

Zofia Szarota
ORCID: 0000-0002-6342-3153
WSB University, Dąbrowa Górnicza

Challenges for a New Old Age: An Essay on Gerontology

Wyzwania dla nowej starości –
esej gerontologiczny

ABSTRACT

The purpose of the essay is to forecast a picture of the elderly and the macro problems resulting from an aging population. The article takes up the question of what older adults, i.e. today's forty- and fifty-year-olds, will be like in 20-30 years. What professions will emerge in connection with the aging population, what changes will occur in the labor market, and in care and social assistance? What will social relations, dialogue with other generations be like? Will and how will the experience and social perception of old age shift? In planning solutions (for the future), it is important to take into account the diverse needs of older adults, as well as socioeconomic, cultural and technological trends. My hypothesis is that as a result of aging processes, seniors in the "young-old" group will be more socially and professionally active than they are now and the life space of the next generation of aging people will expand. On the other hand, old age proper – the cohort of "the old-old" and "the oldest-old" cohort, people," who are usually chronically ill, often lonely, and have impaired functional independence, will be covered by institutional care, using digital technologies.

KEYWORDS

old age, future,
challenges, changes,
forecasts

SŁOWA KLUCZOWE

starość, przyszłość,
zmiany, wyzwania,
prognozy

SPI Vol. 26, 2023/3
e-ISSN 2450-5366

DOI: 10.12775/SPI.2023.3.002en

Submitted: 23.07.2023

Accepted: 9.09.2023

ABSTRAKT

Celem artykułu jest naszkicowanie obrazu osób starszych oraz makro-problemów wynikających ze starzenia się społeczeństwa. W artykule podjęty został namysł nad tym, jacy za 20–30 lat będą starsi dorośli, czyli dzisiejsi czterdziesto-, pięćdziesięciolatkowie. Jakie zawody powstaną w związku ze starzeniem społeczeństwa, jakie zmiany nastąpią na rynku pracy, a jakie w opiece i pomocy społecznej? Co będzie cechować relacje społeczne, dialog z innymi pokoleniami? Czy i jak zmieni się sposób doświadczania i społeczne postrzeganie starości? Planując rozwiązania (z) przyszłości, należy uwzględnić różnorodne potrzeby starszych dorosłych, trendy społeczno-ekonomiczne oraz kulturowe i technologiczne. Stawiam tezę, że w wyniku procesów starzenia się społeczeństw seniorzy z grupy „młodych-starych” będą bardziej niż obecnie aktywni społecznie i zawodowo, a przestrzeń życiowa (*life space*) kolejnych pokoleń ludzi starzejących się ulegnie poszerzeniu. Natomiast starość właściwa – kohorta „old-old” i „oldest-old” – osób zazwyczaj przewlekłe chorujących, częstokroć samotnych, z osłabioną samodzielnością funkcjonalną zostanie objęta instytucjonalną opieką, wykorzystującą cyfrowe technologie.

Introduction

The considerations in this article are a subjective view of ageing and old age in the future. This perspective is shaped by the results of the author's long-term gerontological research and analysis.

Can old age be fascinating to anyone but its researchers? Imagine a photograph from a distant journey, showing fertile fields in the foreground. They are separated by a road from the desert rocks in the background. The green of the crops symbolises the vitality, fertility and social usefulness of young age. In contrast, the grey of the rocks in the background seems to symbolise the stillness, emptiness and barrenness of old age. Colourful balloons carrying tourists equipped with cameras float above the rocks. The barren rocks are so uninteresting; nothing happens there. But the cameras are directed at them... If we look carefully at the photograph, it becomes clear that these rocks hide a great mystery, a great attraction: the Valley of the Kings in Egypt, a treasure that attracts travellers and researchers from all over the world.

The mystery of old age arouses the interest of researchers—gerontologists—but also of younger generations whose members display different attitudes towards old age and the elderly (Łukasiewicz, Kowalski 2021). It is therefore important to look into the changing shape of old age, evolving from the “hateful age”, the “hard old age” (Hesiod 1914, poem 220), into the “desired age”, as the ancient Chinese used to say (Zych 1999: 63; Szarota 2010: 30). The new attitude towards old age may be popular among those who are growing old now, in postmodernity, the generation of the flower children era, who will enter the phase of old age proper (75 and over) in a decade. In this article, I want to talk about the changes taking place in the quality of life at the stage called late adulthood, more often old age. The vector of those changes is leading from the gerontological model of weakness, so strongly rooted in social perception, attitudes, stereotypes and prejudices (Trempała, Zając-Lamparska 2007), to a model based on the quality of life, personal dignity, active participation, strength and agency of older adults, i.e. based on the paradigm of successful ageing.

I am interested in the culture of the “new” old age, i.e. one that is self-determining. I am interested in older adults who, with their attitude, oppose the stereotypical image of the elderly, ageism and so-called elderly speak (*Konkurs...* 2020) (Grimme, Buchanan, Afflerbach 2015; Parlak 2017), as well as the marginalisation and designation of peripheral social roles for seniors. I am interested in an old person in a developmental perspective (Dubas 2019), seen as the perpetrator of their own actions, as a self-creator. But I will not be writing about Joe Biden, who—as I write this text—is 80 years old and the leader of a world power; I will not be talking about popes, creators, artists or scholars, celebrities or elderly models (although their fashionable silhouettes will serve as illustrations later in the text). I want to reflect on what seniors—today’s 40- to 50-year-olds—will be like in 20–30 years’ time. What new professions will emerge? What changes will occur in the labour market and what changes will take place in the area of care and social assistance? What will social relationships and dialogue between generations be like? Will the experience and social perception of old age change, and how?

On old age in a metaphoric manner

An African proverb says that when an old man dies, the whole library burns. Recognition of wisdom and experience, as well as respect shown to those who are older than oneself are inscribed in the cultural canon, in human morality, in the axiological system, irrespective of cultural affiliation. But at a time when the culture promotes young age, in the era of the universal cult of youth, the organisation of an old age-friendly society which is favourably disposed to all generations is a challenge.

Old age (*sēnex* in Latin) is a phase of life with two dimensions—*sēniūm* and *sēnectūs*—depicting, on the one hand, withering, sadness, suffering, a gloomy disposition and the deterioration of body and mind, and on the other hand, the wisdom of life resulting from old age, dignity, seriousness, authority and sagacity (*Słownik łacińsko-polski* 1965: 453–454). *Sēnectūs*, i.e. the phase of life lasting from age 56 to 67, according to Claudius Ptolemy (100–168), is characterised by wisdom and maturity, whilst *sēniūm*, i.e. the phase beyond 68 results in the weakening of physical and mental powers (Jurkiewicz 2011: 192–193).

The god Senectus was the Roman equivalent of Geras (Γῆρας, *Gēras*), the Greek spirit of old age (mythworld.fandom.com/wiki/Geras). According to Hesiod (1904), Geras was the son of Nyx (*Mała encyklopedia kultury antycznej* 1990: 530), the goddess of darkness and night. Little is known about him. Some of his numerous siblings caused fear, perhaps even terror, among the people: Nemesis (goddess of vengeance), Moirai (spinnners of human fate) and Keres (Atropos, Lachesis and Clotho), Erinyes (goddesses of vengeance and retaliation), Charon (carrier of the dead), Thanatos (death), Lyssa (rage), Achlys (poison), Apate (deceit), Eris (known from the myth of Helen of Troy, as Eris' apple of discord was the cause of the many years of war over Troy), Hecate (magic), Moros (personification of fate and violent death), Momus (mockery, derision) and his twin sister Oizys (misery, grief, misfortune) (cf. Jurkiewicz 2011: 186; mitologia-grecka.fandom.com/pl/wiki/Nyks). Many of these deities, including Geras, were locked in a box from which they were freed, to the doom of humanity, by the irrepressible curiosity of Pandora (Morley 2004). Among the siblings were, of course, also the deities

of good states (Hezjod 1904), which reveals various aspects of human fate. On the one hand, we fear old age; on the other, we desire and wish each other a long life. A paradox is born, for old age is given only to those who live to see it.

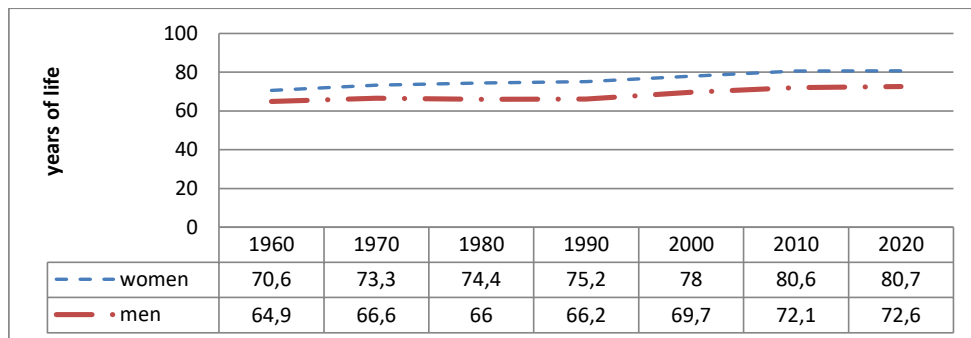
Thus, is old age a curse or a blessing? Does retirement really have to be something that separates us from social prestige and assigns peripheral roles which supposedly belong to the elderly? I will focus on these issues in the following sections of the article.

On old age in a demographic manner

The strongest megatrend of modern times is demographic change, expressed in increasing life expectancy, a greater number of older people and fewer children. In 2021, one in four Poles was 60 or older. There were 9.8 million of them (NSP [Census] 2021), and in 2050 they will constitute more than 40% of the population. The process of population ageing brings about many challenges related to the labour market, pension systems, culture, education, health care and social assistance. Social policy must create social programmes that take into account senior issues.

In 1889, by an edict of Otto von Bismarck, the Invalidity and Old Age Act came into force in Germany, granting retirement benefits to workers over the age of 70 (Szarota 2010: 7). In 1916, the retirement age was lowered to 65 (Petelczyc 2020). Life expectancy in the Roman Empire was 35 years (Williams 2016: 9). Two thousand years later, at the beginning of the 20th century, it was around 45 years in Europe. Thus, not many people lived long enough to receive the retirement benefits. As a result of improvements in the quality of life in later decades, life expectancy in Poland rose steadily to reach 72.6 years for men and 80.7 years for women in 2020 (GUS [Central Statistical Office] CSO 2022: 9–10), as illustrated by Figure 1.

Figure 1. Life expectancy in Poland, for both sexes



Source: Based on data from GUS 2022.

Importantly, life expectancy has also lengthened, which means that a 60-year-old person in 2020 had possibly another 17.9 years ahead of them for men and 23.2 years for women (Table 1). Retirement has become a universal good. This time is worth spending in a satisfactory manner, and it should not be a time of sluggishness, stagnation or apathy: “You’re old, take a rest”, Diogenes was told. And he said: “Why? If I were an athlete, as I approach the finish line, should I slow my stride or should I speed up even more?” (*Hellada i Roma* 1958: 117).

Table 1. Further years of life for people at the age of 60 and over (Poland)

Sex \ Age	*1960		*2020		**2050	
	60	75	60	75	60	75
Men	15,9	7,5	17,9	8,6	21,3	7,6
Women	18,7	9,2	23,2	11,9	24,5	9,2

Source: Based on data from *GUS 2022 and **Eurostat 2023.

Europeans are living longer and healthier lives than ever before. A demographic forecast (Eurostat 2023a) shows that by 2050, one in three Europeans will be 60 or older. In 2021, female life expectancy was 82.9 years, higher than male life expectancy of 77.2 years. The proportion of people aged 80 and over, as a proportion of the EU-27 population, is projected to increase from 5.8% today to 14.6% in 2100. However, it appears that the upward trend in human life expectancy

will be halted (Raleigh 2019) and fertility levels will not increase (Kotowska 2021: 27–28). Poland is among the countries most at risk of depopulation. Poland's population is expected to decrease by almost four million people (nearly 10%), from 37.9 million to 34 million in 2050 (Kotowska 2021: 23). At that time, the 60+ population is expected to constitute 40% of Poland's population. The median age of Poles was 42 in 2022, one of the lowest in the European Union, but this will rise to 50.4 by 2100 (Eurostat 2023a).

There is also a mental phenomenon of the boundary of ageing being shifted, as argued by Adam A. Zych (2004) in his theory of development moderation. The experience of ailments associated with old age has shifted by about 10 years. Today's 75, considered the threshold of old age proper, is like the former 65. The “rejuvenated” third age is a time of activity. Today's 60-year-olds see themselves as middle-aged, with a vitality characteristic of those aged 50+. They feel “younger” than their parents once did (Trempała, Zająć-Lamparska 2007: 450). It is therefore worth considering the validity of situating the lower limit of old age at 60 or 65. For example, Warren C. Sanderson and Sergei Scherbov (2019) reject the idea of chronological age. They suggest replacing it with a “prospective age”, predicting—in combination with certain health indicators—further life expectancy. Thus, we should define the beginning of old age on the basis of the time potentially left to live: “it has been suggested that the age of an individual (people) should be considered in two categories: the chronological (calendar) age and so-called prospective age [...]. The chronological age is connected with the number of years lived by an individual, and the prospective age is based on the number of years an individual may still live. [...] Along with the increase in the expected duration of life, the border of old age also increases” (Abramowska-Kmon 2021: 12). Such a change in the caesura of old age shifts the focus from research on ageing processes to research on the functioning of long-lived people (Withnall 2023).

Challenges for the “ageing” future

The dynamics of sociodemographic changes are resulting in increased interest in demographic ageing from global organisations (e.g. the WHO or the UN), national governments, social policymakers,

economists, health services, etc. These processes, known as the second demographic transition, have been taking place in Europe since the 1960s–1970s, with the effects of the progression of ageing now being particularly strongly recognised. Economic sectors are emerging that respond to changing consumer needs. In the service sector, there is a strong trend towards a *silver economy*, which encompasses a range of areas, from leisure and social care services to commerce, robotics, (tele)medicine, transport, architecture, culture, tourism etc.

This raises several challenges. Firstly, there is an urgent need to find a way to build an economy based on sustainable growth in a society with such a high median of age, given that the ageing population consumes differently, invests differently and is not necessarily willing or able to work until its vital resources are exhausted due to its state of health. Secondly, we must solve the rapidly growing problems of prevention and health care, given that older and older people are falling ill more often and for longer (and more costly). Thirdly, escalating social issues, e.g. loneliness, epidemic proportions of depression and dementia disorders or multiple disabilities must be solved (*PolSenior2* 2021). How do we address the deficit in families' caring capital when there will be more seniors in the future than those who can potentially care for them? The answers to these questions are a concern for governments of ageing welfare states.

Apart from systemic measures to update and evaluate social policy vectors and to optimise social assistance services, measures related to the economy and labour market are important. Equally important is robotisation, automation of the economy and social services. For the quality of supportive care, social, medical and nursing innovations that multiply the independence and functional capacity of older adults and exploit the possibilities of smart housing, neighbourhood services, telemedicine, etc., are important. Innovative instruments of social policy include so-called welfare technology (Klimczuk 2011), which refers to technical solutions, usually digital ones, which improve the quality of life of those who need it and help solve the problems of everyday life in the social environment (Zander et al. 2021). In Poland, we have tested digital innovations to increase the sense of personal security, including the Małopolska Tele-Anioł (Tele-Angel), which has been operating since 2018. This innovation combines traditional care services (including neighbourhood care)

with the operation of a telecare centre, where a qualified rescuer receives SOS signals sent with a safety button by a person equipped with a “life band” worn on the wrist (Małopolski Tele-Anioł 2022). Mobile alarms with a GPS function are in operation. With the consent of the service user, webcams for health monitoring or tele-advice can be installed. Mobile phones are used as carriers for applications that make it easier for people to function in their daily lives and—if they have hearing/visual impairments or limited cognitive functions—to move about in public. “Smart” clothing is being put into practice in everyday life, e.g. “Innotextil”, sports trousers that stimulate the proper way of walking, or “Uniodzież”, unique raincoats for wheelchair users.¹

The stage of old age is being reached by successive generations of the post-war baby boomers, and it is slowly being entered by Generation X, i.e. well-educated people, digital natives² open to technological novelties and pop culture, travellers without borders. I think those people will change the objectives of gerontological research.

Activeness in grey colour

“In winter you need warm clothes, in old age—no worries”, Socrates is supposed to have said (*Hellada i Roma* 1958: 117). What does contemporary gerontology have to say about this? A good end of life is worth earning and preparing for. According to Renata Konieczna-Woźniak, an indicator of adaptation to old age is experiencing “maximum satisfaction at minimum psychological cost” (2011: 251). This thought is derived from one of the so-called “grand” gerontological theories, authored by Paul P. Baltes and Margaret M. Baltes (1990). This is the theory of Selective Optimisation with Compensation (“SOC theory”, the successful ageing model). It may be summarised as follows: in the process of ageing, a person becomes adjusted to functional and social limitations and copes

1 I provide this data as an expert of the Incubator of Social Innovations, the All-Poland Incubator of Accessibility and the Incubator of Social Inclusion (near the Lesser Poland Regional Centre of Social Policy) For more, see rops.krakow.pl, 2019; rpo.malopolska.pl, 21.03.2022).

2 Forty-one per cent of people aged 65–74 use the internet. In the age group of 75+ the proportion of internet users is 22%. See CBOS (2022: 2).

with this reality by choosing and focussing on the most important issues (selection), reducing negative phenomena and their results and withdrawing from actions they find less significant. The SOC theory assumes that high levels of functioning, success and well-being can be maintained in old age despite changing abilities and limitations. The individual plays a central role in designing their own ageing process. People perform three main adaptation processes whilst ageing:

1. selection—older people focus their resources and energy on the most important goals and areas of life and activities, leaving out other activities
2. optimisation—older people focus on maximising the use of available resources to achieve their goals
3. compensation—certain resources are lost or limited, older people compensate for these deficiencies by using alternative strategies, resources or social support; they may look for new ways to achieve goals or use available aids and technologies.

To sum up, the SOC theory assumes that as people age, they adapt to changing opportunities and constraints by selectively pursuing important goals, optimising available resources and compensating for lost resources.

The boundaries of activity shift to increasingly later years of life. Of course, the prerequisite for this activity is good physical and mental health, a strong social support network and economic resources. We live in postmodernity. As Marcin Muszyński (2016: 22) argues, “postmodernism reveals its distrust of objective truth, rigid divisions, classifications and metanarratives. It postulates an extreme constructivism in which the power of language, interpersonal relationships and individual motivations is forcefully revealed”.

Referring to one of the components mentioned—language with causal power—I want to take up the theme of words that not only determine, but also mark and shape attitudes. Some associations arouse fear in younger generations; they are taboo. One example is climacterium (κλιμακτήριος, *klimaktērios*), which in our culture is perceived as the end of womanhood. The truth, however, is that this word “means the highest rung of the ladder” [κλίμακα, *klimaka*, “ladder”, according to the Polish–Greek online dictionary], i.e. the highest level of initiation (cf. Długolecka 2022: 57). On a similar basis, andropause (Gr. άνδρας, *andras*, “man” + “pause”) means a break in

manhood, which is not the same as the end of male activities and possibilities.

Between the age of 45 and the time we become pensioners, we move into what is known as the immobile labour force. This term suggests immobility, stagnation, apathy and a lack of energy. Perhaps this is why employees in this age group are virtually devoid of stimulation from employers? It is worth appreciating the power of experience, prudence, wisdom and even routine of older employees. It is also unadvisable to send them to retirement too early. The term “pensioner” defines a type of social and professional activity. Society expects retirement to be a time of leisure. However, I agree with the idea of a well-deserved leisure; this expression is obvious for social educators, leisure time organisers and those researching adult learning, interests and passions (e.g. Litawa 2021a). Leisure is time for one’s own development. Old age is not only a loss, but a gain in the form of social and professional experience and life wisdom, which bring potential to be managed in leisure time. The paradox is that neither modern society nor the labour market are interested in using this potential.

Geragogy studies older adults’ daily life practices, rituals and preferred everyday activities. Its field of interest includes daily schedules, routines, habits, forms of domestic activity—e.g. reading and other hobbies, social activities, caring for pets, using electronic media—and forms of nearby activity, in the community, with neighbours or family. It also includes the use of cultural institutions, leisure activities (including sports and outdoor recreation), short-term personal trips (including tourism), outdoor education etc. It turns out that older adults learn and develop in everyday life (e.g. Szarota 2018), creating amateur art or undertaking informal cognitive activity (Litawa 2021b), for example exploring the secrets and space of new media. This is particularly true for Generation X, i.e. people born in the 1960s, who are slowly entering the old age phase. This is the generation that first grew up and worked in the reality full of such media (Gruchola 2020: 48).

Certain signs connected with customs and image are heralding changes in the perception of the “ability” and “disability” of older people. More and more often we hear and say “silver economy”, “silver dollars”, “old age glamour”, “grey (silver) media” etc. With older

people involved in local and digital communities, social activists, entertainers, the entertainment industry, artists and wealthy people embracing new and often lavish lifestyles, old age is coming out of the societal shadows. The silver economy will contain more offerings for older adults than before. The clothing, pharmaceutical and cosmetic industries, retail, services, banking, architecture and housing, digital technologies and virtual reality solutions are creating the future of mature consumers and beneficiaries of social services and benefits. Silver modelling,³ grey influencers, the entertainment industry (artists, actors and singers), silver marketing, medical industry, tourism,⁴ leisure services and many other areas of life are becoming a reflection of the purchasing power of pensioners' wallets. It was only a decade, perhaps two decades ago, that cosmetics which are pro-age emerged, and the elderly Barbie doll was created. Today's "muse" and the face of those cosmetics is the centenarian Iris Apfel (1921-), interior designer, style icon and one of the most dynamic personalities in the fashion world.

Nonetheless, a "colourful", socially stereotype-free, uncompromising lifestyle is not available to most older people. This state of affairs is consistent with another of the "great" psychosocial theories of gerontology, namely the theory of continuity. According to this concept, older people tend to maintain the same lifestyles, behaviours and relationships as in earlier stages of life, or at least they aspire to do so (Atchley 1999). People who are passive and not involved in the community will remain the same at retirement age.

The culture of the new old age already includes collective and individual practices of social participation, most strongly represented by NGOs and federations or associations (e.g. University of the Third Age—U3A), senior citizens' councils at local authorities, senior citizens' clubs, a network of social activity centres and associations such as the Polish Association of Retired Persons, Pensioners and Invalids. Older people have a rich repertoire of suggestions, offers and social programmes at their disposal, which they can use to their advantage. Whether they want to actively participate in them is another matter. Many people choose not to use them. Activity is a natural

3 E.g. Iris Apfel (1921-), Helena Norowicz (1934-) or Andrzej Żylak (1950-).

4 According to data from GUS (2021), 33.5% of Polish seniors travel.

manifestation of life, but few show an institutional, formal commitment that is quantifiable and amenable to statistics. Obstacles to taking up new forms of activity are bad habits or a lack of good ones, poor education, poor health, succumbing to stereotypes and disliking oneself. It is, of course, possible to stay well and fulfil oneself in the comfort of one's home, particularly when one has many family burdens, health issues, limited independence and a lack of energy for activities outside the home. Another barrier can be a lack of internal consent to a "colourful" life. Older people are not ready for change and self-expression. The reasons for inactivity are often linked to the belief that it may no longer be appropriate to do certain things. Beliefs and mental prejudice derived from opinions such as "It's awful, unpalatable, unacceptable! It's not appropriate! It isn't right! What will people say? At my/your age?" are particularly limiting for older people, leading to self-marginalisation, inner ageism and turning away from the world. Therefore, discovering self-acceptance is one of the most important challenges and gifts of old age. Then, being "in the here and now", with the emphasis on "in", i.e. mindful immersion in the present, becomes a developmental task.

Geragogy argues (e.g. Leszczyńska-Rejchert 2021: 63–77) that it is possible to prepare oneself for a successful and satisfying life in retirement by maintaining a healthy lifestyle, rational nutrition, physical activity and rational recreation, as well as undergoing preventive medical examinations and regular check-ups. Emotional balance, life satisfaction, family ties, friendships, being married/in a relationship with a partner, enjoying hobbies, ensuring financial abundance and having decision-making autonomy are important factors for functional and efficient longevity.

In creating a new image of old age, it is very important to have a dialogue between the generations (Kilian 2011), to show the younger generations the power of the baby boomers' experience, lessons learnt from groups like the "Grey Panthers"⁵ and learning through old age by interacting with the elderly (Szarota 2015). This

5 The Grey Panthers is a generational political party that existed in Germany between 1989 and 2008. The party fought for the rights of the elderly and decent pensions for people who are over 65 years of age.

could be cooking according to grandma's recipes, using proverbs and wisdom from grandpa's calendar or having important conversations with them.

Contrary to beliefs about the digital exclusion of senior citizens, many of them play computer games, offered by a growing number of providers (e.g. silvergames.com/en/t/games-for-elderly or <https://edziadkowie.pl/internetowe-gry-dla-dziadkow>). Digital culture allows games to be used in educational and therapeutic processes (Gałuszka 2020). Older adults take part in artistic, literary and scientific activities (Henricks 2020: 117). A growing trend in (gera)education is edutainment: learning through entertainment, recreation and play—including outdoors. Research among older adults carried out in UTAs, senior citizens' clubs, activity centres and similar spaces, shows a preference for "light" educational content with a predominantly socialising and entertaining function. In learning in old age, it is important to recognise that older adults give places/spaces/events an educational meaning (Szarota 2022).

According to Ewelina Konieczna (2016), cinematography supports the activity of older people in film culture. Films with documentary and therapeutic value show the advantages and disadvantages of old age through their artistic expression (Tylikowska, Tucholska 2017). Some films or television series entertain and teach older people, e.g. "Grace and Frankie" (2015–2022) which shows the big and small problems of older people in over 100 episodes with original, hilarious plots. The main actresses are 78 (Jane Fonda) and 76 years old (Mary Jean "Lily" Tomlin).

Some older people are graduating from university, doing PhDs, looking for love without necessarily tying themselves down formally (as seen, for example, in the TV show "Sanatorium of Love"), running marathons, singing (e.g. "The Voice Senior"; see Bugajska 2023), and so on. They simply live, sometimes putting their juniors to shame with their vitality, determination and energy.

The new old age is characterised by the use of digital technologies to support older adults and people with disabilities. These technologies are represented, for example, by the safety wristband or the humanoid robot Pepper, whose task is to assist, facilitate communication and entertain the elderly. Pepper can be a companion for an elderly person, e.g. in a seniors' club or care facility. Social robots

support interactions with and among patients in health care facilities, as they have the potential to promote social interactions and facilitate group activities. In the case of patients with dementia, social robots can be helpful to carers, as is the case with the robot dog (Papadopoulos, Koulouglioti, Ali 2018).

Challenges for social policy in the context of the “new” old age

Not all of us are/will be lucky enough to age successfully. Those people need to be supported. Demographic change is posing huge challenges for the labour market and for social policy, the welfare and care system and health care. Depopulation processes, the phenomenon of double ageing, the strong growth of people in the oldest age group, the declining (with the decreasing number of children) care capital of families and informal carers, the loneliness and disability experienced by a large proportion of older adults, neurodegenerative diseases: all these factors will necessitate new forms of support and institutional and community care. The price of a long life is the medicalisation of the needs of increasingly elderly people and the increased demand for medical, physiotherapy and rehabilitation services. Living alone will drive many to use external catering, e-catering, e-commerce, hygiene and housekeeping, nursing and social services. There will be stronger demand for the services of cleaning companies and, above all, for the company of another human being.

Changes in the labour market will lead to a shift away from the existing economic transfers and will replace them with support for those willing (and able) to work longer. The phenomenon of delayed retirement (Working Forever or Unending Employee) is coming, and Lifelong Guidance (LLG) will be needed to support the integration and reintegration processes of senior citizens and life-long geragogical counselling. Due to the mechanisation of production and services, labour law will have to change and human working time will most likely be significantly reduced.

Societal needs and the market are generating products and services based on modern technological solutions, e.g. on artificial intelligence (AI). Thus, the provision of services will be handled by personal social robots: carers, therapists, humanoids and avatars of doctors. Due to the increasing trend towards the singularisation of old age,

the emotional needs of lonely seniors will be met by avatars of family members or phantoms of friends. As a result of declining family caring capital, the safety of the elderly will be ensured by electronic life bands.

Mechanisation, automation and robotisation are changing traditional service, care and social professions, bringing about social and technological innovations in (tele)medicine, (tele)care, (tele)services and social services. New professions will soon emerge, such as time planner, virtual activity coordinator, assistant for the elderly, virtual exercise instructor for seniors or human enhancement designer. Markets are already looking for drug developers and programmers, counsellors and geragogical counsellors (e.g. nutritional therapy assistant, consumer advisor or counsellor in finance, law, psychology, technology etc.), people who can combine the activities of an interior designer and a carer for the elderly, someone to decorate a home in the style of a particular decade), meaning-of-life consultants, robot educators (therapists) and end-of-life planners (*Pracownik przyszłości* 2019; mapakarier.org).⁶ The profession of digital death manager may have a frightening name, but considering how many people use digital platforms and social media, it becomes obvious that someone has to take a professional interest in eradicating the profiles and virtual online traces of the deceased. In April 2023, there were 5.2 billion internet users worldwide. Forecasts suggest that, by the end of 2023, two thirds of the world's population could be online. As of January 2023, 88.4% of the population in Poland used the internet (Digital Around the World 2023).

The coming era of 5.0, known as the age of imagination, will perhaps provide mankind with an opportunity to return not only to the idea of humanism, but to tangible actions for human well-being. Technological solutions will become an integral part of our lives. Intelligent systems will collect information about us from a wide variety of digital devices. Robots will anticipate our wishes. One can imagine commonplace services related to accommodation with assistance, aesthetic medical services or beauty, hairdressing and

6 End-of-life planning is taking action to get your affairs in order and determine how you want to spend your final days. Such planning usually involves drawing up health care powers of attorney and a last will and testament.

styling services dedicated to old people. Also, we can imagine production lines of the clothing industry using patterns and models that reflect changes in the figures of people who are getting older. We may see elderly travellers in cars equipped with an automatic transport function.

We will live in intelligent, friendly cities—smart cities—in smart homes designed for half of the population by gerontoarchitects. Due to the fact that seniors, as they are getting older, spend more and more time in their houses (Niezabitowski 2018), these homes will offer various services and assistance to the elderly (Cieśła A., Cieśła J.P. 2018). Nowadays, there are assisted and protected flats in Poland (Bugajska, Iwański 2018), so-called assisted living, but the supply cannot meet the demand for it.

Gerotechnology, optimization and robotization of care services

By 2100, the number of people aged 80 and above is expected to rise to 64 million in EU countries. In 2022, there was one elderly person in Europe for every three people of working age. According to the forecast, in 2100 there will be almost two older people for every three people of working age (Eurostat 2023b). We need to learn to live in a hybrid society, made up of humans and social robots taking over the care of the elderly.

The robotisation and digitisation of services, entrusting humanoid robots with supportive and therapeutic tasks, clearly correlates with various social innovations. New professions are emerging in which humans are being replaced by AI and robots. Social robot services in seniors' activity centres and senior residences, in cultural institutions and administration and commercial establishments, are already a reality. Pepper is an autonomous social robot, meaning that it is not controlled by a human. It is the result of the global CARESSES (2020) programme, funded by the European Community and the Government of Japan. The aim of CARESSES is to develop and implement AI into the care of seniors and the ill. The possibilities for applying AI are almost limitless. In care facilities Pepper can be used for entertainment, therapy, cognitive training and strengthening group bonds between service users (Vidovićová, Menšíková 2023). Particularly for patients with dementia, social robots such as Paro

the white seal and Dog the robot dog can be of great help to carers, especially those with dementia (Papadopoulos, Koulouglioti, Ali 2018). Here, the social robots act as a companion or organiser. The main partners in this interaction are the patients or residents who can play games or perform exercises with the robots. But it is not only conventional social robots such as Paro or Pepper that are found in care facilities; many robots used in health care are classified as service robots, supporting humans in physically demanding tasks such as disinfection, logistics and monitoring (Holland et al. 2021).

Conclusion

The vision of dehumanised care is frightening. It is difficult to come to terms with a future in which elderly people will be accompanied in their daily lives by robots. However, what if these elderly people are lonely without the families they did not start, without the children they did not raise? It will be necessary in our (your) old age to accept the company of AI, e.g. the robot named Pepper.

The robotisation of social services and the achievements of neurotechnology, biotechnology and nanotechnology may prove to be an indispensable and integral part of the future life of today's 40-year-olds after 2050. New narratives, new ideologies, culture, education, even metaphysics: all of these may contribute significantly to a different quality of life for (future) seniors than we know today.

There are paths leading to old age. We grow old the way we have lived. It is important that access to successful old age is universal in the future. Inequalities start early in life: in our childhood. In order to minimise them, fair social policies are needed, particularly universal education, stable employment and income, good health and sustainable pensions (UNDESA World Social Report 2023). The concepts of successful, healthy and active ageing and social sustainability presuppose optimal individual and social functioning within a social policy framework that is friendly to all generations, solidarity between generations, intergenerational equity and integration, democratic participation and self-determination of the oldest generation, as well as respect for human rights.

Bibliography

- AbramowskaKmon A. (2011). "O nowych miarach zaawansowania procesu starzenia się ludności," *Studia Demograficzne*, no. 1(159), pp. 3–22, <https://econjournals.sgh.waw.pl/SD/article/view/2573>.
- Atchley R.C. (1999). *Continuity and Adaptation in Aging: Creating Positive Experience*, Baltimore (MD): Johns Hopkins University Press.
- 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*, Cambridge: Cambridge University Press, pp. 1–34.
- Bugajska B., Iwański R. (2018). "Zaspokojenie potrzeb mieszkaniowych niesamodzielnych osób starszych – w poszukiwaniu optymalnych rozwiązań," *Exlibris. Biblioteka Gerontologii Społecznej*, vol. 15, no. 1–2, pp. 12–25, DOI: 10.24917/24500232.15.1
- Bugajska B. (2023). "Educational Dimension of the 'The Voice Senior' Programme – an Attempt to Read Meanings," *Dyskursy Młodych Andragogów/Adult Education Discourses*, no. 24, pp. 121–141, DOI: 10.34768/dma.vi24.688
- CBOS (2022). *Korzystanie z internetu w 2022 roku. Komunikat z badań*, Nr 77/2022, Warszawa: Fundacja Centrum Badania Opinii Społecznej, https://www.cbos.pl/SPISKOM.POL/2022/K_077_22.PDF.
- Cieśla A., Cieśla J.P. (2018). "Wzorcowe Mieszkanie Seniora, czyli jak Polacy mogą mieszkać na starość – analiza kosztów," *Exlibris. Biblioteka Gerontologii Społecznej*, vol. 15, no. 1–2, pp. 43–57, DOI: 10.24917/24500232.15.3
- Długolecka A. (2022). *Przyptyw. O emocjach i seksualności dojrzałych kobiet*, Kraków: Znak.
- Dubas E. (2019). "Starzeć się to znaczy dojrzewać. Starość jako kategoria aksjologiczna w geragogice," *Rocznik Andragogiczny*, vol. 26, pp. 139–151, DOI: 10.12775/RA.2019.008
- Gałaszka D. (2020). "Społeczno-kulturowy potencjał gier cyfrowych. Ujęcie syntetyczne," *Studia z Teorii Wychowania*, vol. 11, nr 4(33), pp. 61–89, DOI: 10.5604/01.3001.0014.6559
- Grimme T.M., Buchanan J., Afflerbach S. (2015). "Understanding Elderspeak from the Perspective of Certified Nursing Assistants," *Journal of Gerontological Nursing*, vol. 41, no. 11, pp. 42–49, DOI: 10.3928/00989134-20151015-05
- Gruchola M. (2020). "Osoby starsze w świecie nowych mediów i technologii," *Teologia i Moralność*, vol. 15, no. 2(28), pp. 47–64, DOI: 10.14746/tim.2020.28.2.03
- GUS (2021). *Jakość życia osób starszych w Polsce*, Warszawa: Zakład Wydawnictw Statystycznych, <https://stat.gov.pl>.
- GUS (2022). *Trwanie życia w 2021 roku*, Warszawa: Zakład Wydawnictw Statystycznych, <https://stat.gov.pl>.

- Hellada i Roma: Sentencje i aforyzmy zaczerpnięte z literatury greckiej i rzymskiej* (1958). Selected and edited by I. Krońska, Warszawa: Wiedza Powszechna.
- Henricks T.S. (2020). "Play Studies: A Brief History," *American Journal of Play*, vol. 12, no. 2, pp. 117–155.
- Hezjod (1904). *Teogonia*. Translated and commented by K. Kaszewski, Warszawa: Druk Wacława Maślankiewicza.
- Holland J., Kingston L., McCarthy C., Armstrong E., O'Dwyer P., Merz F., McConnell M. (2021). "Service Robots in the Healthcare Sector," *Robotics*, vol. 10, no. 47, DOI: 10.3390/robotics10010047
- Jurkiewicz J. (2011). "Kiedy w starożytności rozpoczynała się starość?" *Vox Patrum*, vol. 56, pp. 185–197.
- Kilian M. (2011). "Edukacja międzypokoleniowa wobec wyzwań współczesności," *Forum Pedagogiczne UKSW*, vol. 1, no. 2, pp. 97–118, DOI: 10.21697/fp.2011.2.06
- Klimczuk A. (2015). "Modele wielosektorowej polityki społecznej wobec ludzi starych i starości w kontekście zmiany technologicznej," *Zarządzanie Publiczne/Public Governance*, no. 2(32), pp. 41–53, DOI: 10.15678/ZP.2015.32.2.04.
- Konieczna E. (2016). *Seniorzy i film. Aktywizacja i integracja społeczna osób starszych poprzez uczestnictwo w kulturze filmowej*, Toruń: Wydawnictwo Adam Marszałek.
- Konieczna-Woźniak R. (2012). "Odmłodzona' starość – implikacje podmiotowe i społeczne," *Studia Edukacyjne*, no. 21, pp. 249–262.
- Leszczyńska-Rejchert A. (2021). *Wyzwania i zadania geragogiki*, Olsztyn: Wydawnictwo Uniwersytetu Warmińsko-Mazurskiego w Olsztynie.
- Litawa A. (2021a). "Realizowanie harmonijnej pasji jako działanie autokreacyjne," *Rocznik Andragogiczny*, vol. 28, pp. 115–126, DOI: 10.12775/RA.2021.008
- Litawa A. (2021b). "The Enthusiast as Learner: A Case Study," [in:] Z. Szarota, Z. Wojciechowska (eds.), *Learning Never Ends... Spaces of Adult Education: Central and Eastern European Perspectives*, Warszawa: Wydawnictwa Uniwersytetu Warszawskiego, pp. 199–210.
- Łukasiewicz J., Kowalski W. (2021). "Skala Postaw Wobec Seniorów (SPWS). Prezentacja narzędzia," *Przegląd Psychologiczny*, vol. 64, no. 3, pp. 81–101, DOI: 10.31648/pp.7332
- Mała encyklopedia kultury antycznej* (1990). Warszawa: Państwowe Wydawnictwo Naukowe.
- Morley J.E. (2004). "A Brief History of Geriatrics," *The Journals of Gerontology. Series A*, vol. 59, no. 11, pp. 1132–1152, <https://doi.org/10.1093/gerona/59.11.1132>
- Muszyński M. (2016). "Starość w perspektywie postmodernistycznej," *Exlibris. Biblioteka Gerontologii Społecznej*, vol. 11, no. 1, pp. 13–24.

- Niezabitowski M. (2018). "Kilka uwag o problemach środowiska zamieszkania na tle potrzeb osób starszych dotyczących tej sfery," *Exlibris. Biblioteka Gerontologii Społecznej*, vol. 15, no. 1–2, pp. 26–42, DOI: 10.24917/24500232.15.2
- Papadopoulos I., Koulouglioti C., Ali S. (2018). "Views of Nurses and Other Health and Social Care Workers on the Use of Assistive Humanoid and Animal-Like Robots in Health and Social Care: A Scoping Review," *Contemporary Nurse*, vol. 54, no. 4–5, pp. 425–442, DOI: 10.1080/10376178.2018.1519374
- Parlak D. (2017). *Specyfika mowy dyskryminującej używanej wobec osób starszych (elderspeak)*, Warszawa: Rzecznik Praw Obywatelskich.
- PolSenior2 (2021). *Badanie poszczególnych obszarów stanu zdrowia osób starszych, w tym jakości życia związanej ze zdrowiem*, eds. P. Błędowski, T. Grodzicki, M. Mossakowska, T. Zdrojewski, Gdańsk: Gdański Uniwersytet Medyczny.
- Sanderson W.C., Scherbov S. (2019). *Prospective Longevity: A New Vision of Population Aging*, Cambridge (MA): Harvard University Press.
- Słownik łacińsko-polski* (1965), ed. K. Kumaniecki, Warszawa: Państwowe Wydawnictwo Naukowe.
- Szarota Z. (2010). *Starzenie się i starość w perspektywie instytucjonalnego wsparcia*, Kraków: Wydawnictwo Naukowe Uniwersytetu Pedagogicznego.
- Szarota Z. (2015). "Uczenie się przez starość," *Edukacja Dorosłych*, no. 1(72), pp. 23–35.
- Szarota Z. (2018). "Powszednia aktywność wiejskich seniorów (wymiar społeczno-edukacyjny i kulturalny)," *Pedagogika Społeczna*, no. 3(69), pp. 235–252.
- Szarota Z. (2022). "Specyfika oferty dla uczących się w starości," *Dyskursy Młodych Andragogów/Adult Education Discourses*, no. 23, pp. 287–303, doi.org/10.34768/dma.vi23.658
- Trempała J., Zajac-Lamparska L. (2007). "Postawy wobec osób starszych: różnice międzypokoleniowe," *Przegląd Psychologiczny*, vol. 50, no. 4, pp. 447–462.
- Tylikowska A., Tucholska K. (2017). "Cinematherapy Possibilities: How to Use Films to Solve Psychological or Social Problems and Enhance Quality of Life in the Elderly?" *Exlibris. Biblioteka Gerontologii Społecznej*, vol. 13, no. 1, pp. 33–48.
- Vidovićová L., Menšíková T. (2023). "Materiality, Corporeality, and Relationality in Older Human-Robot Interaction (OHRI)," *Societies*, vol. 13, no. 1, art. 15, doi.org/10.3390/soc13010015
- Williams M.E. (2016). *The Art and Science of Aging Well: A Physician's Guide to a Healthy Body, Mind and Spirit*, Chapel Hill (NC): The University of North Carolina Press.
- Withnall A. (2023). "New Perspectives on Later Life Learning in the Age of Longevity," *Dyskursy Młodych Andragogów/Adult Education Discourses*, no. 24, pp. 89–101, doi.org/10.34768/dma.vi24.687

- Zander V., Gustafsson Ch., Landerdahl Stridsberg S., Borg J. (2021). "Implementation of Welfare Technology: A Systematic Review of Barriers and Facilitators," *Disability and Rehabilitation: Assistive Technology*, vol. 18, no. 6, pp. 913–928, DOI: 10.1080/17483107.2021.1938707
- Zych A.A. (1999). *Człowiek wobec starości. Szkice z gerontologii społecznej*, Katowice: Śląsk.
- Zych A.A. (2004). "Moderacja rozwoju – wyzwaniem dla gerontologii edukacyjnej," *Gerontologia Polska*, vol. 12, no. 3, pp. 119–124.

Internet resources

- CARESSES (2020). *A Robot for the Elderly That Knows about Different Cultures (Featuring Pepper)*, https://www.youtube.com/watch?v=0at2oZt_rag [access: 26.04.2023].
- Digital Around the World (2023), datareportal.com/global-digital-overview [access: 2.05.2023].
- Eurostat (2023a). *Demographic Balances and Indicators by Type of Projection*, ec.europa.eu/eurostat/databrowser/view/proj_23ndbi/default/table?lang=en [access: 25.05.2023].
- Eurostat (2023b). *Population Projections in the EU*, ec.europa.eu/eurostat/statistics-explained/index.php?oldid=497115#Population_projections [access: 25.05.2023].
- Hesiod (1914). *The Homeric Hymns and Homerica*. With an English Translation by Hugh G. Evelyn-White. *Theogony*. Cambridge (MA)–London: Harvard University Press; William Heinemann Ltd. www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0130%3Acard%3D207 [access: 20.04.2023].
- Internetowe gry dla Dziadków*, edziadkowie.pl/internetowe-gry-dla-dziadkow/ [access: 26.04.2023].
- Konkurs na polski odpowiednik słowa „elderspeak” – rozstrzygnięcie* (2020), <https://bip.brpo.gov.pl/pl/content/konkurs-na-odpowiednik-slowa-elderspeak-rozstrzygnięcie> [access: 23.04.2023].
- Kotowska I. (2021). *Zmiany demograficzne w Polsce – jakie wyzwania rozwojowe przyniosą?* Warszawa: Fundacja im. Stefana Batorego, <https://www.batory.org.pl/publikacja/zmiany-demograficzne-w-polsce-jakie-wyzwania-rozwojowe-przyniosą/> [access: 12.07.2022].
- Małopolski Tele-Anioł (2022), <https://www.malopolska.pl/teleaniol> [access: 20.04.2023].
- mapakarier.org [access: 20.06.2023].
- mitologia-grecka.fandom.com/pl/wiki/Nyks [access: 20.04.2023].
- mythworld.fandom.com/wiki/Geras [access: 20.04.2023].
- NSP 2011, <https://stat.gov.pl/spisy-powszechn/nsp-2011/> [access: 15.03.2023].

- Petelczyc J. (2020). "Systemy emerytalne na świecie. Z którego kraju brać przykład?" *Gazeta SGH*, <https://gazeta.sgh.waw.pl/po-prostu-ekonomia/systemy-emerytalne-na-swiecie-z-ktorego-kraju-brac-przyklad>, 24.06.2020 [access: 22.05.2023].
- Pracownik przyszłości* (2019). Gdańsk: Infuture Institute, <https://infuture.institute/> [access: 20.04.2023].
- Raleigh V. (2019). *Trends in Life Expectancy in EU and Other OECD Countries: Why Are Improvements Slowing?* OECD Health Working Papers, no. 108, Paris: OECD Publishing, <https://doi.org/10.1787/223159ab-en> [access: 20.04.2023].
- ROPS (2019). *Przewodnik po innowacjach społecznych*, <https://rops.krakow.pl/pliki-do-pobrania/wpis,innmalopolska-przewodnik-po-innowacjach,324> [access: 20.04.2023].
- rpo.malopolska.pl, 21.03.2022, <https://www.rpo.malopolska.pl/wiadomosci/malopolski-tele-aniol-ponad-30-5-mln-zl-na-pomoc-osobom-niesamodzielnym> [access: 20.04.2023].
- silvergames.com/en/t/games-for-elderly [access: 15.05.2023].
- UNDESA World Social Report 2023 (2023). *Leaving No One Behind in an Ageing World*, <https://www.un.org/development/desa/dspd/world-social-report/2023-2.html> [access: 10.06.2023].

ADDRESS FOR CORRESPONDENCE:

Zofia Szarota
 WSB University, Dąbrowa Górnicza
 Faculty of Applied Sciences
 e-mail: zszarota@wsb.edu.pl