

## CHAPTER «PHILOSOPHICAL SCIENCES»

### THE DEVELOPMENT OF PHYSICAL EDUCATION AND SPORTS IN PARALLEL WITH THE FORMS OF AXIAL PRODUCTIVITY OF SOCIETY

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DOI: <https://doi.org/10.30525/978-9934-26-001-8-3-4>

**Abstract.** This article describes the hypothesis that sport originated and developed with forms of axial performance. It is noted that the physical education tradition was formed and modernized according to the axial principles of development of each era. What determines the transition of society from one level of development to another? Among the many reasons, the most important are socio-cultural revolutions, such as agricultural, industrial and scientific information. That is, it is progress, certain evolutionary steps that affect the development of society as a whole.

We propose to consider the concept of axial time for each era (a combination of axial and wave approaches), ie the axial principle and the impact of human civilization on the formation and formation of physical education and sports culture. D. Bell considers the "axial principle" of the division of civilization "axis of production" and the knowledge used. For example, for industrial society such a criterion is the use of machines for the production of goods, and for post-industrial – scientific and primarily theoretical knowledge (which is a strategic resource, the axial principle of society).

According to our concept, the whole historical process can be divided into large stages. The change of each of them is a change of the basic qualitative characteristics of the corresponding step of the historical process. The concept of the principle of axial productivity is not only production, but also the formation of a new worldview, which can be such a basis that describes the great qualitative steps in the development of world history.

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The revolution in the worldview is an integral part of the historical process. With its help there are profound qualitative changes in socio-cultural life, in political and economic relations, the public consciousness changes. In these periods, socio-cultural relations, on the one hand, are approaching the leading productive forces, and on the other hand, they themselves create a new level, which gives impetus to generate new worldview principles.

Worldview trends were the guiding factor first in the formation and then the transformation of the system of physical education, physical culture and sports. Each stage of such development was permeated with the spirit of the corresponding cultural and historical epoch. It is emphasized that compared to the sport of the last century, the sport of the XXI century will develop much faster and more powerfully, and its main task will be to take care of leisure and human health in the economic globalization of the information society.

### 1. Introduction

What determines the transition of society from one level of development to another? Among the many reasons, the most important are socio-cultural revolutions, such as agricultural, industrial and scientific-information. That is, it is progress, certain evolutionary steps that affect the development of society as a whole.

"Human thought cannot but divide the historical process into certain periods," A.Ya. Gurevich [6]. There are several approaches to determining the historical periodization of social development. The main of these approaches are considered to be formational, civilizational, wave, information and axial approaches.

The formational approach is inherent in Marx's assertion that history is a single, regular in all its enormous diversity and contradiction, the process of natural change of socioeconomic formations, which consist of three elements: productive forces, production relations, superstructure [13].

The civilizational approach is inherent in the nonlinear concept of the philosophy of history, which asserts the existence of many self-sufficient historical formations with their own history. A supporter of this paradigm was A. Toynbee [27].

The term "post-industrial society" appeared in the studies of D. Bell [2]. The concept of post-industrial society deals primarily with changes in the social structure, economy, professional system and information.

Alvin Toffler [28] emphasized the direct connection between changes in technology and lifestyle (wave approach). Moreover, the impact of technology is wavy. 1) agrarian, "wave" lasted millennia. 2) "waves" – industrial production. 3) "wave" – "information society".

The author of the concept of "axial time" K. Jaspers argued that the axis of world history should be attributed to the time of about 500 BC, to the spiritual process that took place between 800 and 200 pp. B.C. Then there was the sharpest turn in history. There is a man of this type, which has survived to this day. This time is called axial [31].

We propose to consider the concept of axial time for each era (a combination of axial and wave approaches), ie the axial principle and the impact of human civilization on the formation and becoming of physical education and sports culture. It is worth recalling the opinion of the American sociologist D. Bell, who considers the "axial principle" of the division of civilization to be the "axis of production" and the knowledge used. For example, for industrial society such a criterion is the use of machines for the production of goods, and for post-industrial – scientific and primarily theoretical knowledge (which is a strategic resource, the axial principle of society).

## **2. The principle of periodization**

According to our concept, the whole historical process can be divided into large stages. The change of each of them is a change of the basic qualitative characteristics of the corresponding step of the historical process. The concept of the principle of axial productivity is not only production, but also the formation of a new worldview, which can be a basis that describes the great qualitative steps in the development of world history.

According to the famous researcher L. Greenin, each revolution includes two stages with a more or less long interval between them, during which the achievements of the first stage become widespread. [33, p. 309–315]. Each stage of the revolution is a significant breakthrough in socio-cultural life.

The revolution in the worldview is an integral part of the historical process. With its help there are profound qualitative changes in socio-cultural life, in political and economic relations, the public consciousness changes. In these periods, socio-cultural relations, on the one hand, are approaching the leading productive forces, and on the other hand, they themselves create a new level, which gives impetus to generate new worldview principles.

### 3. Development of sports according to waves of axial productivity

Of course, no one can deny that the "phenomenon of sport" is a heritage of world culture, a heritage of the historical and cultural heritage of nations. Many researchers have written about this, including the famous public figure P. de Coubertin:

“Oh Sports! You are peace and possessions  
All the nations on the planet! ” [10].

In fact, in this way, sport has evolved along with the evolution of human civilization. "The level of development of physical culture and sports, their place in people's lives have always depended and depend on specific forms of production, social relations, politics, the state of science and culture" [4, p. 6]. Of course, to a greater extent this applies to the "Western world", namely Europe. However, such reciprocity and influence can be traced in Eastern culture and in North and South America, although within other chronological limits.

**3.1.** The first to appear on the stage are the historical and cultural milestones of the birth of sports in ancient times.

The importance of this period was first mentioned as a change in socio-cultural life in the 1940s and 1950s. This is Childe's theory of the Neolithic revolution. The essence of this concept [30, p. 53–55] was reduced to the fact that due to radical climate change during the Upper Paleolithic, a dry climate with steppe landscapes was established in the territory of Afrasia. So hunter-gatherers were forced to roam in search of animals, often over long distances. This contributed to the wide communication of teams, exchange of information and dissemination of innovative technologies and industries, especially those related to the cultivation of cereals and livestock. The scientist associated the emergence of these new industries with oases, where the symbiosis of humans and animals first emerged.

The emergence of physical culture, historical science refers to the period of development of the primitive community. It is believed that the first form of physical education were collective games, which were naturalistic, gradual. They partially reproduced both ritual actions and the labor process. Playing, primitive people respected the tradition, learned to hunt, imitating the actions of hunters. These games used hunting equipment and live targets.

In tribal society, physical education has already acquired a significant, for that era, level of development. Ethnographic studies indicate that

each nation had its own forms and types of exercises. The Australians – boomerang and stick throwing, ball games, wrestling, dancing "boxes". The Indians of America – exercises: walking, running (long distances), swimming, boat racing, throwing and throwing games, ball games. In the African tribes there was throwing at the target, fencing with sticks, running, jumping, throwing a spear at a distance and height, war games, dancing. One of the forms of physical education was initiation – checking the physical fitness of community members. For example, such a rite in African tribes was to send a boy into the jungle for a few months.

During the decomposition of the tribal system there is a militarization of physical exercises. For example, fistfighting, training with weapons, chariot races, sword jumping, spears. During this period, the initial forms of public education institutions appeared – secret unions and "youth homes", which existed only for the physical education of boys.

The purpose of physical culture is a positive effect on the vital functions of the human body. This is one of the main reasons why our distant ancestors understood the following: by improving their motor abilities, they can not only improve productivity, hunting, military skills, but also physically improve themselves. It is this circumstance that allows us to assume that our ancestors, with the help of primitive logical thinking, made a significant impetus to the emergence and understanding of the importance of physical culture [19, p. 491–495].

Perhaps the main role in the emergence of physical education was played by an objective anthropological factor – a source that indicates motor activity as a natural human need. No less important is interpersonal interaction as a natural need. As Moskalenko V. notes "The desire of man to interact with another is explained by their need to regulate their own self-concept and increase self-esteem, self-affirmation, get rid of fear, anxiety, doubt and insecurity" [15, p. 540]. In addition, interpersonal communication and interaction have led to the emergence of tactical actions as an important element of physical culture.

**3.2.** The second period can be considered agonism and gymnastics of ancient Greece. The heroic stories and myths of ancient Greece, described by Homer in his works, perfectly characterize the period of antiquity. It was ancient culture that became the "building block" that helped shape European culture – art, philosophy and the principles of physical education. The

ancient polis formed the ideal of a multifaceted man, a significant place in which belonged to the active person and his physical data. Competitiveness, spectacle, courage of the body and emotional stability were the norm of the society, which was repeatedly noted by politicians and philosophers.

The way of life of the ancient individual (anthropocentrism, polis system, cosmology, competitiveness, entertainment, etc.) determined the features and behavior of the citizen, was aimed at meeting his life needs, among which gradually distinguished the need for exercise. Physical culture, as a form of leisure and an element of the development of ancient society, contributed to the formation of virtues, brought people fame, public recognition and became an attribute of the cultural foundations of ancient man. Thinkers of this period have repeatedly expressed their views on the importance of exercise in the harmonious development of personality.

Ancient Greek culture, especially in the period V–IV centuries. BC BC, represented the ideal of man as a combination of physical and physical beauty with spiritual and intellectual content. The famous philosopher Aristotle emphasized the education of courage and endurance, moderation and justice, high intellectual and moral purity. In his work "Politics" the thinker points out that "in education the development of skills must precede the development of the mind and physical education must precede the intellectual..." and adds – "in education the first role should be played by the beautiful, not animal" [1, p. 216–217].

According to Aristotle, the subjects necessary for education were grammar, music and drawing. But most attention was paid to the education of the body. The body must be formed before the spirit, the ability – before the mind. Even when raising children in a family, it is necessary to pay attention to the selection of children's games. In the program of physical education, Aristotle pointed to the choice and division of physical exercises, based on the capabilities of children. He made the first attempt in the history of physical education to give age periodization in the dosage of physical exercises [29, p. 6].

However, the cult of the courageous body was also criticized. For example, the philosopher Xenophanes, emphasizing the exaggerated glorification of the winners of athletic competitions – agon, pointed out that wisdom and prudence benefit the whole society and should be valued more than athletic strength and speed, because they bring glory only to the individual.

Thus, together with the affirmation of the principle of kalokagatia as the ideal of human education, which expresses the ideal union of physical (bodily) beauty and spiritual perfection, the process of confrontation between the values of body culture and spiritual culture began. Its origins are associated with the appearance of Homer's Iliad and Odyssey.

The Iliad describes that Achilles' upbringing was equally based on two components: physical training, which was necessary in battle, as well as music and public speaking. The harmonious upbringing of Achilles became a universal model of the entire ancient period.

Sparta is an interesting page in the history of ancient Greece. The life of the Spartans was subject to the main requirement – to be in a state of military readiness. The main purpose of Spartan physical education was to train a strong, enduring, courageous warrior-defender of the community. "In Lacedaemon, almost all the upbringing of young people and almost the entire legislative system provide for military purposes," Aristotle wrote in Politics [1, p. 184]. Sparta's physical education also showed an interesting position in the gender aspect. The moralist philosopher Plutarch remarked that the position of women in Lacedaemon was specific. They were not isolated from society, like women in all other parts of Greece. Girls underwent the same physical training as boys; more remarkable is the fact that boys and girls did gymnastics together in the nude. [21, p. 5–13].

One of the greatest phenomena of Greek culture is called agon. The spirit of agony permeated everywhere, permeating the most important, basic and dominant spheres of human society: spiritual, intellectual, artistic and even simple peasant and artisan. Like the entire history of ancient Greek society, in fact, they appear in a competitive tradition, on the one hand associated with the cult of the body, and on the other – a competitive principle in intellectual and spiritual culture.

One of the founders of European philosophy, Plato, for example, divided the whole culture into two components: gymnastics, which included the entire sphere of physical culture of the body and music – the sphere of spiritual and intellectual culture. The thinker's idea was to seek harmony through the synthesis of these two components of human culture: to complete harmony much more than one who adjusts the strings" [18, p. 101].

The world-famous Olympia was also the venue for athletic competitions featuring poets, writers and philosophers. No wonder the Ukrainian

philosopher Taras Luty called the Olympic Games "an exceptional cultural phenomenon" [12, p. 37]. Of course, the sport in ancient times gained great popularity, if even the philosopher Thales "died of heat and weakness, watching gymnastics" [12, p. 49].

Some ancient philosophers, such as Socrates, condemned the fact that the organizers of the Olympic Games decided to award high prizes at the Games to athletes for achievements related to their physical results, but did not reward poets, thinkers and philosophers whose concepts and works, in his opinion, could bring not only personal glory but also benefit to other people, residents of other cities-polises. Although the thinker also expressed the thesis in support of physical exercise – "people who are naturally weak in body, due to exercise become stronger."

Ancient culture was not limited to Greek society, but became the heyday of another world-famous phenomenon – Roman civilization. Despite the large number of competitions and games, they did not have such a cult of the human body as the Greeks, which is confirmed by works of art. Competitions are often depicted with spectators, which indicates the publicity and politicization of the games.

During the Republic, the basic right and duty of a Roman citizen was considered service in the army. Military training was well organized, with strict discipline. The basis of military training was systematic training, which included wrestling and fencing on wooden sticks.

Particularly popular were gladiatorial battles, which took place in ancient Rome at the end of the republican period and in the era of the empire (I century BC – V century AD) to entertain the free population. Gladiator fights originate from cult funeral rites associated with sacrifices. The Roman philosopher Lucius Seneca condemned gladiatorial combat and openly despised those who practiced it: "This spectacle is mostly preferred over ordinary fights, as well as over favorite pairs of fighters. In the morning people are thrown to the lions and bears, at lunch – to the spectators. They incite murderers against those who in turn become murderers; the winner is reserved only for the next murder: the only way out for all who are fighting now is death" [26, Sheet XII].

The physical culture of the ancient world is a very interesting springboard for philosophical research. During this period, the first elements of physical education and future sports were formed, and the Olympic Games deserve

special significance and attention. No less important and socially significant are the issues of harmonious development – a combination of physical strength and intellectual culture.

**3.3. Sports culture of the Middle Ages.** The collapse of the Roman Empire led to the destruction of the established social division of labor and the place of the individual in the ancient world. Classical features inherent in ancient culture lost their positions, gradually died out, and the traditions of peoples who managed to adapt to new social relations came to the fore. The change in the social order, namely the transition to feudal relations and the establishment of Christian canons, radically changed the vector of development, and the ideal of medieval man differed significantly from the ancient.

This ideal rejected physical power in favor of spiritual suffering. Accordingly, the image of the body of the crucified Christ became the standard. The symbol of a harmoniously developed personality changed the sacred image of the ascetic, reflecting suffering in the name of saving the soul. In general, the nature of medieval culture was determined by two main factors: the dominant position of Christian ideology and the church, the establishment of Christian values, as well as strict regulation of individual life in accordance with its position in the social hierarchy.

First of all, it is worth noting that the worldview and way of life have changed, which is most clearly indicated by the contrast between the two worldviews – ancient and medieval. A striking example, in particular, is the change in the interpretation of the meaning of the concept of "asceticism". The word "asceticism" comes from the Greek ἀσκήσω, means skillful processing of rough materials, their decoration; derived from it ἀσκησις meant exercise, originally athletic. Accordingly, "ascetics" were called athletes. In the period of medieval Christianity, the word "ascetic" already meant a person who neglected the body and hardened only the spirit. The image of the holy ascetic, which denies physical culture, represented a common ideal for all social strata [20, p. 468–471].

But there were also economic motives that made it impossible to continue or develop ancient physical education. The Middle Ages and even the Renaissance did not have as much financial opportunity, ie money, as the Greeks and Romans invested in palaestra, theaters and circuses.

However, the ideals inherent in the Middle Ages were formed, which corresponded to the established orders and strata of feudal society. Such, for

example, was the ideal of a knight. However, it should be noted that in the end he also fit into the overall image of the ascetic. The knights respected and considered worthy of imitation not only physical strength, fighting spirit, consciousness of honor and conduct in accordance with the norms of the code, but also the fact that he, in most cases, subordinated these qualities to the service of God and the Church. "So God, honor and woman became the motto of all knights, worthy defenders of the fatherland. These magic words shine on their lavish and warlike holidays, in their war games" [24, p. 14]. This position is very similar to the cult of the hero in antiquity, because the knight, usually under the auspices of higher powers, certainly had heroic abilities and sought the same glory. That is, you can trace a certain historical and cultural longevity.

In addition, the popularization of physical culture, certain games, was reduced to heroism – whether tournament battles or romantic episodes. The heroism of a knight is the highest manifestation of devotion, courage and valor (which were the virtues of ancient heroes (arete)) in the implementation of outstanding actions. But it is also a self-sacrifice that corresponds to the spirit of the age.

Dr. Earle F. Zegler writes: "In general, the theology of the church prevailed during this period, but there were differences between the existing variations of theism, deism, pluralism and humanism, a state that has survived to this day. Thus, there was a constant need to train professional soldiers who helped solve their country's political problems, dissonances, often associated with major religious dictates. Then, to be a knight, the absolute requirement was to provide the most achievable physical training. Even today, in a still controversial world environment, servicemen strive for the highest levels of skill, strength and endurance, like the male counterpart of the Middle Ages" [39, p. 284].

Each historical epoch forms its own models of world consciousness, in the categories of which culture represents its own meaning. Thanks to such a "categorical grid" people perceive reality and build an image of the world that exists in consciousness.

As the philosopher Kyrychok O. notes, in this "grid of coordinates" in both the Western and Eastern European Middle Ages, the categories of chivalric culture not only occupied a prominent place, but also "laid the foundations of secular ethics" in general. " In addition, the researcher

identified two groups of categories, which, as he emphasizes, "were a complex mosaic woven from categories drawn from different sources." To the first he refers those who "originated in the depths of military formations and were inherent in knightly cultures from the very beginning of their existence." This group has virtues – "valor", "loyalty" and "honor". To the second, the philosopher refers to the categories, as he believes, "borrowed" from outside "in other cultural worldviews, among which the main one is Christianity". To this group he refers – "mercy", "humility", "courtesy", "knightly love", etc. [8, p. 39–45]. That is, the qualities of piety, cruelty, fidelity, heroism and love come to the fore.

**3.4.** The fourth stage is the period of the Renaissance and the Enlightenment. With the advent of the Renaissance, the ideals of antiquity were revived, and physical education was perceived as a necessity. At this time, physical education is included and used in the curriculum. Of course, the idea of sports in ancient times influenced the development of modern thought.

The humanistic model of education that corresponded to the Renaissance was a creative idea. Its purpose was to create a comprehensive developed man, "homo universale". In the XIV century the principle of embodiment of "humanistic ideas" was formulated. The movement of humanism gradually developed and spread, and its practice was not in doubt. Also characteristic of this period is the principle of anthropocentrism, ie the dominance of worldview, according to which man is the center and goal of the universe.

The famous thinker of this period – Erasmus of Rotterdam [23], who lived in the midst of European humanism, adopted his first scientific principle: "Return to the sources!". For this reason, the works of ancient writers were published. Erasmus's educational case consists of a humanistic-scientific production. Working on this, Erasmus summarizes the conditions of quality education: good teachers, useful curriculum, good pedagogical methods and attention to personal differences (individual capabilities) of students.

Defending his principles, the scientist promoted the importance of children's moving games, which he wrote in a separate chapter of his treatise "On the decency of children's customs" (1530). He considered it necessary for children to play ball, balls, gymnastics, running. Erasmus, like many other members of the Renaissance, emphasized the moderate burden on children, taking into account their age and individual characteristics [16, p. 273].

The French philosopher Michel de Montaigne, known for his works, was a lover of literature, determined, attentive and balanced. To strengthen the health of students, Montaigne recommends physical education. He says that playing for a child is a serious activity and should be treated accordingly: "Even games and exercises will become an integral and significant part of learning: I mean running, wrestling, music, dancing, hunting, horseback riding, fencing. I want the education, secularism, appearance of the student to be improved together with his soul. After all, they educate not one soul and not one body, but a person; it cannot be divided in two. And, as Plato says, one cannot bring up both separately; on the contrary, it is necessary to control them without making a difference between them, as if it were a pair of horses drawn in one drawbar" [14, p. 384]. Teaching and reading works of classics Montaigne recommended to alternate with dancing, games, wrestling, ie education of a comprehensively developed personality.

One of Vittorino da Feltre's humanists saw the upbringing of adolescents and the support of poor but talented children at home as the most enjoyable goal of his life. He "for the first time balanced the teaching of scientific disciplines with gymnastics and all kinds of noble physical exercises – for all schoolchildren equally" [3, p. 136]. According to ancient Greek concepts of upbringing, he argued that the benefits could be provided by the upbringing of body and soul through daily exercises such as swimming, horseback riding, and the generation of love of nature through hiking; he also stressed the importance of games and tournaments.

The German humanist Joachim Camerarius, who ran an academic gymnasium in Nuremberg, is also important for the development of physical education. Engaged in systematic physical culture at the school where he worked, the scientist wrote his work "Dialogus de Cymnasis", which deals with the pedagogical and ethical values of Greek gymnastics. In this paper, he emphasized practices such as mountaineering, running, wrestling, swordplay, jumping, stone throwing and games, which were practiced by specially selected children according to their age and physical abilities and all under the supervision of experienced teachers [36, p. 363].

No less interesting is the work "De arte gymnastica" [35] by the Italian scientist Jerome Mercurialis, first published in Venice in 1569. The first part of the gymnastics included a definition of ancient Greek gymnastics and an explanation of the actual terminology, while the second part contained

precautions against the potential harm of exercises practiced in the absence of a doctor or teacher. Moreover, he separated gymnastics, which was practiced for health reasons, from military gymnastics.

The Enlightenment period dates back to about 1680 and 1770 or even 1780. At this time, science has developed into separate disciplines, literature has become an independent subject and it was required that history also become independent. The ideas and epitome developed before were eventually realized during this period. Educators emphasized the importance of physical education, which appealed only to the aristocracy in the Renaissance, recreating the education system of ancient times.

John Locke was a leading figure in this new intellectual movement and a popular political philosopher in the first part of the 18th century, who emphasized the need for education. His work, *Thoughts on Upbringing*, emphasized the importance of a child's health, advising children to learn to swim and keep fit. Moreover, Locke noted that activities such as dancing, swordplay and horseback riding are important to the gentleman and that education should be filled with play [11].

Jean Jacques Rousseau in his treatise "Emile" wrote about education according to "natural" principles [22, p. 576]. In this work, Rousseau argued that people should learn from nature, people or objects and expressed his views on the upbringing of children and adolescents. Rousseau believed that children should be allowed to develop and learn according to their natural inclinations. The above education was called "natural education" of the public or "education that will create natural people." Emil exercised early in the morning because he needed strength and because a strong body was a basic requirement for a healthy soul. Running barefoot, jumping high and climbing walls and trees, Emil mastered skills such as running, swimming, throwing stones, archery and ball games [25, p. 656]. Rousseau demanded that each school have a gymnasium or area for teaching the body.

Before Pestalozzi organized his schools, there was a very important and influential movement in Germany that carried out some of the practical reforms of teaching methods proposed in Rousseau's *Emily*. These reforms have been successfully implemented in some experimental schools, one of which has continued for more than a century [32, p. 191–202]. Proponents of this movement called themselves "philanthropists" or philanthropists (lovers of people), consider their ideal of providing education for citizens.

They emphasized the regulation of classes in such a way as to provide students with ideas of "pleasure and joy" and greatly contributed to the improvement of "play" and "sports" in education.

The pioneer of the charity movement, Bazedov Johann-Heinrich-Bernhard, believed that the decency and security of the state are proportional to the happiness of the public and that the safest way to achieve this is through education [32, p. 191–202]. He emphasized the practical knowledge of intellectual training and athletics, insisting on frequent breaks. He also suggested teaching languages not through memorization, but as a game. Following the example of the agonistic culture of ancient Greece, he promoted pentathlon from the Dessau school, which consisted of a quintet of exercises: running, jumping, climbing, balance and exercise. He also recommended folk exercises – wrestling, ball games, rowing, swimming and hiking. It was the first public school (philanthropy in Dessau) with regular physical education classes. Emphasizing its research, the school founded modern gymnastics with the first school teachers of physical education.

Johann Christian Friedrich Guts-Muts attended Salzmann School. Having gained invaluable experience and advanced in gymnastics, he improved it, turning it into a full-fledged system. He based the theory of gymnastics on physiological factors and pointed out the benefits of gymnastics for body and soul from a national and aesthetic point of view. J. Guts-Muts had very important ideas about games and their significance [34].

The concept of gymnastics and the people who contributed to its development in the nineteenth century were laid out by J. Guts-Muts and Gerhard Wist in Germany and received a methodological approach developed by Pestalozzi in Switzerland. Friedrich Jan, who introduced gymnastics to the public by separating it from parish schools, is recognized as the father of gymnastics [Turnvater]. And already F. Amaros, who acted in accordance with the foundations supported by Pestalozzi, was influenced by Jan and emphasized military gymnastics, dividing gymnastic practices into different disciplines.

Johann Heinrich Pestalozzi defined education as "the natural, progressive, harmonious development of all human strengths and abilities." Communicating the new concept of gymnastics, Pestalozzi discusses "Natural Gymnastics", following the order that corresponds to children's development. Believing that skillful, experienced, daring and successful

young people can develop only on the playing field, not in schools, Pestalozzi tried the "Step-by-Step Principle" – a method of systematic practice of known and trusted movements [17, p. 28].

Friedrich Ludwig Jan, known as a pioneer of gymnastics in Germany, drew a lot of information from the ideas of Bazedov and Guts-Muts. He introduced the use of equipment in gymnastics, such as parallel bars, horses and rings. Jan's goal was to develop a generation of students who had the strength of the body and could lay down their lives for their country, swim well, use the sword, jump, run and fight. According to him, gymnastics could be performed only in the fresh air in the presence of the community, so even in the smallest settlements should be set aside space for gymnastics [37, p. 159].

The early form of gymnastics was invented by Per Ling, the father of Swedish gymnastics, whose work was later continued by his son Jalmar Ling. Part of the Ling system, called pedagogical gymnastics, consisted of "daily gymnastic training", which showed how to teach and perform gymnastics [9]. Ling observed the social and economic structure of his country and created a new system based on physiological science. The purpose of the system was to provide harmony and harmony to the body and it was not intended to have any effect other than therapeutic effect.

**3.5.** The fifth stage is the information revolution and current trends in sports. The emergence of the public sphere, in which people mix social levels and challenge the political and economic issues of today, formed, according to J. Habermas [5], one of the foundations of modern social structures. As we know, in the XIX century in England formed a modern understanding of sport (English sport, derived from the French French disport – "leisure", "entertainment"). At this time, international sports organizations were formed, and Baron P. de Coubertin realized his plan – the restoration of the Olympic Games on the basis of his philosophy of Olympism.

With the development of mass media, sport reaches a new level, on a global scale. In the 40's and 50's of the XX century, television developed, which allowed to reproduce sports events for a large audience. In 1936, the Olympic Games in Berlin were transmitted by cable to television stations in Berlin and Leipzig, where the public could watch the games live. Later, color television appeared, which improved the enjoyment of the picture and could attract the attention of an even larger audience of sports fans.

With the advent of the World Wide Web, the structure of sport has expanded significantly, sport is becoming global, the concept of sports culture is being formed. That is, sport, at least in its socio-philosophical sense, reaches a new level and it is understood not only as an instrumental value, but as a self-sufficient cultural phenomenon, cultural practice.

"Medicalization, digitalization, globalization have opened new horizons for sports and athletes. And again, in the language of Michel Foucault, they articulated the configuration of body, power and knowledge characteristic of the sport of the last century" [7, p. 8].

In general, the modern era can be called the "era of sports", because the latter took a prominent place in society. It is no coincidence that this phenomenon is one of the important elements of the value system of modern culture, and in some cases even a mirror of public life. Sport is an important element of modern society, which has a huge potential for positive impact not only on health, physical perfection, but also on the spiritual world, human culture, its worldview, emotions, moral principles, aesthetic preferences, and the relationship between people, because sport is a cultural practice. According to Fedya V., "cultural practice expresses worldview traditions in such modes of existence as space, time, movement, formation and verification of cultural creativity in materialization, material subjectivity, artifacts as an object and spiritual" body of "culture". After the last parliamentary elections, Volodymyr Borodyanskyi, the Minister of Culture, Youth and Sports of Ukraine, said: "We are used to considering sports as something secondary, but it is part of culture, a model of behavior and an element of inclusion in society." This thesis clearly emphasizes what has been said [38, p. 173–176].

### 4. Conclusions

Analysis of the problem shows that the main driving force that determines the social and biological vectors of human development is associated with the satisfaction of a number of personal needs. Man interacts with the environment, especially through the implementation of their requirements.

This analysis leads to the conclusion that the social mechanism of self-development of physical culture is manifested in dialectical unity, on the one hand, the competitive activities of people to meet different needs in the use of exercises, and another – public evaluation of such activities.

Each cultural and historical epoch, in accordance with the formed type of worldview, forms the structure of physical education and sports culture.

In accordance with the demands of the time and the reformatting of society, the physical education tradition was formed and modernized according to the axial principles of development of each epoch. This can be manifested through the inclusion of such activities in existing socially significant events. Or it can be formed on the basis of specific features. The approach described above can be one of the concepts of the development of physical culture and sports, which ensures its development in the complex and contradictory conditions of the historical evolution of society. It reveals the nature of the development of physical culture and sports, which is caused by the social system and its temporal and spatial dimensions.

Having come a long way of finding and improving, sports in the XXI century will develop much faster and more powerful, and its main large-scale task will be to care for recreation and human health in the wake of economic globalization of the information society.

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