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The Body and Time

1. Introduction

Both time and the body have almost always been present in science, culture, art, and religion. The body is an organism, a biological potential, but also a cultural potential developed in the sphere of social relations (Jakubowska 2009). In a situation of the extension of human life, in which the perception of the world is very strongly connected with the perception of the changes in one's own body, this reflection is becoming increasingly more common, and the presence of the body, especially the aging body, is progressively more painful. Several reasons for this state can be indicated.

Firstly, this results from the fact that although contemporary media are full of content concerning human somaticity, the topics they cover usually emphasize the advantages of a young, beautiful body, in line with the belief that the body should look young and beautiful. For this reason, physical attractiveness is becoming increasingly important not only in contemporary culture, interpersonal relations or the job market, but also in science (Buczkowski 2005: 111–116; 2017).

Secondly, the demographic ageing of the population of Europe and some highly developed countries outside it is a global process, which means that the experience of the ageing process has become a universal experience. It is predicted that in the coming decades this trend will intensify, leading to significant changes in the proportions between the elderly and the young. According to data, in 2011, 11% of the world's population was elderly people, i.e., aged 60 and over. It is estimated that by 2050 1 in 5 inhabitants of the Earth will be in this group (World Population Ageing 2009; World Population Wallchart. United Nations… 2015). Changes in the age structure mean that the number of young people of reproductive age will systematically decrease, while the number of older people requiring support and care will increase. This is the second important reason why interest in the ageing body has increased. This demographic change will have a significant impact on public health and the social care system (WHO 2015), which will be forced to provide care for those older people whose psycho-physical condition will prevent them from

functioning independently. The body and time have become social issues that have taken an important place in contemporary scientific discourse.

Not only the aforementioned demographic processes and the development of medicine have contributed significantly to this. The pace of civilization development has had and continues to have significance. People live longer and, importantly, live longer in good health. People are expected to be increasingly effective and efficient, a factor necessary for the constantly shifting boundary of "body exploitation" in time. Exploitation is understood as the effective performance of duties at work, in the family, and in social life.

A person experiences their body from the moment of birth. They are specific somatic beings whose birth and death are "dated" with precision to the day, month and year. The "mirror" of passing time is, among others, the human body, which, regardless of our will and efforts, gradually submits to its effects. The increasing pace of life, the speed at which we move between subsequent points "on the map," traveling or moving for work, the race with ourselves or with the "boss" at work to do something faster and better, have their significant share in the interest in the body, but also in time. We live in an era in which many "suffer from a lack of time," and all instances of neglect and omissions are justified precisely by the "lack of time." Yet the body is either not an object of interest and thus "does not take up" time, or, in accordance with contemporary expectations, occupies a special place in the "time budget," which we devote, for example, to beauty treatments or to increasing the body's efficiency.

In contemporary sociological thought, time is a variable that is not taken into account in many analyses (Konecki 1998: 179). Like the body, time was simultaneously present and absent in sociological discourse. In contrast to the body, which has been the subject of sociological analyses in recent decades, time is still that dimension of the existence of an individual and of social groups that is considered obvious and does not require analysis. Nonetheless, just as we perceive the world, meet other individuals, and act through the body, time is "present in our body" and it is due to its passage that we notice the changes occurring in it. Similarly to issues related to the human soma, the category of time was not particularly present in classical sociology, nor is it excessively "exploited" in contemporary theoretical proposals and empirical research. The analysis conducted in this chapter will attempt to present the most important concepts in the field of the sociology of time and connect the area of the considerations concerning the experience of the body in different phases of life with the concepts of time.

2. The most important theoretical concepts

The status of the body in postmodern reality

The changes in the status of the body that take place over time should be analyzed from the perspective of broad social, cultural, economic, and technological changes, which include: the growth of individualism and the increased role of the individual,

the development of the consumer society, the emancipation of women, changes in customs, the development of science and technology, and medicalization (Jakubowska 2009: 15; Byczkowska-Owczarek, Jakubowska 2018). Recent research has demonstrated, for example, how the emancipation of women has reconfigured the social practices and spaces traditionally dominated by men, such as football fandom (Jakubowska, Antonowicz, Kossakowski 2020). These transformations also shape the field of active aging and senior education in Poland (Adamczyk 2021a, 2021b). One of the key reasons for the growing interest in the body is the development of consumer culture and the transition from hard work in line with the Protestant ideal (Weber 2001) to hedonism (Featherstone 1982).

It was not only the change in lifestyle associated with the consumption of goods and the growing importance of free time in human life that influenced the redefinition of the body. The importance of appearance has become equally important. Body shape, appropriate weight, physical fitness, and stopping the signs of aging took on enormous significance not only for shaping individual identity, but also social groups. Mike Featherstone pointed to another important process that undoubtedly had an impact on changes in the perception of the body, namely the aging of "late capitalist societies" (Featherstone 1982: 18).

The ageing process of Western societies has initiated a new discourse at the scientific, social, and economic levels, related to diets for the elderly, their physical activity, and cosmetics intended for seniors with one goal – to change their ageing bodies (Featherstone 1982: 18–19). Biological features indirectly influence the nature of socio-economic phenomena, determining the demand for specific goods, such as the aforementioned cosmetics, personal trainer services, dietary catering, etc. It is biological features, i.e., sex and age, that influence the formation of specific patterns, including those related to the body (Jakubowska 2009: 21).

Particularly important are the processes related to the ageing of the organism, which entail changes in the physiognomy and appearance of an individual, such as graying hair, the appearance of wrinkles, age spots, a stooped figure, and trembling hands. The physical changes characteristic of the ageing process influence the psychological dimension of an individual's life, their self-acceptance, and well-being (Dziuban 2010: 140–147). The quality of life of older adults is strongly connected with their bodily condition and subjective well-being (Adamczyk 2021a).

The factors that intensify "body-centrism" is consumer culture and the accompanying media message promoting the "cult" of a young, fit and beautiful body, specific to modern times, often associating health with physical attractiveness (Featherstone 1982: 22). Modern people treat taking care of their physical condition, fighting obesity, and following dietary tips as the basic dimension of their individual identity (Shilling 1993: 15–17). The dominance of a consumer lifestyle, in which higher values are increasingly treated in terms of a product or commodity, changes the role and status of older people.

The second important reason that has influenced the scientific and popular interest in the body and corporeality is the feminist movement, both academic and

in the form of a social movement. This movement has shown in a special way the dynamics of social life as constantly occurring changes and progressive processes. If we approach the time-body relationship as a process in which time plays a significant role in the change in the perception of the body, then time becomes a very important variable. In such an approach, time becomes an inalienable aspect of the social reality (Sztompka 2021: 597). The activity of feminists has contributed to the interest in the body as a source of subordination (Jakubowska 2009: 20), but importantly, this interest has turned into a social process taking place at a specific time. In approaching the feminist movement as a social process, its developmental aspect becomes important, in which the direction of this development is valued and assessed positively (Sztompka 2021: 585). In this approach, the interest in the body presented in classical feminist concepts aims at social progress, which is to lead to a state in which an important social goal will be achieved: the body will cease to be a source of oppression and a cause of subordination in social life (this issue is described in more detail in the chapter *The Body and Gender*).

If we approach this issue in this way, we must link it to time because all social phenomena take place in time, at some point, and last for some time. In this approach, the interest in a woman's body as a source of oppression or a biological determinant conditioning social position (Buczkowski 2005: 40) is linked to other social phenomena. Thus, activities for women's equality were and are closely linked to activities to, for instance, combat racism. An example of such connections are the "feminists of color" movements. These are feminists from the African-American community (black feminism), the Native American community (red feminism) or the Latino community, who, in fighting for women's rights, simultaneously oppose the universalist aspirations of feminisms created by white women and point out that identity, including that related to the experience of one's own body, is strongly linked ethnically. In this way, they combine the fight for women's rights with the activities for the recognition of not only their different skin color, but also their different cultural identity. According to the representatives of these movements, these differences entail different cognitive perspectives and value systems. Each of these feminisms addresses issues important for its ethnic or racial group, and activities are conducted at a specific time and refer to situations taking place in a specific time and space (Tong 2002: 278–296).

Similarly, there are movements working to protect the rights of children, the elderly, and other groups of individuals with special needs. All of them refer to earlier actions taken to protect human rights. For example, the Convention on the Rights of the Child clearly states that **every child has rights**, regardless of skin color, religion or origin (United Nations General Assembly 1989).

Sztompka called such a connection of events a sequence, or a chain of phenomena occurring one after another. Such sequences occur at all levels of social life, from an individual biography (individual actions aimed at, for instance, taking up education, gainful employment, etc.), to chains of events occurring on a macro scale (signing legal acts sanctioning such actions). Events initiated in one country trigger a chain of

subsequent changes in other distant regions of the world. If we look at, for example, the sequence of dates that will illustrate how the movement entitling women to vote progressed over the years, we will notice that individual actions and events occurred after some other events and before some events. This means that they took place in "[…] some place in the temporal sequence of preceding and following events. In other words, they have their own temporal location, the time at which they occurred, relative to other events or phenomena: earlier, later or simultaneously," (Sztompka 2021: 598).

Human rights constitute a set of **rights** and freedoms to which every person is entitled, regardless of their race, gender, language, religion, political beliefs, national or social origin, property, etc. **Human rights** are inalienable (they cannot be waived) and inviolable.

The third factor responsible for the growing interest in the body and related to the issue of time is the progress in technology and science. Such a connection seems obvious, but we should ask what progress is and why it is obvious. In order to explain the concept of progress, we must first refer to the concept of social change. In his considerations on the issues of social development, Jan Szczepański has rightly noted that not all changes occurring in society are social changes, and he has also clearly defined how change occurs. Namely, if in a certain social system new components arise or old elements that have existed in it so far disappear, then we are dealing with a change of the system. Similarly, if new relations between these elements arise or existing ones disappear, then we are also dealing with a change of the system (Szczepański 1972: 505). What must happen for a change of the system to be considered progress? According to Szczepański, if development approaches the ideal accepted in a given system, assessed positively, then we say that this development is progress (Szczepański 1972: 505). If we accept such a definition of progress, it means that progress in science and technology should be assessed positively, and most often it is. Medicine is already giving us a foretaste, if not of immortality, then certainly of longevity and improvement of the human body. At the same time, the development of digital technologies creates new risks of exclusion, especially for older adults, limiting their opportunities for participation in social and cultural life (Adamczyk 2021b). Practices that allow the replacement of damaged or diseased organs or body parts, procedures that prolong youth, and techniques that enable the treatment of unborn children are becoming increasingly advanced and widely used. Nevertheless, not all of these activities are assessed unequivocally positively and there is no complete freedom in assessing what progress is. The filter that eliminates undesirable criteria when defining progress is the creation of a social consensus around the criteria of progress, i.e., certain values considered fundamental by the majority of the members of society (Sztompka 2021: 586). What does this have to do with time and the body? Well, time is a necessary dimension of social life in all its manifestations, it is a constitutive, definitional factor of change that occurs

over time (Sztompka 2021: 601). Similarly, the body is possessed and experienced by each individual and this happens at a specific time, and the changes that the body undergoes are not only because of its somatic nature. How we perceive it, what respect we give it or not, is related to development and consequently to social progress.

The body has ceased to be a taboo subject, it has become the point of reference for many actions taken with health, fitness, and beauty in mind. People shape their bodies to manipulate time, and not only women succumb to the spiral of procedures that "cheat time," giving the illusion that it can be stopped.[1] What we eat, how much we eat, and how often is not related to satisfying hunger, but to the models of beauty, fitness, and health adopted in many contemporary societies. The fact that we force our bodies to exert themselves, to improve their fitness, is not related to the need to provide efficient warriors to maintain state independence, as the ancient Spartans did. We do this because, firstly, the development of medicine shows us the positive consequences of such actions (e.g., longer life, more efficient and independent old age, etc.), and, secondly, the models of promoted beauty force us to act in this way (Bieńko 2015: 23–36). The development of technology shows us new possibilities of influencing, transforming the body, such as 3D bioprinting, i.e., a parallel development of medicine and technology, which enables the 3D printing of organs. This is a giant step forward, because thanks to this method, individuals who wait for years for a transplant and wait in lines, losing hope, will be able to receive a new organ without having to wait for a suitable donor. In 2016, scientists from the Wake Forest Institute for Regenerative Medicine, who developed the Integrated Tissue and Organ Printing System (ITOP) printer, managed to print an ear, muscles, and bones for transplantation (Shapira, Dvir 2021).

Another example of the connection between time, the body and progress is cryopreservation. In science fiction films, we find many examples of freezing the characters for many years in order to "wait out the time" in which science is helpless against disease or old age, and unfreezing them in the future, giving hope for health and further life (e.g., *A.I. Artificial Intelligence, Frozen Hope: Second Life Einz*). Cryopreservation ceased to be just an *idée fixe* since already in the early 1970s and it enabled the first human birth from a frozen embryo (Zoe Leyland) in 1984 (Lakra, Planer 2009). Since then, devices for freezing biological samples using programmable steps or controlled levels have been used all over the world to freeze human, animal, and biological samples – for better preservation and future thawing, before they are deep-frozen (cryopreserved) in liquid nitrogen. They are employed to freeze oocytes, skin, blood, embryos, sperm, stem cells, and tissue in hospitals, veterinary clinics, and research laboratories worldwide. The number of live births from slow-frozen embryos is estimated to be around 300,000 to 400,000, or 20% of the estimated 3 million babies born via IVF (Reigstad, Storeng 2019; https://uscfertility.org/egg-freezing-faqs).

1 The broader phenomenon of plastic surgery and generally interventions aimed at "improving" the body is described in the chapter *The Body and Beauty*.

Cryopreservation – a process in which cells or tissues are stored at a negative temperature, usually 77 K, or −196°C (the boiling point of liquid nitrogen). At such a low temperature, all biological activity stops, including the biochemical reactions that lead to cell death (Mikuła, Rybczyński 2006).

The body, thanks to advances in science and technology, has become important, not only during life, but also in what can be called a closed space between life and death in the form of a frozen entity. For example, members of the Alcor Life Extension Foundation commit to having their bodies frozen after death, so that when people can become immortal or when a cure for the disease that "killed" them is discovered, they can be brought back to life (ALCOR). Another example in which the body has become a "battlefield" on which progress fights imperfections and diseases, stretched over a specific time not only physical but also social, is the cutting out of defective genes and the development of HPE (human performance enhancement) and HET (human enhancement) technologies. Why is a specific social time mentioned here? A historian studying the history of ancient societies can do this on the basis of an analysis of the living conditions of these societies, which remained very similar for hundreds of years. That is, their members were born and died in a society that did not undergo very radical changes. Nowadays, civilizational, technological, and social changes are so dynamic that they can change radically and repeatedly during one human life (Fołtyn 2012: 14–16; Sztompka 2021: 601). At present, we live in a time when the CRISPR/CAS9 technology is being developed in Western societies, which, in simple terms, involves cutting out sick or defective genes and replacing them with healthy ones. At the same time, in some regions of Africa, individuals affected by albinism are mutilated and murdered, because according to some beliefs, African albinos are considered the incarnations of the spirits of the dead. There is also a superstition, mainly in East Africa, that the body parts of albinos have magical powers (Greszta 2008).

HPE (human performance enhancement) and **HET** (human enhancement technologies). These technologies are used in both disabled and fully able-bodied people to improve their physical and mental abilities. They include exoskeletons that enable movement for individuals who have lost their mobility, e.g., as a result of an accident. They also include bionic implants, e.g., cochlear implants that enable individuals who have lost their ability to hear, and non-vital transplants, which can be used in individuals who do not need them to save their lives, but to help them function even more efficiently.

Drugs that increase mental efficiency (smart drugs) are also being developed (Hatalska 2018; Blumenthal et al. 2021).

The presented medicalization of life, meaning the growth of medical knowledge and the development of scientific techniques for studying the human body, provides the possibility of an almost unlimited transformation of the body using modern

medical technologies, such as organ transplants or plastic surgery. This has given rise to many ethical dilemmas, including the issue of eugenics and the borderline between life and death. Another effect of medicalization[2] is that non-medical categories begin to be treated as biomedical problems, most often as diseases or disorders (Szymczyk 2013: 208).

As the considerations presented above show, the technicization of life is associated with the perception of the body in both the collective and individual dimensions of existence. Apart from the indicated medical, technological effects, this fascination triggers the development of "biopower" and also "somatic society," in which the body becomes the main field of scientific, political, and cultural activity (Adams 2017). Along with progressive economic development, the value of the body as a tool accelerating this development was noticed. In this context, the issue of "biopower" appears, which was written about by, among others, Foucault. He noticed two extremes of this phenomenon (Foucault 2008).

In the first, the body is perceived as a machine subject to laws such as training, improvement or increased utility, which is related to the transformation of the economy and the organizational principles of Western societies. This is particularly visible in the functioning of modern enterprises, which overcome the complexity of the world and the paradoxes of everyday life, using permanent and variable elements, emerging opportunities, and realizing visions (Fołtyn 2007: 43). What drives them is speed and efficiency, time plays a leading role here, and the human body is only a tool in the race. Speed of action, anticipation, control over deadlines, and the ability to react are the basic types of competitive advantages in the fight against time. Fatigue, illness, and a lack of form are competitive obstacles. Modern organizations are subject to the absolute laws of time, its control, and management (Maige, Muller 1995: 21–28). This means, for example, the control of the arrival at and departure from work based on an electronic monitoring system, but also a system for influencing employees and their working time, based on unwritten norms and customs. For example, officially, the working hours in Japan have no framework. Work time has not been legally established, although it is assumed to be 40 hours a week, or 8 hours a day. In practice, however, due to the culture of work in Japan, because of numerous after-hours meetings and business talks with co-workers, this time is significantly extended. In *The History of Sexuality*, Foucault wrote: "This biopower was without question an indispensable element in the development of capitalism; the latter would not have been possible without the controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes," (Foucault 1978: 140–141).

The second extreme of the instance of biopower, according to Foucault, focuses on the body as a species and the reproductive mechanisms subordinate to it. He called this process "the biopolitics of population" (Buczkowski 2005: 139). We can, therefore, say that biopower is the power over biology, while biopolitics is the

2 More on the topic of medicalization in the chapter *The Body and Medicine*.

conscious use of biopower in practice (Foucault 1990). These processes are also embedded in the broader frameworks of social security, which shape the ways of organizing life in old age and reflect the institutional dimensions of biopolitics (Adamczyk, Betlej 2021). The biological aspects of human existence have been subject to legal regulation many times. Here are some examples of such norms: in vitro fertilization, a restriction or ban on abortion, a restriction or ban on the use of contraceptives, the permissible age of sexual activity and marriage, a ban on homosexual marriage and polygamy, a ban on euthanasia, a ban on cloning and other genetic manipulations, the control of psychosurgery[3], and compulsory treatment (drug addiction, alcoholism).

Regardless of the reasons for the interest in the body as either a limiting or enabling action, the experience of the human body is a personal one. The sphere of the body has become an inspiration for taking up new issues or reinterpreting "old" issues in postmodern reality.

Time as a social category

Without taking into account the temporal dimension in analyses of social life, it would be difficult to construct or reconstruct social phenomena or interactions (Konecki 1998: 179–180; 2005). Social life, like the lives of individuals, is embedded in time, and time, like space, constitutes the common context of social life (Giddens 1979: 202). We live in a specific time and space. Nonetheless, although Émile Durkheim began to consider time in *Elementary Forms of Religious Life* (2008), relatively few researchers have followed his lead, analyzing the issues of time in society in a systematic way. Since most sociologists treat time as a contingent element of their research and not as a topic in itself, as a result we have relatively few detailed descriptions of how modern concepts of time are related to other subdisciplines of sociology, including the sociology of the body (Tarkowska 1987: 7–8).

In the process of describing the features of physical, quantitative time, the essential features of social time will be revealed (Tarkowska 1987: 125). Elżbieta Tarkowska defines social time as follows:

> Social time consists of patterns of temporal behavior and ideas about time, i.e. phenomena such as duration, passing, change, and succession. Social time is time common to a community, i.e. created by this community in the process of interaction between its members; experienced, internalized, shared by all or most members of the community; embedded in norms and values; performs cognitive, communicative and regulatory functions; is a means of building social bonds and shaping a sense of group identification (Tarkowska 1992: 23).

3 Psychosurgery is a method of the surgical treatment of mental disorders. It is used relatively rarely, usually when some forms of disorders resist pharmacological treatment and other therapies (e.g., electroconvulsive therapy). Psychosurgical procedures are used quite rarely and primarily under the supervision of special committees, and are performed by multidisciplinary teams, in which ethical issues remain very important. One of the frequently used techniques is thermocoagulation, i.e., damaging a selected part of the brain with an electrode. Unfortunately, apart from the probability of achieving improvement, these procedures also cause side effects (Mashour, Walker, Martuza 2005).

It should be remembered that such an approach to the category of time is associated with social change.

Social phenomena are interconnected; they do not exist in isolation. One form of their interconnection is the aforementioned sequence, with precedent and consequence relations connecting events into a process occurring at all levels of life (Sztompka 2005: 53). It is worth taking a closer look at it. At the macro level, this sequence concerns large social groups, as it does at the meso level. At the micro level, the same sequence of events affects individuals who participate in it.

This can be illustrated by the example of the global economic crisis on the financial and banking markets, which peaked in 2008–2009. The first sequence of events was the collapse of the high-risk mortgage market in the United States – the macro level. The crisis initially affected only American investment banks, but owing to the involvement of European banks in the securitization process, it quickly spread to the European continent. Securitization is an off-balance sheet method of raising capital, consisting in the transformation of segregated assets into securities. The market for securitized bonds and structured credit instruments collapsed – the meso level. Going down to the micro level – until individual biographies – we are dealing with individual bankruptcies, insolvencies, and job losses (Szczepański, Szyszko 2007: 141–142; OGE 2011). Another example of the development of the sequence of events is the unfolding of the COVID-19 pandemic from 2019, when the first cases of COVID-19 were detected, to the present (I am is writing these words in 2022).

Quantitative time, qualitative time

Quantitative time is "dead" time, calculated using accepted units: hours, seconds, etc. It serves as an external scale for measuring events and processes, and arranges them chronologically. It enables better orientation in the social world (Horonziak 2014: 109–110). Qualitative time is the time that enables us to find our way in the events taking place, in human culture, and consciousness (Borowiec 2013: 75). Time is most often described in a quantitative way, referring to its understanding as a measure or quantity (Pawełczyńska 1986: 7). In sociology, the issue of time is often connected with time budget research or with the issue of "free time" and "work time." In both of these fields of research, the category of time is understood in a special way. In the case of the perspective of time budget research, the understanding of this category is related exclusively to the quantitative aspect. As Elżbieta Tarkowska has noted, the quantitative understanding of time is very often used in research in an unreflective way. According to the author, researchers too often consider time measured by clocks and calendars as the only acceptable concept of time. In the case of free time, the focus is on work or rest, on activity, and not on time itself (Tarkowska 1987: 12).

Time can be experienced as both a physical change and a social process. In the physical dimension, for example, when speaking about the age of a specific person, we mean physical time, counted in years since their birth. In the case of chronological age, the perspective is broadened, as many social, psychological, and biological factors are taken into account (Lewis, Weigert 1981: 433). The fact that someone

finished their education before the 1989 breakthrough is not just a simple piece of information limited to providing a date, but provides information about its social, political, and economic significance. The social perception of reality in time more often uses symbols than their empirical equivalents. This common perception of reality (e.g., the times of communism, Poland during the partitions) lacks specific data in the physical sense, but these measurements seem very orderly from the perspective of the social vision of time (Horonziak 2014: 105). The characteristic features of quantitative time are its continuity and uniformity. This means that quantitative time is infinitely divisible, divisible into infinitely small segments and that it is characterized by a uniform succession of comparable units. This time is also unidirectional and irreversible, and its measures are reducible to a common measure; these are arbitrary measures, independent of the features of the measured phenomenon (Tarkowska 1987: 125).

Time can be experienced as a physical change. It can also be experienced as an internal, qualitative change, but not necessarily in the sense of, for example, progressive biological changes or involutional processes of the aging of an organism. Qualitative time can be experienced as an internal, immanent property of social events and processes, the essence of which is succession, simultaneity, duration, and change in the direction of the passage of time. The essence of time is movement and change; two contradictory aspects of time are particularly important: the contradiction between transience and duration (Tarkowska 1998: 107–108; Sztompka 2005: 56–57). Sztompka has pointed to several properties of social processes of a temporal nature. Events and processes can last for a short or long time, happen quickly or slowly, can take the form of rhythmic intervals or be chaotic. Social processes are divided into parts according to their substantial properties resulting from the natural or social conditions in which they occur. This means that, on the one hand, we have the time of rest and work connected with the succession of day and night, and, on the other, there is a division of a social nature: into sacred time and secular time – working days and holidays. All these properties refer to social time, because, as Sztompka noted, "in all these cases we are dealing with «time contained in events» rather than simply with «events happening in time.»" In sociology we usually refer to this as "social time" (Sztompka 2005: 57).

Ways to measure time

The fact that time is an experience that is both individual and collective means that all societies and all cultures have certain attitudes towards time, towards the phenomena of duration, transience, change, and succession (Tarkowska 1992: 22). The way in which these universal problems for all societies are explained depends on specific socio-cultural contexts. Social time is an ambiguous category, internally diverse, and, at the same time, important for the everyday life of an individual within a social group and – like the category of time in general – referring to specific events and phenomena important for a society.

Social time is not quantitative but qualitative, non-uniform, heterogeneous, and its individual sections are valued differently. Time can be good or bad, lost or full of hope. As Elżbieta Tarkowska wrote: "quantitatively equal periods of time can be socially unequal, while quantitatively unequal periods can be socially equalized (e.g., counting generations, which are actually quantitatively unequal)," (Tarkowska 1992: 23–24). Social time is a phenomenon that differs significantly from the classical definitions of physical time, but just like it, it is also subject to divisions and, above all, measurement, since it is not completely devoid of quantitative features (Horonziak 2014: 106). We measure physical time in seconds, minutes, days, and years. The measures of social time differ slightly from this scheme, primarily because it is not objective time (Banaszczyk 1981: 23). Nevertheless, in the case of both categories, we are dealing with a human construct. Physically dead dates, such as 1 September 1939, gain the meaning of symbols, holidays, state ceremonies, name days or even birthdays of specific individuals.

When discussing the social methods for measuring time, we should start with those related to natural phenomena, referring to the sequence of days and nights, seasons or phases of the moon. Defining the units of measurement of a day and a year and dividing them into smaller units had the nature of an agreement related to the social dimension of time (Tarkowska 1998: 107–108; Sztompka 2005: 64). One of the greatest human achievements related to the social dimension of time was the creation of the calendar. The calendar has enabled a clear determination of holidays and other important events for the life of various communities. Apart from these events, the rest of the days mainly meant the time of preparation or waiting for the next holiday (Banaszczyk 1981: 31). To this day, this pattern is an important determinant of the orderly functioning of communities in many regions of the world.

Apart from the repeatability of the sequence of natural phenomena, an important determinant of the passage of time has been the sequence of life phases: birth, development and death. This led to one of the basic distinctions in time, namely the identification of three time vectors: past, present and future. These three levels of analysis of reality are present to this day. Although these concepts are very fluid and not obvious, because the present quickly passes, becoming the past, and the future is uncertain, it is thanks to this vectorial distinction that individual societies could find their own identity (Banaszczyk 1981: 26; Tarkowska 1987: 54–55, 60–63).

An example of the use of measuring time in social reality is the historical perspective. In the case of history, the timeline is measured using dates, but generally the years, days or hours that have passed cease to matter, and what lies behind these dates becomes important. Social time becomes the time of "experienced" wars and periods of peace. "Experienced" time is the time behind which events lie, especially those that have an element of importance for a given society (Horonziak 2014: 107). Time in social reality enables the organization of general knowledge about the world and social life, and also enables the organization and reconstruction of more detailed knowledge about the lives of individuals. This theme was taken up by Thomas Luckmann in his work, who identified three compatible levels of human identity

with time: internal time, intersubjective time, and biographical time (Leccardi 2014: 10–24; Krekula 2022: 432–447). Luckmann believed that an individual, a solitary human remained a being at the animal level, and his development was not only preceded by the existing social order, but only thanks to it could the individual function (Berger, Luckmann 1966). External actions undertaken by the individual as a result of the passage of time and resulting from externalization begin to repeat themselves and become habitual. They take the form of ready-made patterns that are used in subsequent actions in similar situations. The individual does not then have to look for new solutions, but uses a previously developed pattern (Berger, Luckmann 1966). Internal time is, therefore, an expression of human subjectivity and its anchoring in reality is subject to the laws of time and space (Leccardi 2014: 13). It is not measurable with an "objective" measure, but it enables people to refer to their past actions (Lech 2013: 184). Intersubjective time is linked to the social structure of everyday life, also of the individual, which is a consequence of sharing it with other individuals. Biographical time is the time that connects life lived on the inner level with the intersubjective level. This type of time is embedded in historical time and enables individual life to be related to a specific moment in which the individual exists (Leccardi 2014: 14).

Classical sociology and the concept of time

Time is a conceptual category belonging to a set of universal concepts that help humans organize the reality around them and make it more understandable. Émile Durkheim and the representatives of the "French school," i.e., Marcel Mauss, Henri Hubert, Maurice Halbwachs, are considered to be the creators of the sociological approach to the category of time (see Banaszczyk 1981; Banaszczyk 1989; Tarkowska 1998: 108; Sztompka 2005: 64–66). Durkheim considered that the characteristic feature of the category of time was its social (collective), not individual character. It is the network of sequential relations that organize social events and arrange them into repeatable patterns of behavior that is crucial for maintaining social order and harmony (Sztompka 2005: 64). The most important relation is the relation of the "before and after" sequence. Another type of relationship is the linear sequence of unique and non-repeating events that take a certain direction, and, finally, there are cycles of repetitive events (Sztompka 2021: 598). For Durkheim, time was a social fact, which resulted from such features as its external character in relation to individual consciousness and the ability to exert coercion on individual consciousness (Durkheim 1982). Durkheim considered "all ways of doing, whether established or not, capable of exercising external coercion over the individual; or, in other words, those which are common in a given society, but which have an existence of their own, independent of their individual manifestations" as a social fact (Durkheim 1982). Therefore, people perceive time as something external to them and limiting their actions, providing norms regulating their individual lives, as well as social life. In this way, time has a return effect on society. Time is also a "collective

representation," a manifestation of shared experiences and social organization, and, as such, is a social construct (Sztompka 2005: 64).

The representatives of the "French school" (Marcel Mauss, Henri Hubert, Robert Hertz, Maurice Halbwachs, Marcel Granet, and Stefan Czarnowski) extended the approach proposed by Durkheim, based on a comparison of different forms of time, resulting from different existential assumptions developed in different cultures and eras, to include analyses of the components of time (Horonziak 2014: 105–106; Sztompka 2021: 606).

Among the many reflections and studies on the issue of social time, it is worth mentioning, among others, those by: Marcel Mauss, who in his analyses dealt with the rhythm of collective life, Maurice Halbwachs, who analyzed the multiplicity of social times and the social differentiation of memory, and Henri Hubert, whose concept of qualitative time became the starting point for the analyses of social time conducted by Pitirim A. Sorokin and Robert Merton (Tarkowska 1987: 80–82; 1998: 108). An important contribution to the development of the theory of time was made by the aforementioned Merton and Sorokin, who introduced the concept of socio-cultural time, strongly linking it with the issue of social change and emphasizing the qualitative and relativistic nature of time (Tarkowska 1998: 108–109; Sztompka 2005: 65).

Another interesting continuation of Durkheim's thought is Georges Gurvitch's theory of social time, the main theme of which is the multiplicity of social times. Gurvitch stated that all elements of social reality occurred in their own time. He reduced the types of tenses characteristic of various social structures, situations, and social activities to eight types and distinguished them: long-lasting time, deceptive time, irregular time, cyclical time, delayed time, variable time, leading time, and explosive time (Tarkowska 1998: 109).

It should be clearly emphasized that in the analyses of time as a social phenomenon, the fundamental role was played by knowledge describing the differences of other cultures, showing different social thinking about time. It was within such sciences as social and cultural anthropology, in addition to the history of culture, that the reflection on time developed. In sociology, time was for many years associated with research on time budgets and free time, in which the concept of social time was not used, referring exclusively to quantitative time. As Tarkowska noted, it was only in the 1980s and 1990s that significant changes were brought about, and they were contributed to, among others, by the works of sociologists such as Eviatar Zerubavel, Helga Nowotny, and Barbara Adam (Tarkowska 1998: 109).

The followers of Durkheim's thought pointed out several important elements. First: different communities (local, rural, urban, professional or age groups) "lived in different times." Time in the countryside passes slower than time in the city. Different organizations such as schools, enterprises, etc., create special time frames that organize the functioning of their members.

In addition to the differences in time temporal profiles among various professional groups, there are differences in time temporal profiles among age groups (adults

– children, retirees – professionally active individuals). This means that there are groups or social categories that are to some extent separated from the time that applies to the lives of other individuals or communities. These groups use individual time frames or ignore time altogether, e.g., hospital patients, residents of retirement homes, and children or retirees.

In the case of these groups, the internal differentiation of time temporal profiles becomes particularly evident in connection with such a social process as aging. Aging people seem to have a different awareness of the importance of time. Its passage and passing are measured not only by a watch or a calendar, but also by observing the progressive changes in one's own body, the decline in its efficiency and fitness, as well as aesthetic feelings. However, the universality of the aging phenomenon, according to which a real change related to age must occur in all members of a species, is strongly internally differentiated (Strehler 1977). It is difficult to predict how an individual's body and mind will age. Each older person has a long and unique life story, ages differently and at a different pace, even if time for peers flows in the rhythm of the same dates and seasons. Nonetheless, generalizing about the changes that occur with age is justified to some extent in order to identify certain universal changes and mechanisms that are common to all people subject to the ageing process (Kilian 2020: 52–53). Although contemporary consumer culture, despite being aimed at the largest possible audience, has not developed different standards of beauty for different stages of life, the increase in the number of older people in Western societies will force changes in this aspect as well.

Another important issue is the emphasized fact that each type of human economic, educational or religious activity takes place in accordance with the guidelines of a different time matrix (Sztompka 2005: 64–65; Sztompka 2021: 605–606). This relationship was noticed in the late 1990s when the World Health Organization (WHO) proposed a new approach to the process of aging and old age, introducing the concept of active ageing into the field of politics and economy (Kalache, Kickbusch 1997: 4–5). According to the definition proposed by the WHO, active ageing "is the process of optimizing opportunities for health, participation and safety in order to improve the quality of life as people age," (WHO 2015). This definition assumes maintaining the ability and capacity to perform professional work by older people for as long as possible, as well as their active participation in social, economic, cultural and civic life. In the approach proposed by the WHO, active ageing goes beyond previous areas such as professional work or physical activity and refers to all spheres of life – social, cultural, spiritual, civic, and economic. This holistic approach assumes that older people should participate in socio-economic life to the extent they are able, which means that they are expected to take such care of their bodies so that they are able to, among other things, work longer, retire gradually and at a later age, and be active as retirees and pensioners, taking action for their health and fitness (Adamczyk 2019: 62–67).

The human body and time

The connections between the human body and physical time have been present for a long time. An example of such a connection is *kalokagathia* – the ideal of beauty in ancient Greece, in which what was beautiful was also considered good. Nevertheless, can an old body be as beautiful, proportionate, muscular, etc., as a young body? And if it is not, because the ageing process affects everyone, can older people not be good? Over the centuries, there has been an interest in older people, and the approach to them has changed. In certain periods, their life experience and wisdom were appreciated, in others they were marginalized and their ugliness, infirmity, and the lack of usefulness were pointed out (Nowicka 2006). The adopted perspective was influenced by the organization and structure of society, the family model and its functions, the type of dominant communication in the community, the place in the social hierarchy developed throughout life, and cultural values (Nowicka 2006: 46–48).

The succession of seasons, spring, summer, autumn, and winter, differentiated by climatic and atmospheric conditions, was naturally associated with the phases of human life, emphasizing their similarity to the individual phases of human life. In the most primitive hunting or gathering tribes, the succession of time was important not only for the organization of activity cycles of horticultural and agricultural societies (Sztompka 2005: 57), but also for the individual existence of a person entering adulthood, a mature individual, and an elderly one. Comparing the phases of human life to the seasons of the year or day, which was previously reflected in philosophical concepts, is only becoming increasingly more distinct in contemporary analyses. One of the first people to develop a theory of life periods corresponding to the seasons was Pythagoras. This motif was later replicated many times. Pythagoras divided life into four sections of twenty years each: childhood – spring (up to 20 years), adolescence – summer (from 20 to 40 years), youth – autumn (from 40 to 60 years), and old age – winter (from 60 to 80 years) (Minois 1995: 66). In literature, we can find many references and comparisons of human life to the changes related to the succession of seasons and the passage of time during the day. Mikołaj Rej devoted much space to this issue, for whom human life was a part of creation, a link in the biological cycle of constant renewal. For Rej, youth was like morning, because it was the first stage of life, and just as morning began each day, it was its announcement. He compared adulthood with noon, firstly because adulthood was chronologically the second stage of human age, just as noon was the second moment of the day. Conversely, noon was the time of day when the sun shone the highest, so it was the hottest, and work undertaken at that time required the most effort, as did an individual's efforts to be responsible. Evening, as the last part of the day, was compared by him with old age – the last stage of human life (Kozaryn 2015: 113).

Kalokagathia – the term comes from the Greek words ***kalos k'agathos***, translated as "beautiful and good". It was an ideal in which beauty remained the visibility of good. In the ancient Greek interpretation, a beautiful thing, phenomenon or deed were, at the same time,

a good thing, phenomenon or deed; therefore, what was beautiful was also, as it were, good by its nature. Plato stated in ***Philebus*** that "what is perfect is by all means good," (Plato, *Philebus*).

Nowadays, the use of seasons or days to denominate a stage of life appears in psychological concepts belonging to the trend called "life span," which encompass the entire period of human life in their analysis. Before we discuss the basic assumptions of these concepts, it is worth emphasizing that although old age is compared to the evening, twilight or autumn, this phase of life does not gain "additional shine" or color thanks to these comparisons. Concepts from the life span circle try to convince modern people of the naturalness of this last phase of life, of its potential attractiveness, but this does not create a new image of the physical beauty of this period of life. Nowadays, when the body has become too valuable a currency, and an attractive appearance an important and desired value, it is difficult to give meaning to the aging body in such a reality (Slevin 2010; Slevin, Linneman 2010). In contemporary culture, aging and being old are treated as a problem, although it is emphasized that this is a problem that is increasingly solvable (Cruikshank 2013). Consumer society treats the body – young, beautiful, slim, well-groomed, and athletic – as a commodity that can be "exchanged" for other goods: a better job, greater life satisfaction or social prestige (cf. Schier 2009). Physically attractive people are more liked and treated more leniently. The old body has also become a "product," a central element of the practices and strategies aimed at stopping aging, and fighting aging, resisting aging or looking old is big business (Gilleard, Higgs 2000; Calasanti, Slevin 2001). Yet, despite all the attempts to combat ageing, bodies are more than social constructs; they are subject to biological and physiological constraints and are subject to deterioration (Turner 1996).

Therefore, the concepts of the "life course" and their basic assumption that a human being develops not only in childhood and adolescence but also throughout adulthood and old age, must face the reality that old age is not accepted (Calasanti, Slevin, King 2006: 13–30). The proponents of this approach emphasize that the life course consists of the observable features of human development from the beginning to the end of life and includes fluctuations, progression, and regression. It is not a continuous process that is easy to understand (Minter, Samuels 1998; O'Connor, Wolfe 1991). Biopsychosocial factors must be taken into account all together when the life course is studied (Levinson 1986, 1996; Kittrell 1998). Practitioners and theoreticians of such disciplines as: personnel policy, human resource management, developmental psychology, socialization theory, organizational psychology, management theory, personality psychology, and others, use the achievements of Daniel Levinson, one of the most famous authors of the human life cycle theory. It was Levinson, among others, who used the concept of the human life cycle, employing metaphors such as a journey or seasons, which brought closer the understanding of phenomena typical of development: moving forward, hardship, discovering something new, wandering, and, at the same time, cyclicality and changeability (Levinson 1986: 5).

The time factor functions in a society, community or social group not only in the form of time orientation, but also in the form of specific rules, normative expectations that regulate various aspects of human behavior, including those related to the body (Giddens 1979: 221). Rules related to time are embedded in the structure of broader networks of rules, in social normative systems (Sztompka 2005: 60). This means that there are norms that, rooted in the social structure, determine the durability of certain actions, the length of the existence of groups and organizations, etc. It is not only about the fact that some forms of life last longer than others, but that there are normative expectations in society about how long they should last, and any departure from such a norm is defined as a deviation (Sztompka 2005: 60). This approach to the significance of time in the social structure clearly links it with Bryan S. Turner's concept of "body management," for which the body is an important object serving to maintain the cohesion and durability of the social structure, in four spheres: the regulation of the spatial functioning of the body, the regulation of the body in time, the representation of the body in social space, and the limitation of the body's internal drives. For Turner, body management is mainly related to exercising control over female sexuality, which plays a special role in the patriarchal system (Buczkowski 2005: 12). In all the spheres indicated by Turner, social time plays a special function, defining the adopted time orientations, which fundamentally influence the management of population reproduction at the institutional level.

At the individual level, the regulation of the body's functioning in time is achieved by suppressing sexual drive. The methods of controlling sexual drive in the name of the survival of society are adopted, depending on the "time temporal profiles" accepted and deeply rooted in the social consciousness and culture (Sztompka 2005: 58), which affect the satisfaction of two important biological human needs – food and the satisfaction of sexual needs (Buczkowski 2005: 13). The setting of time frames for "waiting" to make the decision to marry, the age limits accepted in the community at which women are allowed to enter into marriage, and the age limits considered acceptable when it comes to engaging in sexual practices – all these time frames are established not by biology, but by the "time orientations" accepted in the community, recognizing that the "time for marriage" has come. If we look at the contemporary diversity of "time temporal profiles" adopted by individual societies separated by continent and religion, we will observe that what is obvious to some societies is unacceptable to others. Depending on the region of the world, there are different age limits of the so-called social consent to start sexual activity. The age of consent is the minimum age established by law (usually statutory, within criminal law) at which an individual is considered capable of expressing legally valid consent to sexual activities with another person. It is often different from the age of majority, criminal or civil liability or the ability to enter into marriage. Most often, this age in the world is 14–18 years old, but it can range from 9 to 21 years old from country to country (Waites 2005: 40–59; Monitoring EU… 2018: 18–24). This age may also change depending on the type of sexual activity, the sex of those involved, and other restrictions. In Poland, it is currently 15 years old.

Pierre Bourdieu wrote that the body was a social construct, resulting from the process of socialization of that what was biological (Bourdieu 1990). In his opinion, the body was the basis of social interactions and the means by which an individual was included or excluded from a group. In this approach, the human body not only reflects the norms, rules, social hierarchies, and cultural obligations in force in a given society (Kumaniecka-Wiśniewska 2006: 80), but – importantly – places them in historical time, and links them with social time. The body is embedded in specific temporal realities and social space, in which specific symbols, values, rules, etc., apply. They are codified and deeply rooted in social consciousness (Sztompka 2005: 58). The body is not only connected with physical time passing, the passage of years, but it is a "hostage of the culture" in which it functions (e.g., practices related to clothing or circumcision) (Wąsik, Sygit, Dubiel 2015: 33–44). An example of contemporary migration processes is not only the image of economic, subsistence, and integration problems, but also the image of changes in the perception of the body (especially the female body) by women themselves arriving from countries with different traditions, norms, and rules of behavior.

The influence of such common cultural patterns is permanently present in various areas of social life. Different time temporal profiles are reflected at different levels of social life. At the macro level, for example, they can be reflected in the preferred lifestyle of entire communities. For example, the Spanish *Mañana*, which is a lifestyle associated with Mediterranean countries, according to which "what you have to do today, do tomorrow, you will have two days off," and, in comparison, that associated with Germany or Scandinavian countries, i.e., the maximum use of time, punctuality, which is expressed by the famous saying of Benjamin Franklin: "time is money." We can also see the differentiation of time temporal profiles in some professional groups, where the appearance of the body is particularly important and related to the physical passage of time, as well as to the socially accepted time frame in which representatives of the profession can perform it (e.g., models or actors). Of course, we have examples of these socially defined time frames being broken. An example is the oldest (born 29 August 1921 in New York) professionally active model Iris Apfel. Of course, we also have professions that have specific time frames for being professionally active, not only resulting from changes in the body, but also as a consequence of the mental burdens associated with this profession – such as professional soldiers. As Sztompka wrote, "Not only individual professions, but also social classes, genders, and age groups occur to differ significantly in the way they perceive time," (Sztompka 2005: 60). Time not in the physical sense, which for everyone passes in the rhythm of the same hours and seconds, but precisely social time. Writing about time orientation or perspective, he distinguished specific aspects of social time that should be taken into account in his analyses.

The time factor functions in the culture of a society, community or social group not only in the form of a binding time orientation, but also in the form of much more specific normative expectations that regulate various aspects of behavior or actions, including those related to the body. What are the functions of social time

in the context of the body? Not all functions of social time are directly related to somaticity. The universal requirement of social life, the implementation of which is possible thanks to commonly recognized time measurement systems, i.e., the synchronization of actions (Sztompka 2005: 61–62), belongs to this category of actions. However, when we look at such aspects of life as illness or hospitalization, we will notice that patients must undertake specific actions (taking medication, going to bed – night silence) at the same time. Medications are administered according to a set schedule also owing to the time of their action. The higher the level of the interdependence of units, the greater the need for time synchronization (Lewis, Weigart 1990: 96), which is particularly visible in the case of medical activities.

The first function of synchronizing actions in time is related to another one, namely the coordination of actions in time. Individual actions take place in a specific space and at a specific time (Sztompka 2005: 62). They constitute a bundle of "communicating vessels" leading to a common goal (human bodies that build houses, assemble cars, and manufacture products in factories in a system of the division of labor). This is the coordination of actions undertaken in time by specific individuals, who are, after all, corporeal. This ability to coordinate results from human biology. In the 1960s, a theory was developed that dealt with the degree of the complexity of motor coordination, which illustrated the arrangement of coordination abilities (understood as various specific manifestations of motor coordination) according to their hierarchy. These abilities were divided into three levels of varying degrees of complexity, including indicating the ability to coordinate movement at a specific time. The first level characterized the spatial accuracy of motor actions performed in standard conditions without time limits. The second level determined the spatial accuracy of movement in an optimal – limited time in standard conditions. The third was characterized by movement tasks performed accurately, quickly or with the speed adjusted to changing external conditions (Farfiel 1960). Of course, we have a reference to physical time here, but if we transfer the ability to coordinate movement at a specific time to soldiers of the guard of honor, marching at a specific social time, i.e., 15 August, in a specific place in Warsaw, then we are dealing with the coordination of actions due to a socially sanctioned national holiday. Another example of this type of relationship can be of one appearing in the costume of Count Dracula at the presentation of generals' nominations and decorations by the president of the country on Polish Armed Forces Day. Let us imagine a situation in which an officer nominated to the rank of general wears such an outfit instead of a uniform. The reaction to this type of behavior would be strictly defined, i.e., removal from the ceremony and perhaps the imposition of disciplinary sanctions. In the calendar of every society, there are a number of dates that have social significance, i.e., they are associated with established norms regarding appearance, dress code, behavior, and the individuals participating in these events.

The two previous ones are strongly connected to "sequential ordering." Social processes do not proceed chaotically, but take place in stages, in a specific order. Many actions only make sense when performed at the right time – not before and

not after (Sztompka 2005: 62). In the case of the human body, we can link this to the concept of body management, and in particular to Turner's body management in time. Examples of its implementation include postponing the decision to get married, and get pregnant and give birth to the first and subsequent child. The human body (e.g., in the sphere of reproduction) is strongly connected to the requirement to adopt specific deadlines for certain actions, which can only be undertaken in specific phases or cycles. For example, in a woman's menstrual cycle, the first and the beginning of the second phase coincide with a period of relative infertility. On the 10th–18th days of the cycle, the fertility period occurs, with ovulation being key in its scope (assuming that the female cycle lasts 28 days). This is the period when it is easiest to get pregnant.

The last two functions of time – measuring the duration of various activities and the qualitative allocation of time (Sztompka 2005: 62–63) – are very strongly connected with disciplining the body. Here, we can refer to the example of soldiers and the practice of subjecting a recruit to appropriate training in order to make the soldier's body one that complies with the requirements of power (Buczkowski 2005: 243). In the training process, every gesture, movement, tempo, posture, etc., is subject to influence. The same applies to professional dancers (Byczkowska 2012) or athletes. Foucault wrote about the mechanism of disciplining the body, according to which disciplining became a method that controlled the body's activities in a total way, ensuring subordination and imposing on it a relationship of "usefulness–susceptibility" (Foucault 1977).

3. Key concepts

Social time – an entity thought out and individually created by each society. Its diversity depends to a large extent on the psychological abilities and socio-cultural conditions that an individual has and lives in.

Elements of social time – social time consists of patterns of temporal behavior and ideas about time, i.e., phenomena such as duration, passing, change, and succession. **Features of social time**: it is common to a community; it is created by this community in the process of interaction between its members; it is experienced, internalized, and shared by all or most members of the community; and it is embedded in norms and values.

Functions of social time – it performs cognitive, communicative, and regulatory functions; it is a means of building social bonds and shaping a sense of group identification.

Quantitative time – calculated using accepted units: hours, seconds, etc. It serves as an external scale for measuring events and processes, as well as arranges them chronologically. It enables a better orientation in the social world.

Qualitative time – can be felt as an internal, immanent property of social events and processes, the essence of which is the succession, simultaneity, duration, change, and direction of the flow of time.

Body centricity – the process of considering the body and external appearance as very important or even decisive for building self-esteem.

4. The most important studies

An example of analyses carried out by Polish sociologists, in which threads connecting temporal and somatic profiles can be found, is the research on time in social and cultural consciousness initiated by Elżbieta Tarkowska. In her work from 1992, Tarkowska wondered in what Poles were involved: in imagining and planning the future, in current life and current problems, or in recollecting the past? The work, although created over almost a decade, and 33 years have passed since its publication, and it did not analyze issues in the field of sociology of the body, it provided a strong basis for undertaking temporal analyses, including those connecting time and somatics. This was possible thanks to the adoption of a broader time period in the analyses than the one in which the work was finalized, i.e., 1989–1990. Seeking answers to the questions about in what categories of time Poles live on a daily basis and which of the areas of time – past, present, future – constituted the main plane of reference for their actions, Tarkowska prepared the ground for other researchers to create models that take into account temporal perspectives in analyses of attitudes towards old age and aging, as well as the changes occurring in the body.

One of the constitutive elements of the structure of the temporal consciousness of individuals, as well as entire communities, is the temporal orientations they adopt, i.e., different ways of perceiving and valuing areas of time, i.e., the past, present, and future. The time horizons associated with them are also important, i.e., the scope of the time perspective into the past or the future. On the one hand, these are ideas about time related to the past (memories, individual and collective memory, history, myth), and, on the other, to the future (plans, predictions, expectations, and hopes) (Tarkowska 1992: 26; 1993). The interrelation of social time and collective memory has also been addressed in Polish sociology (Tarkowska 2016). Temporal orientations express different ways of perceiving the passage of time, its specific understanding and valorization, in addition to a specific attitude to it.

This approach was proposed, among others, in the work *Społeczne uwarunkowania pomyślnego starzenia się i aktywnego przygotowania do emerytury* (Adamczyk 2019), in which time orientations comprised one of the important areas of analysis. The study examined the experience of time by humans, which changes with the passing years not only in the calendar, but also as a result of experiencing changes in the

body. The study included 1,010 individuals aged 15 and over. Throughout the course of an individual's life, biological changes occur in them, changes in social roles, but also a change in the proportions between the past and the future. Old age, like all the stages of the life preceding it, has goals and tasks typical of its period, as well as a new configuration of the past and the future. With age, the awareness of the shortening perspective of time grows, and a reflection on and assessment of one's own life appear. As the period of the greatest life activity – professional, family, social – fades away, reflections on lost time appear, which can cause anxiety and a sense of insecurity. Nonetheless, human life happens here and now, what we participate in determines the way we perceive the past, but also shapes our future. How an older person experiences the present may determine their attitude to the future, and, therefore, as part of our own research, respondents were asked about their attitude to three statements placed on three levels: past (retrospective) – "the best things in life are already behind me", future (prospective) – "many good things can still happen in my life," and present (presentist) – "it is hard to say, every day can bring something good or bad." The analysis has confirmed the assumption that the choice of temporal orientation is related to age, which means that young people (18–40 years old) most often identify with a prospective orientation (57.5%), mature people (41–60 years old) with a presentist orientation (43.5%), and older people (over 60 years old) with a retrospective orientation (39.5%). The higher the education and the monthly net household income, the higher the probability of the occurrence of a prospective temporal orientation, but only for the population aged 40 and over. The analysis did not confirm the relationship between the choice of temporal orientation and sex, being married/partnered, having children, and professional activity.

An important example of interdisciplinary analyses in the field of the body and time is the work of Christian Tewes and Giovanni Stanghellini *Time and Body: Phenomenological and Psychopathological Approaches* (Tewes, Stanghellini 2020: 41–122). The authors, adopting two perspectives in their analyses: psychological and phenomenological, analyzed the body and time as spaces that were equally related to each other. In their work, the authors examined how temporal processes contributed to the creation of embodiment and a sense of self-identity, as well as to their destabilization, e.g., in the form of eating disorders, borderline personality disorders, schizophrenia, depression, social anxiety or dementia.

5. Summary

In contemporary society, time and the body are treated as capital – "time is money." This approach results in assigning a special status to both, the body and time. They have become resources that can be safeguarded, managed, wasted, controlled, and even sold. The body has become physical capital, thanks to which we can gain recognition, work, admiration, but also very quickly experience

transience – the relationship between time and the body, which flows "faster" for athletes, models or professional dancers. For example, a professional sports career does not last forever, and when you start and when you end it depends on the sports discipline. Usually, we talk about late teenage years. If health permits, one can compete for even a dozen or so years, sometimes even over twenty, but on the scale of their whole life, this is still not much. Physical capital is one of the most impermanent human capitals. Biological resources have their limitations. As time passes, the body loses those qualities that seem to be the key determinants of attractiveness for the modern civilization: youth, fitness, and physical attractiveness. It is often said that "the despotism of time" is the result of the modern civilization being governed by the calendar and the clock.

6. Review questions

1. How can the functions of social time be linked to the body?
2. Consider how Bryan Turner's theory links the issue of the body to time.
3. How does physical time differ from social time?
4. How does society make the perception of time in an individual's biography dependent on their gender?
5. What is the age of consent and why has it been introduced?

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