 26(2), 107–129.
- Jorm, A. F., & Jolley, D. (1998). The incidence of dementia: A meta-analysis. *Neurology*, 51(3), 728–733.
- Karp, A., Paillard-Borg, S., Wang, H. X., Silverstein, M., Winblad, B., & Fratiglioni, L. (2006). Mental, physical and social components in leisure activities equally contribute to decrease dementia risk. *Dementia and Geriatric Cognitive Disorders*, 21(2), 65–73.
- Laurin, D., Verreault, R., Lindsay, J., MacPherson, K., & Rockwood, K. (2001). Physical activity and risk of cognitive impairment and dementia in elderly persons. *Archives of Neurology*, 58(3), 498–504.
- Lindenberger, U., & Baltes, P. B. (1997). Intellectual functioning in old and very old age: Crosssectional results from the Berlin Aging Study. *Psychology and Aging*, 12(3), 410–432.
- Marcoen, A., Coleman, P. G., & O'Hanlon, A. (2007). Psychological ageing. In J. Bond, S. M. Peace, F. Dittman-Kohli, & G. Westerhof (Eds.), *Ageing in Society* (3rd ed., pp. 38–67). London: Sage.
- Martin, M., Clare, L., Altgassen, A.M., Cameron, M.H., & Zehnder, F. (2011). Cognition-based interventions for healthy older people and people with mild cognitive impairment. Cochrane Database of Systematic Reviews. http://onlinelibrary.wiley.com/doi/10.1002/14651858. CD006220.pub2/pdf/standard. Accessed 16 June 2012.

- Martin, M., Peter-Wight, M., Braun, M., Hornung, R., & Scholz, U. (2009). The 3-phase model of dyadic adaptation to dementia: Why it might sometimes be better to be worse. *European Journal of Aging*, 6(4), 291–301.
- Martin, M., Schneider, R., Eicher, S., & Moor, C. (2012). The functional quality of life (fQOL) model: A new basis for Quality of life-enhancing interventions in old age. *Journal of Gerontopsychology and Geriatric Psychiatry*, 25(1), 33–40.
- Mowszowski, L., Batchelor, J., & Naismith, S. L. (2010). Early intervention for cognitive decline: Can cognitive training be used as a selective prevention technique? *International Psychogeriatrics*, 22(4), 537–548.
- Park, D. C. (1999). Cognitive aging: A primer. Philadelphia, PA: Psychology Press.
- Park, D. C., Smith, A. D., Lautenschlager, G., Earles, J. L., Frieske, D., Zwahr, M., et al. (1996). Mediators of long-term memory performance across the life span. *Psychology and Aging*, 11(4), 621–637.
- Power, M., Quinn, K., Schmidt, S., & the WHOQOL-OLD Group. (2005). Development of the WHOQOL-old module. *Quality of Life Research*, 14(10), 2197–2214.
- Qiu, C., Backman, L., Winblad, B., Aguero-Torres, H., & Fratiglioni, L. (2001). The influence of education on clinically diagnosed dementia incidence and mortality data from the Kungsholmen Project. Archives of Neurology, 58(12), 2034–2039.
- Ring, L., Höfer, S., McGee, H., Hickey, A., & O'Boyle, C. A. (2007). Individual quality of life: Can it be accounted for by psychological or subjective well-being? *Social Indicators Research*, 82(3), 443–461.
- Ritchie, K., Carriere, I., Ritchie, C. W., Berr, C., Artero, S., & Ancelin, M. L. (2010). Designing prevention programmes to reduce incidence of dementia: Prospective cohort study of modifiable risk factors. *BMJ*, 341, 1–9.
- Ritchie, K., & Kildea, D. (1995). Is senile dementia "age-related" or "ageing-related"?-evidence from meta-analysis of dementia prevalence in the oldest old. *Lancet*, 346(8980), 931–934.
- Rodrigue, K. M., & Raz, N. (2004). Shrinkage of the entorhinal cortex over five years predicts memory performance in healthy adults. *The Journal of Neuroscience*, 24(4), 956–963.
- Rolland, Y., Abellan van Kan, G., & Vellas, B. (2008). Physical activity and Alzheimer's disease: From prevention to therapeutic perspectives. *Journal of the American Medical Directors Association*, 9(6), 390–405.
- Salthouse, T. A. (1991). *Theoretical perspectives on cognitive aging*. Hillsdale: L. Erlbaum Associates.
- Salthouse, T. A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review*, 103(3), 403–428.
- Schaefer, S., & Schumacher, V. (2011). The interplay between cognitive and motor functioning in healthy older adults: Findings from dual-task studies and suggestions for intervention. *Gerontology*, 57(3), 239–246.
- Schaie, K. W. (1974). Translations in gerontology–from lab to life. Intellectual Functioning. American Psychologist, 29(11), 802–807.
- Schaie, K. W. (2005). Longitudinal studies. In K. W. Schaie (Ed.), Developmental influences on adult intelligence: The Seattle longitudinal study (pp. 112–132). New York: Oxford University Press.
- Sitzer, D.I., Twamley, E.W., & Jeste, D.V. (2006). Cognitive training in Alzheimer's disease: A meta-analysis of the literature. Acta Psychiatrica Scandinavica, 114(2), 75–90.
- Staudinger, U. M., & Bowen, C. E. (2010). Life-Span perspectives on positive personality development in adulthood and old age. In M. E. Lamb & A. M. Freund (Eds.), *The handbook of life-span development: Social and emotional development* (Vol. 2, pp. 254–297). New Jersey: Wiley.
- Stern, Y. (2002). What is cognitive reserve? Theory and research application of the reserve concept. *Journal of the International Neuropsychological Society*, 8(3), 448–460.
- Theill, N., Martin, M., Schumacher, V., Bridenbaugh, S. A., & Kressig, R. W. (2011). Simultaneously measuring gait and cognitive performance in cognitively healthy and cognitively impaired older adults: The Basel motor-cognition dual-task paradigm. *Journal of the American Geriatrics Society*, 59(6), 1012–1018.

- The WHOQOL Group. (1995). The World Health Organisation quality of life assessment (WHOQOL). Position paper from the World Health Organisation. *Social Science and Medicine*, *41*(10), 1403–1409.
- United Nations (2009). World population prospects: The 2008 revision, highlights. Working Paper no. ESA/WP.210. New York: United Nations.
- Van Hoof, J., & Kort, H. S. M. (2009). Supportive living environments. A first concept of a dwelling designed for older adults with dementia. *Dementia*, 8(2), 293–316.
- Van Hoof, J., Kort, S. M. H., & van Waarde, H. (2009). Housing and care for older adults with dementia: A European perspective. *Journal of Housing and the Built Environment*, 24(3), 369–390.
- Verbeek, H., van Rossum, E., Zwakhalen, S. M., Kempen, G. I., & Hamers, J. P. (2009). Small, homelike care environments for older people with dementia: A literature review. *International Psychogeriatrics*, 21(2), 252–264.
- Verghese, J., Lipton, R. B., Katz, M. J., Hall, C. B., Derby, C. A., Kuslansky, G., et al. (2003). Leisure activities and the risk of dementia in the elderly. *The New England Journal of Medicine*, 348(25), 2508–2516.
- Wancata, J., Musalek, M., Alexandrowicz, R., & Krautgartner, M. (2003). Number of dementia sufferers in Europe between the years 2000 and 2050. European Psychiatry: The Journal of the Association of European Psychiatrists, 18(6), 306–313.
- Wang, H. X., Karp, A., Winblad, B., & Fratiglioni, L. (2002). Late-life engagement in social and leisure activities is associated with a decreased risk of dementia: A longitudinal study from the Kungsholmen project. *American Journal of Epidemiology*, 155(12), 1081–1087.
- Willis, S. L., Schaie, K. W., & Martin, M. (2009). Cognitive plasticity. In V. Bengtson, M. Silverstein, & N. Putney (Eds.), *Handbook of theories of aging* (pp. 295–322). New York: Springer Publishing.
- Willis, S.L., Tennstedt, S.L., Marsiske, M., Ball, K., Elias, J., Mann Koepke, K., Morris, J.N., Rebok, G.W., Unverzagt, F.W., Stoddard, A.M., Wright, E., for the ACTIVE Study Group (2006). Long-term effects of cognitive training on everyday functional outcomes in older adults. *Journal of the American Medical Association*, 296(23), 2805–2814.
- Wilson, R. S., Mendes De Leon, C. F., Barnes, L. L., Schneider, J. A., Bienias, J. L., Evans, D. A., et al. (2002). Participation in cognitively stimulating activities and risk of incident Alzheimer disease. *The Journal of the American Medical Association*, 287(6), 742–748.
- Zöllig, J., Eschen, A., & Martin, M. (2010). Lebenslanges Lernen: Vom Gedächtnistraining zum Beratungsansatz des Memory Management [Lifelong learning: From memory training to memory management]. In A. Frick, et al. (Eds.), *Gedächtnistraining: Theoretische und praktische Grundlagen [Memory traiing: Theoretical and practical foundations]* (pp. 4–12). Heidelberg: Springer.

#### **Recommended Readings**

- Ettema, T. P., Dröes, R.-M., de Lange, J., Mellenbergh, G. J., & Ribbe, M. W. (2005). A review of quality of life instruments used in dementia. *Quality of Life Research*, 14(3), 675–686. *This article gives an overview of the most relevant instruments to measure quality of life in old age.*
- Willis, S. L., Schaie, K. W., & Martin, M. (2009). Cognitive plasticity. In V. Bengtson, M. Silverstein, & N. Putney (Eds.), *Handbook of theories of aging* (pp. 295–322). New York: Springer Publishing.

This book chapter provides an overview of the various concepts of neural and behavioural plasticity.

## Chapter 4 Social Gerontology: Older People and Everybody Else

#### **Christina Victor**

## 4.1 Summary and Learning Goals

Social gerontology studies the social contacts of older people. It studies, for example, how older people interact with their kin and friends as well as which roles they play in society. Both, social interaction and social roles, change as populations age. Moreover, social interaction and social roles vary across Europe. This chapter describes and explains such variation. Moreover, it discusses how older people are affected by the process of globalization, meaning the interconnectedness of countries because of increased trade, the creation of multi- and transnational organizations, travel, migration and cultural exchange

After reading this chapter, you should be able to:

- Explain the differences between the macro-, meso-, and micro-level perspectives on old age
- Name and explain at least three theories about social changes with old age
- Describe how social contacts and social engagement varies across Europe
- Discuss how globalization affects older people

## 4.2 What is Social Gerontology?

Social gerontology involves a range of disciplines including the social sciences and arts and humanities in studying the social context of ageing, the impact of population ageing upon society and the analysis, evaluation and review of policies and services/interventions that address individual/societal aspects of ageing. Social gerontology focuses upon three broad areas of activity thus:

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- The macro-level perspective: here the emphasis is upon examining the social context of ageing at a societal level. Our focus from this perspective is with enumerating and articulating the demographic, structural, cultural and economic transformations resultant from the absolute and relative increase in the numbers of older people. The predominant focus of investigation has been upon the societal effects of population ageing but is developing and broadening the questions asked by addressing important global trends such as globalisation and their intersection with population ageing. Focussing upon the specific example of the social relationships of older people, a societal macro-level perspective would focus upon the implications of growing numbers of older people and how to promote social engagement and inter-generational relationships;
- The meso-level analysis emphasises the importance of the social context and social structures for the experience of ageing and later life for groups and individuals. Key questions from this perspective relate to the influence of gender, class and ethnicity on the experience of later life and there is an underlying theme of revealing the profound inequalities in the experience of ageing and how these structural dimensions intersect to form the framework within which the realities of later life are experienced by older people. Illustrative of this approach towards studying social relationships is the work of Dykstra and Fokkema (2011) examining relationships between older people and their adult children, and the crossnational study of loneliness in Europe reported by Fokkema et al. (2012);
- The micro-level approach emphasises the individual level experience of old age and answers questions relating to the meaning and experience of ageing and being an 'older person'. Here researchers focus upon questions of experience, meaning, social roles and interpretation. From this perspective the focus of investigation, in terms of understanding social relationships in later life, would be upon elucidating the older person's understanding of the meaning of, for example, loneliness (see Victor et al. 2009) or examining the value and meaning attributed by older people to different relationships and different modes of social engagement such as computer mediated, phone or direct contacts.

#### 4.3 Central Theories and Concepts in Social Gerontology

Before considering specific examples with regard to social exclusion and older people in Europe we first need to consider what is meant by theory within the context of social gerontological research. What is theory and how useful is it in gerontology? Of course the term theory has a number of differing connotations depending upon the context and field of study. At the most basic level theory and theoretical propositions help us to explain a series of empirical findings or observations. However, theory and the development of theoretical perspectives within the field of social gerontology has been perceived as problematic. Baars et al. (2006: 10) note that "Despite its explosive development over the last half-century, social gerontology has been characterized by an imbalance between the

accumulation of data and the development of theory" and further observe that "researchers interested in aging have relentlessly collected mountains of data, often driven by narrowly defined, problem-based questions and with little attention to basic assumptions or larger theoretical issues."

Despite these rather negative comments there are a broad range of theoretical perspectives in gerontology and Bengtson et al. (2008) provide a comprehensive overview. Here we are concerned with the key approaches used in the social gerontological research and which have influenced the empirical focus in gerontology and which have been most influential. Theories may be classified in a number of different ways and there is a range of typologies that may be applied. For this brief review we consider theories in terms of the level at which they operate-the micro-level 'individually located' theories and those operating at a more macro level using the example of social relationships by older people within Europe to illustrate their key points. Of course social theories of ageing do not exist in a vacuum. As Powell (2005, 2006) notes social theories reflect the concerns, norms and values of the historical period in which they were generated and we can see this in some of the early theorising about age in the gerontological arena.

#### 4.3.1 Disengagement, Activity, and Continuity Theory

Focussing upon theories of age that operate at the individual level, the theories of ageing that arose in the early years of gerontology, disengagement and activity theory derived broadly from the functionalist school of sociology. The functionalist perspective conceived society as mirroring a biological entity such that all of the component parts such as the family, work, and education were interrelated to produce a stable and ordered society. This dominant paradigm, combined with a concern about population ageing as a social problem, produced a series of interlinked theories: disengagement, activity and continuity theories. These theories have both an emphasis upon explaining social relationships in later life but also seem to offer a roadmap of how people should age. Disengagement theory was first articulated in terms of disengagement from the workplace and other social relationships. It was seen as a natural and inevitable process which benefited society as it facilitated a smooth transfer of roles across generations and for individuals as they prepared for the ultimate withdrawal of death. This perspective suggests in terms of social relationships a triple loss for the individual: a loss of social roles, a reduction of social contacts and relationships and a reduction of engagement with social values. However, whilst the focus is upon examining specific social groups these theories have implications at the level of the individual and their experience of ageing and later life. So, in terms of social relationship, disengagement favours older people withdrawing from social engagement and implies that isolation is a manifestation of disengagement theory in action. However, whilst we may have empirical data describing reduced social engagement with increasing age the inevitability, universality and essentially adaptive nature of these changes, criteria that need to be meet if we are support the notion of disengagement theory, remains unproven.

Of course there is a range of critiques of this perspective. At the humane level disengagement seems to validate the neglect of the very real problems of older people and support indifference towards the plight of the lonely and isolated. There is an implicit ageist devaluing of the importance of older people in society and a devaluing of their contribution in society. Activity theory is usually presented as a response to the negativity implicit within disengagement theory, although the initial work predates the work of the disengagement theorists. Activity theory proffers the maintenance of roles and social relationships as the key to a successful old age and posits that new roles and activities should be adopted to compensate for those 'lost' through retirement or other transitions such as widowhood. Thus, from this perspective, we would see the maintenance of social relationships in later life as central to a successful old age. This perspective is, perhaps, the first contemporary theory to promote the now almost ubiquitous idea of 'successful' ageing which has gained considerable prominence in recent years but both perspectives are united by a highly prescriptive approach towards how people should age and experience later life. Continuity theory is a much less prescriptive and emphasises that in growing older individuals will seek to preserve the activities and social relationships acquired over a lifetime and that any changes will be adaptive and incremental. Thus whilst both disengagement and activity theory suggest that successful ageing is achieved by movement in a single direction, continuity theory is more adaptive and offers the potential for the loss of some forms of activity, the retention of others and the possibility for new activities.

#### 4.3.2 Critical Gerontology

A key critique of these functionalist theories was their failure to engage with the influence of key social structures such as age, class, gender and ethnicity in shaping the experience of ageing and later life; do not focus upon the experiences of individuals nor often attribute them with any agency. Thus in terms of explaining the patterns of social engagement illustrated by older people, the functionalists did not examine how factors such as class and material resources may promote/limit opportunities for social interaction. There is some limited evidence that material resources, independent of other factors, are associated with both loneliness and isolation. Within a British context, older people themselves articulate how lack of resources inhibits social engagement (Victor et al. 2009). Contemporary theories have attempted to address these limitations at a range of levels. Critical gerontology has been an influential school developing from the notions that old age is socially constructed generated by interactions with their social context namely individuals, organisations and institutions and which are constrained by socio-structural factors such as class, race and gender. One of the most influential

theories within the critical gerontology was the 'political economy' of old age which sought to understand the position of older people and the experience of old age as it related to advanced capitalist society (see Estes et al. 2003). A key facet of this work has been to expose the heterogeneous nature of old age and later life compared with the universalist perspective characteristic of functionalism. The marginalisation of older people is explained by their lack of social value resultant from inequalities in the distribution of power and institutional policies such as retirement that create dependency and poverty. Thus the critical gerontology encompasses a range of perspectives on power relations in influencing later life of which feminism is one factor of key importance (Estes et al. 2003). For example age-relations are experienced through a gendered lens as, indeed they are through race and indeed gerontologists need to adopt the ideas of intersectionality in that individuals experience old age as a combination of identities based around class, gender and ethnicity.

A critique of critical gerontology has focussed upon the over-emphasis upon social class at the expense of other aspects of social differentiation and the lack of agency and autonomy ascribed to older people by such theories. This observation applies also to the functionalists who did not actively engage with the experience of ageing or fully articulate the meaning and interpretation of these by older people. Thus there is a range of individual level theoretical formulations that focus upon meaning and interpretation in old age and later life but which are not specific to this phase of life including exchange, constructivist and interactionist and others, from the psycho-dynamic traditions we have the theories of gerotranscendence as a form of personal integration and theories of adult development (see Bengtson et al. 2008). Whilst these intense detail of these approaches offers a quantitatively based approach of, for example, examining social relationships such approaches often fail to locate micro-processes of social engagement within the wider macrosocial context and fail to take adequate account of power and power relationships. Certainly Baars et al. (2006) argue that understanding macro-level power relationships is a pre-requisite to understanding the experience of ageing at the level of the individual. However, such micro-level perspectives are not in themselves fully enabled to explain the experiences of old age because of their relative lack of engagement with issues of class, race and gender.

#### 4.3.3 The Lifecourse Perspective

The notion of the lifecourse is one of the oldest and most enduring of all our conceptual frameworks concerning ageing and has been important in the development of gerontological theorising and frameworks for analysis. It is a perspective that is embedded within a range of academic traditions and which has several interpretations. Grenier (2012) differentiates between the personological approach and the institutional which focuses more upon later life and which looks at the lifecourse as a foundation for social organisation. At its most straightforward the lifecourse consists of a series of stages (or social roles) which individuals pass through as they age. Usually but not always, some form of significant event usually marks the transition from one stage or role to the next and the life course has become increasingly differentiated into smaller segments with the emergence of the subgroups of 'adolescence', 'pre-school' and 'middle age' as distinct phases and the more recent distinction between the third and fourth ages. However, the lifecourse is not a single entity but consists of several different spheres such as education, occupation and family dimensions. In understanding the lifecourse we need to distinguish and analysis three different types of time: historical time, which defines the temporal context; biological time and social time which relates to the definition, expectation and meaning that is attributed to the different stages of life. These different dimensions inter-relate to produce a pattern of lifestages that is historically and culturally distinct. The lifecourse perspective can highlight how cumulative patterns of advantage and disadvantage can influence the experience of ageing and later life. Thus we attempt to understand social engagement in later life within the framework of the lifecourse of individuals in terms of their personal preferences, the opportunities offered by their cultural and historical context and the material/social advantages (or disadvantages) acquired over a lifetime. Whilst there have been some attempts to use life course approaches to understand health in later life this approach is much rarer in terms of understanding social relationships and how the quantity and quality of patterns of social interaction evolve over the life course

# 4.4 What Does Social Gerontology Tell Us about the Current State of Europe?

Individuals do not grow older in isolation from the rest of society. Rather, ageing occurs within a social context ranging from the micro-scale of the individual; the meso-level of community and neighbourhood based relationship and, increasingly, the macro-level of society and an increasingly globalised world. In understanding social engagement we would argue that this is best understood within a life course perspective and that it is shaped by the influence of historical and cultural time and by structural factors such as class, gender and ethnicity.

The meaning and impact of the constraints operating upon the older adult are highly dependent upon the social environment in which the individual encounters them. Thus, regardless of the specific aspect under review, ageing and later life is not a homogeneous experience which affects every individual within the same society in a monolithic fashion. All 'old people' are not alike and pre old-age characteristics such as class, ethnicity and gender continue to exert a strong influence across the life course. We all bring to the experience of old age access to various resources; material, health and social and these are strongly influenced by our experiences prior to 'old age'. Indeed with the development of the ideas of 'successful ageing' (Rowe and Kahn 1997) the importance of the social context

for the shaping of the experience of old age have assumed greater prominence. These authors argue that successful ageing is defined by both longevity and quality of life and that these are prompted by the interaction of three sets of factors: social engagement/participation; reduction of disease and promotion of high levels of physical and mental functioning. Thus, the focus of this empirical section of the chapter is upon presenting an overview of the social integration and social exclusion of older people within European societies. This section serves to fulfill two key functions. We present an overview of the social engagement of older people across Europe to both contribute to the understanding of later life and to illustrate the importance of the social context in shaping the experience of old age and later life.

In common with other domains of gerontological research, terms such as social engagement, social integration and social exclusion are often used interchangeably and without clear definitions. In this chapter we focus upon social inclusion which is defined as being the obverse of social exclusion. In considering social engagement of older people across Europe we first look at social relationships within the family; then with the wider network to include family, friends and neighbours as well as participation in civic and other activities and conclude by looking at the 'pathological' elements of social relationships: loneliness and isolation. In each of these examples the importance of the socio-cultural context in mediating and contextualising these experiences is paramount.

## 4.4.1 An Overview of Social Engagement of Older People across Europe

Are social relationships in later life experienced in the same frequency and type by people of similar ages across Europe? Data from the European Social Survey offer one data source from which we can make direct comparisons across a range of European countries in terms of frequency of contact with friends, relatives and colleagues. This survey also provides a question which enables participants to evaluate their levels of social contact in comparison to others of the same age; the availability of a confidant and perceived levels of loneliness. There are variations between European countries across three measures, contact with friends/relatives; perceived evaluation of social contact and loneliness (Table 4.1). The countries of northern Europe (e.g. the Netherlands, Norway and Sweden) show low levels of loneliness (under 10 %); high levels of weekly contact with friends and relatives (60 % and over) and approximately 20 % rate their levels of social engagement as higher than their peers. We may contrast this with the former communist countries (Russia, Poland and Hungary) which demonstrate the opposite pattern with the countries of southern Europe occupying an intermediate pattern.

In their specification of what constituted successful ageing, Rowe and Kahn (1997) defined social engagement, meaning involvement with productive activity and social networks, as one key dimension. The Survey of Health, Ageing,

| Country            | At least weekly<br>contact with<br>friends, family | More social contact than others | Availability of confident | Felt lonely all or most of time |
|--------------------|--|---------------------------------|---------------------------|---------------------------------|
| Belgium            | 63   | 23                              | 89                        | 11                              |
| Bulgaria           | 45   | 25                              | 82                        | 3                               |
| Switzerland        | 63   | 18                              | 96                        | 4                               |
| Czech Republic     | 47   | 13                              | 81                        | 20                              |
| Germany            | 46   | 18                              | 97                        | 6                               |
| Denmark            | 71   | 22                              | 93                        | 2                               |
| Estonia            | 32   | 13                              | 86                        | 15                              |
| Spain              | 61   | 11                              | 92                        | 13                              |
| Finland            | 62   | 23                              | 91                        | 4                               |
| France             | 58   | 20                              | 86                        | 17                              |
| United Kingdom     | 73   | 20                              | 9                         | 9                               |
| Hungary            | 23   | 11                              | 88                        | 23                              |
| Netherlands        | 70   | 23                              | 95                        | 4                               |
| Norway             | 69   | 21                              | 93                        | 2                               |
| Poland             | 33   | 12                              | 90                        | 22                              |
| Portugal           | 76   | 10                              | 91                        | 18                              |
| Russian Federation | 40   | 13                              | 88                        | 10                              |
| Sweden             | 64   | 22                              | 92                        | 7                               |

Table 4.1 Social contact across Europe (in %), 2010

(Own calculations with data from the European Social Survey)

and Retirement in Europe provides us with more detailed information about the involvement of those aged 50+ in 'formal' social organisations in the month prior to interview at the two survey points 2004 and 2008 (Kohli et al. 2009). Overall in 2004, 31 % of those aged 50+ reported participating in a formal social organisation; four years later this was virtually unchanged at 32 % (Kohli et al. 2009). This resonates with the overall EU level figure reported above. However, as with patterns of social contact there are variations in levels of community based participation between national states. A similar pattern to that for contacts with family and friends may be identified with social participation being high in the 'northern' countries of Sweden, the Netherlands, Switzerland; much lower rates are demonstrated by both Spain and Italy. The low reported rates for Poland and Czech Republic presumably represent the relatively recent emergence of civic society in these former communist countries and illustrate how the national policy and political context influence opportunities for social participation beyond the immediate confines of the family.

Social engagement with family, friends and involvement in civic activities has, thus far, been looking at individually. Older people demonstrate high levels of contact with family and friends and this finding is consistent across different surveys in differing countries and is robust despite methodological variations in terms of sampling and nuances of question wording. However, we have thus far looked at social relationships on an individual basis although most older people have a range of relationships that encompasses family, friends, colleagues and neighbours. These clusters of relationships, who may 'age', alongside the individual at the heart of the relationship web are often summarised as representing the social network of a given individual that provides social, emotional and practical support across the lifecourse (see Phillipson et al. 2003). A key strand of research in terms of social networks is the convoy model of support which suggests that the convoys of support that accompany us across the lifecourse vary between individuals and over time (Antonucci and Akiyama 1987) further suggesting that the 'oldest old' reduce their number of ties focussing on the most 'meaningful' and disengaging from the peripheral ones. There is an extensive literature examining social networks in terms of determining the breadth and depth of relationships, the extent of social exchanges, the relationships with the need for care and their 'mobilisation' in times of crisis. Overall, however, we see a similar pattern within Europe to that described for the individual indicators. Social networks, especially when civic participation is included, are larger in Northern European countries when compared with the Southern and Eastern European countries.

How 'satisfied' are older Europeans with these relations? This is a methodologically challenging question, especially if we wish to include a cross national perspective. Bonsang and Van Soest (2012) examined older people's satisfaction with social relationships in 11 European countries: Belgium, Czech Republic, Denmark, France, Germany, Greece, Italy, the Netherlands, Poland, Spain, and Sweden. Satisfaction was asked in two ways and the results compared. Initially participants were asked a traditional self-reported satisfaction question which invited participants to rate their satisfaction with their social relations in general (there was no distinction between family, friends or neighbours) on a 5 point scale (very satisfied/satisfied; very dissatisfied/dissatisfied and a mid-point of neither satisfied or dis satisfied). They were then given two hypothetical vignettes (not relating to older people specifically) and asked to rate how satisfied the individual in the vignette was with their relations on a similar scale.

The self-report data indicate high levels of satisfaction with relationships from those resident in Sweden, Denmark, the Netherlands, Belgium, and Germany where a minimum of 20 % are 'very satisfied' with 44 % in Denmark in this category. Least satisfied (under 20 %) were participants from France, Italy, Spain, and Greece where 9 % are dissatisfied with their social relationships. However, Bonsang and Van Soest (2012) argue, using the analysis of the responses to the hypothetical vignettes, that this distribution reflects both satisfaction and the influence of how the questions are asked and answered. Recalibrating the satisfaction responses in line with the vignettes produces a very different ordering of satisfaction levels thus: a group of 'high' satisfaction countries (Sweden, followed by Denmark, Italy, and Germany); a group of 'average' satisfaction countries (France, the Czech Republic, Poland, and Belgium) and finally Spain, Greece, and finally, the Netherlands, form the group of worst performing countries. This is an interesting analysis which challenges details of the emerging pattern of social relationships across Europe of a 'north-south' divide with the former Soviet bloc countries demonstrating an emergent position.

That older people are at risk of experiencing loneliness and isolation in old age is one of the enduring themes of research in social gerontology. There is a range of differing ways of theorising and conceptualising loneliness but at the heart of all definitions is the deficit between the desired quantity/quality of social relationships and the reality of an individual's social engagement. It is this 'gap' that is manifested as feelings of loneliness. Research consistently demonstrates that loneliness is one of most feared aspects of growing older and, within the UK context, it is a problem that has been associated with old age since the early research of Sheldon (Victor et al. 2009). Several authors have examined the distribution of loneliness across Europe (Fokkema et al. 2012; Sundström et al. 2009; Yang and Victor 2011). Although the measures used to measure loneliness vary across the studies, there is a broad similarity across the studies in terms of the distribution of loneliness across Europe which we may characterise thus: (a) a group of former Soviet bloc countries with rates of loneliness of 20 % or greater (Russia, Bulgaria, Hungary, Poland, Ukraine); (b) a group of northern European countries with low rates of loneliness of under 10 % (e.g. Belgium, Denmark, Finland, Germany, Ireland, the Netherlands, Norway, Sweden, Switzerland, and UK) and a third intermediate loneliness group where loneliness is in the 15–20 % range (e.g. Austria, Cyprus, Estonia, France, Portugal, Slovenia, and Spain) (see Yang and Victor 2011).

As with other dimensions of social engagement it is important to locate this within a lifecourse perspective which includes the socio-cultural and temporal components which form the context for understanding loneliness. Yang and Victor (2011) have examined patterns of age related loneliness and demonstrated that this is a complex relationship which varies across the three groups noted earlier. To summarise a complex relationship, the former Soviet countries demonstrate an age-related increase in loneliness; the southern European illustrate a U shaped distribution with loneliness highest in early adulthood and later life with the northern European countries showing little clear relationship with age.

#### 4.4.2 Loneliness in the United Kingdom: A Case Study

The study of Yang and Victor (2011) indicates that loneliness is a complex phenomenon that is culturally, temporally and historically situated and serve to remind us of the variability in the experience of old age and later life across and between the countries of Europe. We can explore some of these issues further by focussing upon the United Kingdom (UK) where there is an extensive empirical body of work examining the prevalence and risk factors for loneliness over a sixty year time period. The initial studies investigation loneliness in later life were undertaken in the late 1940s/early 1950s revealed that approximately 10 % of those aged 60+ reported that they were lonely most or all of the time: a figure which has been consistent across the last six decades (see Victor et al. 2009).

There remains some debate as to the risk factors associated with loneliness. Whilst factors such as widowhood and a reduction in the number of confiding relationships show a consistent relationship with loneliness, other factors such as age and gender are not consistently linked to loneliness as independent risk factors. Within the UK context, physical health does not feature as a risk factor but expectations about health and quality of life do. Whilst less consistently reported across studies, there is a link between loneliness and material resources, which is very evident in qualitative research. The nature of the older population is also dynamic as different birth cohorts move into old age. Within the UK, this is most noticeable as the population of migrants from the Caribbean and South Asia who moved to the UK in the post war period start to grow old. Preliminary work indicates that these populations demonstrate very high rates of loneliness (Victor et al. 2012).

These findings remind us that the nature of the older population is dynamic and, consequently, so will the factors influencing the context for and experience of social relationships. Within the UK the focus has predominantly been upon studying loneliness at a single point in time. However, Victor and Bowling (2012) have examined loneliness longitudinally and demonstrated that loneliness in old age is a dynamic experience reporting that, over an 8 year follow-up period, 40–50 % of the sample aged 65+ at baseline were never lonely; 20–25 % were as persistently lonely (i.e. they were lonely at both baseline and follow up); 25 % demonstrated a decreased loneliness and for approximately 15 % loneliness had worsened. The factors associated with deteriorating loneliness included decreased number of confidents; deteriorating physical health and widowhood. Examined in detail across the adult life age groups, Victor and Yang (2012) indicate that the prevalence of loneliness shows a U shaped distribution with rates highest for those aged under 25 and 65 years and over.

Depression is associated with loneliness for all age groups. Poor physical health is associated with loneliness in young adult and midlife but not later life. For those in mid and later life, the quality of social engagement is protective against loneliness whilst for young adults it is the quantity of social engagement. This indicates that different factors may endow vulnerability (or protect) against loneliness at different stages of life and suggests that preventative strategies or interventions need to be developed that reflect these variations.

Social gerontology is one of the key perspectives that help us understand the experiences of ageing and later life and, as such, has generated a range of theoretical perspectives that operate at a range of levels from micro to macro. Understanding later life fully requires the integration of a range of perspectives embracing individuals within their social, cultural and temporal context. Our analysis of social relationships across Europe indicates how these vary across Europe reflecting the importance of cultural and contextual factors as well as the influence of structural factors such as gender, class and ethnicity and the agency of individuals. As such we need to be aware of these when considering developing interventions to mediate the experiences of loneliness and isolation and promote social inclusion.

### 4.5 Current Debate in Social Gerontology: How Does Globalization Affect Older People?

One of the key contemporary social trends influencing the context within which current (and future) cohorts experience old age is that of globalisation. At its most basic, the term 'globalisation' describes the trend whereby the world is becoming increasingly interconnected as a result of increased trade, the creation of multiand transnational organisations, travel and migration as well as cultural exchange. Phillipson (2003) argues that, as a consequence of these interrelated trends, population ageing and its social, political and policy consequences can no longer be seen as simply a 'national' issue but is rather one that requires action at a global/ international level. Phillipson further argues that globalisation as a social phenomenon adversely influences older people within both developed and developing countries by widening inequalities between older people and those of working age.

In terms of social inclusion and exclusion, one facet of globalisation has been the creation of 'transnational communities' resultant from the migration of individuals and families across the globe for economic and political imperatives. Examples of such transnational population movements are the waves of migrants, largely from former colonies, that moved to Britain during the decades of the 1950, 1960 and 1970s. The initial migrants came from the Caribbean in the 1950s and were subsequently followed by migrants from Indian during the 1960s with the migration from Pakistan and Bangladesh occurring in the 1970s. Similar trends are evident across other European countries although the countries of origin of the migrant groups vary. The growth of these migrant populations and now ageing of international migrants in the countries to which they moved has created a complex web of social relationships between the country of origin and the country to which the migrants moved (see Victor et al. 2012). This social trend poses challenges for social policy but also the 'lived experience' of older migrants who retain links back to their countries of origin as well as in the country to which they have migrated.

Gerontologists are actively investigating the experience of ageing within a transnational context and revealing the complexity of the experiences of ageing migrants and how the outflow of migrants influences the experience of old age for those left behind in the country of origin. Such research has revealed the diversity of the migrant experience which includes those moving within Europe such as the migration of Poles and Portuguese to find work within Europe; those moving from countries adjacent to Europe such as Turkey and those moving from the former colonial countries such as the Caribbean and South Asia. Recent work by Victor et al. (2012) has revealed, using the example of South Asian migrants, the complex nature of these transnational communities which -in addition to links within the UK- also included relationships with those based back in South Asia, but also with North America, Australia and Africa as well as Europe. A key challenge for gerontologists in coming decades is to examine how the presence of social links and relationships with these communities promote and enhance quality of life in old age both for the migrants and those who remained in the country of origin.

## **Check Your Progress: A Quiz on Social Gerontology**

Question 4.1: Which theory states that older people will uphold a lifestyle that resembles their lifestyle at an earlier age?

- a. Lifestyle theory
- b. Persistence theory
- c. Continuity theory
- d. Upholding theory
- e. Activity theory

Question 4.2: Which of the following is NOT a theory about the social aspects of ageing?

- a. Activity theory
- b. Social ageing theory
- c. Disengagement theory
- d. Continuity theory
- e. All of the above are theories on the social aspects of ageing

Question 4.3: What does the life-course perspective imply? (Multiple answers possible)

- a. Events can shape the lives of people for years to come
- b. As lives develop, they all follow the same course
- c. The social context can influence how the lives of individuals progress
- d. Events can structure lives into phases
- e. All of the above apply

Question 4.4: In which part of Europe do particularly many older Europeans feel lonely?

- a. Southern Europe
- b. Northern Europe
- c. Continental Europe
- d. Eastern Europe
- e. There are no big difference within Europe

## References

- Antonucci, T. C., & Akiyama, H. (1987). Social networks in adult life and a preliminary examination of the convoy model. *Journal of Gerontology*, 42(5), 519–527.
- Baars, J., Dannefer, D., Phillipson, C., & Walker, A. (2006) (Eds.). Aging, globalization and inequality: the new critical gerontology. Amityville: Baywood.
- Bengtson, V., Silverstein, M., Putney, N., & Gans, D. (2008) (Eds). *Handbook of theories of aging.* New York: Springer.

- Bonsang, E., & Van Soest, A. (2012). Satisfaction with social contacts of older Europeans. Social Indicators Research, 105(2), 273–292.
- Dykstra, P. A., & Fokkema, T. (2011). Relationships between parents and their adult children: a West European typology of late-life families. *Ageing & Society*, *31*(4), 545–569.
- Estes, C., Biggs, S., & Phillipson, C. (2003). Social theory, social policy and ageing: a critical introduction. Maidenhead: Open University Press.
- Fokkema, T., De Jong Gierveld, J., & Dykstra, P. A. (2012). Cross-national differences in older adult loneliness. *The Journal of Psychology*, 146(1–2), 201–228.
- Grenier, A. (2012). Transitions and the lifecourse. Bristol: Policy Press.
- Kohli, M., Hank, K., & Künemund, H. (2009). The social connectedness of older Europeans: patterns, dynamics and contexts. *Journal of European Social Policy*, 19(4), 327–340.
- Phillipson, C. (2003). Globalisation and the future of ageing: developing a critical gerontology. Sociological Research Online, 8(4), 1–6.
- Phillipson, C., Allan, G., & Morgan, D. (2003). Social networks and social exclusion: sociological and policy perspectives. Aldershot: Ashgate.
- Powell, J. L. (2005). Social theory and aging. Lanham: Rowman and Littlefield.
- Powell, J. L. (2006). Rethinking social theory and later life. New York: Nova Science Publishers.
- Rowe, J. W., & Kahn, R. L. (1997). Successful aging. The Gerontologist, 37(4), 433-440.
- Sundstrom, G., Fransson, E., Malmberg, B., & Davey, A. (2009). Loneliness among older Europeans. *European Journal of Ageing*, 6(4), 267–275.
- Victor, C., Bond, J., & Scambler, S. (2009). The social world of older people. Maidenhead: Open University Press.
- Victor, C., & Bowling, A. (2012). A longitudinal analysis of loneliness amongst older people in Great Britain. *The Journal of Psychology: Interdisciplinary and Applied*, 146(3), 313–331.
- Victor, C., Burholt, V., & Martin, W. (2012). Loneliness and ethnic minority elders in Great Britain: an exploratory study. *Journal Cross Cultural Gerontology*, 27(1), 65–78.
- Victor, C., & Yang, K. (2012). The prevalence of loneliness among adults: a case study of the United Kingdom. *The Journal of Psychology: Interdisciplinary and Applied*, 146(1–2), 85–104.
- Yang, K., & Victor, C. (2011). Age and loneliness in 25 European nations. Ageing & Society, 31(8), 1–21.

#### **Recommended Readings**

Bengtson, V., Silverstein, M., Putney, N., & Gans, D. (2008) (Eds). *Handbook of theories of aging*. New York: Springer.

This book provides an excellent and comprehensive overview of theories in social gerontology and beyond.

Phillipson, C. (2003). Globalisation and the future of ageing: developing a critical gerontology. Sociological Research Online, 8(4), 1–6.

This article discusses how globalization affects older people.

## **Chapter 5 Political Gerontology: Population Ageing and the State of the State**

#### Kathrin Komp

## 5.1 Summary and Learning Goals

Political gerontology reflects on the role of older people in the state. It considers older people in their roles as, for example, voters who shape the state in elections, and as welfare citizens who benefit from and contribute to welfare states. These roles differ between European countries, e.g. because of differences in welfare state provisions. Finally, this chapter discusses what possibilities governments have to encourage active ageing.

After reading this chapter, you should be able to:

- Explain what roles older people play in welfare states.
- Describe how and why voting behavior (does not) change over the life course.
- Give a short overview of welfare state provisions for older Europeans.
- Discuss how governments support active ageing.

## 5.2 What is Political Gerontology?

As populations age, they transform the society and social institutions around them. They change families, they change the economy, and they also change the state. Ageing populations effect the latter change in various ways, most prominently by shifting the balance in the electorate and in the clientele of welfare states. The balance in the electorate changes, because the increasing number of older voters might lead to more votes for old age-friendly politics. Moreover, it might also cause policymakers to rank issues that are relevant for older people high on the political agenda, hoping that such a move will prove popular in upcoming elections. The balance in the clientele of welfare state changes, because an increasing number of older people can put stronger demands on e.g. pension schemes and care arrangements. Additionally, the increasing number of older people might

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reduce the number of individuals who can contribute to pension schemes and provide care. Political gerontology explores such developments. It studies the situation of older people in the state, and the dynamics between ageing populations and states. Typical discussions in political gerontology focus on the situation of pension schemes and long-term care insurances in ageing populations, on parties representing senior citizens, on older people's interest to engage in the local selfgovernment, and on policies that encourage older people to remain active.

#### 5.3 Central Theories and Concepts in Political Gerontology

Political gerontology takes a comprehensive approach. It derives its central theories and concepts from various disciplines, most notably political science, sociology, and social psychology. To adapt these theories and concepts to the topic of old age, it looks at them through the lenses of gerontology and life-course studies. This section of the chapter will familiarize you with current theories and concepts in political gerontology. Those discussions deal with older people's voting behaviour and with the role of older people in welfare states. The discussions on older people's voting behaviour circle around the issue of self-interest versus altruism. Will older people only vote for parties favouring the interests of older individuals, or will they also vote for parties that push the interest of other age groups? The discussions on the role of older people in welfare states question the balance of rights and obligations. What should welfare states do for older people and what can we expect older people to contribute to welfare states and society? This chapter will consecutively introduce you to the arguments in both discussions. When doing this, this chapter will draw from insight from the political economy of ageing. The political economy of ageing stresses that the heterogeneity of older people needs to be considered when policies for old age are planned and evaluated (Komp 2011).

#### 5.3.1 Older Voters

Population ageing might change what topics governments focus on. If older people mainly vote for parties that represent their interests, then population ageing might shift the outcomes of elections. It might strengthen the position of parties that represent the interests of older individuals while simultaneously weakening the position of parties that represent the interests of youths and middle-aged individuals. Some researchers therefore ask whether population ageing might lead us into gerontocracy, which is a form of political rule that gives older people strong power of decision (Sinn and Uebelmesser 2002).

How older people handle their growing influence in elections depends on what they base their voting preferences on: self-interest or altruism. If self-interest prevails, then older people will mainly vote for pensioners' parties and for parties that explicitly support older people. However, if altruism prevails, then older people might also vote for parties that favour population groups other than the old. In practice, older people do not strictly follow one of these preferences, but usually show elements of both, self-interest and altruism.

Researchers wondered how strong self-interest and altruism are when it comes to older people's political orientation. Therefore, they studied whether older people mainly support policies that benefit older people, or whether they also support policies that benefit other age groups. These studies found that older people are in favour of policies that benefit different age groups. They do not only think that policies that benefit them, such as policies strengthening the pension system, are important. Instead, they also think that e.g. policies that help young people by strengthening childcare services and the educational system are important (Busemeyer et al. 2009; Goerres and Tepe 2010). This means that people do not only think about their own age group when they decide what they would like policymakers to do, and whom they want to vote for. Consequently, population ageing does not entail that elections will lead to results that benefit older people only.

While age might not strongly drive older people's voting behaviour, the membership in a generation does have such an effect. A generation is a group of people who were born at around the same time and who, therefore, experienced the same historical events at about the same age. The members of a generation might, therefore, have similar worldviews and preferences (Gilleard and Higgs 2002). It turns out that the members of a generation also resemble each other in their preferences of political parties and in their ideas of what the state ought to do. The explanation is that people's preferences are partly shaped during one's youth and by the experiences made, and that these preferences are often maintained throughout one's life (Goerres 2008; Svallfors 2010). This means that the voting behaviour of older people might differ from the voting behaviour of younger people—but not because of age. It might simply differ because individuals belong to different generations, because they made different experiences while they grew up, and because they have different views on the world.

In addition to generational membership, there also are various other factors that influence how older people vote. This fact has repeatedly been underlined by the political economy of ageing, which stresses the existence of differences between, for example, genders and levels of socio-economic status (Komp 2011). From studies in political science, we know that factors such as information on political topics and interest in specific policy fields, e.g. migration or the environment, also influence how older people cast their votes (De Vries et al. 2011; Goerres and Tepe 2010). These insights tell us that while older people might resemble each other in their voting behavior, they nevertheless do not form a homogeneous group. In Walker's (1999, p. 16) words, "older people do not necessarily share a common interest by virtue of their age alone which transcends all other interests. Thus, it is mistaken to regard senior citizens as a homogeneous group which might coalesce around or be attracted by one-dimensional politics of old age."

#### 5.3.2 Older People and the Welfare State

The second discussion that currently dominates political gerontology deals with older people's role in welfare states. The British sociologist T.H. Marshall laid the foundation for this discussion in 1950, when he introduced the idea of social citizenship. According to Marshall, citizenship means being a full member of society. There are three types of citizenship: the civil, the political, and the social one. Social citizenship refers to questions of welfare, social participation, and standard of living (Marshall and Bottomore 1992). Consequently, social citizenship shapes a person's role in the welfare state.

A citizen's social rights and obligations change over the life-course. This change is supposed to accommodate the development of capabilities and opportunities that people experience as they age. For example, children and youths still develop their capabilities. They, therefore, often have fewer social responsibilities than middle-agers and older people. Middle-aged people, in contrast, have developed their capabilities and they have many opportunities. Therefore, they are usually bestowed the full set of social citizenship rights and responsibilities. Older people, finally, might lose some of their capabilities as their health declines. They are therefore often relieved from some of their social citizenship responsibilities while keeping all their social citizenship rights (Komp and Van Tilburg 2010; Mayer and Schoepflin 1989).

The social citizenship rights and responsibilities of older people are usually defined with the idea in mind that these individuals are in poor health. In fact, the idea of poor health even shaped the image of old age in Europe for a long time. European societies are often described as work societies, which means that paid work strongly influences these societies and the life-courses of their citizens. In work societies, old age is commonly understood as the time after people retire from work. Most European countries introduced a mandatory retirement age to regulate the transition from paid work to retirement, and this retirement age was set at the chronological age where people were assumed to experience health decline. The mandatory retirement age is, therewith, supposed to render individuals in poor health independent of labour market demands (Kohli 1988; Phillipson 2004). Consequently, the first and foremost social citizenship rights of older Europeans are to abstain from paid work and to receive pension benefits. Other important social citizenship rights of older Europeans are to receive the health, social, and long-term care services they need. These rights portray older Europeans as beneficiaries of welfare states.

Lately, however, scholars and policy-makers wondered whether the social citizenship rights of older Europeans might have to be restricted. Developments such as economic crises and population ageing put pressure on welfare states. They leave welfare states with fewer resources to distribute, while they simultaneously increase the number of people who need support from welfare states (Hemerijck et al. 2009; Pierson 2001). As a result, resources become scarce and policy-makers have to consider cutting benefits—including the benefits for older people. Older Europeans were affected by such reforms during the last few years. In the area of labour market and pension policies, we mainly saw three types of reforms of this kind. First, pension benefits were lowered. Second, eligibility to pension schemes was tightened, e.g. by increasing the pension age. Third, the mode of funding for pension schemes was shifted towards mechanisms that strengthen the responsibility of individuals (Myles 2002; OECD 2006). In the areas of health, social, and long-term care services, similar reforms strategies were pursued (Leive 2010; Pavolini and Ranci 2008).

Recently, scholars and policy-makers also started to wonder whether the social citizenship obligations of older people could be expanded. Europeans stay healthy until an increasingly old age, which even now is years after they retired. Therefore, the idea that older people per se are in poor health and that their capabilities decline does not hold true anymore. Instead, we see increasing heterogeneity in the older population, with many older Europeans still being healthy, active, and engaged. These healthy older Europeans are still capable of contributing to the welfare state, society, the labour market, and to their families. They could, for example, still work, volunteer, or provide care to frail spouses. Such activities might benefit their own well-being, strengthen the workforce, take pressure off pension schemes, and increase the amount of informal care that is available. Governments across Europe have been implementing policies to this aim for several years now. The most prominent example is the numerous reforms that increase the pension age. The pension age is the age at which individuals who participate in the pension scheme become eligible for receiving the full amount of benefits. Less prominent but just as important are policies that support older volunteers, as we can for example find them in Germany and the United Kingdom, and policies that support care-givers (Komp 2011).

Although it might suggest itself to re-define the social citizenship rights and obligations of older Europeans, such efforts nevertheless meet criticism and protests. For example, reforms that increased the mandatory retirement age met vehement protest across Europe, and in France these protest even developed into riots (New York Times 2010). These protests and bursts of criticism might result from our ideas about old age. Our ideas of old age change slowly. Even though there already are many healthy older people and they clearly can be active, we still hold on to the deeply engrained idea that all older people are frail and therefore deserve to be inactive (Riley and Riley 1994). The concept of the moral economy of ageing states that our ideas of old age determine which behaviour towards older people we consider justified and which behaviour we consider unjustified (Estes 2003; Kohli 1991). If our mind is still set on the idea that older people are necessarily frail, then we will naturally oppose efforts to activate them for paid work or volunteering. Such efforts might feel illogical and even morally wrong to us. This interpretation of the protests underlines that policies for older people are not only shaped by numbers and straightforward logic, they are also shaped by ideas and images. Old age policies do therefore not only reflect how far population ageing has already progressed, they also reflect what we think about old age. Policies that stress the social citizenship obligations of older people will, therefore, probably only become more common once the idea gains further ground that older people are a heterogeneous group, consisting of frail as well as healthy individuals.

# 5.4 What Does Political Gerontology Tell Us about the Current State of Europe?

The situation of older people varies across Europe, not least concerning their role in the state. The following section illustrates the role older people play in different European states. It starts out with a description of older voters, and then it moves on to describe welfare state provisions for old age.

#### 5.4.1 Older Voters in Europe

The voting behaviour of older Europeans is especially important for two reasons. First the number of older Europeans increases, which means that they constitute an increasing share of the electorate. Second, older Europeans are particularly likely to vote, which additionally increases their influence in elections (Goerres 2007). Table 5.1 shows how likely older Europeans are to vote. In most countries, individuals aged 65 years and older are more likely to vote than individuals aged 20–64 years. The difference in the election participation usually ranges between 5 and 14 %, with countries such as Germany, Poland and France reaching such values. In Switzerland and the United Kingdom, the difference is even bigger.

The parties older people are interested in differ across Europe. Table 5.2 shows how Europeans aged 65 years and older describe their political orientation. This table reveals that most older Europeans identify with either the left or the right side of the political spectrum, with only few of them choosing a political position in the center. Countries in which most older people tend to support the left are, for example, Estonia, Germany, the Slovak Republic and Sweden. Countries in which most older people tend to support the right are, for example, Austria, Denmark, Poland, and the United Kingdom. A study that compared older people's party choice in Germany and the United Kingdom found that the political preferences change from generation to generation. In the United Kingdom, people born before 1891 ("Victorian generation") were least likely to vote for the Labour party, while

|                                 | Difference (%) | Countries   |  |
|---------------------------------|----------------|---|--|
| Older Europeans vote less often | <10            | Belgium, Hungary  |  |
| Older Europeans vote more often | <5             | Netherlands, Spain, Sweden  |  |
|                                 | 5–9            | Bulgaria, Denmark, Estonia,<br>Germany, Norway, Poland            |  |
|                                 | 10–14          | Czech Republic, Finland,<br>France, Portugal, Russia,<br>Slovenia |  |
|                                 | 15+            | Switzerland, United Kingdom                                       |  |

**Table 5.1** The election participation of older Europeans (65+ years), compared to young andmiddle-aged Europeans (20-64 years), 2010

(Own calculations with data from the European social survey)

| Political orientation | Countries   |
|-----------------------|---|
| Left                  | Bulgaria, Czech Republic, Estonia, Germany, Iceland, Latvia, Russia,<br>Slovak Republic, Spain, Sweden, Ukraine |
| Center                | France, Portugal, Slovenia  |
| Right                 | Austria, Croatia, Denmark, Finland, Norway, Poland, Switzerland,<br>Great Britain                               |

Table 5.2 The political orientation of Europeans aged 65 years and older, 2009

(Own calculations with data from the International Social Survey Programme)

the cohort born between 1966 and 1979 is most likely to vote for the Labour party. In Germany, the Victorian generation was most likely to vote for the Conservative party, while the cohort born between 1966 and 1979 is least likely to vote for the Conservatives (Goerres 2008).

In the electoral system, older people are not only represented by the general parties, but sometimes also by pensioners' parties. Pensioners' parties seek to mainly represent the interests of older people and pensioners. Such parties emerged throughout Europe during the last decades. The oldest pensioners' party that was formed in Western Europe is the Italian "Partito dei Pensionati", which was founded in 1987. Since then, similar parties were also founded in countries such as Germany ["Die Grauen Panther" (The Grey Panthers)], the Netherlands ["Algemeen Ouderen Verbond" (General Elderly Alliance)], Sweden ["Sveriges Pensionärers Intresseparti" (Swedish Pensioners' Interest Party)], and the United Kingdom ("Senior Citizens Party"). Central and Easter Europe also saw the emergence of pensioners' parties, for example the "Partiya pensionerov" (Pensioners' Party) in Russia, and the "Hrvatska stranka umirovljenika" (Croatian Pensioners' Party) in Croatia. Several European countries, such as Iceland, France, and Moldova, however, do not yet have pensioners' parties (Hanley 2012).

Although pensioners' parties now exist in many European countries, they only play minor roles in elections. In many of the national elections they participate in, such parties only gain one to three percent of the votes. However, in a few countries, they have been more successful and won seats in national parliaments. This happened, for example, in Luxemburg, the Netherlands, Slovenia, and Croatia. In a few cases, pensioners' parties even were so successful as to enter governments as coalition parties. They achieved this, most notably, in Slovenia, where the "Demokratična stranka upokojencev Slovenije" (Democratic Party of Pensioners of Slovenia) has been a coalition partner for more than a decade. In Serbia, the "Partija ujedinjenih pensionera Srbije" (Party of the United Pensioners of Serbia) entered parliament in 2007 as a coalition partner (Hanley 2012).

#### 5.4.2 Older People and the Welfare State in Europe

European governments provide for older individuals in many ways. These governments have a long history of addressing the social citizenship rights of older people. Most notably, they provide and regulate pension schemes, health and longterm care services. Besides the social citizenship rights, European governments also increasingly address the social citizenship obligations of older people. They primarily do this by encouraging older people to volunteer.

Table 5.3 gives an overview of pension regulations in Europe. It shows the pension age and the replacement rate of pensions. The pension age is the age at which individuals who participate in the pension scheme become eligible for receiving the full amount of benefits. The regular pension age in Europe varies between 60 and 68 years. Comparatively low pension ages apply to Estonians, Slovaks, Slovenes, and to Italian and Polish women. Comparatively high pension ages apply to the Brits, Norwegians, Danes, and Icelanders. Many European countries also introduced regulations that open up possibilities for early retirement. For example, Italians and Greeks have the possibility to retire at any age, the Portuguese can retire at age 55, and the Slovenes can retire at age 58. However, some countries such as Denmark and the United Kingdom do not know an early retirement age.

The pension benefits Europeans receive usually relate to their previous earnings. The pension replacement rate expresses the pension level by dividing the pension benefits by the income before retirement. The result is a percentage that can take on any value equal to or higher than zero. A pension replacement rate of zero means that individuals do not receive any pension benefits. A pension replacement rate of 100 signals that the amount of pension benefits is identical to the income before retirement. Pension replacement rates between 0 and 100 indicate that individuals receive pension benefits that are lower than their previous income. Replacement rates higher than 100 would mean that pension benefits exceed the previous income.

The pension replacement rates in Europe range from 48 to 97 % (see Table 5.3). This means that Europeans usually face financial losses when they retire, some even losing half their previous income. The loss in income is particularly high in countries such as Estonia, France, and Poland. Individuals in Greece and Iceland, in contrast, see hardly any difference between their previous income and their pension benefits. These individuals are therefore able to maintain their life-styles and consumption patterns after retirement, while pensioners in other countries might have to make some cut-backs. The chapter on economic gerontology in this volume gives further insight into the economic situation of older Europeans.

The pension replacement rate is not only relevant for older Europeans, it also is of crucial importance for European welfare states. Simply put: the higher the pension replacement rate, the stronger the financial impact of population ageing on pension schemes. We might, therefore, expect governments in countries with high pension replacement rates to be particularly concerned about the financial sustainability of their pension schemes as populations age. However, the view of governments on the situation of pension schemes depends on more factors than just the pension replacement rate. Among other things, it also depends on the source of pension benefits, that is the prevalence of public, occupational and private pension

| Country         | Pension age  | Replacem      | Replacement rate of pensions |                           |    |
|-----------------|--------------|---------------|------------------------------|---------------------------|----|
|                 | Regular      | Early         | Public                       | Occupation<br>and private |    |
| Austria         | 65           | 62 m/60w      | 77                           | _                         | 77 |
| Belgium         | 65           | 60            | 42                           | 16                        | 58 |
| Czech Republic  | 65 m/62–65 w | 60 m/59–60 w  | 50                           | 12                        | 62 |
| Denmark         | 67           | n.a.          | 29                           | 51                        | 80 |
| Estonia         | 63           | 60            | 26                           | 22                        | 48 |
| Finland         | 65           | 62            | 58                           | -                         | 58 |
| France          | 65           | 56-60         | 49                           | -                         | 49 |
| Germany         | 67           | 63            | 42                           | 17                        | 59 |
| Greece          | 65           | Any age       | 96                           | _                         | 96 |
| Hungary         | 65           | 63            | 44                           | 32                        | 76 |
| Iceland         | 67           | 62            | 15                           | 82                        | 97 |
| Ireland         | 65–66        | n.a.          | 29                           | 38                        | 67 |
| Italy           | 65 m/60 w    | Any age       | 65                           | -                         | 65 |
| Luxembourg      | 65           | 57-60         | 87                           | _                         | 87 |
| Netherlands     | 65           | n.a.          | 29                           | 59                        | 88 |
| Norway          | 67           | 62            | 46                           | 9                         | 65 |
| Poland          | 65 m/60 w    | n.a.          | 29                           | 22                        | 51 |
| Portugal        | 65           | 55            | 54                           | -                         | 54 |
| Slovak Republic | 62           | 60            | 26                           | 32                        | 58 |
| Slovenia        | 63           | 58            | 62                           | _                         | 62 |
| Spain           | 65           | 61            | 81                           | _                         | 81 |
| Sweden          | 65           | 55-61         | 31                           | 23                        | 54 |
| Switzerland     | 64–65 m/64 w | 60-63 m/59-62 | w 35                         | 23                        | 58 |
| United Kingdom  | 68           | n.a.          | 32                           | 37                        | 69 |

Table 5.3 Pension regulations in Europe, 2010

Notes

*m* men, *w* women, *n.a.* Early retirement or deferral of pension is not available

(Organisation for Economic Co-operation and Development 2011a, b)

schemes. If public pension schemes play a central role, then governments need to reconsider in detail how to handle public finances so that the pension schemes can best accommodate the growing number of pensioners. If occupational and private pensions play a predominant role, however, then the perspective of governments is different. They then need to consider how best to negotiate with and regulate the occupational and private pension schemes. Table 5.3 shows that countries such as Austria, Greece, and Spain exclusively rely on public pension schemes. In countries such as Denmark, Iceland, and the Netherlands, in contrast, occupational and private pension schemes play an important role.

Due to population ageing and economic crises, European governments have introduced extensive pension reforms since the 1980s. These reforms take three different approaches to restructuring pension schemes. First, they re-balance pension benefits and contributions. They primarily do this by lowering the benefit level, increasing the required contributions, and delaying the age when people become eligible for pension benefits. Second, they change the mechanisms though which pension benefits and contributions are linked. More precisely, they put less emphasis on pay-as-you-go financing and instead favour capital-stock based approaches for newly introduced and reformed pension schemes. The pay-as-yougo model re-distributes funding across generations, meaning it hands out the contributions that today's generation of middle-agers make to today's older people. Since we have a shrinking workforce and an increasing number of older people, this model is not sustainable. The capital-stock based approach, in contrast, is sustainable when populations age. This approach collects the contributions individuals make over their life-courses and hands them out to the same individuals again once these individuals retire. Third, the reforms strengthen the role of occupational and private pension schemes. This way, they take pressure off public budgets and the public administration (Myles 2002; OECD 2006).

Besides pension schemes, health care also plays an important role in fulfilling the social citizenship rights of older Europeans. The health of many older people declines, which makes health care services an important support pillar in older people's lives. The services individuals first contact when they want to enter the health care system are called primary health care. Those services are, for example, provided by general practitioners and nurses. Table 5.4 gives an overview of primary health care coverage across Europe. The table shows that almost all Europeans are covered by this kind of health care. In some countries, especially in Northern Europe, people are automatically covered. The other countries mainly rely on compulsory coverage. Only Germany has a considerable share of people who are voluntarily insured (15 %). In most European countries, there is only one primary health care provider, such as a local or national health services or a common insurance scheme. However, some countries, such as Austria, the Slovak Republic, and Switzerland know several insurers working side by side. This means that about all older Europeans in poor health can get health care, even though type of coverage and provider can differ within and between countries. The chapter on health gerontology provides further information on the health status of and health care for older Europeans.

When health deteriorates, individuals might end up needing care and support over a long period of time. Long-term care provisions cater to these needs. They support the provision of such care at home or in institutions, by family members or by professionals. Most Europeans are covered by long-term care provisions, even though only some countries, such as Germany, the Netherlands, and Luxembourg, have insurance schemes explicitly dedicated to long-term care. The other European countries usually cover the needs for long-term care through health and social care schemes. Table 5.5 gives an overview of the long-term care coverage in Europe. It reveals that most European countries have at least some universal elements in their long-term care system, which means that all citizens of these countries are covered by long-term care provisions to some extent. Many countries, such as Austria, Ireland, and Portugal, also have a means-tested element, which means that individuals with low income have access to more public long-term care services than individual with high incomes in these countries.

| Country            | Coverage (i | n %)       | Provider  |                       |   |
|--------------------|-------------|------------|-----------|-----------------------|---|
|                    | Automatic   | Compulsory | Voluntary | Not insured/<br>Other |   |
| Austria            | -           | 99         | _         | 1                     | Multiple insurers, no choice between them |
| Belgium            | -           | 99         | -         | 1                     | Common health insurance scheme            |
| Czech<br>Republic  | -           | 100        | _         | -                     | Choice among several insurers             |
| Denmark            | 100         | _          | -         | _                     | Local health services                     |
| Finland            | 100         | _          | _         | _                     | Local health services                     |
| France             | 3           | 97         | -         | _                     | Multiple insurers, no choice between them |
| Germany            | 1           | 83         | 15        | 1                     | Choice among several insurers             |
| Greece             | _           | 100        | -         | _                     | Multiple insurers, no choice between them |
| Hungary            | _           | 100        | -         | _                     | National health services                  |
| Iceland            | 100         | _          | -         | _                     | National health services                  |
| Ireland            | 100         | _          | -         | _                     | National health services                  |
| Italy              | 100         | _          | _         | _                     | National health services                  |
| Luxembourg         | _           | 97         | 1         | 2                     | Common health insurance scheme            |
| Netherlands        | -           | 100        | -         | -                     | Choice among several insurers             |
| Norway             | 100         | _          | -         | _                     | Local health services                     |
| Poland             | -           | 99         | -         | 1                     | Common health insurance scheme            |
| Portugal           | 100         | _          | -         | _                     | National health services                  |
| Slovak<br>Republic | 56          | 44         | -         | -                     | Choice among several insurers             |
| Spain              | 100         | _          | -         | _                     | Local health services                     |
| Sweden             | 100         | _          | -         | _                     | National health services                  |
| Switzerland        | -           | 100        | -         | -                     | Choice among several insurers             |
| United<br>Kingdom  | 100         | -          | -         | -                     | National health services                  |

Table 5.4 Primary health care coverage in Europe, 2008–2009

(Paris et al. 2010)

Only Slovenia has means-tested access to long-term care only. European long-term care provisions support home and institutional care in most countries. Only Ireland supports home-care only, while Portugal and Greece support institutional care only. The budget used for long-term care was rather low in 2009 and 2010, with peak values of only 4 % of the gross domestic product being reached in the Netherlands and Sweden. However, these budgets will probably increase as populations age. The chapter on health gerontology in this volume presents additional information on long-term care in Europe.

| Country        | Eligibility |              | Type of care | Public LTC<br>spending, share<br>of GDP (%) |      |
|----------------|-------------|--------------|--------------|---|------|
|                | Universal   | Means-tested | Home care    | Institutional care                          |      |
| Austria        | Х           | Х            | Х            | Х   | 1    |
| Belgium        | Х           | _            | Х            | Х   | 2    |
| Czech Republic | Х           | Х            | Х            | Х   | 1    |
| Denmark        | Х           | _            | Х            | Х   | 2    |
| Finland        | Х           | _            | Х            | Х   | 2    |
| France         | Х           | Х            | Х            | Х   | 2    |
| Germany        | Х           | _            | Х            | Х   | 1    |
| Greece         | Х           | Х            | _            | Х   | <1   |
| Hungary        | Х           | Х            | Х            | Х   | <1   |
| Ireland        | Х           | Х            | Х            | _   | n.k. |
| Italy          | Х           | Х            | Х            | Х   | n.k. |
| Luxembourg     | Х           | _            | Х            | Х   | 1    |
| Netherlands    | Х           | _            | Х            | Х   | 4    |
| Norway         | Х           | _            | Х            | Х   | 2    |
| Poland         | Х           | _            | Х            | Х   | <1   |
| Portugal       | Х           | Х            | _            | Х   | <1   |
| Slovenia       | _           | Х            | Х            | Х   | 1    |
| Sweden         | Х           | _            | Х            | Х   | 4    |
| Switzerland    | Х           | Х            | Х            | Х   | 1    |
| United Kingdom | Х           | Х            | Х            | Х   | 1    |

Table 5.5 Long-term care (LTC) coverage in Europe, 2009–2010

Note

GDP means gross domestic product, n.k. means not known

(OECD 2011a, b)

While European governments have a long history of catering to older people's social citizenship rights, they are still developing ways in which to address older people's social citizenship obligations. The furthest developed way to address these obligations in Europe is to delay retirement. Reforms to this aim have been implemented in about all European countries over the past years (OECD 2006). However, since old age is sometimes defined as the time after retirement, such reforms also re-define who is considered old. Consequently, reforms that delay retirement have two different outcomes at the same time. First, they strengthen the social citizenship obligations of older people. Second, they label those people who work until a later age as "not old", which means that on the level of perceptions, they do not affect the social citizenship rights of older people (Komp 2013). Reforms delaying retirement therewith have a strong impact on the image and perception of older people in Europe.

Besides efforts to delay retirement, we can see another emerging strategy to strengthen older Europeans' social citizenship obligations. This strategy is to encourage older people to volunteer. European governments take different approaches to this idea, with some governments being more active and explicit than others. The central dividing line is whether governments prefer to address individuals of all ages with their strategies for volunteering, or whether they think it is desirable to explicitly address older people with these strategies. Policymakers voice two main arguments for addressing all age groups at the same time. First, they state that explicitly addressing older people would be age discrimination. It would separate older people from young and middle-aged people, increase the social cleavage between older people and the rest of society, and it would lead to a stronger stigmatization of old age. The Dutch government, for example, uses this argument (Baldock 1999). Second, governments sometimes state that older people are already very active as volunteers, which makes is unnecessary to design strategies explicitly trying to motivate them to engage in volunteering. Designing such strategies would, consequently, be inefficient and uneconomic. Italy is an example for a country where such an argumentation is used (Komp 2010). In contrast, governments that support the idea of explicitly addressing older people as volunteers usually argue that these older individuals are especially suitable for volunteering. They argue that older individuals have particularly much disposable time, experiential knowledge, and accumulated wealth, which makes them the ideal candidates for voluntary tasks. Consequently, they deserve to be explicitly addressed. Germany and the United Kingdom are examples of countries where this line of argumentation is used (Bundesministerium für Familie, Senioren, Frauen und Jugend 2005; Komp 2010; Rochester et al. 2002).

European governments implemented various programmes that encourage older people to volunteer. Among these programmes, the ones implemented in Germany are particularly interesting, because they have a long tradition and their approach changed over time. In Germany, local, regional, and federal governments have been implementing programmes that support older volunteers, with the Federal Government drawing particularly much media attention to the contributions of older people. The German federal government first installed such a pilot project entitled "Seniorenbueros" ("Agencies for Senior Citizens") in 1993. Within this project, agencies were created that established contacts between interested older people and organizations that provided possibilities for volunteering. From 2002 to 2006, the federal government then hosted a pilot project entitled "Erfahrungswissen für Initiativen" ("Experiential knowledge for initiatives"). The idea here was to enable older people to develop their own voluntary projects. Between 2005 and 2007, the federal government then ran a project entitled "Selbstorganisation älterer Menschen" ("Self-organization of older people"). This project supported groups of older people that carried out tasks that were important to their municipality, such as service provision for other older people or running a public swimming pool. In 2008, finally, the federal government launched the project "Aktiv im Alter" ("Active in old age"). The central idea of this project is to install forums where citizens discuss developmental possibilities for their municipalities and, thereby indirectly help older people find an active role in society (Komp 2010).

Although policies for older workers and older volunteers are common in Europe, they are not the only policies that address older people's social citizenship

obligations. Policies that support older people's pressure and interest groups, for example, can also be considered in this light. They can be seen as efforts to give older people a stronger voice in the policy-making process. Unfortunately, only a minority of older Europeans engage in such pressure and interest groups (Walker 1999). In addition to these policies that focus on specific activities, we also find another kind of policies that take a more general approach: these are active ageing policies. In contrast to policies for older workers and older volunteers, active ageing policies also stress the benefits that older people derive from being active and engaged. The final section of this chapter discusses these policies.

# 5.5 Current Debate in Political Gerontology: How Can Governments Support Active Ageing?

The ageing of Europe's population brought about a shift in the focus of old age policies. In addition to the well-established policy goal of adding more years to the Europeans' lives, we now also see the policy goal of adding more life to years. But what can governments do to pursue such a goal? Active ageing policies provide an answer.

Active ageing is the "process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age. [...] The word "active" refers to continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force" (World Health Organization 2002, p. 12). This definition shows that there are many ways in which individuals can remain active, even after they retired and when their health declines. Governments, therefore, have various starting points for efforts to encourage older people to be active and to promote quality of life in old age.

European policy-makers have been considering active ageing policies since the end the twentieth century. When the United Nations declared 1999 the "United Nations Year of Older People", several European governments and the European Commission organized events that discussed active ageing policies, among other things (Walker 2008). Over the next years, however, the focus of active ageing policies was narrowly set on the labour market. From the perspective of these policies, active ageing meant to work for pay until a late age. Consequently, active ageing policies mainly aimed to keep older people in the labour force and to increase the state pension age. Moreover, in this initial period, active ageing policies were mainly framed as means to reach other goals, such as economic growth (Walker 2008; Von Nordheim 2004).

By now, however, the discussion on active ageing policies in Europe has broadened. This development became clearly visible when the European Union designated 2012 the "European Year for Active Ageing and Solidarity between Generations". With this step, the European Union strives to counteract the negative image of older people as mere beneficiaries of the welfare state and as a burden on society. It stresses that active ageing does not only benefit older people, but that it might additionally render economic benefits for society. Consequently, the European Union suggests that governments could look into possibilities to improve job opportunities and working conditions for older individuals, help older Europeans play an active role in society, and facilitate health and independent living in old age (Eurostat 2011). It, thereby, underlines that active ageing entails more than just good health and workforce participation. It, simultaneously, stresses that active ageing can be a goal by itself instead of a mere means to another goal.

In the framework of the European Year of Active Ageing, the umbrella term "active ageing" is used in a very broad sense. The European Union and its member states issued several publications to celebrate this year, with the publications illustrating the current understanding of active ageing. Two publications of the European Union are particularly detailed and therefore particularly suitable for showing which activities are currently considered "active ageing" activities. The first publication is a Eurobarometer report on active ageing that was requested by the European Commission. This report still adopts a narrow view on active ageing. It starts out with a description of the perceptions of ageing and older people. It, then, moves on to describe older people as workers, pensioners, volunteers, and as individuals in need of support. In its final section, it investigates how countries, local areas, authorities, and institutions, could best accommodate population ageing (European Commission 2012). The second publication is a report of Eurostat, which is the statistical office of the European Commission, on active ageing and solidarity between generations. This report adopts a wider understanding of the term active ageing. It starts out with a demographic portray of the European Union and then describes older people a workers and pensioners. Then, it moves on to describe older Europeans' health and well-being, their living and housing conditions, as well as their financial situation. In its last part, this report then zooms in on older people's participation in society. This part describes: intergenerational contacts and solidarity; older people's participation in organizations, voluntary, educational, and leisure activities; their use of public transport and the internet; and their participation in the political system, e.g. as Members of Parliament (Eurostat 2011).

Even though the perception of active ageing broadened, we cannot yet say whether active ageing policies themselves will also broaden their scope. The current fiscal crisis forces governments to restrict their spending and to focus on economic questions (Komp and Béland 2012). When pursuing such a strategy, the narrow understanding of active ageing with its focus on the labour market and on economic growth is more helpful than the broad understanding. Moreover, the broad understanding of active ageing includes activities that fall into the private sphere, such as grandparental child care and care-giving to kin. Governmental intervention in the private sphere is often considered inappropriate (Komp 2010). Finally, researchers and policy-makers are starting to grasp that active ageing policies cannot be implemented from one day to another. The predispositions for active ageing are laid during one's youth and middle-age, which means that policy-makers need to adopt a life-course approach when promoting active ageing (Walker 2002, 2008). While this approach is more effective than short-term initiatives, it has the drawbacks that its effects are only visible in the long run and that they cannot be measured directly. These kinds of effects can, unfortunately, be problematic for policy-makers, who need to give account of the effects of their activities whenever elections are upcoming.

Taken together, active ageing is a suitable approach for the growing number of healthy older people in ageing populations. Active ageing policies, thus, try to tap the potentials and opportunities that population ageing provides. The European Commission initially adopted a narrow understanding of active ageing policies that tried to harness the potentials of ageing populations to benefit labour markets and welfare states. Lately, however, the European Commission started to promote a wider understanding of active ageing policies that also benefit the older people themselves. Important characteristics of this broad understanding are that it takes a holistic view on older peoples' lives and that is also considers life-course effects. However, only time will tell whether the broad understanding can gain ground in the concrete policies of the European Union and its member states.

### **Check Your Progress: A Quiz on Political Gerontology**

Question 5.1: What roles do older people play in welfare states? (Multiple answers possible)

- (a) Beneficiaries of health and social care provisions
- (b) Contributors to welfare, e.g. through volunteering
- (c) Voters
- (d) Beneficiaries of pension schemes
- (e) All of the above

Question 5.2: What are important influences on older people's voting behavior (Multiple answers possible)

- (a) Age
- (b) Generational membership
- (c) Gender
- (d) Socio-economic status
- (e) All of the above

Question 5.3: How is the concept called that describes a person's membership in society in terms of social participation, welfare, and standard of living?

- (a) Welfare citizenship
- (b) Political citizenship
- (c) Welfare rights
- (d) Social citizenship
- (e) Social rights

Question 5.4: Which part of Europe has the highest mandatory retirement age?

- (a) Southern Europe
- (b) Continental Europe
- (c) Northern Europe
- (d) Eastern Europe
- (e) The mandatory retirement age is similar in all parts of Europe

Question 5.5: What are aims of active ageing policies? (Multiple answers possible)

- (a) Improve the physical appearance of older people
- (b) Enhance older people's health
- (c) Enable people to work longer
- (d) Strengthen older people's social integration
- (e) Help older people to live independently

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#### References

- Baldock, C. V. (1999). Seniors as volunteers: an international perspective on policy. Ageing and Society, 19(5), 581–602.
- Bundesministerium für Familie, Senioren, Frauen und Jugend (2005). Fünfter Bericht zur Lage der älteren Generationen in der Bundesrepublik Deutschland [Fifth report on the situation of older generationen in the Federal Republic of Germany]. Bonn: Bundesministerium für Familie, Senioren, Frauen und Jugend.
- Busemeyer, M. R., Goerres, A., & Weschle, S. (2009). Attitudes towards redistributive spending in an era of demographic ageing: the rival pressures from age and income in 14 OECD countries. *Journal of European Social Policy*, 19(3), 195–212.
- de Vries, C. E., van der Brug, W., van Egmond, M. H., & van der Eijk, C. (2011). Individual and contextual variation in EU issue voting: the role of political information. *Electoral Studies*, *30*(1), 16–28.
- Estes, C. (2003). Theoretical perspectives on old age policy: a critique and a proposal. In S. Biggs, A. Lowenstein, & J. Hendricks (Eds.), *The need for theory. Critical approaches to social gerontology* (pp. 219–243). Amityville: Baywood Publishing.
- European Commission (2012). Active ageing. Report. Special Eurobarometer 378. http://ec. europa.eu/public\_opinion/archives/ebs/ebs\_378\_en.pdf. Accessed 01 Feb 2012.
- European Union 2012. Luxembourg: Publications Office of the European Union.
- Gilleard, C., & Higgs, P. (2002). The third age: class, cohort or generation? *Ageing and Society*, 22(3), 369–382.
- Goerres, A. (2007). Why are older people more likely to vote? The impact of ageing on electoral turnout in Europe. *British Journal of Politics and International Relations*, 9(1), 90–121.
- Goerres, A. (2008). The grey vote: determinants of older voters' party choice in Britain and West Germany. *Electoral Studies*, 27(2), 285–304.
- Goerres, A., & Tepe, M. (2010). Age-based self-interest, intergenerational solidarity and the welfare state: a comparative analysis of older people's attitudes towards public childcare in 12 OECD countries. *European Journal of Political Research*, 49(6), 818–851.

- Hanley, S. (2012). Explaining the success of pensioners' parties: a qualitative comparative analysis of 31 countries. In P. Vanhuysse, & A. Goerres (Eds.), Ageing populations in postindustrial democracies. Comparative studies of policies and politics (pp. 23–53). New York: Routledge.
- Hemerijck, A., Knapen, B., & van Doorne, E. (Eds.). (2009). *Aftershocks. Economic crisis and institutional choice*. Amsterdam: Amsterdam University Press.
- Kohli, M. (1988). Ageing as a challenge for sociological theory. Ageing and Society, 8(4), 367–394.
- Kohli, M. (1991). Retirement and the moral economy: a historical interpretation of the German case. In M. Minkler & C. L. Estes (Eds.), *Critical perspectives on aging: the political and moral economy of growing old* (pp. 273–292). Amityville: Baywood Publishing.
- Komp, K. (2013). Reimagining old age in Europe: the effects of changing work and retirement patterns. In S. McDaniel, & Z. Zimmer (Eds.), *Global ageing in the 21st century* (pp 175– 193). Aldershot: Ashgate.
- Komp, K. (2011). The political economy of the third age. In D. Carr & K. Komp (Eds.), Gerontology in the era of the third age (pp. 51–66). New York: Springer Publishing.
- Komp, K. (2010). The young old in Europe—burden on or resource to the welfare state? Dissertation VU University Amsterdam. Amsterdam: Ipskamp.
- Komp, K., & Béland, D. (2012). Balancing protection and productivity: International perspectives on social policies for older people. *International Journal of Social Welfare, Supplement*, *1*(21), S1–S7.
- Komp, K., & Van Tilburg, T. (2010). Ageing societies and the welfare state: where the inter-generational contract is not breached. *International Journal of Ageing and Later Life*, 5(1), 7–11.
- Leive, A. (2010). Economic transition and health care reform: the experience of Europe and Central Asia. International Monetary Fund Working Paper 10/75. Washington: International Monetary Fund.
- Marshall, T. H., & Bottomore, T. (1992). Citizenship and social class. Chicago: Pluto Press.
- Mayer, K.-U., & Schoepflin, U. (1989). The state and the life course. Annual Review of Sociology, 15, 187–209.
- Myles, J. (2002). A new social contract for the elderly? In G. Esping-Andersen, D. Gallie, A. Hemerijck, & J. Myles (Eds.), Why we need a new welfare state (pp. 130–172). Oxford: Oxford University Press.
- New York Times (2010). In France, labour strikes head for showdown. http://www.nytimes. com/2010/10/20/world/europe/20france.html. Accessed 19 Oct 2010 (19.10.2010).
- Organisation for Economic Co-operation and Development (OECD). (2011a). *Help wanted? Providing and paying for long-term care*. Paris: Organisation for Economic Co-operation and Development.
- Organisation for Economic Co-operation and Development (OECD). (2011b). *Pensions at a glance 2011. Retirement income systems in OECD and G20 countries*. Paris: Organisation for Economic Co-operation and Development.
- Organisation for Economic Co-operation and Development (OECD). (2006). *Ageing and employment policies: live longer, work longer*. Paris: Organisation for Economic Co-operation and Development.
- Paris, V., Devaux, M., & Wei, L. (2010). Health systems institutional characteristics: a survey of 29 OECD countries. OECD health working papers no. 50. Paris: Organisation for Economic Co-operation and Development.
- Pavolini, E., & Ranci, C. (2008). Restructuring the welfare state: reforms in long-term care in Western European countries. *Journal of European Social Policy*, 18(3), 246–259.
- Phillipson, C. (2004). Work and retirement transitions: changing sociological and social policy contexts. *Social Policy and Society*, *3*(2), 155–162.
- Pierson, C. (2001). *Beyond the welfare state? The new political economy of welfare*. Cambridge: Polity Press.
- Riley, M. W., & Riley, J. W, Jr. (1994). Age integration and the lives of older people. *The Gerontologist*, 33(1), 110–115.

- Rochester, C., Hutchinson, R., Harris, M., Keely, L. (2002). A review of the home office older volunteers initiative. Home office research study 248. London: Home Office.
- Sinn, H.-W., & Uebelmesser, S. (2002). Pensions and the path to gerontocracy in Germany. *European Journal of Political Economy*, 19(1), 153–158.
- Svallfors, S. (2010). Policy feedback, generational replacement, and attitudes to state intervention: Eastern and Western Germany, 1990–2006. *European Political Science Review*, 2(1), 119–135.
- Von Nordheim, F. (2004). Responding well to the challenge of an ageing and shrinking workforce. European Union policies in support of member state efforts to retain, reinforce and re-integrate older workers in employment. *Social Policy and Society*, 3(2), 145–153.
- Walker, A. (1999). Political participation and representation of older people in Europe. In A. Walker & G. Naegele (Eds.), *The politics of old age in Europe* (pp. 7–24). Buckingham: Open University Press.
- Walker, A. (2002). A strategy for active ageing. *International Social Security Association*, 55(1), 121–139.
- Walker, A. (2008). Commentary: The emergence and application of active aging in Europe. Journal of Aging and Social Policy, 21(1), 75–93.
- World Health Organization. (2002). Active ageing. A policy framework. Geneva: World Health Organization.

#### **Recommended Readings**

Komp, K. (2011). The political economy of the third age. In D. Carr & K. Komp (Eds.), *Gerontology in the era of the third age* (pp. 51–66). New York: Springer Publishing. *This chapter describes the opportunities that population ageing provides to welfare states.* 

*It, therewith, underlines that older people can be a resource to welfare states, if governments implement suitable strategies.* 

Mayer, K.-U., & Schoepflin, U. (1989). The state and the life course. Annual Review of Sociology, 15, 187–209.

This article explains how welfare states are connected to life-courses, and therewith to old age. It, thereby, lays the groundwork for understanding the theoretical foundation of discussions on old age and welfare states.

Vanhuysse, P., & Goerres, A. (Eds.). (2012). Ageing populations in post-industrial democracies. Comparative studies of policies and politics. New York: Routledge.

This book features chapters on different aspects of policies for ageing populations, such as pension reforms, attitudes to redistribution, and pensioners' parties. In doing so, it provides insight into current debates.

# Chapter 6 Economic Gerontology: Older People as Consumers and Workers

Jolanta Perek-Bialas and Joop J. Schippers

# 6.1 Summary and Learning Goals

This chapter discusses older people's roles in the economy. It considers them in their role as workers who sell their manpower in the labour market, and as consumers who purchase goods and services. In Europe, the situation of older workers is currently strongly debated, and several governments have implemented reforms trying to encourage people to work until a later age. Older Europeans' consumption patterns differ markedly from the ones of younger individuals, e.g. in that older people spend less money. Finally, this chapter discusses how the economic crisis might affect older Europeans.

After reading this chapter, you should be able to:

- Describe how consumption patterns change over the life course
- Describe challenges that older workers encounter
- Explain what policy-makers could do to support older workers
- Discuss how the economic crisis could impact older Europeans

# 6.2 What is Economic Gerontology?

In this chapter, we would like to jointly treat economics and gerontology, seeing it as one sub-discipline in the framework of gerontology called *economic gerontology*. On the one hand, gerontology is the scientific study of the biological, psychological and social aspects of ageing—as it is stated by Quadagno (2011). On the other hand, economics is the social science that primarily studies choices and focuses on the production, distribution, and consumption of goods and services. From the perspective of economic gerontology, we will therefore be interested in the analysis of

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the consequences for the production, distribution and consumption of the process of population ageing. In other words, economic gerontology considers older people's roles in and for the economy. It considers them in their role as workers who sell their manpower in the labour market. It also considers them in their role as consumers who purchase goods and services. Moreover, it considers them in their role as tax payers and consumers of public services, like care.<sup>1</sup>

# 6.3 Central Theories and Concepts in Economic Gerontology

There is a variety of theories on ageing, which are well described and presented, with a division-like in economics-between micro theories of ageing (these are related to issues of individual ageing<sup>2</sup>) and macro theories (here ageing is a part of the social structure, i.e. relation between age and social status). An influential theory in Europe is the activity theory (Havighurst et al. 1968), which assumes that older persons age optimally if they stay active and manage to resist the shrinkage of their social worlds (Havighurst et al. 1968, p. 161). The impact of this theory is visible in the active ageing concept-popular in Europe-which could be understood as the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age (World Health Organization 2002, p. 12). However, researchers discuss whether this concept includes all issues relevant from the perspective of ageing studies, and whether European policy-makers take it on board (Walker and Maltby 2012). These discussions sometimes also tackle the topic of successful ageing, as it was introduced by Havighurst (see Chap. 4 on Social Gerontology). Related to economic theory is the so-called social exchange theory. This theory, which is often used in sociological research, claims that the behaviour of individuals (including social interactions) is rational and based on people's interest to maximize their profits and minimize their costs (Marshall 1996). Individuals are interested in exchange with other individuals as long as the benefits of this exchange are greater than costs associated with it. In this understanding, older generations could be perceived as those with lower resources, poorer health and low education. Consequently, members of younger generations do not have a motive for exchanges with them. However, many analyses of care within families show that the care for older parents/family member is provided thanks to love or other emotions, pointing to the fact that not only rational arguments and calculations are important (see the results of the EUROFAMCARE project<sup>3</sup>). Also, studies showed that intergenerational transfers

<sup>&</sup>lt;sup>1</sup> For information about the economics of ageing, see Schulz (2001), Wise (2009, 2010).

<sup>&</sup>lt;sup>2</sup> For an excellent overview of theories of ageing, see Quadagno (2011).

<sup>&</sup>lt;sup>3</sup> EUROFAMCARE project about Services for Supporting Family Carers of Elderly People in Europe: Characteristics, Coverage and Usage, see http://www.uke.de/extern/eurofamcare/.

between family members are still strong in Europe, not only in the Mediterranean countries, but also in Central and Eastern Europe (Litwin and Attias-Donfut 2009).

The other important theory—from the point of view of the current chapter is the modernization theory of Cowgill (1974), which claims that social changes devalue the position of older people. This theory distinguishes four types of social changes that affect the position of older persons: health technology, economic technology, urbanization and mass education. These changes are lowering the status of older people and favour youth. However, the modernization theory was criticized heavily and nowadays the age stratification theory seems to be more influential (see i.e. Riley 1971). Here, age is defined as an element of social organization as the ageing process and age structures form a system of interdependent parts that we refer to as an'age stratification system' (Riley et al. 1988, p. 243; Riley and Riley 2000). Besides in theories which are more appropriate to be mentioned in an overview of political gerontology, the interest of old age and ageing are also considered from an economic perspective in feminist theories.

However, compared to social sciences like sociology or (social) psychology, economics as a scientific discipline is rather underdeveloped when it comes to the 'gerontology of economics' or 'economic gerontology'. There is no economics equivalent to the SAGE handbook of social gerontology (Dannefer and Phillipson 2010). Also an impressive volume like the Encyclopedia of Gerontology (Birren 2007) does not include any substantial and serious contributions on economics. Even though Estes and Phillipson (2007), Estes (2001/2009) and Polivka and Estes (2009) talk about 'the political economy of aging', their primary orientation is on social policy, which is—of course—very important, but only covers a small part of the wide range of topics economists usually study and which will be influenced by the ageing of the population. That is why in this chapter we opt for a broader approach that is not limited to the consequences of ageing for the health system, social policy or the pension system, but addresses the whole economic circle, including also consumption, saving and the labour market.

In order to present a systematic analysis of the economic consequences of an ageing population, we will depart from a basic circular model like the ones that are included in many economic textbooks to describe the main flows and relations in a country's economy (see Fig. 6.1).

The model in Fig. 6.1 illustrates the different roles that individuals play in the economy. They sell their working hours in the labour market. In exchange, they get paid and with the earnings they make they can buy commodities and services in the markets for goods and services. To produce these goods and services, entrepreneurs hire workers in the labour market. These relations constitute the economic circle that is the foundation of every market economy. Yet, in most national economies the picture is slightly more complicated. Some citizens earn enough to be able to save part of their income. These savings go to the capital market (usually with banks as intermediate institutions). In these capital markets, the same entrepreneurs that hire workers to produce goods and services borrow these savings again to build production plants, buy machines or lorries, equip offices etc. We call such items capital goods. In most modern economies, individual citizens can or have to spend their earnings

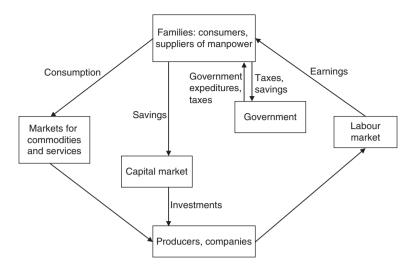


Fig. 6.1 The economic circle and the basic flow of money

on a third category, i.e. taxes to be paid to the government. In return the government 'produces' all kinds of (public) goods and services, like the police and the fire brigade, laws, a legal system with judges, in many countries an army to defend the nation, and sometimes dykes to protect the land against the sea. Depending on the type of welfare state, the government is also responsible for the provision of education, child care, health and social security, though countries differ very much with respect to the extent of government intervention in these domains. Public pensions are included in government expenditures, while social premiums to pay for these public pensions in case of a pay-as-you-go pension system are included in the taxes paid by all workers/all inhabitants. Private pensions stem from (former) employers and are included in the earnings stream to families. These private pensions are paid from a fund kept/organised by employers and fostered from a share of the wages of employees withheld during earlier stages of their life course. Thus, the circle includes both individuals who are still in the labour market and those who have retired already.

# 6.4 What Does Economic Gerontology Tell Us about the Current State of Europe?

Economic gerontology helps us to capture the role of older people in the economy. In the following pages, we will use it to gain an overview of the situation in Europe.<sup>4</sup> For this purpose, we will first look at income and poverty, then at consumption and savings, and finally at older workers and their place in the labour market.

<sup>&</sup>lt;sup>4</sup> For more information, see the 'Survey of Health, Ageing and Retirement in Europe', which studies the situation of Europeans aged 50+ http://www.share-project.org/.

# 6.4.1 Income and Poverty over the Life Course and in Old Age

For economists, the issue of income is essential for the explanation of the wealth of society. Looking at the development of income over the life course, a common finding is that when we are young, still in school and not working yet, we do not have an income of our own. Next, at the beginning of the working career, most individuals start earning an income, but wages are still modest as a new worker is not yet very experienced and still earns less than a skilled worker. During their careers, most people become more experienced, move to higher jobs, and see their earnings increase, even though at different paces. This development of income over the life course has been extensively discussed by the human capital theory (Becker 1962; Polachek and Siebert 1993). When workers retire from the labour market they usually see their income fall. The extent to which income falls after retirement depends on the pension system in various economic countries.

Table 6.1 shows the level of income at various stages of the life course for a selection of European countries. We did select these eight countries because they present a representative picture for the whole of Europe. The pattern is the same for all countries, though at a different level and with greater and smaller variation over the life course.

Of course, these figures do not represent 'real' life-course patterns, because they relate to income statistics for different cohorts at one singular point in time. Those who are over 65 years now had much lower incomes when they were under 18 than the current cohorts under 18. In a similar way, future older people will probably be richer than past and current cohorts of older people. Thus, individual life-income patters do have a parabolic shape, but less steep than Table 6.1 suggests.

Additionally, income is a key variable in calculating poverty rates, which are a crucial indicator for whether and where intervention for older persons is needed. Time series data for several European countries show that for the group of people aged 65+ years, the median income is lower than that for the group of persons aged 18–64 years (Atkinson and Marlier 2010). The general picture shows that the income of the 65+ age category is gradually rising over time. However, as the available income figures have not been corrected for inflation, one cannot be sure that the rise in income represents an increase in welfare and purchasing power, too.

Of course, a lower income after retirement does not automatically implicate that people in this age category are poor. According to a definition of poverty used in several countries, the poverty threshold lies at 60 % of the national median income. Using this definition, older persons are not the most vulnerable groups in many countries, unlike for instance the unemployed, single mothers and families with many children. However, also within the age group 65+ years, one may find wide differences. Usually, retired women are in a much worse financial situation than retired men. This worse financial situation is not only caused by different methods of calculating pension benefits and the longer average life expectancy of

| Country         | Age group (in years) | Income (in Euros) |         |  |
|-----------------|----------------------|-------------------|---------|--|
|                 |                      | In 2005           | In 2010 |  |
| Denmark         | Below 18             | 21,996            | 25,817  |  |
|                 | 18–64                | 23,759            | 27,695  |  |
|                 | 65 and older         | 16,298            | 19,342  |  |
| Germany         | Below 18             | 14,934            | 17,607  |  |
|                 | 18–64                | 17,194            | 20,000  |  |
|                 | 65 and older         | 15,650            | 17,167  |  |
| France          | Below 18             | 14,790            | 18,222  |  |
|                 | 18–64                | 16,796            | 20,717  |  |
|                 | 65 and older         | 14,549            | 19,998  |  |
| Italy           | Below 18             | 12,782            | 13,799  |  |
|                 | 18–64                | 15,471            | 17,082  |  |
|                 | 65 and older         | 12,592            | 14,939  |  |
| The Netherlands | Below 18             | 15,310            | 18,920  |  |
|                 | 18–64                | 18,198            | 21,478  |  |
|                 | 65 and older         | 15,261            | 18,041  |  |
| Poland          | Below 18             | 2,162             | 4,048   |  |
|                 | 18–64                | 2,588             | 4,584   |  |
|                 | 65 and older         | 2,702             | 4,146   |  |
| Sweden          | Below 18             | 16,414            | 18,965  |  |
|                 | 18–64                | 18,981            | 20,990  |  |
|                 | 65 and older         | 14,692            | 16,127  |  |
| UK              | Below 18             | 16,622            | 15,203  |  |
|                 | 18–64                | 20,697            | 18,873  |  |
|                 | 65 and older         | 14,590            | 14,524  |  |

Table 6.1 Income by age groups, 2005 and 2010

(Eurostat 2012c)

Note The income is the median equivalised income, it has not been corrected for inflation

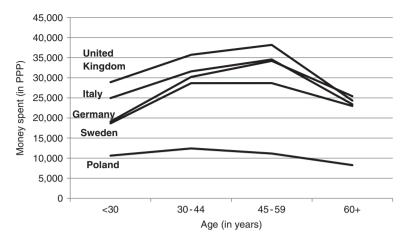
women, but also by the fact that during the whole life course women have been doing additional, unpaid tasks outside the labour market (like childcare, house-work etc.) which prevented them from spending as much time and effort on their labour market career as men and which is not rewarded in most pension systems. For a more detailed picture of the income position and the risk of poverty of older people across Europe, we would like to refer to Jehoel-Gijsbers and Vrooman (2008), Vrooman (2008) and Zaidi (2010).

### 6.4.2 Consumption over the Life Course and Older Consumers

Population ageing in Europe entails that older consumers become more numerous. Are older consumers likely to behave differently from younger consumers? There are several reasons to answer this question affirmatively. Already, intuition may point to the fact that younger people are engaged in different activities than older people. Children play with toys, adolescents may ride a surf board, while older people may go to the museum more often or work in their garden to grow vegetables. Each of these activities is related to the consumption of different goods and services. In general, one may point to the fact that during the course of their lives, older people usually have been able to acquire some wealth (it could be a house, a car, furniture, a TV set and a washing machine, and most of the things needed when a new-usually young-household is established). Therefore, one might hypothesize that basic consumer durables will be bought more often by younger and middle aged people than by people over fifty or sixty. Next, young people who are still growing physically or workers in their forties who work in construction need more calories and will eat more than older people. In addition, retired people who spend more time at home and maybe sit on the couch more often, reading a book or watching television may spend more money on heating their home than younger people who are at school or at work most of the day. On the other hand, as older people—especially after retirement—have more leisure time they may spend a larger share of their income on going to the theatre, a trip to another town to visit a special exhibition or going to the zoo with their grandchildren. Moreover, due to declining physical or cognitive capacities, older people might more often consult their general practitioner or a physiotherapist. Consequently, one might expect a shift in consumption from 'goods' to 'services' throughout the life course.

Figure 6.2 presents information on consumption in a selection of European countries. The general picture presented here supports the idea that consumption shows a parabolic development over the life course. In all countries except Poland consumption reaches a maximum for the age category 45–59 years old and declines afterwards. This development is similar to the development of earnings over the life course presented above. Of course, here the same caveat holds that the information included in the graph does not stem from longitudinal data, but instead describes the behaviour of different generations. People currently in their 30s will probably show different consumption patterns when they will be in their 60s or 70s than those who are in these age brackets today. Moreover, the figures do not reveal which share of their income individuals of various age categories spend on consumption.

Detailed analyses of consumption expenditure patterns (e.g. from the Eurostat database) gives us more information of the development of various categories of consumption over the life course. While the consumption of food and non-alcoholic beverages is more or less stable over the life course, the expenditures on clothing and footwear show a clear tendency to fall when we analyse the shares of total expenditures. Looking at spending on rent, we see that during the first stage of the life course many individuals have not yet settled down and live in rented places. During their thirties and forties they settle down, have saved some money and buy a place of their own. The number of house owners reaches its peak for the age category 45–69 years and decreases afterwards, because in some European countries older people sell their houses (e.g. because the children have moved out or because they move to an old age home). In contrast with the expenditures on food



**Fig. 6.2** How much money people spend (in PPP), in 2005 (Eurostat 2009). *Note* PPP means 'purchasing power parity'. PPP tells us how much money would be needed to buy the same goods and services in different countries. Using PPP is helpful when we compare countries with different currencies (like Euros and Polish zloty), because then we do not have to pay attention to foreign exchange rates

and clothing, the expenditures on rent for housing show wide differences between countries. These differences reflect both cultural and institutional variation between European countries. As expected, the expenditures on electricity, gas and other fuels are more or less stable as long as most people still spend most of their days away from home (at school or in the labour market) and increases after the age of 60. Health expenditures show a tendency—as expected—to increase over the life course. This increase already starts for the age category 45–59 and continues from there on. While older people spend more money on health, their expenditures on education are very low. Expenditures on transportation are stable during working life and drop in almost all countries when people retire and do not commute to work every day any longer. Other expenditures like expenditures on recreation and culture remain stable after retirement (in some countries one can observe an increasing trend, like in Germany, while in others, like Poland, the trend is decreasing). Expenditures on restaurants and hotels slowly decline over the life course.

Consequently, if consumer behaviour would not change in the future, population ageing would result in less consumption overall, in less expenditures on clothing and footwear, on education, and on restaurants and hotels, and in more expenditures on rent for housing, on electricity, and on health care. However, the consumption behaviour of future generations is unlikely to remain the same as that of past generations. First, the supply and availability of consumer goods and services is changing all of the time. One sees this in the field of information and communication technologies, but also in the field of health or in that of recreation. People have more options to choose and it is almost impossible to predict which options they will actually choose. Second, people of current generations are much healthier than those of previous generations. Many of today's older people are energetic and healthy, have hobbies, travel, and maybe even start their own business. These changes in opportunities and changes in behaviour may give rise to what is sometimes called 'a silver economy': an economy with all kinds of new products and services, particularly aimed at the growing share of healthy, wealthy senior citizens. Of course, this development may be different for various countries, depending on their wealth and the general health of the (senior) population. Interesting developments concerning a 'silver economy' can be found in some Western European countries (Germany, France and others), while such initiatives have not yet developed in most Central and Eastern European countries.<sup>5</sup>

#### 6.4.3 Savings

To a large extent, saving behaviour and saving patterns reflect consumption behaviour and consumption patterns. Young people who still have low earnings and high expenditures on consumption to build up their household are likely to spend a large share of their income on consumption. This leaves them with little opportunity for savings. If income increases over the life course and many desires on consumption have been fulfilled there may be more room for savings, especially after the children have grown up. From a theoretical perspective it is often hypothesized that individuals may want to put money aside during their fourties and fifties, while they are still in the prime of their life and active in the labour market to save it for the 'rainy days' after retirement. As a matter of fact, in some countries with capital funded (additional) old age pensions (like the Netherlands and the United Kingdom) these savings are even obligatory: every month the employer puts part of the workers' wages into a special pension fund. From this fund workers get (additional) benefits after retirement (on top of their public pensions based on a pay-as-you-go system). In general-as we have seen already above-individuals' income falls after retirement, but so does consumption. Whether income or consumption declines faster as people age cannot be predicted beforehand. Empirical evidence has to provide the answer to this question. The older people get, the lower the necessity for savings, unless older people want to leave a large inheritance to their surviving relatives.

Consequently, at the macro level, one may expect that the higher the share of the population in retirement, the lower the share of savings in national income and the larger the withdrawals from private saving accounts and pension funds. However, this relation may be obscured by the availability of public provisions, for instance in the field of health care. If older people have to pay for health care themselves, they may need much more savings for the last years of their life than in case of the availability of an extensive public health insurance system. On the other hand, the need for savings depends on the national situation in housing. In countries where many

<sup>&</sup>lt;sup>5</sup> For more details, see http://www.silvereconomy-europe.org/.

families own their own houses, older people may often be in a position where their mortgage has been paid off and living expenses are low. This will give room for savings, even in old age. In countries where most families live in rented houses, people will have to pay rent until the end of their lives, which leaves them less room for savings. Moreover, the saving behavior is related to the feeling of being uncertain about one's future, and Hershey's et al. (2010) analysis clearly shows that there are differences across nations in the degree of retirement worries, as well as differences in the propensity to save for the future. While low levels of worry can be observed in Scandinavian countries and the Netherlands, Europeans from Eastern Europe reported high levels of worry. Yet, in those countries, saving for old age is not so popular.

#### 6.4.4 Older Workers

Most contributions that have been made so far to the scientific field of the (sub) discipline of economic gerontology are related to the labour market. This has probably to do with the fact that the labour market is much more sensitive to the ageing of the population than consumer markets. No matter what their age is, individuals keep buying food and clothes, they need a place to live, and they need to heat that place during the winter. As we have seen, consumption fluctuates over the life course, but it does not come to a halt after a certain age. This is, however, precisely what happens in the labour market. At some age, most people that are in the labour market retire and stop working for pay (see Chap. 5 on Political Gerontology). This holds in particular for the large share of employees within the work force. Farmers and self-employed individuals often keep on working until the end of their lives. However, their share of the workforce has been decreasing over the past century. According to the latest Eurostat data, in general 41 % of men and 59 % of women in the age group 55-64 years are inactive. This is mirrored by low employment rates for older workers in the age group 55-64 years (see Table 6.2). However, there are countries like Sweden with more than 70 % of those between 55 and 64 years employed, but also countries like Poland with an employment rate for this age group of about 30 %. It is still evident that persons aged 55-64 years are less active on the labour market than younger age groups. Inactivity of individuals in this age bracket is not only caused by (early) retirement, but also by illness, disability, and unemployment.

Many workers belonging to the cohorts that are now in their fifties and sixties started working at a relatively young age, in the middle of their teens. At that time, most jobs were to be found in manufacturing and agriculture and many of the jobs were physically demanding. In addition, protective measures (against dust, noise, heat or cold, security clothing) were not yet as well developed as they are nowadays. Consequently, many members of these cohorts who have been working for forty years or longer in these physically demanding jobs are worn out by the time they reach the age of 55 or 60 and/or suffer from some kind of disease. Therefore, among disabled workers the share of older workers is relatively high.

|                | Total |      | By educat |              |      |
|----------------|-------|------|-----------|--------------|------|
|                | 2000  | 2011 | Low       | Intermediate | High |
| Denmark        | 55    | 59   | 48        | 59           | 72   |
| France         | 29    | 41   | 34        | 42           | 57   |
| Germany        | 37    | 60   | 42        | 58           | 74   |
| Italy          | 27    | 37   | 26        | 50           | 68   |
| Netherlands    | 38    | 56   | 44        | 58           | 71   |
| Poland         | 29    | 37   | 23        | 37           | 58   |
| Sweden         | 64    | 73   | 63        | 73           | 82   |
| United Kingdom | 50    | 57   | 43        | 62           | 65   |

Table 6.2 Employment rate of Europeans aged 55–64 years (in %), in 2000 and 2011

(Eurostat 2012a, b)

While research shows that physical capacities decrease over the life course and on average younger workers are in a better physical condition than older workers, older workers may also become obsolete from an economic perspective. When young people go to school, they accumulate all kinds of knowledge and skills and when they enter the labour market they are the ones embodying the state of the art in their profession or discipline. During their career they get more experienced in performing their job, but their knowledge may become out-dated as technological development goes on and new findings are introduced in the work process. Of course, additional training can compensate for this loss of 'human capital'. However, at some point during the life course both individuals and their employers become reluctant to invest any more in additional training and the development of new skills as the payback period shortens, i.e. the time the employer and the employee will benefit from these additional investments. So, what we see is that training activities decline after the age of 45 or 50 years and come almost to a halt at the age of 60 years. As a consequence, many older workers remain afloat in their professional life based on the knowledge they acquired in the past (De Grip and Van Loo 2002; Mayhew and Rijkers 2004; Thijssen and Van der Heijden 2003; Thijssen and Walter 2006). This makes them particularly vulnerable in times of economic downturn or crisis. If employers have to reduce their staff, they may prefer to retain their most productive workers (Taylor and Walker 1998; Parsons 1972; Boxall and Purcell 2003; Dorn and Sousa-Poza 2010). Unless older workers possess some specific talents, employers will often prefer to retain those workers who embody most recent skills and knowledge and who are physically fit to do the job. It, of course also depends on national laws concerning redundancies to what extend employers can follow their economic preferences and to what extend older workers will be protected (as a case of Poland, four years before the retirement eligible age the worker cannot be laid off). However, it has to be indicated that there are various possibilities of using performances and skills of older people in the labour market (e.g. via mentoring system in the companies).

Bearing in mind the causes for disability and unemployment of older workers, it should not come as a surprise that there is a strong correlation between older

people's labour force participation and education. First, highly educated individuals enter the labour market later than lower educated individuals. Therefore, at the age of 55 or 60 years, the higher educated have been working fewer years than their lower educated colleagues. In addition, highly educated workers often work in so-called white collar office jobs, which may be less demanding from the perspective of physical health. As the initial learning abilities of highly educated workers are higher, they may also find it easier to pick up new knowledge during the course of their career. This might protect them against (part of) the depreciation of their human capital.

If future cohorts of workers were to show retirement patterns similar to current ones, this would imply an ever smaller workforce. This ever smaller workforce would have to generate income for an increasing group of retirees, unless—of course—these retirees would have saved enough money for their old age themselves. In most countries this is not the case, and even countries with well-developed private pension funds and high private pension savings like the Netherlands will have to deal with increasing health and public pension costs as the group of retirees grows.

That is why in 2000, European government leaders have develop the so-called 'Lisbon strategy' aimed at—among other things–increasing the share of the 50+ population active in the labour market. Bearing in mind that the life expectancy of men and women in Europe is still rising (see Chap. 1), part of the strategy to increase the support for the future welfare state has been and still is the increase of the official retirement age. In most European countries this retirement age is 65 years, but several European governments have already decided that this official retirement age should be increased (for example in Germany, Sweden, France, the Netherlands, Belgium and Poland), immediately or in the next few years. In some countries, this has resulted in social unrest and strikes. Next to that, it is noteworthy to examine how employers look at the ageing of the work force and its consequences. Because, in the end, even if individual workers want to continue working until a higher age, it still depends on the employers whether they will be able to realize this goal.

Taylor and Walker (1994) were among the first to analyze the organizational response to an ageing work force. One of their findings (later on quite often confirmed by others) is that employers assume older workers to lack appropriate and adequate skills. In many studies (e.g. Taylor and Walker 1998) about perceptions of older versus younger workers, one can find the typical pattern that older workers are appreciated for their loyalty, reliability, and even productivity (e.g. in the United Kingdom, employers value older over younger workers in terms of productivity, see Van Dalen et al. 2009). However, employers' most negative opinions about older workers' are those related to their inability to deal with new technology, resistance to change, lack of flexibility in adjusting to changing market demands, and lack of willingness to collaborate with younger superiors. All these stereotypical beliefs negatively affect employers' attitudes and behaviours towards older workers. Employers-driven by negative attitudes and the desire to reduce the labour cost-could send workers into retirement (see employers' strategies towards older workers at the company-level in Poland, Perek-Białas and Turek 2012). In spite of the perceived demographic challenges ahead, employers in some countries-such as Greece, Spain and the Netherlands-did not take substantial

measures to retain and recruit older workers or improve their productivity, contrary to employers in the United Kingdom, who recognized older workers as a valuable source of labour supply and have implemented measures which allow to keep older workers not only in the companies but also in the labour market (Van Dalen et al. 2009).

Recent analyses show how European employers look at various dimensions of productivity of older and younger workers. For instance, 50 % of employers associate 'flexibility' with younger workers, while only 20 % associate flexibility with older workers. The analysis shows that older workers have better scores on so-called 'soft skills', while younger workers are perceived to perform better on 'hard skills' (Aleksandrowicz 2011).

# 6.5 Current Debate in Economic Gerontology: How Does the Economic Crisis Affect Older Individuals?

In Europe, the tone of economic considerations on old age currently sharpens because of the economic crisis of 2008. This crisis drives old age poverty, it leads companies to foreclose, and it tightens public budgets at the same time. These developments give more weight to questions of economic sustainability and they will bring forward changes that will still persist even after the economic crisis subsided.

An important fact in times of economic crisis is that future opportunities of older workers do not only depend on employers' views on older and younger workers' qualities, but also on how they perceive these qualities in relation to labour costs. Many European employers foresee an (un)balance between labour costs and productivity (Schippers et al. 2011). While human capital theory predicts that workers' productivity will decrease as they get older, in many countries institutional arrangements provide for age or experience related wage schemes and different forms of seniority payment. Table 6.3 shows employers' beliefs on what will happen with labour costs and productivity, respectively, if the average age of their staff increases by 5 years.

|             | Labour costs |           |       | Productivity |           |       |
|-------------|--------------|-----------|-------|--------------|-----------|-------|
|             | Higher       | No change | Lower | Higher       | No change | Lower |
| Denmark     | 33           | 61        | 6     | 10           | 71        | 19    |
| France      | 51           | 43        | 6     | 8            | 64        | 28    |
| Germany     | 48           | 51        | 1     | 10           | 54        | 36    |
| Italy       | 49           | 48        | 3     | 14           | 61        | 25    |
| Netherlands | 75           | 24        | 1     | 8            | 58        | 34    |
| Poland      | 16           | 74        | 10    | 10           | 61        | 29    |
| Sweden      | 44           | 50        | 6     | 8            | 55        | 37    |

**Table 6.3** What employees think will happen if the average age of their employees increases by5 years (in %), in 2009

(Own calculations with data from the project 'Activating Senior Potential in Ageing Europe')

While a majority of employers (about 60 %) expects productivity to stay the same if the age of their staff increases by five years, about 30 % expects a decrease and only a small 10 % expects an increase in productivity. The figures on the expectations with respect to labour costs more or less mirror the expectations with respect to productivity. The limited number of employers expecting productivity gains contrasts with a much higher share that expects labour costs to increase. The expectations with respect to the evolution of labour costs, however, show a much larger variety than the expectations with respect to productivity put older workers in a relatively unfavourable position. Of course, there are major differences between countries. Dutch employers are the most skeptical ones when it comes to the expectations regarding older workers. In Poland, on the contrary, there is much less fear for an imbalance between productivity and labour costs when the staff grows older.

It is important to briefly consider the effects of the current economic crisis on the situation of older people in the labour market. The economic crisis has several effects on older people. First, there is the risk that (relatively expensive) older workers may lose their jobs and, once unemployed, remain unemployed until the official retirement age. Several countries already show a high share of older people among the long-term unemployed. As growing unemployment mitigates the effect of ageing and dejuvenation, employers (and governments) may not feel the urgency of increasing older workers' labour market participation any longer. This may be detrimental for earlier initiatives to promote older workers' employment. Another effect of the crisis may be the loss of retirement savings and lower private pensions, due to lower yields in the stock market. Public pensions may decreased due to the necessity for cut backs in public spending. Lower pensions may increase the share of the poor among the elderly and the need to keep on working beyond the official retirement age. Moreover, the proposed extension of European rules on (risky commercial) banking to (less risky and well organized) private pension funds may result in lower private pensions and harm those people in Europe that have been saving throughout their life course by participating in such a private pension fund.

We also have to remember that population ageing may have substantial consequences for the public sector economy. First, with respect to taxes, one may expect that the increase of the number of retirees will result in lower revenues from income taxes. In addition, if older people consume less than people who are still in their primes, then the revenues from consumption related taxes (like Value Added Tax) will also fall. Therefore, the main source of revenues to pay for public expenditures is likely to shrink.

What is there to be expected with respect to various categories of public expenditures? Of course, an ageing society may need less public spending on education. If the number of children born every year is declining there is—if everything else stays the same—less need for child care facilities, schools and teachers. At the other side of the age spectrum, one may expect a higher demand for care and health services. Whether this implies higher public expenditures primarily depends on the (national) institutional arrangements with respect to the (health) care system. In several countries there is already an ongoing debate on what kind of services and facilities should be provided by public authorities (paid for from taxes) and what by private parties (paid for directly by the clients themselves). Some politicians argue that just like a child's tricycle is not financed from public money, in a similar way older people should pay for their reading glasses or rollators themselves.

As the number of citizens over the official retirement age increases, the number of people entitled to public pensions also increases. If these retirees live longer than their predecessors, public pension expenditures will increase even stronger. As discussed in the previous section, in many European countries there is a debate going on about the necessity and the possibilities to increase the official retirement age that entitles people to a public pension. In some countries where retirees also receive relatively high private pensions in addition to their public pension, the discussion focuses on the desirability to levy higher taxes on well-to-do senior citizens to pay for part of the consequences of the ageing of the population.

These discussions make it very difficult to come up with more detailed predictions on the consequences of population ageing for public sector economics, especially in an era of economic crisis, where most European governments are also engaged in reducing public deficits in order to save the Euro and to promote a healthier economic climate. Moreover, we need to keep in mind the relation between population ageing and the competitiveness of the European economy beyond Europe. One might argue that the decline in young people entering the labour market after having completed education that taught them most recent theories, scientific insights and developments will be detrimental to the adoption of new technology. Then again, what employers say about older workers loyalty, their ability to take into consideration (older) customers' needs and desires and their dedication may help to create tailor-made products and find tailor-made solutions for customers' problems. Consequently, the ageing of the labour force might help Europe to move away from bulk production to specialized tailor-made products despite the economic crisis.

#### **Check Your Progress: A Quiz on Economic Gerontology**

Question 6.1: Why do older people sometimes have problems to find a job? (multiple answers apply)

- (a) Older people might have health problems, which can make it hard to carry out physically demanding jobs
- (b) Older people might not be interested in working anymore
- (c) Employers might be prejudiced against older workers
- (d) Older people might not be informed about the latest technological developments
- (e) All of the above.

Question 6.2: What does the social exchange theory imply about older people?

- (a) Older people do not want to have social contact with younger people, because younger people do not have many resources
- (b) Older people want to have social contact with younger people, because younger people have many resources
- (c) Younger people do not want to have social contact with older people, because older people do not have many resources
- (d) Younger people want to have social contact with older people, because older people have many resources
- (e) Older people want to have contact with younger people, because everybody lost resources due to the economic crisis.

Question 6.3: How does consumption behaviour change with age?

- (a) Young people consume particularly much
- (b) Old people consume particularly much
- (c) Middle-aged people consume particularly much
- (d) Young and old people consume particularly much
- (e) Middle-aged and old people consume particularly much.

Question 6.4: In which areas does consumption increase in old age? (Multiple answers possible)

- (a) Food
- (b) Transportation
- (c) Heating
- (d) Health
- (e) Leisure

Question 6.5: Which older Europeans are particularly likely to work? (Multiple answers apply)

- (a) Those with a low educational level
- (b) Those with an intermediate educational level.
- (c) Those with a high educational level.
- (d) Those in Northern and Continental Europe.
- (e) Those in Southern and Eastern Europe.

### References

- Aleksandrowicz, P. (2011). Age and stereotypes. European Policy Brief, April 2011. Vechta: 'Activating Senior Potential in Ageing Europe' Project.
- Atkinson, B., & Marlier, E. (2010). *Income and living conditions in Europe*. Luxembourg: Publication Office of the European Union.
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, LXX*, 9–49.
- Birren, J. E. (Ed.). (2007). *Encyclopedia of gerontology (2nd ed.)* (pp. 330–336). San Diego: Academic Press.

- Boxall, P., & Purcell, J. (2003). *Strategy and human resource management*. New York: Palgrave Macmillan.
- Cowgill, D. (1974). The aging of populations and societies. *Annals of the American Academy of Political and Social Science.*, *415*(29), 1–18.
- Dannefer, D., & Phillipson, C. (Eds.). (2010). The SAGE handbook of social gerontology. London: Sage.
- De Grip, A., & Van Loo, J. (2002). The economics of skills obsolescence: a review. *Research in Labor Economics*, 21, 1–26.
- Dorn, D., & Sousa-Poza, A. (2010). 'Voluntary' and 'involuntary' early retirement: An international analysis. Applied Economics, 42(4), 427–438.
- Estes, C. L., & Phillipson, C. (2007). Critical gerontology. In J. E. Birren (Ed.), *Encyclopedia of gerontology* (2nd ed., pp. 330–336). San Diego: Academic Press.
- Estes, C.L. (Ed.) (2001/2009) Social policy & ageing. A critical perspective. Thousand Oaks: Sage.
- Eurostat (2009) *Mean consumption expenditure by age of the reference person (in PPS)*. Excel file. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hbs\_exp\_t135&lang=en. Accessed 19 June 2012.
- Eurostat (2012a). Employment rate, by highest level of education attained. Excel file. http://epp. eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdec430&plu gin=0. Accessed 19 June 2012.
- Eurostat (2012b). Employment rate of older workers by sex. Excel file. http://epp.eurostat.ec. europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsiem020&plugin=0. Accessed 19 June 2012.
- Eurostat (2012c). *Mean and median income by age and sex*. Excel file. http://appsso.eurostat.ec. europa.eu/nui/show.do?dataset=ilc\_di03&lang=en. Accessed 19 June 2012.
- Havighurst, R. J., Neugarten, B. L., & Tobin, S. S. (1968). Disengagement and patterns of aging. In B. Neugarten (Ed.), *Middle age and aging: a reader in social psychology* (pp. 161–172). Chicago: University of Chicago Press.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2010). What drives retirement income worries in Europe? A multilevel analysis. *European Journal of Ageing*, 7(4), 301–311.
- Jehoel-Gijsbers, G., & Vrooman, C. (2008). Social exclusion of the elderly: a comparative study of EU member states. CEPS, ENEPRI Research Report No. 57. Brussels: The Centre for European Policy Studies.
- Litwin, H., & Attias-Donfut, C. (2009). The inter-relationship between formal and informal care: a study in France and Israel. *Ageing and Society*, 29(1), 71–91.
- Marshall, V. (1996). Sociology, psychology, and the social sciences. In R. Binstock & L. George (Eds.), Handbook of aging and the social sciences (pp. 12–20). San Diego: Academic Press.
- Mayhew, K., & Rijkers, B. (2004). How to improve the human capital of older workers, or the sad tale of the magic bullet. Report. http://www.oecd.org/dataoecd/3/39/34932028.pdf. Accessed 20 June 2012.
- Parsons, D. O. (1972). Specific human capital: an application to quit rates and layoff rates. *Journal of Political Economy*, 80(6), 1120–1143.
- Perek-Bialas, J., & Turek, K. (2011). Organisation-level policy towards older workers in Poland. International Journal of Social Welfare., 21(S1), S101–S116
- Polachek, S. W., & Siebert, W. S. (1993). The economics of earnings. Cambridge: Cambridge University Press.
- Polivka, L., & Estes, C. L. (2009). The economic meltdown of old age politics. *Generations*, 33(3), 56–62.
- Quadagno, J. (2011). Aging and the life course. An introduction to social gerontology. Boston: McGraw-Hill.
- Riley, M. W. (1971). Social gerontology and the age stratification of society. *The Gerontologist*, *11*(1), 79–87.
- Riley, M. W., & Riley, J. W. (2000). Age integration: Conceptual and historical background. *The Gerontologist*, 40(3), 266–270.

Schulz, J. H. (2001). The economics of aging. Westport: Auburn House.

- Schippers, J., Conen, W., & Henkens, K. (2011). Extending working lives in Europe: employers' opinions and actions. In K. Busch, M. Flore, H. Kohl, & H. Schlatermund (Eds.), Socially imbalanced Europe—socio-political proposals in times of crisis (pp. 206–216). Pontypool: Merlin Press.
- Taylor, P. E., & Walker, A. (1994). The ageing workforce—employers' attitudes towards older people. Work, Employment & Society, 8(4), 569–591.
- Taylor, P. E., & Walker, A. (1998). Employers and older workers: Attitudes and employment practices. Ageing and Society, 18(6), 641–658.
- Thijssen, J. G. L., & Van Der Heijden, B. I. J. M. (2003). Evaporated talent? Problems with talent development during the career. *International Journal of Human Resources Development and Management*, 3(2), 154–170.
- Thijssen, J., & Walter, E. (2006). Identifying obsolescence and related factors among elderly employees. Conference paper. http://www.ufhrd.co.uk/wordpress/?p=1185. Accessed 7 June 2012.
- Walker, A., & Maltby, T. (2012). Active ageing: a strategic policy solution to demographic ageing in the European Union. *International Journal of Social Welfare*, 21(S1), S117–S130.
- World Health Organization. (2012). *Active ageing. A policy framework*.. Madrid: World Health Organization.
- Wise, D. A. (Ed.). (2009). *Developments in the economics of aging*. Chicago: The University of Chicago Press.
- Wise, D. A. (Ed.). (2010). *Research findings in the economics of aging*. Chicago: The University of Chicago Press.
- Van Dalen, H., Henkens, K., & Schippers, J. (2009). Dealing with older workers in Europe: A comparative survey of employers' attitudes and actions. *Journal of European Social Policy*, 19(1), 47–60.
- Vrooman, J. C. (Ed.). (2008). The elderly poor in the EU's new member states. CEPS-ENEPRI Research Report No. 60. Brussels: The Centre for European Policy Studies.
- Zaidi, A. (2010). *Poverty risks for older people in EU countries*. Policy Brief No. 11. Vienna: Centre of Social Welfare Policy and Research.

#### **Recommended Readings**

Bond, J., Peace, S., Dittmann-Kohli, F., & Westerhof, G. J. (Eds.). (2007). Ageing in society. *European perspective on gerontology* (3rd ed.). London: Sage.

This volume discusses different topics concerning ageing from a European perspective.

Taylor, P. (Ed.). (2008). Ageing labour forces: Promises and prospects. Cheltenham: Edward Elgar.

This book gives an overview of the discussions around ageing workers.

Van Dalen, H. P., Henkens, K., & Schippers, J. J. (2010). How do employers cope with an ageing workforce? Views from employers and employees. *Demographic Research*, 22(32), 1015–1036.

This article investigates how Dutch employers deal with the challenges of population ageing.

# Chapter 7 Gero-Technology: Old Age in the Electronic Jungle

Harald Künemund and Nele Tanschus

# 7.1 Summary and Learning Goals

Gero-technology refers to the design and use of technologies that both promote independence and autonomy in old age and strengthen the support networks of older people. A central concept in gero-technology in Europe today is Ambient Assisted Living (AAL), which describes technology that helps older people to live an active life and remain socially included. It is assumed that technology can help to alleviate the increasing need for care-givers for older people. After reading this chapter, you should be able to:

• Explain how technology can be used to help older people

- Explain why technology can make the lives of older people more complicated
- Describe the idea of Ambient Assisted Living
- Describe how the use of technology in old age differs across Europe
- Discuss in how far technology can help in the care-provision for older people

# 7.2 What is Gero-Technology?

The aging of societies will be a major challenge of the coming decades for Europe, but of course—sooner or later—for nearly all countries worldwide (see Chap. 1). As these developments have tremendous consequences, especially with respect to public pension and health care systems, there exist serious worries about the abilities to cope with the expected problems. Gero-technology—an umbrella term used in this chapter to refer to technology specifically designed for older people as users or beneficiaries—may help to assist older people in their daily living activities and help their informal or professional supporters so that individuals, welfare systems and the economy will profit at the same time. The general idea is to develop technologies that enable older people to "stay put" and to maintain independence even in very old age.

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Today, and especially in the future, such new technologies might indeed help to further improve autonomy, communication, provision of health care from the family, the state, and the market. However, there also exist serious worries about ethical issues—privacy, informal self-determination, and data protection on the one hand, and displacement of face-to-face contacts and social relations on the other. Development and implementation of such technologies have to be researched and accompanied carefully by gerontologists to avoid unintended side effects and undesirable trends.

#### 7.3 Central Theories and Concepts in Gero-Technology

Gero-technology, in general, aims at maintaining independence and selfdetermination even in very old age and in case of chronic diseases and impairments. It may take on the role of a prosthetic environment, which is an environment that takes over functions that individuals cannot fulfill by themselves, or assist in carrying out activities of daily living, or support care giving networks and communication. Gero-technology can, thus, help older people to remain active and self-determined even in case of physical decline.

In the following paragraphs, we will first describe gero-technological applications. Then, we will explain the development of gero-technology and challenges related to these technologies. Finally, we will focus on one of the main challenges, namely technology acceptance by older users.

#### 7.3.1 Gero-Technological Applications

Gero-technology can be applied in many different settings:

- Compensation for declining capabilities and age related impairments, e.g., physical performance, cognitive, hearing or vision impairments, orientation (for example, remote controls, reminder devices, mobility assistance).
- Monitoring of vital parameters or behavior (for example sensors in the room or the carpet to detect falls, or in the clothing to monitor chronic diseases, or to secure compliance in rehabilitation).
- Comfort and safety (e.g. 'smart home' technologies), for example alarm buttons, automated doors and blinds, or a fridge that is linked to a shop and places an order when the stock of food or drinks is low.
- Support of and communications with (and among) relatives and healthcare professionals, for example communication and notification tools, lifting devices, GPS-tracking.
- Support of professional healthcare systems, for example tele-monitoring, healthcare management, electronic health care documentation, activity monitoring in nursing homes.

Although technology has been used in such settings for a long time, think of wheelchairs, smoke detectors or alarm buttons, assistance systems being developed today can be regarded as a new generation of technology for a number of reasons (cf. Doughty et al. 1996). Firstly, the idea today is to develop 'intelligent' technology that not only detects problematic situations and sets an alarm, but acts 'intelligently' by itself. Examples would be an automated wheelchair that is able to detect and avoid obstacles, or a fall-detection sensor that makes several phone calls in the case of an accident: it rings home first, and if the phone is not answered, the device tries a neighbor, a relative or an emergency physician. Secondly, this technology should be unobtrusive, a quality that is conveyed by the term 'ambient', as it is for example used in 'Ambient Assisted Living'. Sensors like for example cameras, microphones, motion detectors, power meters, or accelerometers can be integrated into the environment or even into clothing and adapted to the particular needs of the individual user. A carpet may detect falls, shoes may detect an increase in walking insecurity, cameras may detect inactivity or sleeping quality, a shirt may collect vital parameters, or the fridge can register drink or food consumption. Such sensors may be combined and integrated to reduce false alarms and widen the scope for more complex activity-detection.

Furthermore, the technology might, for example, take notice of visitors and automatically switch off speech messages like "please do not forget to take you medicine", which would otherwise have been given to the older person. In other words, "intelligent" technologies can be rather invisible and, hence, less stigmatizing. Moreover, behavior may be monitored over long periods of time so that deviations from individual standards can be observed and used to detect possible problems. For example, smart shoes may help to prevent falls by identifying changes in walking competence over time and giving notice in case of increasing insecurity. Such data can also be stored, transmitted to a physician, or collected (with appropriate permission) for scientific use.

The possibilities are indeed manifold, and although there are considerable problems to be taken into account—ethical issues, data security and informational self-determination—the outlook is extremely promising, especially from the perspectives of a concerned care-giver or responsible physician. However, from these examples it becomes clear that there are many possible classifications of these new technologies, and since most of the research addresses several aspects at the same time, categories like, for example, "health", "comfort" or "individual centered", would not be exclusive.

#### 7.3.2 Explaining the Development

At first glance, the main driving factor behind the general trend seems to be the demographic change, as described in Chap. 1. But looking at the research in more detail reveals other, probably even more important factors, namely technology development itself and the existence of generous funding for research in this field.

However, in many cases research does not seem to have started with a scientific analysis of old age and its problems—in gerontology—, but instead with the available technology (e.g., sensor and actor devices) and its further development. The question often seems to have been 'what can we do with these new technologies to help older people?' To put it slightly exaggerated, the aspired technical solution is in search of a problem, or an application. This might be an overstatement, but aside from personal experience in the field, there are several pieces of circumstantial evidence.

Firstly, the solutions are not always convincing. For example, we find reminder devices and digital calendars justified with the diagnosis of increasing forgetfulness in old age (for example, Geven et al. 2008). Although the empirical evidence is not yet convincing (see Daviglus et al. 2010 for an overview)—if the problem to be addressed would have been cognitive decline, solutions should have considered more often the training of prospective memory tasks than their avoidance. Similarly, many projects aim at the use of internet communities to avoid or reduce loneliness in old age, while many older people are convinced that these new technologies lead to increasing loneliness and social isolation. If the research would have started with a proper analysis of the problem to be solved, more attention for such threats should be visible in the literature.

Secondly, most of the research—although the trend seems to be declining—is done without involvement of gerontologists (especially those with a sociological and psychological background). Consequently, aside from the often missing gerontological problem analysis, a frequent problem seems to be the lack of scientific evaluation of the results or interventions, or the restriction of evaluation to usability aspects, while social and psychological consequences are widely ignored.

Thirdly, many research projects make use of "scenarios" that do not reflect typical cases in terms of common situations of older people in the "real world", but ideal users of the technology to be developed. For example, the advantages of a smart home for the elderly are sketched as follows:

"It is the year 2010 (...) the Gator Tech Smart House System. Mrs. Holden is 87 years old, widowed, and lives alone. (...) When Mrs. Holden gets up in the morning, the time is tracked. If it is significantly earlier or later than normal, the smart house notes this. Mrs. Holden completes her basic activities of daily living—taking a shower, combing her hair, getting dressed. While her forget-fulness is not severe, the house is ready to help with prompting through these activities, should Mrs. Holden need help. Monitors and speakers in the bathroom and the bedroom provide auditory and visual prompts for brushing teeth, combing hair, bathing, and dressing. The house 'remembers' if these activities have been completed..." (Mann and Helal 2007, p. 283).

In such "scenarios" the user seems to be designed according to the technology that is going to be demonstrated. It is not the design of technology according to the needs of an older user. Although 'user centered design'– an approach to include user into research and development from the early 1980s (cf. Norman and Draper 1986)—is a widely accepted and a common phrase in technology development today, and indeed in many aspects the procedures to design everyday objects and technology have improved dramatically, the main emphasis still seems to be on aspects of usability, not on a detailed analysis of the problems of older people that need to be solved, taking into account the existing gerontological knowledge and expertise.

#### 7.3.3 Challenges

The example scenario presented above allows mentioning some more relevant challenges. Firstly, the acceptance of such technologies—especially from the viewpoint of older people—is questionable. Not every older person will be enthusiastic to have cameras and microphones in bath or bedrooms. Of course, these cameras and microphones are sensors that should be analyzing their data immediately, without any recording functionality. But some feeling of being watched (and some uncertainty what the technology is doing in reality) is highly plausible. Especially with the coming of the internet of things—objects equipped with tags and sensors able to communicate with each other—the problems of privacy, independence and informational self-determination will become crucial.

Secondly, the technologies might be too complex for older people to handle. Today's older people grew up in a time, where technology use was less computerized and less complex. Different generations have had different experiences with technology. Furthermore, physical and mental decline might make it even more difficult for older people to use these new technologies. The idea of a 'design for all'—products and services designed in a way that everybody, regardless of age, education etc., can use them—is expected to reduce such problems in the future.

Thirdly, it becomes obvious that the technology is rather complex and—most probably—expensive, so that many people may not be able to buy such technologies, and even if so the maintenance costs might be rather high as well. Thus, new technologies may exacerbate social inequalities that already exist. This might especially come true if the aim of supporting care-givers is achieved: As a consequence of reductions in pension levels and reduced pension entitlements due to unsteady careers, many social scientists already expect less economic resources and greater social inequality within future cohorts of older people. This reduction of welfare state spending for the elderly may aggravate the burden placed on those children—especially the daughters—of the baby boom cohorts, who are less likely to share care activities with siblings, face competing demands from both younger and elderly kin as well as from the labor market and cannot simply buy missing services in the market. We therefore may have a threefold interaction of social class, cohort, and gender that deserves further research (Künemund 2006).

Fourthly, it is exemplified that most research is addressing negative aspects of aging—we rarely find any projects that aim at, for example, self-fulfillment, wisdom, or enhancement of capabilities, except in some medical and rehabilitation settings of research. It is—at least implicitly—assumed that senior citizens are a homogeneous group, impaired and in need of help, living alone, not a heterogeneous group with certain abilities that may be trained, supported or improved.

Finally, scenarios that have to be thought through carefully are, for example, failure of single components, false alarms, power failure, and of course social and psychological consequences, for example the possibility of "granny dumping"<sup>1</sup>: What if the children stay away because they are convinced that the technology takes care of the elderly parent? Such a reaction would be an example of a crowding out mechanism. Crowding out means that different sources of help compete instead of complementing each other. In other words, the more technology is used, the less help families might provide (Künemund and Rein 1999).

Aside from such criticism, it is obvious that new technologies can strengthen the positive aspects of ageing and help to maintain independence and selfdetermination even in very old age. There is an enormous potential, especially in rural areas. But it is essential that technology development starts from a proper analysis of the problem to be solved and that the outcomes are evaluated carefully. If such technologies are widely available and affordable, will older people make use of such technologies?

## 7.3.4 User Acceptance

One of the most prominent challenges to gero-technology is its acceptance by older users. It is often taken for granted that the interest in technology is decreasing with age. Many studies, especially large scale surveys, seem to confirm declining technology acceptance (e.g. Morris and Venkatesh 2000), interest in technology (e.g., Hennen 2002), and usage of new technologies with increasing age (e.g., Peacock and Künemund 2007). Today, computer technologies are part of the everyday life experience, for example when drawing money from a bank account or using a ticket machine in public transport. However, elderly people usually did not have had contact with these technologies during their schooling and working years, and they are very often less capable to adapt to these new technologies (cf. Mollenkopf and Kaspar 2005). As far as these new technologies have an impact on the general quality of life, elderly people are less likely to participate in this general

<sup>&</sup>lt;sup>1</sup> The term was most probably introduced in the "Newsweek" to indicate elder abandonment: "No hard statistics have been collected, but in a recent survey by the Senate Aging Committee, 38 % of the hospitals responding said they had received reports of such ,elder abandonments". An informal survey by the American College of Emergency Physicians last May found similar figures; some doctors reported as many as eight elderly patients dumped on their emergency wards every week" (Beck and Gordon 1991, p. 64). The term, however, received much more attention worldwide with an article in the New York Times: "Although precise numbers are not available, the American College of Emergency Physicians surveyed hospitals and concluded that up to 70,000 elderly parents were abandoned last year by family members who were unable or unwilling to care for them any longer" (Egan 1992). This calculation was wrong, the survey misinterpreted, and there are rarely any "true" cases of such elder abandonment documented in the literature, but the metaphor is still very common as a threat of the future of family support for older people [see Künemund (2008a) for a more detailed account].

development. This is especially tragic because older people might profit from these new technologies in many different ways, e.g., by communicating with relatives, and by retrieving and gathering information. Everyday activities and overall quality of life may even be worsened by these technologies, for example when older people are unable to buy a railroad ticket or to withdraw money from the cash dispenser to buy such a ticket at the counter (where these still exist).

Many factors may contribute to the common finding that older people express little interest in technology. When solely looking at differences between age groups, composition effects (e.g., increasing proportions of women among the older age groups), cohort effects (e.g., experience with different technologies during the life course) and various living and health conditions (e.g., living alone, having children in the neighborhood, experience of falls) might explain the lack of interest. However, with respect to the acceptance and usage of technology, many more aspects need to be taken into account. As the example of hearing aids usage shows, even in case of urgent need, many people do not use technological assistance, be it because of fear of stigmatization—using technology that signals that one has become old-, negative experiences with technology-for example complicated operation, incomprehensible instruction manuals-, or because of poor reliability and quality of technical devices. Older people also express ambivalence with respect to the internet (too much information, hard to decide which information is reliable), to tele-health (missing personal contact to physicians, too difficult to handle), and also to edutainment and communication tools (may prevent from personal social contacts).

Nevertheless, most technology driven research projects report surprisingly high levels of technology acceptance among older people. Evaluation research in the context of such projects, experiences in living-labs etc. often report that older people are very interested in these technologies and willing to use them. However, these studies are hardly comparable to the survey studies mentioned above. On the one hand, the samples might not be comparable—older people participating in technology development studies might have more interest in (and experience with) technology, while those who try to avoid technology will not visit a living lab. On the other hand, even in the case of "mock up" studies without any functionality, the expected utility of using the technology becomes much clearer compared to a rather general survey question.

# 7.4 What Does Gero-Technology Tell Us about the Current State of Europe?

In response to the expected demographic change, most European countries have already implemented reforms to reduce welfare state spending for old age. As new technologies might help to cope with the expected increase of the number of older people in need of help and the simultaneous shortage of carers, the development of such technologies has become a mushrooming trend, especially in Europe: Numerous research activities have been carried out, for example on older people's use of technology, tele-health, telecare, 'Ambient Assisted Living' and "Smart Homes for the Elderly". Funding institutions both on the national and the European level have addressed these topics with several calls for proposals, so that we face a very lively community of researchers and projects today. For example, solely the first call of the "AAL Joint Programme" from 2008 received 117 transnational project proposals from 958 organizations, most of them with partners from Spain and Italy (more than 100) and Germany, France and Greece (more than 50; see http://www.aal-europe.eu for details). This programme is a research and development funding initiative by 20 member states of the European Community with a budget of EUR 700 million (during 2008–2013), the fifth call for proposals has been launched in February 2012. The "European Ambient Assisted Living Innovation Alliance" project, funded already by the 7th European Framework Programme, has published an "Ambient Assisted Living Roadmap" (van den Broek et al. 2009), and numerous conferences, forums and summits follow at an increasing speed. These activities and research projects give us insight into older people's use of technology across Europe. In the following paragraphs, we will describe the digital divide, meaning social differences in the use of information and communication technologies. We will use data on age-differences in the internet use in Germany to illustrate this divide. Then, we will describe the internet usage in old age across Europe. Finally, we will discuss technology acceptance by older Germans

# 7.4.1 The Digital Divide

In general, older people make use of new technologies less often than younger age groups. This is especially true in regard to new information and communication technologies, such as the internet. Some people—especially those with lower education—are excluded from the various useful social and economic advantages of new technologies, what is described as a *digital divide* (Tichenor et al. 1970). Since younger cohorts—on average—have higher educational levels, and older people are less capable to adapt to new technologies, the digital divide is extremely sharp between age groups. The extent of the problem and its change over time is displayed in Fig. 7.1.

Figure 7.1 presents the percentages of Germans using computers by age groups, differentiated by sex and region (east and west), in 1996, 2002 and 2008.<sup>2</sup> It shows that, while there has already been a steep decline in computer usage across age groups in 1996, namely from about 40 % among those aged 40–45 to few

<sup>&</sup>lt;sup>2</sup> For details on the German Aging Survey see Kohli and Künemund (2000) and Motel-Klingebiel et al. (2010). Although there are variations in levels and speed between European countries, the general pattern is obviously not limited to Germany (cf. for example Peacock and Künemund 2007, Gilleard and Higgs 2008, Wagner et al. 2010).

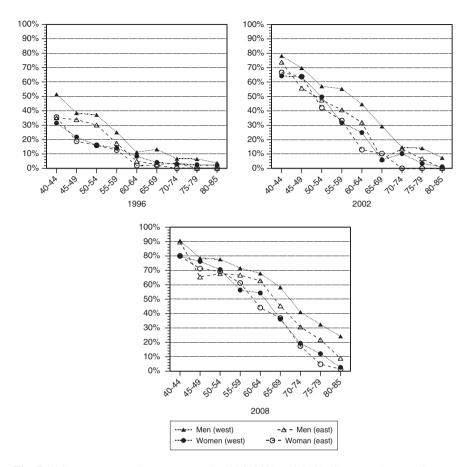


Fig. 7.1 Computer usage by age groups in 1996, 2002 and 2008, Germany. *Sources* German Aging Survey 1996, 2002 and 2008, own calculations

exceptional cases in the age group 80–85, the digital divide has widened in 2002. While there still have been less than 10 % in the oldest group, the percentage in the age group 40–45 has increased to 70 %. Older people have had enormous increases in percentages, but their number has been so small that even a doubling has not been enough to maintain the difference in percentages. From 2002 to 2008 the situation seems better—especially older men in West Germany have improved dramatically, but in general the digital divide is still huge. One might expect that the digital divide vanishes as people get older and the diffusion of the technologies make progress. But it has to be kept in mind that these technologies get older, too. As long as neither lifelong learning nor intuitive operation are the rule, and—for example—those aged 40–45 today will stay with their current personal computer knowledge, they will be using technology that is 40 years old when they are 80–85. We cannot really see what technology we will have 40 years from now, but it might turn out that older people will be again shaken off.

## 7.4.2 Older Internet Users across Europe

Today, older people use the internet all across Europe. On average, one out of three Europeans aged 65–74 years in 2010 used the internet (Destatis 2011). However, the proportion of older internet users differs widely across Europe. In Norway, the European country with the highest percentage of regular internet users in the age group 65–74 years, about two out of three older individuals use the internet. In Romania, the European country with the lowest percentage, only one in 30 older people uses the internet. Generally speaking, internet use in old age is more common in Northern and Continental Europe than in Southern and Eastern Europe (see Fig. 7.2).

When using the internet, older Europeans were particularly often sending and receiving emails, searching information about goods, services, and health-related issues, and reading newspapers (Peacock and Künemund 2007, Eurostat 2011). However, these usage patterns change over time. For example, the use of internet banking and internet commerce in the older age groups almost tripled between 2005 and 2010 (Eurostat 2011). Furthermore, social characteristics as well as reasons for using or not using the internet in old age differ across Europe. For example, in Northern and Continental Europe, lack of a computer and lack of interest have been reported to be the most prominent reasons for not using the internet, while in Southern Europe, lack of interest and lack of knowledge have been main reasons (Peacock and Künemund 2007). With respect to computer and internet usage, these differences between countries will most probably decrease in the near future. New technological developments, however, may also contribute to new inequalities within Europe.

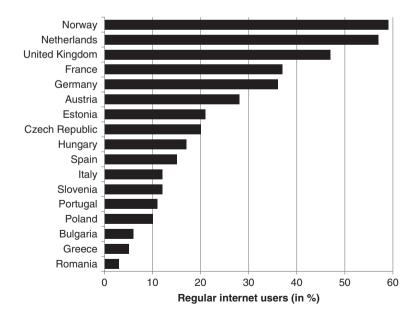


Fig. 7.2 Internet use among Europeans aged 65–74 years, in 2011 (Eurostat 2012)

## 7.4.3 User Acceptance in Europe

Technology acceptance is a necessary, although not sufficient, precondition to its usage. Acceptance is not simply dependent on more or less stable individual characteristics like gender, cohort, experience with technology, education, or personal beliefs and attitudes. It is also influenced by the special "mix" with current health situation, living arrangements, availability of a support network, and with the features, quality, and public respect of the technology to be used-expected utility, ease of usage, social desirability-, and the individual "fit" of all these aspects. For example, a recent survey (Haux et al. 2010) compared four assistive systems: a memory assistant for everyday planning of activities and housekeeping, a physical activity rehabilitation monitoring device that records vital parameters of patients with chronic obstructive pulmonary disease, a sensor based automatic and continuous determination of activities at home, and a sensor-based fall prevention and detection device. About 20 % of the respondents of this survey express immediate interest in using technologies according to the first two scenarios, but only about 10 % were interested in using technologies in the third and fourth scenario. Results show that the simple assumption of an aging effect—that is, technology acceptance simply declines with increasing age-is misleading. For the memory assistant no age effect was found. Income, slight health impairments and experience with technology contribute to the explanation of intended usage. The monitoring of physical activity in a rehabilitation context would rather be used by young old people with slight or strong health impairments and experience with technology. The sensorbased activity measurement would rather be used by older individuals with health impairments. Regarding the sensor-based fall prevention and detection device, especially very old people aged 80 years and above express interest. Health impairments and experience with technology increase the probability to use such a device. Furthermore, childlessness adds to the explanation of the user acceptance on this scenario, which means that having no children to turn to in need of help strengthens technology acceptance. Consequently, an answer to the question whether older people will make use of assistive technologies in the future should take into account specific scenarios, various socio-economic variables, and their interaction. User acceptance is not simply a matter of education, cohort, technology experience and so on, but also dependent on social norms and individual life circumstances.

# 7.5 Current Debate in Gero-Technology: Can Technology Replace Care-Givers?

Care-giving is a central topic of debate in Europe. An ageing population may increase the need for care, because old age is often associated with poor health (see Chap. 2). At the same time, the decreasing number of children of the 'baby boomers' and the growing childlessness within these cohorts result in a lack of potential care-givers. Gero-technology might help to cope with the expected increase of the number of older people in need of help and the simultaneous shortage of care-givers.

The use of technology in care for older people, however, does not come without problems. Even if older people and their care-givers make use of such new technologies, it may turn out that—as an unintended by-product of the technological innovation—a mechanism of "crowding out" takes place: The family might withdraw from supporting their older kin as soon as something else—in this case, technology—steps in and substitutes for the help that has been provided by relatives before. It is, for example, widely assumed that the modern welfare state has undermined family solidarity and the family itself. Increasing childlessness and fewer births, decreasing marriage and increasing divorce rates, increasing numbers of singles and the decrease of multigenerational co-residence—to name just a few widely known facts—may indeed indicate a weakening of the family and its functions. This logic is where the fear of 'granny dumping', the abandonment of older people by their kin mentioned above, has its origin.

The general argument of crowding out is raised in many different settings, most often in economic sciences and with respect to the unintended consequences of public provision of goods and services. For example, Roberts (1984) offers evidence that government donations crowd out private philanthropy's provision of material relief to the poor. In this case, altruistic behaviour declines as the state increasingly cares for the poor: When the need is met, there is no reason for altruistically motivated giving anymore. The resulting crowding out effect may be complete—Euro for Euro—or only partial (Bolton and Katok 1998). Furthermore, even over-crowding out is theoretically possible (Carlson and Spencer 1975), for example when the level of public provision remains inadequate compared to the former private donations, but the potential donors refuse to further provide help because the state is regarded as being responsible to provide these resources.

In most applications it is assumed that public solidarity crowds out private, altruistically motivated solidarity since it does not make any difference who is providing the resources, but only that these are available. Therefore, a large public welfare sector is assumed to crowd out private solidarity. This mechanism does not only apply to donations, but also to voluntary activities (van Oorschot and Arts 2005), familial support and informal care activities (Dunér and Nordström 2007), and of course to new technologies (Allen et al. 2001; Agree et al. 2005).

But despite the high intuitive plausibility of such interpretations, in which large parts of the social sciences meet with common sense, it has been argued that the family has in fact changed but not diminished its role (Künemund and Rein 1999): The welfare state supports older people and thus the family, which in turn improves the quality of intergenerational relations within the family with the likely result of even stronger family solidarity. This is possible because welfare state spending for older people reduces the 'burden' of family relationships (e.g., financial dependency from children, necessity of co-residence), enhances self-respect and autonomy, enables to initiate exchange and reciprocity with the family, friends, the neighborhood, and the market, just to name a few aspects [see Künemund (2008b) for a more detailed account].

This opposing effect of crowding in might also be relevant in the case of new technologies, namely if these technologies support both the older person and their care-givers: The result may be less burdensome relationships and—as a consequence—more intense help of other types, more quality of life for both the older persons and their relatives. These effects urgently need to be studied in a longitudinal design in order to calm down the discussion.

Other current debates focus on the design of games for older people, potentials for enhancing performance (also at the workplace—'Ambient Assisted Working' is becoming a mushrooming trend in research), service roboting, increased productivity, education, learning or leisure support, artwork and self-fulfillment. These aspects have been neglected for a long time, but more and more research is taking up such positive aspects of ageing. But again, it should be kept in mind that technology acceptance and experience are distributed unequally in society. Thus, especially such new technologies may deepen existing social inequalities. If the idea of 'design for all' works fine and the products are affordable, this might be a minor problem. At the moment, however, it seems that the general development takes the other direction.

A specific challenge of Ambient Assisted Living lies in its interdisciplinarity: A multitude of technical challenges coincides with a really complex situation human ageing in a certain social environment. For that reason, solving the technological problems is not sufficient. An understanding of the needs and resources of the user as well as for the medical and economic questions is also needed. Moreover, it is vital to develop new devices as creatively as possible and to keep them close to the needs and wishes that older people express. Users should be involved at all stages of product development. Of course, there exists a great number of promising research projects in this field, and some of these are already successful. But the outcomes could be even better if it were possible to combine technological and social-scientific expertise more effectively.

# **Check Your Progress: A Quiz on Gero-Technology**

Question 7.1: Which of the following are examples of gero-technology? (multiple answers possible)

- (a) Spoken messages that remind older people to take their medicines
- (b) Volunteers who help older people shop for computers
- (c) A carpet that recognizes when somebody falls
- (d) Alarm buttons
- (e) All of the above

Question 7.2: How are technologies called that support older people in their homes in an unobtrusive way?

- (a) Supportive technologies
- (b) Technology supported living

- (c) Smart homes
- (d) Smart assisted living
- (e) Ambient Assisted Living

Question 7.3: Which mechanism explains decreasing familial support when technology advances?

- (a) Crowding in
- (b) Crowding out
- (c) Bringing in
- (d) Bringing out
- (e) Supplementation

Question 7.4: Why might older people have problems with gero-technology? (multiple answers possible)

- (a) They might not understand what it is good for
- (b) They might perceive it as an intrusion into privacy
- (c) They might not understand it
- (d) It might be too expensive for them
- (e) All of the above

Question 7.5: In which parts of Europe do particularly many older people use the internet?

- (a) Continental and Eastern Europe
- (b) Continental and Northern Europe
- (c) Southern and Eastern Europe
- (d) Continental and Southern Europe
- (e) There are hardly any country-differences in the internet use among older Europeans

# References

- Agree, E. M., Freedman, V. A., Cornman, J. C., Wolf, D. A., & Marcotte, J. E. (2005). Reconsidering substitution in long-term care: when does assistive technology take the place of personal care? *Journal of Gerontology: Social Sciences*, 60B(5), S272–S280.
- Allen, S. M., Foster, A., & Berg, K. (2001). Receiving help at home: the interplay of human and technological assistance. *Journal of Gerontology: Social Sciences*, *56B*(6), S374–S382.
- Beck, M., & Gordon, J. (1991). A dumping ground for granny. Newsweek, 118(26), 64.
- Bolton, G. E., & Katok, E. (1998). An experimental test of the crowding out hypothesis: the nature of beneficent behavior. *Journal of Economic Behavior and Organization*, *37*(3), 315–331.
- Carlson, K. M., & Spencer, R. W. (1975). Crowding out and its critics. *Federal Reserve Bank of St. Louis Review*, 57(12), 2–17.
- Daviglus, M. L., Bell, C. C., Berrettini, W., Bowen, P. W., Connolly, E. S., Cox, N. J., et al. (2010). Preventing Alzheimer's disease and cognitive decline. *National Institutes of Health State-of-the-Science Conference Statement*, 27(4), 1–30.
- Destatis (2011). Older people in Germany and the EU. Wiesbaden: Federal Statistical Office of Germany.

- Doughty, K., Cameron, K., & Garner, P. (1996). Three generations of telecare of the elderly. Journal of Telemedicine and Telecare, 2(2), 71–80.
- Dunér, A., & Nordström, M. (2007). The roles and functions of the informal support networks of older people who receive formal support: a Swedish qualitative study. Ageing and Society, 27(1), 67–85.
- Egan, T. (1992). Old, ailing and finally a burden abandoned. The New York Times, March 26, 1992. http://query.nytimes.com/gst/fullpage.html?sec=health&res=9F0CE6D9133CF935A1 5750C0A964958260. Accessed 27 June 2012.
- European Union 2012. Luxembourg: Publications Office of the European Union.
- Eurostat (2012). Internet use and activities. Excel-file. http://appsso.eurostat.ec.europa.eu/nui/ show.do?dataset=isoc\_bde15cua&lang=en. Accessed 26 June 2012.
- Geven, A., Tscheligi, M., Sorin, A., & Aronowitz, H. (2008). Presenting a speech-based mobile reminder system. Paper presented at the third workshop on speech in mobile and pervasive environments, Amsterdam. http://www.fp7-hermes.eu/uploads/media/publications/Geven\_ HERMES\_SIMPE2008.pdf. Accessed 27 June 2012.
- Gilleard, C., & Higgs, P. (2008). Internet use and the digital divide in the English longitudinal study of ageing. *European Journal of Ageing*, 5(3), 233–239.
- Haux, R., Hein, A., Eichelberg, M., Appell, J.-E., Appelrath, H.-J., Bartsch, C., Bisitz, T., Bitzer, J., Blau, M., Boll, S., Buschermöhle, M., Büsching, F., Erdmann, B., Fachinger, U., Felber, J., Fleuren, T., Gietzelt, M., Goetze, S., Gövercin, M., Helmer, A., Heuten, W., Hohmann, V., Huber, R., Hülsken-Giesler, M., Jacobs, G., Kayser, R., Kerling, A., Klingeberg, T., Költzsch, Y., Künemund, H., Kunze, J., Ludwig, W., Marschollek, M., Martens, B., Meis, M., Michael Meyer, E., Meyer, J., Nebel, W., Neyer, F.J., Okken, P.-K., Remmers, H., Rölker-Denker, L., Rohdenburg, T., Schilling, M., Schulze, G.C., Song, B., Spehr, J., Steinhagen-Thiessen, E., Tegtbur, U., Thoben, W., Van Hengel, P., Wabnik, S., Wahl, F., Wegel, S., Wilken, O., Winkelbach, S., Wist, T., Wittrock, M., Wolf, K.-H., Wolf, L., & Zokoll-Van DerLaan, M. (2010). The Lower Saxony research network design of environments for ageing: towards interdisciplinary research on information and communication technologies in ageing societies. *Informatics for Health and Social Care*, *35*(3), 92–103.
- Hennen, L. (2002). Positive Veränderung des Meinungsklimas—konstante Einstellungsmuster. Ergebnisse einer repräsentativen Umfrage des TAB zur Einstellung der deutschen Bevölkerung zur Technik (positive changes in public opinion—constant attitudes: results of a representative survey of the TAB on attitudes towards technology among Germans). Berlin: Büro für Technikfolgenabschätzung beim Deutschen Bundestag.
- Kohli, M., & Künemund, H. (Eds.). (2000). Die zweite Lebenshälfte. Gesellschaftliche Lage und Partizipation im Spiegel des Alters-Survey (The second half of life. Social situation and participation mirrored by the ageing survey). Opladen: Leske + Budrich.
- Künemund, H. (2006). Changing welfare states and the "sandwich generation"—increasing burden for the next generation? *International Journal of Ageing and Later Life*, 1(2), 11–30.
- Künemund, H. (2008a).Granny-dumping– die Zukunft des Alters? (Granny-dumping—the future of ageing?). In A. Amann, & F. Kolland (Eds.). Paradiese des Alters? Freiheit und Notwendigkeit (Paradises of Ageing? Freedom and necessity) (pp. 221–234). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Künemund, H. (2008b). Intergenerational relations within the family and the state. In C. Saraceno (Ed.), *Families, ageing and social policy—intergenerational solidarity in European welfare states* (pp. 105–122). Cheltenham: Edward Elgar.
- Künemund, H., & Rein, M. (1999). There is more to receiving than needing: theoretical arguments and empirical explorations of crowding in and crowding out. Ageing and Society, 19(1), 93–121.
- Mann, W.C., & Helal, S. (2007). Technology and chronic conditions in later years: reasons for new hope. In H.-W. Wahl, C. Tesch-Römer, & A. Hoff (Eds.) New dynamics in old age: individual, environmental and societal perspectives (pp. 271–289). Amityville: Baywood.
- Mollenkopf, H., & Kaspar, R. (2005). Elderly people's use and acceptance of information and communication technologies. In B. Jaeger (Ed.), Young technologies in old hands—an

international view on senior citizens' utilization of ICT (pp. 41–58). Copenhagen: DJOF Publishing.

- Morris, M. G., & Venkathesh, V. (2000). Age differences in technology adoption decisions: implications for changing work force. *Personnel Psychology*, 53(2), 375–403.
- Motel-Klingebiel, A., Wurm, S., & Tesch-Römer, C. (2010). *Altern im Wandel. Befunde des Deutschen Altersurvey (Ageing in change: findings of the German ageing survey).* Stuttgart: Kohlhammer.
- Norman, D. A., & Draper, S. W. (1986). User centered system design: new perspectives on human-computer interaction. Hillsdale: Erlbaum.
- Peacock, S. E., & Künemund, H. (2007). Senior citizens and Internet technology: reasons and correlates of access versus non-access in a European comparative perspective. *European Journal of Ageing*, 4(4), 191–200.
- Roberts, R. D. (1984). A positive model of private charity and public transfers. *Journal of Political Economy*, 92(1), 136–148.
- Tichenor, P. J., Donohue, G. A., & Olien, C. N. (1970). Mass media flow and differential growth in knowledge. *Public Opinion Quarterly*, 34(2), 159–170.
- van den Broek, G., Cavallo, E., Odetti, L., & Wehrmann, C. (2009). Ambient assisted living roadmap. Berlin: VDI/VDE-IT.
- van Oorschot, W., & Arts, W. (2005). The social capital of European welfare states: the crowding out hypothesis revisited. *Journal of European Social Policy*, 15(1), 5–26.
- Wagner, N., Hassanein, K., & Head, M. (2010). Computer use by older adults: a multi-disciplinary review. *Computers in Human Behavior*, 26(5), 870–882.

# **Recommended Readings**

Burdick, D.C., & Kwan, S. (Eds.) (2004). Gerotechnology: research and practice in technology and aging. New York: Springer.

This book gives an overview of ideas and applications of gero-technology.

Charness, N., & Schaie, K.W. (Eds.) (2003). Impact of technology on successful aging. New York: Springer.

*This volume explains the connection between gero-technology and successful ageing.* Sixsmith, A. (Ed.) (forthcoming). *Technology for active aging.* New York: Springer.

*This volume discusses how gero-technology can be used to facilitate active ageing.* 

# Chapter 8 Cultural Gerontology: Valuing Older People

**Ricca Edmondson** 

# 8.1 Summary and Learning Goals

Cultural gerontology focuses on norms, values, practices, and moral ideas related to older age. Those norms, values, practices, and moral ideas shape significant images of older people in a society. They also influence stereotypes of old age and the possibilities an older individual has to participate in society. In Europe, older people's image and their plans for their later life-years are important topics of discussion. These and similar topics are debated in relation to gender-differences and a youthand consumption-oriented culture. Depending on the framework of the discussion, older Europeans are sometimes portrayed as tragic, and sometimes as inspiring. After reading this chapter, you should be able to:

- explain how culture influences the role and image of older people
- give a short description of the image of older Europeans
- use arguments from cultural gerontology to criticize and question statements made in the previous chapters of this book
- explain the ambiguous image of old age in Europe

# 8.2 What is Cultural Gerontology?

...Now Winter's marching round Drumard We'll log up stoves against the coming cold Much to live for, still more to remember And never, ever talk of growing old. Light can catch the glory in November Of summers past and though God gives no sign When love is all there is no final line. McCabe (2005), 'For Margot for a Lifetime'

Cultural gerontology's focus on interpretations, values and practices related to the life-course explores how these mould images of older age, generating

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expectations and stereotypes that affect older people's possibilities for participating in society; it interrogates how the experience of ageing is shaped, both in interpersonal interaction, and by the social, political and economic structures in which it is embedded. Different societies produce different versions of the life-course, even within 'Western' culture (Westerhof et al. 2003). Exploring cultural material is thus crucial to understanding the sociality of the life-course, with the interactive qualities and processes that enhance or undermine the implications of ageing. To highlight the richness of this multifaceted approach, this chapter will examine some of the contentions, disputes and opportunities involved in practising cultural gerontology in Europe.

While 'out of the world's twenty countries with highest percentages of persons aged 65+, eighteen are in Europe', there are fifty WHO member-states in Europe. They include regions recently afflicted by war, in which many State-sponsored programmes for older people were simply abandoned and where 'survival became the main issue' (Hermanova 2000, p. 15), as well as more affluent regions in which some older people live in greater comfort. But contrasts internal to Europe are not the only ones involved in ageing in this region. European cities have always been multicultural (see e.g. Kolland 2008), but are growing increasingly globalised, 'transnational social spaces' that are the foci of processes with origins in diverse parts of the world (Faist and Özveren 2004; Daatland and Biggs 2004).

Bernhard Weicht (2010, p. 18) therefore explores the 'paradoxical' situation in which migrant care workers, who might have been considered strangers, are employed for intimate support to older people in Austria. 'Moral, cultural and social considerations' transform local cultural interpretations of migration; carers may be regarded 'as if' they were relations or even 'angels' (2010, p. 34), a potentially ambivalent position in which they compensate for emotional problems generated by contemporary socio-economic structures. Katy Gardner's *Age, Narrative and Migration* (2002) brings together political and economic themes centring on globalisation and transnational migration between Bengali regions of the Indian subcontinent and the UK; but she stresses that 'household and kinship dynamics' must also be 'central to the inquiry' (2002, p. 17). Yet making such dynamics central to a text is not a simple process. Gardner writes that.... decisions concerning movement between places and participation in the societies, economies or politics of either Britain or Bangladesh are... often guided by the stages that men and women have reached in their lives (ibid.).

This means that there are 'a variety of histories' all bearing on 'Bengali transnationalism', including the history of global capitalism and colonialism; processes of inclusion and exclusion within Britain and political and economic conditions in Bangladesh; the development of Bengali and Muslim communities in Britain— Gardner gives the term 'community' inverted commas, to signal its shifting, multilayered complexity—and the histories of the tens of thousands of individuals concerned, each weighing features of these surrounding dynamics against their own concerns and those of their families. Here, 'the feelings of the elders are central to what they tell us about their past and present experiences': the pain of separation, regret, disappointment 'and a strong sense of love or grief jostle for our attention with pride, excitement, contentment and acceptance of the way things have turned out' (2002: 17–18). This 'strong sense of ambivalence' is 'core' to what transnational migration means to those affected, within a global system in which 'space and place are far from politically neutral'; the social and geographical regions involved are 'permeated' by 'relations of power' (2002: 18). Cultural meanings are central to interpreting this interplay of influences, showing how ambivalence takes effect and power operates in the daily lives of those concerned.

Work of this kind understands structural and cultural aspects of ageing together: neither is complete on its own. It is influenced by writers including Tamara Haraven, whose 'life course paradigm' illuminates the interaction of just such demographic, socio-structural and cultural factors as they affect family patterns, generational relations, and 'the impact of historical events on the lives of various cohorts, and their consequences for old age' (1994, p. 438). Here it is concern with life-course meaning that makes an investigation 'cultural', not the use of face-to-face or interpretive methods as such, though these are central to the genre for their power in communicating key characteristics of a social field. For Miriam Bernard and her colleagues (2000), an interpretive account of what older people's lives are actually like is essential to describing social impacts on ageing in families and communities. Revisiting areas in London, Wolverhampton and Essex earlier explored in the 1940s and 1950s, they refer to novels and use excerpts from biographical memoirs to convey the ambiences of social practices at different stages in recent history, concerned with people's day-to-day efforts to cope with the pressures of modern urban life. In wider gerontological circles, the very concept of 'quality of life' implies the need to take cultural interpretations seriously. This applies even when investigation reveals a discourse of absence, as when Österlind and her colleagues (2011) investigate discourses of death and dying in four Swedish nursing-homes. Though dying is not rare in these settings, the researchers find that staff tend to avoid confronting it explicitly. They attribute this to 'a combination of individual and organizational factors', including 'emotional stress' caused by the 'daily workload' of hard-pressed staff (2011, p. 539). But the project of identifying connections between meanings and their social settings points to sites of deep contestation, for a variety of reasons that are central to the theory, methodology and politics of gerontology itself.

# 8.3 Central Theories and Concepts in Cultural Gerontology

Misunderstandings of cultural gerontology include the assumption that it merely adds 'insights' to socio-political and economic accounts, as if these alone comprised the serious substance of the study of ageing. The term 'insight' is puzzling in such usages, where writers typically omit to specify exactly what they imagine insights to contribute, implying that they are optional ornaments to the real business of explanation. Yet the examples here make clear that interpreting cultural meanings is intrinsic to explicating what is happening in the social world. Cultural gerontology is an inherently contextualising, often multidisciplinary enterprise, with all the challenges that such a hybrid approach entails.

# 8.3.1 Retirement as a Social Construct

The intrinsic connections between ageing and culture are shown conclusively by the fact that views of older people and of ageing itself vary according to the societies in which they occur (Thane 2005); contrasts between different times and places have detectable effects on what it is possible for 'older people' to do. This is underlined graphically by the gerontologist Jan Baars (Baars et al. 2006, 2012), who celebrated his 'non-retirement' in May 2012. Compelled by official policy to retire on reaching his 65th birthday, he declined to cease working and was 'graciously' extended a part-time appointment at the University of Humanistic Studies at Utrecht until 2016. The website explaining this event points out that through standardised, enforced retirement ages a formal kind of equality is imposed on very different situations, leading not only to inequality, but also to a loss of meaning in life, isolation of age categories and loss of competence and productivity (Anonymous 2012).

While retirement is in many respects a radically progressive and significant institution, the unintended effects of its 'social construction' (Berger and Luckmann 1966) include causing people in the prime of their work to be 'written off' as 'old' (Gullette 2011). Work is by and large a social activity; in many contemporary societies it provides—rightly or wrongly—the central yardstick for evaluating other people and their lives. Individuals who are prevented from cooperating with their colleagues and institutions can scarcely continue to think of themselves exactly as before.

Yet striving for diagnostic precision about these cultural effects accentuates disputes endemic in the social sciences about the causes of social phenomena and the capacities of individuals and groups to affect them. Analytical emphasis on cultural phenomena can sometimes seem to suggest that cultural change, or attitudinal change on the parts of individuals, can form independent sources of social development or even transformation-claims which would require, at the least, considerable argument. Linked to this issue is the question how genuinely free social identity and action really are. It is seldom seriously asserted that individuals are mere instruments of their cultural environments ('cultural dopes'); in the study of ageing, older people's moral and political stature, profound personal and everyday experience, and efforts to make impacts on their life-circumstances should clearly be respected. But this does not mean they necessarily impact decisively on social causality. The study of social resistance shows that it can be precisely the struggles of individuals against their predicaments that imprison them more firmly (Willis 2003). Nor does respecting older people automatically mean we should ignore questions about their ideological beliefs or consider them immune to social denial.

#### 8.3.2 Culture and Society

Alan Walker's (2009) account of the 'cultural turn' makes clear that cultural analyses can have damaging political implications if associated with individualistic interpretations of modernity and theories of the 'risk society'. Suggestions that 'as needs become more diversely individual, the bureaucratic social institutions simply cannot respond to them sensitively enough' (2009, p. 599) can provide excuses for governments to expect individuals and families to take responsibility for risks against which it is actually impossible for them to guard effectively. Walker rightly stresses, too, that social groups vary markedly in the extent to which they are able to exercise power over their lives (2009, p. 603). Without 'a clear understanding of the social' (2009, p. 605), such fundamental theoretical issues could potentially destabilise gerontology as a whole.

Much European cultural gerontology aligns itself to theories of 'moral economy' or 'critical gerontology', explicitly seeking to relate cultural phenomena to complex socio-political and economic frameworks. The 'moral economy' approach explores relations between social values and practices, for instance values relating to justice and desert, and material ways of life. Like critical gerontology, it contends that much that is associated with ageing 'is created through societal organization and by the way material or social resources are allocated' (Hendricks 2005, p. 512). Walker (1981) too emphasises that major expectations of older age are linked to contingent social and economic processes, not to intrinsic features of ageing itself; Townsend (1981) explored the 'structured dependency' of older people on the state caused by, among other things, early retirement. Martin Kohli (2007) has expounded a view of the life course as a series of socially-defined stages shaped largely by the social structure of work. For example, biographical methods can elucidate the life-worlds of people living out comparable trajectories, such as artisan bakers in France (Bertaux and Kohli 1984). Anne-Marie Guillemard (1986) also analysed role expectations and habits as affected by material relations in the marketplace, tracing the cascading effects of retirement on perceptions of 55-year-olds as 'nearly old' and 40-year-olds as 'a group with no future'. Thus critical gerontology (Minkler and Estes 1991; Phillipson 1992; Baars et al. 2006 and 2012) urges explorations of meaning that are sensitive to the political and economic power-relationships among which they arise.

Work by Chris Gilleard and Paul Higgs (2000 and 2005) also contributes to the question of cultural change and its impact on the life course, in connection with the rise of consumerism and the power they consider this confers on individuals. While, as they mention, youth is a form of cultural capital that can put older people at a disadvantage, Gilleard and Higgs postulate a cohort-effect associated with the fact that current older generations themselves pioneered youth culture in the 1960s, participating in its subsequent evolution into a consumer culture that many are sufficiently affluent to enjoy. Thus Rees-Jones et al. argue, in the eloquently-entitled *Ageing in a Consumer Society: From Passive to Active Consumption in Britain*, that 'With the rise of the modern retiree, the status of old

age is no longer crystallised around that of the old age pensioner' (2008: 1). Older people, Gilleard and Higgs contend, will not allow themselves to be marginalised from the social mainstream. Not only did 'the retired population' become 'a more complex and socially differentiated group' during the twentieth century; this precipitated a 'crisis of meaning' relating to later life and how it is lived (2005: 60). These authors concede that while identity in later life was formerly established in types of 'connectedness' that were locally-rooted and relatively permanent, contemporary 'symbolic communities' offer less robust and viable support (2005: 124). They point to the perhaps surprising circumstance that in more 'fluid' worlds, families rather than communities show 'resilience' in adjusting to changed conditions (2005: 148). But while Gilleard and Higgs are not alone in suggesting that generational relations are evolving, not everyone ascribes such changes to lifestyle-related developments. Daatland (2009), for example, traces changing family relationships in European states that he sees as ensuing from institutional changes. Where State care for older people is strong, he argues, space is created for new forms of mutually-respectful independence, allowing affection between family members to persist in new forms.

### 8.3.3 Expectations and Practices

Cultural gerontology, therefore, debates resources in terms of expectations and practices to which people can turn, obstacles that confront them, and ways in which their circumstances are interpreted by themselves and others, that impact decisively on how their life-courses develop. Such expectations and practices can mean that overall predicaments-'being retired' or 'staying in a nursing home'are lived in entirely different ways. Assumpta Ryan and her colleagues (2012) show that in rural areas of Northern Ireland, older people have deep attachments to their own homes, entering residential care only when this cannot be avoided. But the meaning this has for them is affected by their close relationships with care-practitioners and the location of care-homes near their own communities. Entering a nursing home is transformed if one can draw on 'familiarity' with the setting. This impacts on how older people envisage their own predicaments: they do not simply adopt attitudes from their social environments, but make active use of local interpretations and meanings of place. While Phillipson (2007) points out that not all groups of older people have the power to do this, Sheila Peace and her colleagues (2005) argue for the significance of 'favourite places' and the power of energised re-engagement with them as a result of journeying away, however, briefly: even moving into another room and back might enhance older people's efforts to maintain their identities. Judith Phillips et al. (2011), however, show that although familiarity with place is a resource on which older people can profitably draw, other strategies can respond to unfamiliarity and 'placelessness'. This can be caused in different ways, for example in urban settings where both built environments and uses of space may change. Exploring modulations of ascribing social

meaning, these authors show how aesthetic elements can help to make environments intelligible and significant—enhancing the power of older people who are obliged to negotiate them.

Analyses like these show how, over time, social constructions take shape in the intersection of dynamic processes involving a variety of people, practices and power-relations. This interrelatedness among components of the social world renders cultural gerontology essential for appreciating what ageing means, both for individuals' own lives and as a social process. Thus, for example, in the rural West of Ireland, agricultural practices in a harsh, unforgiving landscape are aligned with forms of interaction and attitudes to the life-course such that, if they were ignored, a false impression would be given of what it is like to age there. At the same time, exploring these specificities allows for connections and comparisons with ways in which later life is lived in other settings. Conversation and meaning here function according to local rhythms, with local uses of allusion and silence; both the English and the Irish language are employed in ways very different from those in formal texts. These cultural practices, closely related to the subsistence farming prevalent until within the last half-century, make it possible to age in certain ways (Edmondson 2001, 2009 and 2011). These include a degree of tolerance with regard to other people, a capacity to accept them for what they have shown themselves to be; correspondingly, individuals may be relatively undemanding of their own life-circumstances, making the best of them through connecting them with expectations in the social microcosms in which they are set. Ageing itself is not subject to the sharp cut-off point of 'retirement', since farming can continue indefinitely; people need not relinquish their identities as farmers at any age. Such rural locations also make it possible to survey the entirety of others' life-courses, since neighbours are acquainted from birth to death. At funerals, local biographies may be recounted-in ways that emphasise the influence of good or bad character or fortune; apart from relatively perfunctory references to the length of individuals' lives ('She was a good age'), it seems more interesting to stress the deceased's relations with other people. Remarks such as 'He was well-liked,' are by no means trivial: they honour the tenor and conduct of a person's lifelong relationships. In more urban settings, acquaintance-time is generally shorter, extending only over relatively brief segments of others' lives; their life 'achievements' are estimated in other ways. Growing older in rural Ireland is thus a social phenomenon offering a range of specific possibilities; yet it is not completely detached from cultures elsewhere. Some parallel dimensions can be observed in Finland or Austria, say, albeit with modulations that need to be traced empirically and interpreted in terms of locally-effective meanings.

In these examples, different cultural attitudes are associated with both local and structural features of place; this does not make them inalterably inscribed within their locations. The contrary is the case, since cultural attitudes change all the time—albeit in ways that are predictable only in part. This capacity for change is interrogated in work by Fairhurst and Slee (forthcoming) on 'culturally-led regeneration' in an urban area, Salford in the UK. Here a disused church is being renewed as a centre for community and the arts, within a larger programme of

regeneration in an ethnically-diverse locality where disadvantage is high. Some half of all adults have no qualifications; a similar proportion have been receiving benefits for over five years. The development of this church and the garden around it is intended to underpin, and in effect to rework, local senses of heritage and tradition, supporting a more 'cohesive contemporary community' (forthcoming). A green area will be created for children's play, neighbours will be encouraged to talk, birds and insects will be enticed into the area; people of all ages will be encouraged to engage in gardening-perhaps to become active in the local Residents' Association too. In the event, this has developed into a markedly 'intergenerational' project, led by two older female residents, while much physical work is carried out by those younger. Fairhurst and Slee conclude that these women simply 'happened to be' older; their main characteristics were not their age, but their capacities to contribute decisively to local 'communities of practice'. Indeed, the authors suggest, the category of age may be far from particularly useful in examining 'intergenerational relations and culturally-led regeneration'; 'a focus on identities located in place' may be more 'fruitful'.

The examples here show that in the absence of cultural gerontology, it would be impossible adequately to understand the sociality of ageing, what makes it a joint, interpersonal development that both responds to and alters the nature of social circumstances. This too has theoretical and methodological implications. 'Emergent' meanings are necessarily part of the analysis; meanings are not simply built up from the opinions and reactions of individuals, but form shared, public, if not always consciously understood, interpretive resources on which people draw in the ways they make themselves intelligible to each other. As Gubrium remarks, 'the rush to discover and trace personal meaning must not discount the social organisation of voicing', since 'voice is ineluctably part of language and communication, things inherently situated and shared' (1993: 61–62). Cultural interactions are social phenomena developing over time in specifically social spaces, using and also changing available patterns of meaning. Whether or not their users are conscious of them, accounts of life-courses that omit them leave out the heart of what it is to be a person.

# 8.4 What Does Cultural Gerontology Tell Us about the Current State of Europe?

One of the most profound influences on the meaning of ageing in Europe has been the development of the welfare state, which has transformed much of the riskprone character and outright misery formerly attaching to later life (Thane 2005). Westerhof et al. (2003, p. 379) speculate that inhabiting 'a corporatist social welfare system' itself impacts on the ways German adults see themselves as compared with older people in the US, in a liberal system that 'stresses competitive individualism and therefore values youth'. The cultural security that European welfare arrangements provide is taken for granted by many commentators, but a major contemporary feature of Europe is increasing cultural and economic dislocation (Powell 2006). If, for instance, companies abandon perceptions of moral obligations to provide for a viable old age among staff who have given them their working lives, this has sharp moral and cultural impacts. Ingo Bode's examination of the 'deregulation of old age welfare' 'underway in Europe' stresses that although 'moral ideas remain prominent' in connection with ageing, increasing 'disorganization' inevitably impacts on the 'moral economy' of the life-course (2011, p. 2).

Gender issues are also profoundly significant in the European landscape of ageing, but need to be rendered visible before they can be discussed. This may be achieved via large-scale analysis, as when Ginn (2001) explores relations between labour markets and households, crucially upheld by women's unpaid labour. The different ways in which care-years are computed in pension terms both affect and are affected by cultural understandings of gender and ageing. Such discursive undercurrents may go unremarked unless investigated. Wilińska (2010, p. 879) draws on Krekula's (2007) account of gender and age as 'intertwining systems' of power relations, showing that 'public discourse in Poland is replete with instances of ageism' (Wikinska 2010, p. 885): 'grandma' seems the only role available for older women (Wilinska 2010, p. 887). This phenomenon is not restricted to Poland. On the violent death of the widely- admired war journalist Marie Colvin in 2012, the London Sunday Times published a whole-page photographic portrait of her (Sect. 4, p. 1, 26 February 2012), together with memoirs by colleagues. The portrait, taken in 2007 by Bryan Adams, when Colvin was in her early fifties, is remarkable for presenting her as glamorously smooth-skinned, like the young women on the photographer's website. This is apparently intended as complimentary. The newspaper quotes Adams as saying, 'There was a quiet confidence. There were no airs and graces. She was the real thing.' Colvin was a remarkably authoritative reporter, but neither the photographer nor the newspaper seems to have found it appropriate to depict her as an older woman of experience. It appears that these individuals simply have no access to a visual discourse in whose terms they can represent a woman of this kind appropriately.

Thus Lars Andersson (2002, p. 7) identifies major concern within cultural gerontology for two 'key' sets of problems: 'sources of self-identity and self-image in higher ages' and 'the absence of vision regarding the purpose of the extended life-course'. As far as the first is concerned, highlighting neglected areas of the later life-course can have a critical effect, as in the case of Swinnen's (2011) attention to late-life sexuality, experienced as liberating by many of its readers. But major European work in cultural gerontology highlights the invisibility or distortion of older people's capacities, contributions and potential. Centring on both restoration and resistance, it brings to light the cultural exclusion recurrently suffered by older people in Europe.

# 8.4.1 The Body in Old Age

Here the work of Julia Twigg in 're-valuing the mundane' (2000: 3) is both a cultural and a political intervention, highlighting the values and experiences of the lower-paid, those of lower status, the people who make a difference to others' lives on a day-to-day level that is often ignored. It also links older people's bodies to wider systems of meaning. Twigg's study of bathing, for example, underlines its disciplinary functions when used during admission to an institution, or explores its implications in post-modern contexts where the authority of religion is retreating and people seek meaning at the private level, including 'in and through their bodies' (2000: 16). She remarks that during bathing in community care, 'in the dynamics of the care encounter' 'production and consumption collapse into one another'; exploring 'the significance of the ordinary and the day-to-day' in this way can bring into focus 'the fine texture of our lives', in particular its bodiliness, so often neglected in 'disembodied' accounts that occlude 'the true nature of care' (2000: 1).

As a rule, Twigg writes, 'We conceive of the body through the medium of dress' (2007, p. 286). Clothes present 'a means whereby social expectations in relation to age act upon and are made manifest in the body' (2007, p. 285). She explores connections between clothing, the body and identity, enquiring if older patterns of 'ageordering in dress' have really 'given way to a new fluidity' in which garments can be chosen without reference to age (2007, p. 286), disrupting 'the old narrative of age in terms of marginalisation and decline' (2007, p. 300)? How free are older individuals to choose how they dress, thus how they present themselves to the world? Individuals must make practical accommodations to bodily changes-mastectomy, perhaps, or difficulties in walking; yet the 'expressivity' of dress 'operates within a cultural context that assigns distinctive meanings to social forms' (2007, p. 291). These include gender, ethnic and class differences in particular, 'signaling or erasing aspects of identity' (2007, p. 292). While such modes of signaling fluctuate with cultural change, 'age-ordering' in dress has surprisingly persistent features: older people still select relatively shapeless forms and muted colours, for instance (2007, p. 294). There is constant interplay here between cultural prescriptions and readings, and individual agency: how great are 'possibilities of resistance' here (2007, p. 289)?

'Age-resistance can mean rejecting the cultural denigration implicit in the processes that assign to older women drab, frumpy, shapeless and concealing garments—clothing that endorses the cultural norm of invisibility and that acts to entrench the sidelined status of the old. Such strategies, however, contain their own dangers in the form of radical age-denial through the pursuit of youth styles that present the body—and the self—as if it were unchanged, and in so doing actually expose and emphasise those changes' (Twigg 2007: 299). The expression of age through clothing may have grown more, not less, significant (2007: 301), as consumer culture imposes social discipline in 'new and more sub-tle forms' (2007: 302).

The often-unacknowledged pressures connected with being seen as old mean that many older people experience their ageing bodies as in tension with the selves they would wish to acknowledge, 'masking' what they feel are more youth-ful identities (Featherstone and Hepworth 1989, p. 148). Coming to terms with such contradictions and ambiguities demands effort of the imagination; Hepworth (2000) analyses the ways such contradictions are reflected in novels, with their refiguring of 'dys-appearing' physical distortions imposed by age, or the risks that older people can take. Simon Biggs (2004, p. 137) questions distinctions 'between surface and hidden elements in identify performance': what is it that could exist 'behind' the masquerade? Could it be that this is all about 'slavishly and often

unsuccessfully trying to "fit in" (2004, p. 143)? Or is the masquerade designed 'to protect a mature identity in the context of an increasingly ambiguous external environment' (2004, p. 144)? Biggs examines alternatives to the strategy of masquerade, such as striving for coherence on the basis of 'personal continuity' and 'deeper components of identity, such as remembered experience' (2004, p. 146). This enquiry shows Biggs's own concern for moral integrity:

'So, to live authentically in later life would mean an ability to express deeper and thus more integrated aspects of oneself that arise with maturity, and to anchor this experience in a recognition of the tasks and issues arising from a certain position upon an ultimately biologically determined life-trajectory' (2004, p. 152).

This article is not alone in treating exploring cultural impacts on ageing as inseparable from resisting them.

Cultural gerontology not seldom shows strong moral as well as political concern with the potential value of later life, demonstrated in transatlantic influences on European cultural gerontology such as the work of Minkler and Estes (1991) or Haraven (1994). Kathleen Woodward (1991) both explores negative impacts of expectations of ageing on how individuals experience it, and reflects on difficulties for younger people in appreciating the condition of those rendered infirm by age. 'The aging body as imagined and experienced and the aging body as represented structure each other in endless and reciprocal reverberation' (1991: 5). It is in particular American authors such as Moody (1988 and 2002) or Cole who underline the need for personal commitment to authentic forms of life, including academic life. While European cultural gerontologists are aware of criticisms applicable to the discipline of gerontology itself (Von Kondratowitz 2009), Cole, after exploring successive cultural meanings attributed to ageing in both Europe and the United States, rejects the flight towards science as a cure for senescence in favour of serious responses to older age as 'a moral and spiritual frontier' (1992: 243).

#### 8.4.2 Discourses

In an allied approach, 'resistance readings' of contemporary culture attempt to 'recover the indeterminacy of the world' by exposing how language can make it appear that particular categories and power-structures are natural and acceptable (Alvesson and Deetz 2006, p. 271). This is intended to militate against what Blaikie calls 'the opacity of aging', the 'willful failure to see into the social dynamics of later life'; even where 'resistant subcultures' exist among the old, 'ageism within the academy' causes them to be overlooked (Blaikie 2002, p. 99). In order to interrogate life-courses at intersecting levels, methods in cultural gerontology tend to 'transgress' disciplinary and methodological boundaries (Hartung and Maierhofer 2009). Writers such as Kunow (2009) explore the potential 'transformative power' of ageing, for example in a novel's dissection of how older people may feel freer to take political risks they might not have dared to contemplate when younger, or how their experience can help them judge when it is crucial to embark on the resistance involved.

The challenges of identifying and translating partly-obscured discourses, their distortion, or their absence are central to cultural gerontology; Van Nes et al. (2010) allude to this specifically in a European context. Rightly, they point out that 'The relation between subjective experience and language is a two-way process; language is used to express meaning, but... language influences how meaning is constructed' (2010, pp. 313–314). This entails that English-language accounts of meanings expressed in other tongues necessarily lose in the telling. As Gubrium and Holstein (1998) point out, stories people tell about ageing arise in, though they are not determined by, particular sites and occasions of lived experience; if they are ripped from these contexts and framed in different terms, this particularity must diminish (cf. Nikander 2008). Gubrium and Holstein remark, 'The world of meanings does not apply the same way to everyone, but is locally applicable' (2000, p. 7). This is not to argue that narrative and experience necessarily 'precisely mirror each other' (Kolb 2008, p. 342), but that understanding their mutual influence within local worlds of meaning is key to understanding life-course developments (cf. Hyvärinen 2010). Yet, how can such embedded complexities be conveyed to readers inhabiting quite different worlds of meaning (Edmondson 2000)? Textual conventions impose their own techniques for cultural translation, influencing and often limiting the forms in which cultural contexts can be represented. Here art and literature can perform services key to gerontology, opening up moral and imaginative connections that might otherwise fail to be made (Worsfeld 2011).

# 8.5 Current Debate in Cultural Gerontology: Older People as Tragic or Inspiring?

Arguing that 'ours is probably the most age-conscious period in human history' (Hepworth 2000: 3), the (mainly) European cultural gerontologists examined here emphasise both social critique and self-criticism vis-à-vis the discipline itself. Bytheway (2011) comments on the pervasiveness of starkly chronological interpretations of ageing in official categorisations now routinely used, and the ease with which they dominate thinking about older people. Like his Canadian colleague, Stephen Katz (1986), he locates this dominance within the 'disciplining' of later life. In *Cultural Aging* (2005), Katz comments on contemporary reinterpretations of older age in the interest of commercial and control, repressing capacities that might give later life sense and meaning. Standards of 'successful' ageing are imposed for managerial reasons, and anti-ageism is confused with anti-ageing;

... positive agendas based on activity and mobility can downplay traditionally crucial values such as wisdom and disengagement by translating them into (negative) problems of inactivity and dependency (2005, p. 195).

Cultural changes, therefore, do not all arise spontaneously, but can be manipulated in interests that may conflict with those of older people. Haim Hazan (2009) contends that contemporary fixation on activity and energy, themselves associated with gerontologists' activities, causes us to fail to recognise the very old and sick as 'selves' at all, as we foist our own hopes and expectations onto them. Outi Jolanki (2009), too, shows that (partly in response to gerontological discourse) older people may feel obliged to enact vibrant activity and energy, for fear of forfeiting their status as moral agents. Cultural gerontologists, then, resent both cultural and disciplinary impositions foisted on older people, and attempt to resist these trends.

Despite such efforts, social images of age continue to highlight its 'deficits'. Sociological investigations of older people's life-satisfaction are often pointedly restricted to personal interaction. Is this an unintentional continuation of the 'modernisation theory' (Cowgill 1974) that sees older people as bereft of authority in contemporary societies, preoccupied with relinquishing social roles and compensating for loss? Cultural gerontologists instead stress the active control older people take over interpreting their own lives—as Ville and Khlat (2007) explore how people in the Île de France actively adapt their life-narratives to restore their senses of meaning and coherence. Writers such as Gallagher (2008) accentuate older people's strong contributions to community life. But, in the absence of appropriate political and economic structures, even maintaining a sense of spiritual integrity may be no easy task. Coleman (2011) explores the struggles older people may have with respect to religious belief, often unsupported by Church interest. In contrast, Lars Tornstam (2005: 59, 76) offers evidence suggesting that individuals in later life may undergo an identity-development in which they stress 'transcendental sources of happiness', fostering richly-combined tolerance, patience and enjoyment of nature or human relationships. This 'modern asceticism' (2005: 68-89) seems in part counter-cultural, exploiting small but significant everyday experiences to evoke 'the feeling of being at one with the universe' (2005: 59-60).

Changing cultural interpretations of ageing show clearly in fluctuating interpretations of the notion of wisdom, formerly an acknowledged aim throughout individuals' life-courses as well as used to evaluate societies as wholes and their systems of human formation. As Katz's remark, above, indicates, the concept of wisdom has been downplayed; what used to be the most-admired aspect of later life is now denigrated. This is a serious issue. In cultures dominated by criteria relating to paid work outside the home, people whose major activities do not take this form find it hard to achieve recognition. Influenced by positive psychology and its implications for gerontology, writers such as Ardelt (2005), Ferrari (2008) or Baltes and Staudinger (2000) attempt a counterbalance, offering valuable explorations of the notion of wisdom and what it might mean in the contemporary world, stressing more personality-based, more cognitive and pragmatic, or more balance-oriented aspects of this phenomenon.

Edmondson (forthcoming a, b) focuses on everyday aspects of wise behaviour, seeing wisdom as taking forms that vary according to cultural setting but play parts at the centre of activities that are vitally important to people's lives. In the West of Ireland, specific characteristics of daily interaction both prescribe and make possible forms of interpersonal wisdom that are low-key, humorous, often entertaining; they can be creative and surprising, opening up new courses of conduct for those involved. These social prompts to new perspectives may be related in significant ways to wise practices occurring elsewhere—in working-class

Birmingham or Berlin—but are not identical with them. Tracing such varieties of wisdom requires combined ethnographic, sociological and philosophical methods to reconstruct types of wisdom used in practice, allowing us to explore both the everyday quality of interpersonal wisdom and its centrality to societal life.

Investigations like these are intended to be innovative rather than nostalgic, identifying vibrant contributions that older people actually make and on which societies depend. In such projects, examining non-mainstream societies can draw attention to patterns of ageing that also exist elsewhere but may be less well recognised. In rural cultures it tends to be health, not age, that determines how people regard their life-courses; older individuals are not automatically seen as incapable of contributing to local life. But the work of Fairhurst and Slee (forthcoming) suggests that this phenomenon can be found in highly urban settings too. Like Kaufman (1986), Gubrium and Holstein note (2000: 4) that for many older people, even into their nineties, 'old age hardly comes up at all as a significant framework for perceiving themselves, orienting to their pasts and futures, or for guiding interaction with others'. It is a large part of cultural gerontology's role to explore what it is—quite apart from being old—that older people are and do.

# **Check Your Progress: A Quiz on Cultural Gerontology**

Question 8.1: What is the image of old age in Europe?

- (a) A source of wisdom
- (b) Frail and socially isolated individuals
- (c) Potential consumers
- (d) Neither of the above
- (e) It can be any of these images, depending on the social context

Question 8.2: What is the approach called, that states that people have very different experiences of the ageing process?

- (a) Ageing diversity approach
- (b) Diverse ageing approach
- (c) Diversity gerontology
- (d) Critical gerontology
- (e) Critical diversity gerontology

Question 8.3: Why is it important to consider culture when discussing the situation of older Europeans? (multiple answers possible)

- (a) Culture influences the roles that older people play in society
- (b) Culture influences how many older people live in a country
- (c) Culture influences the image of older people
- (d) There are many cultures in Europe, which means that culture creates differences between (older) Europeans
- (e) Culture is not important for older Europeans

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# References

- Alvesson, M., & Deetz, S. (2006). Critical theory and postmodernism approaches to organizational studies. In S. Clegg, C. Hardy, T. Lawrence, & W. Nord (Eds.), Sage handbook of organization studies (pp. 255–283). London: Sage.
- Andersson, L. (2002). Introduction. In L. Andersson (Ed.), *Cultural gerontology* (pp. 7–10). Westport: Auburn House.
- Anonymous (2012). A non-retirement conference. Frictions between age-related rules and (inter) personal meanings in aging. Conference homepage. Utrecht University. http://www.uvh.nl/non-retirement-symposium. Accessed 4 March 2012.
- Ardelt, M. (2005). How wise people cope with crises and obstacles in life. *Revision. A Journal of Consciousness and Transformation*, 28(1), 7–19.
- Baars, J., Dannefer, D., Phillipson, C., & Walker, A. (Eds.). (2006). Aging, globalization and inequality. Amityville: Baywood.
- Baars, J., Dohmen, J., Grenier, A., & Phillipson, C. (Eds.). (2012). Ageing, meaning and social structure: connecting critical and humanistic gerontology. Bristol: Policy Press.
- Baltes, P., & Staudinger, U. (2000). Wisdom: a metaheuristic (pragmatic) to orchestrate mind and virtue towards excellence. *American Psychologist*, 55(1), 122–136.
- Berger, P., & Luckmann, T. (1966). *The social construction of reality: a treatise in the sociology of knowledge*. Garden City: Anchor Books.
- Bernard, M., Ogg, J., Phillips, J., & Phillipson, C. (2000). Family and community life of older people: social networks and social support in three urban areas. London: Routledge.
- Bertaux, D., & Kohli, M. (1984). The life-story approach: a continental view. Annual Review of Sociology, 10, 215–237.
- Biggs, S. (2004). In pursuit of successful identities and authentic aging. In E. Tulle (Ed.), Old age and agency (pp. 137–157). New York: Nova.
- Blaikie, A. (2002). The secret world of subcultural ageing: what unites and what divides? In L. Andersson (Ed.), *Cultural gerontology* (pp. 95–110). Westport: Auburn House.
- Bode, I. (2011). A new moral economy of old age provision? The disorganization of welfare for the elderly and its consequences in international perspective. Conference paper. http://www. ageing-in-europe.org/murciapapers/bode.pdf. Accessed 28 February 2012.
- Bytheway, B. (2011). Unmasking age: the significance of age for social research. Bristol: Policy Press.
- Cole, T. (1992). *The journey of life: a cultural history of aging in America*. Cambridge: Cambridge University Press.
- Coleman, P. (2011). Belief and ageing: spiritual pathways in later life. Bristol: Policy Press.
- Cowgill, D. (1974). Aging and modernization: a revision of the theory. In J. Gubrium (Ed.), *Late life* (pp. 124–146). Springfield: Charles C. Thomas.
- Daatland, S.-O. (2009). How to balance generations: solidarity dilemmas in a European perspective. In R. Edmondson & H.-J. von Kondratowitz (Eds.), *Valuing older people: a humanist* approach to ageing (pp. 123–138). Bristol: Policy Press.
- Daatland, S.-O., & Biggs, S. (Eds.). (2004). Ageing and diversity: multiple pathways and cultural migrations. Bristol: Policy Press.
- Edmondson, R. (2000). Writing between worlds. In A. Byrne & R. Lentin (Eds.), (*Re)Searching women: feminist research methodologies in the social sciences in Ireland* (pp. 188–213). Dublin: IPA Press.
- Edmondson, R. (2001). Tracing civic culture ethnographically and what it tells us about social capital: communities in the west of Ireland. In E. Uslaner & P. Dekker (Eds.), *The politics of everyday life* (pp. 59–72). London: Routledge.

- Edmondson, R. (2009). Wisdom: a humanist approach to valuing older people. In R. Edmondson & H.-J. von Kondratowitz (Eds.), *Valuing older people: a humanist approach to ageing* (pp. 201–216). Bristol: Policy Press.
- Edmondson, R. (2011). Intergenerational relations in the west of Ireland: socio-cultural approaches to wisdom and resilience. *Journal of Family Issues*, *33*(1), 76–98.
- Edmondson, R. (forthcoming a). A social interpretation of personal wisdom. In M. Ferrari, & N. Weststrate (Eds.), *Personal wisdom*. New York: Springer.
- Edmondson, R. (forthcoming b). Ageing in Ireland. In S. Chen, & J. Powell (Eds.), *Global aging*. New York: Nova Science.
- Fairhurst, E., & Slee, S.M. (forthcoming). The hive in the cliff: a case study in intergenerational relations and culturally led regeneration. *Journal of Intergenerational Relationships*.
- Faist, T., & Özveren, E. (Eds.). (2004). Transnational social spaces: agents, networks and institutions. Aldershot: Ashgate.
- Ferrari, M. (2008). Developing expert and transformative wisdom: can either be taught in public schools? In M. Ferrari & G. Potworowski (Eds.), *Teaching for wisdom: cross-cultural per*spectives on fostering wisdom (pp. 207–221). New York: Springer.
- Featherstone, M., & Hepworth, M. (1989). Ageing and old age: reflections on the postmodern lifecourse. In B. Bytheway, T. Keil, P. Allatt, & A. Bryman (Eds.), *Becoming and being old: sociological approaches to later life* (pp. 143–157). London: Sage.
- Gallagher, C. (2008). The community life of older people in Ireland. Oxford: Peter Lang.
- Gardner, K. (2002). Age, narrative and migration: the life course and life histories of Bengali elders in London. Oxford: Berg.
- Gilleard, C., & Higgs, P. (2000). Cultures of ageing: self, citizen and the body. London: Prentice-Hall.
- Gilleard, C., & Higgs, P. (2005). Contexts of ageing: class, cohort and community. Cambridge: Polity Press.
- Ginn, J. (2001). Privatising pensions: new options and new risks for women. In N. Gilbert (Ed.), *Researching social life* (pp. 287–301). London: Sage.
- Gubrium, J. (1993). Speaking of life: horizons of meaning for nursing home residents. Hawthorne: Aldine de Gruyter.
- Gubrium, J., & Holstein, J. (1998). Narrative practice and the coherence of personal stories. Sociological Quarterly, 39(1), 163–187.
- Gubrium, J., & Holstein, J. (2000). Aging and everyday life. Oxford: Blackwell.
- Guillemard, A.-M. (1986). Le déclin du social. Formation et crise des politiques de la veillesse [The decline of social thought. The upcoming and crisis of old age politics]. Paris: Presses Universitaires de France.
- Gullette, M. M. (2011). Agewise: fighting the new ageism in America. Chicago: Chicago University Press.
- Haraven, T. (1994). Ageing and generational relations: a historical and life course perspective. Annual Review of Sociology, 20, 237–461.
- Hartung, H., & Maierhofer, R. (Eds.) (2009). Narratives of life: mediating age. Lit Verlag.
- Hazan, H. (2009). Beyond dialogue: entering the fourth space in old age. In R. Edmondson & H.-J. von Kondratowitz (Eds.), *Valuing older people: a humanist approach to ageing* (pp. 91–104). Bristol: Policy Press.
- Hendricks, J. (2005). Moral economy and ageing. In M. Johnson, V. Bengtson, P. Coleman, & T. Kirkwood (Eds.), *The Cambridge handbook of age and ageing* (pp. 510–517). Cambridge: Cambridge University Press.
- Hepworth, M. (2000). Stories of ageing. Buckingham: Open University Press.
- Hermanova, H. (2000). Healthy aging in WHO programs in aging and health in the nineties. In U. Walter & T. Altgeld (Eds.), Altern im ländlichem Raum: Ansätze für eine vorausschauende Alten- und Gesundheitspolitik [Ageing in rural areas: Approaches to foresightful ageing- and health politics] (pp. 15–20). Frankfurt/M: Campus.
- Hyvärinen, M. (2010). Revisiting the narrative turns. Life Writing, 7(1), 69-82.

- Jolanki, O. (2009). Talk about old age, health and morality. In R. Edmondson, & H.-J. von Kondratowitz (Eds.), *Valuing older people: a humanist approach to ageing* (pp.261-274). Bristol: Policy.
- Katz, S. (1986). *Disciplining old age: the formation of gerontological knowledge*. Charlottesville: University Press of Virginia.
- Katz, S. (2005). *Cultural aging: life course, lifestyles, and senior worlds*. Toronto: Toronto University Press.
- Kaufman, S. (1986). *The ageless self: sources of meaning in late life*. Madison: University of Madison Press.
- Kolb, P. (2008). Developmental theories of aging. In S. Austrian (Ed.), *Developmental theories through the life cycle* (pp. 285–364). New York: Columbia University Press.
- Kohli, M. (2007). The institutionalization of the life course: looking back to look ahead. *Research in Human Development*, 4(3–4), 253–271.
- Kolland, D. (2008). Immigrants in Berlin. In J. A. Williams (Ed.), Berlin since the wall's end: shaping society and memory in the German metropolis since 1989 (pp. 59–87). Newcastle: Cambridge Scholars.
- Krekula, C. (2007). The intersection of age and gender: reworking gender theory and social gerontology. *Current Sociology*, 55(2), 155–171.
- Kunow, R. (2009). The coming of age: the descriptive organization of later life. In A. Hornung & R. Kunow (Eds.), *Representation and decoration in a postmodern age* (pp. 295–309). Heidelberg: Winter.
- McCabe, E. (2005). Heaven lies about us. London: Jonathan Cabe.
- Minkler, M., & Estes, C. (1991). *Critical perspectives on aging: the political and moral economy of growing old*. Amityville: Baywood.
- Moody, H. R. (1988). Toward a critical gerontology: the contribution of the humanities to theories of ageing. In J. E. Birren & V. L. Bengtson (Eds.), *Emergent theories of aging* (pp. 19–40). New York: Springer.
- Moody, H. R. (2002). Conscious ageing: a strategy for positive development in later life. In J. Ronch & J. Goldfield (Eds.), *Mental wellness in aging: strength-based approaches* (pp. 139– 160). Baltimore: Health Professions Press.
- Nikander, P. (2008). Working with transcriptions and translated data. *Qualitative Research in Psychology*, 5(3), 225–231.
- Österlind, J., Hansebo, G., Anderrson, J., Ternestedt, B.-M., & Hellström, I. (2011). A discourse of silence: professional carers reasoning about death and dying in nursing homes. *Ageing and Society*, *31*(4), 529–544.
- Peace, S., Holland, C., & Kellaher, L. (2005). *Environment and identity in later life*. Maidenhead: Open University Press.
- Phillips, J., Walford, N., & Hockey, A. (2011). How do unfamiliar environments convey meaning to older people? Urban dimensions of placelessness and attachment. *International Journal of Ageing and Later Life*, 6(2), 73–102.
- Phillipson, C. (1992). Reconstructing old age: new agendas in social theory and practice. London: Sage.
- Phillipson, C. (2007). The 'elected' and the 'excluded': perspectives on the experience of place and community in old age. *Ageing and Society*, 27(3), 321–342.
- Powell, J. (2006). Social theory and aging. Lanham: Rowman and Littlefield.
- Rees-Jones, I., Hyde, M., Higgs, P., & Victor, C. (Eds.). (2008). Ageing in a consumer society: from passive to active consumption in Britain. Bristol: Policy Press.
- Ryan, A., McKenna, H., & Slevin, O. (2012). Family care-giving and decisions about entry to care: a rural perspective. *Ageing and Society*, 32(1), 1–18.
- Swinnen, A. (Ed.). (2011). Seksualiteit van ouderen: Een multidisciplinaire benadering [The sexuality of older people: a multidisciplinary approach]. Amsterdam: Amsterdam University Press.

- Thane, P. (2005). The age of old age. In P. Thane (Ed.), *A history of old age* (pp. 9–29). Oxford: Oxford University Press.
- Tornstam, L. (2005). *Gerotranscendence—a developmental theory of positive aging*. New York: Springer.
- Townsend, P. (1981). The structured dependency of the elderly: the creation of social policy in the twentieth century. *Ageing and Society*, *1*(1), 5–28.
- Twigg, J. (2000). Bathing: the body and community care. London: Routledge.
- Twigg, J. (2007). Clothing, age and the body: a critical review. Ageing and Society, 27(2), 285–305.
- Van Nes, F., Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: is meaning lost in translation? *European Journal of Ageing*, 7(4), 313–316.
- Ville, I., & Khlat, M. (2007). Meaning and coherence of self and health: an approach based on narratives of life events. *Social Science and Medicine*, 64(4), 1001–1014.
- Von Kondratowitz, H.-J. (2009). The long road to a moralisation of old age. In R. Edmondson & H.-J. von Kondratowitz (Eds.), *Valuing older people: a humanist approach to ageing* (pp. 107–122). Bristol: Policy Press.
- Walker, A. (1981). Towards a political economy of old age. Ageing and Society, 1(1), 73-94.
- Walker, A. (2009). Aging and social policy: theorizing the social. In V. Bengtson, M. Silverstein, N. Putney, & D. Gans (Eds.), *Handbook of theories of aging* (pp. 595–614). New York: Springer.
- Weicht, B. (2010). Embodying the ideal carer: the Austrian discourse on migrant carers. International Journal of Ageing and Later Life, 5(2), 17–52.
- Westerhof, G., Barrett, A., & Steverink, N. (2003). Forever young? A comparison of age identities in the United States and Germany. *Research in Aging*, 25(4), 366–383.
- Wilińska, M. (2010). Because women will always be women and men are just getting older: intersecting discourses of age and gender. *Current Sociology*, 58(6), 879–896.
- Willis, P. (2003). Foot soldiers of modernity: the dialectics of cultural consumption and the 21st century school. *Harvard Educational Review*, 73(3), 390–415.
- Woodward, K. (1991). Ageing and its discontents: Freud and other fictions. Indiana University Press.
- Worsfeld, B. (Ed.). (2011). Acculturating age: approaches to cultural gerontology. Lleida: University of Lleida.

#### **Recommended Readings**

Edmondson, R., & Von Kondratowitz, H.-J. (Eds.). (2009). Valuing older people: a humanist approach to ageing. Bristol: Policy Press.

This book gives an overview of the roles of morals, spirituality, images, and wisdom in debates about old age.

Andersson, L. (Ed.). (2002b). *Cultural gerontology*. Westport: Auburn House. *This book describes the cultural dimension of gerontology*.

# Chapter 9 Conclusion: The Future of Greying Europe

Marja Aartsen and Kathrin Komp

Although Europe's population is greying, the future of Europe does not look grey. What can be learned from this book is that old age is not necessarily characterized by frailty and decline, but instead can be a time of self-fulfillment, activity, and social participation. Moreover, we now know that population ageing does not need to threaten extant social and welfare state-related institutions, but instead opens up potentials for restructuring and reinvention. Life expectancy is longer than ever before and living conditions that enhance healthy ageing have very much improved. New technologies and Information and Communication Technologies may assist older people to stay in their homes longer (see Chap. 7 by Künemund and Tanschus on gero-technology in this volume). The growing possibilities to reach a good old age may have given rise to what is sometimes called 'a silver economy' (see Chap. 6 in this volume): an economy with all kinds of new products and services, particularly aimed at the growing share of healthy and wealthy senior citizens. The greying of Europe might, thus, ultimately lead us into a bright and colourful future.

# 9.1 Where Do We Stand Now?

Despite this optimistic view on our future, any nuance disparaging remarks should be called for as well. For example, the desirability of a longer life depends on the question whether the newly gained live years are healthy or disease-ridden ones (see Chap. 2 on bio- and health gerontology by Ankri and Cassou in this volume). In their chapter on psychogerontology, Martin and colleagues show that the changes for the age related disease dementia sharply increase at higher ages, and we do not know yet how to cure this. Quality of life, instead of length of life,

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might therefore be a better candidate for the evaluation of improvement of everyday lives of ageing individuals. From the chapter on social gerontology by Victor, we learned that ageing does not take place in a vacuum. Through our life, we are surrounded by other people to whom we feel connected and who may provide comfort and support in times of crisis. However, not all are well connected to a supportive social network; some people lack other people to whom they can rely, which may lead to severe feelings of loneliness. In her chapter on political gerontology, Komp discussed how governments could intervene to support older people's social inclusion, well-being, and activity. In addition, Edmondson's chapter on cultural gerontology explains that values and practices can generate expectations but also stereotypes of older people, which in turn affects their possibilities for participating in society.

Nevertheless, compared to previous generations current older cohorts are much better off. After the end of the Second World War in 1945, a new period of political and social insecurity began; the cold war between the Soviet Union and the United States. Trade, travelling and even communication between East and West became more and more restricted, and ended in 1961 in the construction of a physical barrier between East and West (Huntington 1993). This so called Iron Curtain, with the Berlin Wall as its most noticeable symbol, separated Europe for almost thirty years into two ideologically and politically distinct parts: the Eastern European communistic part with totalitarian regimes and the Western European liberal democratic part. Consequences for the communistic part are among others a much slower economic growth and more deprived health situation as compared to the Western part of Europe (Castle-Kanerova 1992). After the fall of the Berlin wall in 1989, major changes took place in Europe and its societies and these changes resulted especially in Eastern Europe in a more modern world. Communistic countries adopted a more liberal policy which brought freedom for individuals and stimulated the emancipation of less fortunate people such as the unemployed, the poor, the lower educated people and women. Internet brought new opportunities for human interaction even across borders and stimulated the exchange of ideas and good practices in for example health care.

Notwithstanding the improvements in living conditions for Eastern European countries, there is still much heterogeneity in health and wellbeing in the four regions of Europe (see Table 9.1). Reaching a good old age is still more likely in the North and West than in the East. People in France and Spain can expect to live another 20 years once they have reached the age of 65, whereas people in Hungary and Slovakia have only 15 years left to live once they reach the age of 65. In the wealthier Northern and Western parts of Europe, more money is and can be spent on professional health care. The larger percentage of lonely people in the East reflect the weaker socially embeddedness and therefore lower opportunities for alternative sources for support. In addition, employment rates for the young old (55–65 years old) are the lowest in Eastern European countries with further restricts the opportunities to age well. Access to Internet is more limited in the South and East than in the North and West of Europe and people from the South followed by people from the East have the lowest levels of education. The recent

|          | 0   |   | · · · · · · · · · · · ·          |   |             |  |
|----------|---|---|----------------------------------|---|-------------|--|
| Country  | Life expec-<br>tancy (at age<br>65, in years) | Public health<br>expenditure<br>(PPP per<br>capita) | Loneliness<br>(age 65+,<br>in %) | Employment<br>rate (age<br>55–65, in %) | with inter- | Educational<br>level (age<br>55–65, in<br>years) |
| Sweden   | 20  | 3,722   | 7                                | 72                                      | 88          | 12   |
| Denmark  | 18  | 4,348   | 2                                | 59                                      | 86          | 13   |
| France   | 20  | 3,978   | 17                               | 41                                      | 74          | 10   |
| Germany  | 19  | 4,218   | 6                                | 60                                      | 82          | 13   |
| Spain    | 20  | 3,067   | 13                               | 45                                      | 59          | 8  |
| Italy    | 20  | 3,137   | _                                | 38                                      | 59          | 8  |
| Slovakia | 16  | 2,084   | _                                | 41                                      | 67          | 12   |
| Hungary  | 16  | 1,511   | 23                               | 36                                      | 60          | 11   |
|          |   |   |                                  |   |             |  |

Table 9.1 Living circumstances across Europe, around 2010

Note PPP purchasing power parities

(Organisation for Economic Co-operation and Development 2011b; Eurostat 2012; Victor in this volume)

worldwide economic crisis that started in 2008 in Europe may further this process of differentiation between European countries.

#### 9.2 Where Are We Heading?

Although changes for a good old age in Europe are currently better than ever before, the modernization of Europe over the last decades with its increased individual freedom also has its downside. Bauman, a Polish sociologist, argues that the rapid socio-economic changes turned societies from 'solid' into 'liquid societies' (Bauman 2007). In his view, the growth of freedom ultimately leads to a less predictable and therefore more unfavourable society with more insecurity. This in turn will lead to a call for more security which limits individual freedom. A "pendulumlike movement" from more to less freedom and less to more individual security can and will be observed in the years ahead (Bauman 2011). The contours of this process are also visible in the executive summary of the report "2011 State of the Future" of the Millenium Project of the United Nations, where it is stated that

The world is getting richer, healthier, better educated, more peaceful, and better connected and people are living longer, yet half the world is potentially unstable. Food prices are rising, water tables are falling, corruption and organized crime are increasing, environmental viability for our life support is diminishing, debt and economic insecurity are increasing, climate change continues, and the gap between the rich and poor continues to widen dangerously (Glenn et al. 2011, p. 1).

Concerns about increasing gaps between certain groups of people can also be found in the work of Castells, a Spanish sociologist, who speaks about the 'digital divide' between people who have access to Internet and those who do not have access. Not having access to Internet increases social exclusion as access to public services is more and more organized via Internet. Also health care institutions increasingly inform people via Internet, (Castells and Gustavo 2005). This may especially affect older adults as Internet use is still lowest in older age groups.

Another important influence on the future of greying Europe is the current economic crisis. The current crisis started in 2007 with the burst of the housing bubble in the United States and it rapidly transformed societies around the globe since then (Hemerijck et al. 2009). Older people are particularly likely to lose their jobs and to remain unemployed in such a situation, as Perek-Bialas and Schippers explained in their chapter on economic gerontology. In other words, older people are particularly likely to irretrievably loose contact with the labour market because of the economic crisis. To make up for this loss, they might drain their savings and their private pension funds (Hillyard et al. 2010), which increases their risk of old age poverty.

The economic crisis may also have various long-term effects. Elder (1974) traced such effects in his seminal study 'Children of the great depression: Social change in life experience', in which he described the lives of Americans during and after the economic depression of the 1930s. Elder describes how the economic depression changes the live-courses of individuals, altering their values, their career trajectories, their family structures, and their social roles. Although we cannot yet state anything with certainty, it nevertheless seems plausible that the current economic crisis will have similar effects on Europe. We, therefore, expect the current economic crisis to alter the work ethics of Europeans, which will affect their work biographies and their situation after retirement. Moreover, we expect the crisis to draw attention to the importance of family solidarity, of gifts and transfers between generations, and of household production. This focus might tie people's identities closer to their gender-roles and to their positions within their families, which, consequently, also impacts the self-image of older Europeans.

Finally, the economic crisis will redefine the political and economic framework within which Europe's population ages. Will tomorrow's Europe be one with a strong shared identity, a common market and open boarders, in which migration, international travels, and international friendships are common? Or will it be one in which lives mainly unfold within one's country of birth, and in which people of different nationalities like to distance themselves from one another? We do not yet know how long the crisis will last, but we can already now tell that its impacts will be visible for decades to come. The economic crisis therewith also shapes the situation of older Europeans, and it influences the framework in which the ageing process of Europe's population continues.

# 9.3 Challenges and Opportunities for Tomorrow's Europe

The greying of Europe and the economic crisis have raised many urgent questions about the sustainability of pension systems and affordability of health care facilities in the coming decades. Budgets for pensions are shrinking, while an increasing number of people reach the pension age (see the chapter on political gerontology in this volume). In political debates, it is often argued that there is a need for the reform of pension, health care and social protection systems. These systems are based on solidarity between generations, since the treasury from which the pensions and health care is paid is filled by taxes paid by the younger working class. Intergenerational solidarity, however, is under pressure. A survey among more than 27,000 Europeans found that 55 % of older people strongly belief that more governmental funds are needed for pensions and care for old age, compared to only 41 % of the teenagers and 43 % of the young adults. In addition, more than 50 % of the young and old in Europe belief that people in employment will be increasingly reluctant to pay taxes and social contributions to support older people (European Commission 2009). Not surprisingly, the European Commission states in its "Manifesto for an age-friendly European Union" that one of the objectives is to enhance solidarity between generations (Age Platform Europe 2011).

The "Manifesto for an Age-Friendly European Union" calls on decision-makers in Europe to take responsibility in creating societies that are fairer and more sustainable for all generations with active participation and involvement of all age groups in society. In the Manifesto, a list of benefits of age-friendly societies are formulated. It can be concluded that Europe is not yet in a state that can be fully called "Age-friendly", although progress is visible in many domains. There is not yet an inclusive labour market ensuring participation in paid work of younger and older people (see Chap. 6 on economic gerontology); there is much digital exclusion (see Chap. 7 on gero-technology) which limits participation in the increasingly Information and Communication Technology-based society; participation in lifelong learning as indicated with participation in non-formal learning activities is high in the North and West (participation rates from 50 to 80 %), but low in the South and East of Europe (5-30 %) (Organisation for Economic Co-operation and Development 2011a). With respect to conditions and opportunities to grow and age in good health, there is still much to gain. Unhealthy lifestyles such as smoking and heavy alcohol use are prevalent throughout Europe. In contrast, social protection systems in various European countries seem to work well, since the percentages of citizens at risk of poverty are moderately low in most European countries. In sum, there has been much progress in the possibilities to age healthy and well in Europe but much needs to be done, especially in Eastern and Southern Europe.

#### 9.4 To Conclude

Europe is currently moulded by the ageing of its population—and this will remain so in the foreseeable future. True, Europe is currently also facing challenges beyond population ageing. The current economic crisis, for example, is reshaping the European economy, leaving a deep imprint on the political and social landscape of Europe. Other developments such as globalization, the shift to a service society, and the progressing European integration likewise remodeled Europe. These developments, however, will not overshadow the impact of population ageing. Instead, all developments interact to jointly shape Europe's future. Discussions about the impact of old age will, therefore, persist into the future, and they will continue to be a cross-cutting theme. The multi-disciplinary perspective on gerontology adopted in this book caters to this vision of the future. It illustrates the situation of older people and the impact of population ageing from different angles, which helps to develop an encompassing idea about the future of greying Europe.

# References

- Age Platform Europe (2011). *Manifesto for an age-friendly European Union by 2020*. http://www.age-platform.eu/images/stories/23598\_poster\_everyone2012\_v4.pdf. Accessed 26 June 2012.
- Bauman, Z. (2007). Liquid times: living in an age of uncertainty. Cambridge: Polity Press.
- Bauman, Z. (2011). Migration and identities in the globalized world. *Philosophy and Social Criticism*, 37(4), 425–435.
- Castle-Kanerova, M. (1992). Social policy in Czechoslovakia. In D. Deacon (Ed.), *The new Eastern Europe: Social policy past, present and future* (pp. 91–117). London: Sage.
- Castells, M., & Gustavo, C. (Eds.). (2005). *The network society: from knowledge to policy*. Washington: Johns Hopkins Center for Transatlantic Relations.
- Elder, G. (1974). *Children of the great depression: social change in life experience*. Chicago: University of Chicago Press.
- European Commission (2009). Intergenerational solidarity: Analytical report. Flash Eurobarometer 269. No place: The Gallup Organisation.
- Eurostat (2012). Level of Internet access-households. Excel-file. http://epp.eurostat.ec.europa. eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsiir040 Accessed 27 June 2012.
- Glenn, J. C., Gordon, T. J., & Florescu, E. (2011). 2011 State of the Future. The Millennium Project.
- Hemerijck, A., Knapen, B., & Van Doorne, E. (Eds.). (2009). *Aftershocks. Economic crisis and institutional choice*. Amsterdam: Amsterdam University Press.
- Hillyard, P., Lundström, F., Patsios, D., Machniewski, S., Taylor, D., & Lyons, M. (2010). Old age: the impact of the recession on older people in Ireland, North and South. Dublin: Centre for Ageing Research and Development in Ireland.
- Huntington, S. P. (1993). The clash of civilizations. Foreign Affairs, 72(3), 22-49.
- Organisation for Economic Co-operation and Development. (2011a). *Education at a glance 2011*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2011b). *OECD health data 2011*. Paris: OECD Publishing.

# Glossary

- *Active ageing* means that older people are active and engaged in e.g. the community and in social networks. Because of this engagement, they experience many positive effects, among them a better quality of life, health, and social integration.
- *Active ageing policies* are policies that support older people in their efforts to be healthy and to engage in paid work, social, economic, cultural, spiritual and civic affairs.
- Activity theory states that older people can uphold an activity level similar to the one of middle-agers.
- *Ageing workforce* is a workforce in which the average age increases because the annual inflow of young people is lower than the annual number of older people retiring.
- *Alzheimer's Disease* Degenerative disease of the brain and most common form of dementia, generally associated with memory loss and confusion.
- *Ambient Assisted Living* Unobtrusive technology designed to enable older people to live longer in their homes, e.g. a smart medicine cabinet that identifies potential conflicts and interactions between drugs and warns the user, or an activity identification system that detects deviations in daily routines and informs care-givers.
- Cognitive ageing Describes the age-related changes in cognitive abilities.
- *Cognitive reserve* Existence of cognitive plasticity despite compromised neuronal plasticity and damage of the brain.
- *Common cause theory* Theory implying that sensory function, as a general index of the neurobiological architecture, is essential for cognitive functioning.
- *Compression of morbidity hypothesis* states that when people live longer, they experience more life years in good health, while the amount of life years in poor health remains the same.

- *Continuity theory* states that older people will uphold a lifestyle similar to the one they personally had at younger ages.
- *Critical gerontology* questions the knowledge on ageing that we take for granted. It stresses social differences in the ageing process and differences between theory and real-life experiences.
- *Crowding in* Mechanism that leads to more support from one source when support from another source increases.
- *Crowding out* Mechanism that leads to less support from one source when support from another source increases.
- *Crystallized intelligence* Part of the intelligence that involves explicit and tacit knowledge.
- *Design for all* Products and services designed in a way that everybody, regardless of age, education, cultural background etc. can use them intuitively without problems.
- *Digital divide* Social inequalities in access to information and communication technologies, for example the divide between users and non-users of the internet. Is nowadays strongly correlated with age.
- *Disengagement theory* states that people withdraw from society and activities as they age, in order to prepare for death.
- *Expansion of morbidity hypothesis* states that when people live longer, they experience more life-years in poor health.
- *Fluid intelligence* Part of the intelligence that involves processes such as problem solving, reasoning or learning.
- *Formal care arrangement* is a situation where paid professionals provide care either in institutions, such as nursing homes, or in the homes of frail persons.
- *Globalization* is the interconnectedness of countries because of increased trade, the creation of multi- and transnational organizations, travel, migration and cultural exchange.
- *Health* can be understood in two ways. A narrow understanding defines it as the absence of diseases. A wider understanding defines it as a state of physical, mental, and social well-being.
- *Healthy Ageing* Maintenance of mental, social and physical wellbeing and functioning up to an old age.
- *Humanistic gerontology* considers the connection between human values and the ageing process. It discusses norms, morals, and constructions of meaning, connecting them with social and economic frameworks.
- *Informal care arrangement* is a situation in which individuals habitually provide unpaid care to friends of kin.

- *Life-course perspective* states that events at one point of time can influence the lives and decisions of individuals at later points of time. It, moreover, states that the social context can influence how the lives of individuals progress.
- *Long-term care* is social and health care for people whose health is impaired and who, therefore, need care for a longer period of time.
- Macro-level looks at phenomena at the societal or country-level.
- *Mandatory retirement age* is the age at which people are required to retire from paid work, and from when on they are entitled to receive old age pensions.
- *Meso-level* looks at phenomena at the level of social networks, such as families and neighourhoods.
- *Micro-level* looks at phenomena at the individual level.
- *Mild cognitive impairment* Memory disturbances that go beyond the normal cognitive ageing process, but are not serious enough to be diagnosed with dementia disease. Can be a preliminary stage of dementia.
- *Modernization theory* states that societies change with modernization in a way that decreases the social status of older people.
- *Moral economy of ageing* deals with shared moral ideas shaping images and roles of older people in society; these ideas are themselves shaped by social and economic processes.
- *Multidimensionality* Concept emphasizing that multiple dimensions characterize the ageing process.
- *Multidirectionality* Within each developmental dimension, increases, stability, and decreases are possible.
- *Plasticity* Potential of abilities to change through experiences or training of abilities.
- *Political economy of ageing* stresses that the heterogeneity of older people needs to be considered when policies for old age are planned and evaluated.
- *Primary health care* refers to those services that individuals first contact when they want to enter the health care systems, e.g. general practitioners and nurses.
- *Prosthetic environment* is a surrounding designed to compensate for limited capabilities of individuals, e.g. because of old age or health problems.
- *Silver economy* is an economy with all kinds of new products and services, particularly aimed at the growing share of healthy, wealthy senior citizens.
- *Smart Homes* Dwellings with automated and sometimes interacting technologies, e.g. automated blinders or doors, remote controls, alarm systems, monitors, height adjustable cupboards etc.

- *Social citizenship* is the state of being a full member of society in questions of welfare, social participation, and standard of living. Social citizenship comes with rights and obligations.
- *Social construction* is the process by which social interaction builds up ideas or practices through the ways they are enacted in specific social contexts. Social roles or images, therefore, develop and change as the social activities that generate them develop and change.
- Social exchange theory states that individuals base their social relations on cost-benefit-analyses.
- *Successful ageing* occurs when older people experience three things at the same time: (1) the absence of disease, (2) good physical and cognitive abilities, and (3) engagement in productive activities.
- *Wisdom* is insight into fundamental questions of life and meaning. It takes forms that vary in different social settings, may be communicated non-verbally, and may accumulate with experience or age.

# Answer Key for the Quizzes

Chapter 2: 2.1b, c; 2.2a, b, d; 2.3c; 2.4d. Chapter 3: 3.1d; 3.2d; 3.3b; 3.4d; 3.5c, e. Chapter 4: 4.1c; 4.2b; 4.3a, c, d; 4.4d. Chapter 5: 5.1e; 5.2b, c, d; 5.3d; 4c; 5.5b, c, d, e. Chapter 6: 6.1a, c, d; 6.2c; 6.3c; 6.4c, d; 6.5c, d. Chapter 7: 7.1a, c, d; 7.2e; 7.3b; 7.4b, c, d; 7.5b.

Chapter 8: 8.1e; 8.2d; 8.3a, c, d.