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# PHYSICAL CULTURE OF THE MOUSTIERIAN ARCHAEOLOGICAL ERA

## CULTURA FÍSICA EN LA ERA ARQUEOLÓGICA DE MUSTIER

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ABSTRACT

Archaeologists date the Mousterian era to the historical period of 80-32 thousand years BC. It was at this time that the vast expanses of the Eurasian continent were explored by the extinct genetic branch of Homo - the Neanderthals. For a long time, the latter were considered to be the predecessors of modern homo sapiens, but new genetic data suggest that representatives of both species coexisted and shared common territories in Europe and Asia. The age of the classical Neanderthal is 80-30 thousand years BC, and the brain volume ranged from 1350-1700 cm3. This feature leaves no doubt that Neanderthals were a cognitive society, but it should not be taken to mean that they were smarter than modern humans. The intellectual potential and reflexive capabilities of Neanderthals allowed them, in this historical period, to perfectly adapt to life in the temperate climate zone, where there were cold and warm seasons throughout the year, geological and natural disasters, intra- and interspecies competition (clashes with representatives of the first people who immigrated from the African continent), etc. To have existed on planet Earth for 200,000 years, to have “written” their history, and to have left behind more questions than answers. What was the reason for the end of their evolutionary path; whether “cavemen”, as Neanderthals are sometimes called, could create stable foundations of their own civilization and culture; whether two species of Homo interbred with each other - this is not the whole list of questions that confuse the minds of modern scientists. Therefore, in this article, based on the analysis of the data of modern official science, we will try to prove that the community of classical Neanderthals, which during the Early and Middle Paleolithic created stable special aspects of its civilization: socio-political organization, economy and culture, common spiritual values and ideals, mentality (worldview) and morality. If material and non-material artifacts confirm this prognostic and theoretical idea, we can confidently state that physical culture could have originated in the bowels of the Mustier civilization.

Keywords: Civilization, Culture, History of physical culture, Physical culture, Neanderthals, Mousterian culture.

RESUMEN

Los arqueólogos datan la era de Mousterian al período histórico de 80-32 mil años a. C. Fue en este momento que las vastas extensiones del continente euroasiático fueron exploradas por la extinta rama genética del HOMO - los

neandertales. Durante mucho tiempo, estos últimos se consideran los predecesores del homo sapiens moderno, pero los nuevos datos genéticos sugieren que los representantes de ambas especies coexistieron y compartieron territorios comunes en Europa y Asia. La edad del neandertal clásico es de 80-30 mil años a. C., y el volumen cerebral oscila entre 1350 y 1700 $cm^3$. Esta característica no deja dudas de que los neandertales eran una sociedad cognitiva, pero no debe considerarse que eran más inteligentes que los humanos modernos. El potencial intelectual y las capacidades reflexivas de los neandertales les permitieron, en este período histórico, adaptarse perfectamente a la vida en la zona climática templada, donde hubo estaciones frías y cálidas durante todo el año, desastres geológicos y naturales, competencia intra e Inter especie (enfrentamientos con representantes de la primera gente que emigró del continente africano), etc. Y haber dejado atrás más preguntas que respuestas. ¿Cuál fue la razón del final de su camino evolutivo? Si a veces se llama a "hombres de las cavernas", como a veces se llama a los neandertales, puede crear cimientos estables de su propia civilización y cultura; Si dos especies de HOMO se cruzan entre sí, esta no es la lista completa de preguntas que confunden las mentes de los científicos modernos. Por lo tanto, en este artículo, basado en el análisis de los datos de la ciencia oficial moderna, se trata de demostrar que la comunidad de neandertales clásicos, que durante el Paleolítico temprano y medio crea aspectos especiales estables de su civilización: organización sociopolítica, economía y cultura, valores espirituales e ideales comunes, mentalidad (visión del mundo) y moralidad. Si los artefactos materiales y no materiales confirman esta idea pronóstica y teórica, se puede afirmar con confianza que la cultura física podría haberse originado en las entrañas de la civilización mustista.

Palabras clave: Civilización, Cultura, Historia de la cultura física, Cultura física, Neandertales, Cultura mousteriana

## INTRODUCTION

The first representatives of Neanderthals appeared on the European continent during the last interglacial period, at the turn of 200-150 thousand years BC. This period is defined by archaeologists as the Middle Paleolithic. Today, it is an indisputable fact that there were two evolutionary lineages within the species, of which the first was called "early Neanderthals" or "pre-Neanderthals", and the second was called "classical" or "Western European". It was the representatives of the latter who existed until the 30th millennium BC and competed with Cro-Magnons for hunting grounds in Europe and Asia. For a long time, the representatives of the "cavemen" were considered to be the direct ancestors of modern humans, but as it turned out (Ibrayimovich & Ismamutovich, 2023; King, 2021; Whigham et al., 2020; Miller, 2018).

Neanderthals are an independent species of Homo. This misconception arose because the morphology of Neanderthals was very similar to that of Cro-Magnons: upright body position, elongated face, bipedal way of moving, large skull, round back of the head, etc. However, the anatomy of these two species differed significantly: Neanderthals had a low-sloping forehead, large brow bones, a large nose, wide shoulder, elbow, hip, and knee joints, wide chest and pelvic bones, short forearms and legs, hypertrophied muscles, etc.

There is evidence that Neanderthals had dark, white, and red hair. Moreover, at a certain point in history, Neanderthals and Cro-Magnons existed side by side throughout Europe and Western Asia, up to the territory of modern Uzbekistan. American scientists say that Neanderthals crossed the Bering Strait to North America via a "land bridge", leaving behind sites with the remains of their material culture. And this fact is beyond doubt, because Neanderthals led an active lifestyle in search of food, always looking for suitable living conditions. Analysis of the mitochondrial DNA of the "cavemen", which was studied by American and European scientists, indicates that Neanderthals are an independent branch of the evolution of higher hominids.

During their heyday 80-35 thousand years ago, about one million representatives of the classical Neanderthals lived in Europe. They used homemade tools and weapons (about 60 types of various tools are known), the manufacturing technique of which was fundamentally different from that used by the Cro-Magnons. In their life, they were guided by the biological cycles of animals, and immigrated together with the latter, since hunting was the main way to provide the whole family with food, so they learned hunting theory from the very childhood. The low temperatures of European winters forced Neanderthals to sew clothes from animal skins to protect them from wind and cold. The above aspects of Homo neanderthalensis' life and the ability to express their thoughts in a primitive language indicate the high cognitive and reflective nature of their society.

Therefore, we will try, through the paradigm of modern archaeological and historical research, to prove the existence of civilization in the Mousterian culture and answer the question, of recreating historical consumerism, whether physical culture could have been founded as an independent activity in the Neanderthal society. When writing textbooks for the subject "History of Physical Culture",

Ukrainian and foreign authors use ancient facts as the basis for didactic information.

I. Bakiko, V. Dmytruk, N. Dolgova, L. Kuhn, N. Pangelova, S. Fil, O. Shkola, M. Solopchuk and their team of authors argue that physical culture originated only in the society of intelligent people - Cro-Magnons, leaving out Neanderthals (Bakiko & Dmytruk, 2013). More than ten years ago, in a scientific article, based only on their intuition, the team of authors Serhii Lazorenko, Nina Kulyk, and Mykola Chkhailo tried to theoretically prove the existence of Neanderthal physical culture (Shkola, 2013; Lazorenko et al., 2015).

But since then, new historical, archaeological, genetic, and progressive scientific information has emerged that details the entire life course of Neanderthals from birth to death (Solopchuk et al., 2016).

## MATERIALS AND METHODS

The methodology of this study is aimed at a comprehensive study of the physical culture of the Moustier archaeological era. The main objective is to prove the existence of stable aspects of Neanderthal civilization, including sociopolitical organization, economy, and culture, shared spiritual and moral values, worldview, and morality.

Examination and analysis of existing literature and scientific publications on the topic of the Moustier era and Neanderthal physical culture.

Using data from archaeological excavations, genetic studies, and anthropological research.

Archaeological method:

Analysis of artifacts found in archaeological excavations of the Mustier culture.

Examination of tools, implements, jewelry, and other material objects that may indicate Neanderthal physical activity and culture.

Anthropological method:

Examination of Neanderthal skeletons to determine the physical activity associated with their lifestyle.

Analysis of food remains to understand diet and associated physical activity.

Comparative method:

Comparing Neanderthal physical culture data with that of Cro-Magnon and other ancient human species.

To analyze similarities and differences in physical activity and culture between different human populations.

The methodology of this study involves a comprehensive analysis of data from various sources to prove the existence of physical culture in the Moustier era. An integrated approach, including literary analysis, archaeological and anthropological methods, and genetic analysis, allows for a deeper understanding of the physical culture of Neanderthals and their role in the development of early human civilizations.

## RESULTS AND DISCUSSION

Civilization is a human community that over a long period (the process of origin, development, death, or its transformation) has stable priority features of socio-political structuring (stratification of society into classes), economy, and culture (science, technology, art, etc.), common spiritual and moral values and mental socio-cultural phenomena. Civilization is formed as a certain model of the social behavior of an individual and the corresponding structure of social institutions.

Culture - (lat. “cultura” - to cultivate, to handle) - a set of material and spiritual values created by mankind throughout the history of its existence, a historically acquired set of moral foundations within society for its preservation and further development based on humanization and harmonization. The word “culture” literally means cultivation, care, and improvement. It was first recorded in the work of the famous Roman politician and writer Marcus Porcius Cato the Elder (234-149 BC) “On Agriculture” (Latin: De agri cultura), dedicated to the concerns of a landowner who cultivated land using slave labor. The concept of “culture” today is a synthetic term that combines the achievements of science and technology, education, art, literature, morality, way of life, and worldview (Lazorenko, 2023).

Civilization and culture - the difference between these two definitions was first stated by the famous German philosopher Immanuel Kant (1724-1804), who argued that culture serves the spiritual development of society is inherently humanistic, and promotes self-realization of the individual. On the contrary, civilization creates the conditions for the free and spiritual development of a person. Since it is devoid of everything spiritual, civilization eventually creates the danger of self-destruction of all living things (Kiun, 2021).

But today, these two terms are synonymous. “Civilization” and “culture” are the stages of development of civilizations when individuals conquer nature and make biological laws work in their favor. The fundamental features of these definitions include the following facts: stratification of society into classes, the emergence of crafts and writing, language to transmit information, architecture,

religion, and public morality. Using the logical research method of induction, we will try to identify the fundamental features of civilization in the bowels of the Mustier culture by monitoring the latest information on history, archeology, and genetics (Lazorenko, 2023).

Each civilization leaves behind a cultural heritage - material and spiritual values that help society develop, maintain harmony and morality within it for a long time, and adapt to environmental changes as quickly as possible. To do this, society creates an educational space where information useful for their survival is transmitted to descendants through verbal methods. Speaking of Neanderthals, the question immediately arises whether they could speak.

It was answered by the results of a study of the DNA of "cavemen", which was investigated by Peter Borger and Royal Truman from the Institute of Anthropology in Zurich (Switzerland), Svante Pablo and David Reich from the Max Planck Institute for Physics in Munich (Germany). Scientists have sequenced the so-called "language gene" FOXP2 in the primary structure of Neanderthal deoxyribonucleic acid, indicating that its mutations in the structure of their DNA could have caused the emergence of language traits (Raikh, 2019). In support of this theory, we can add the discovery made by scientists during the study of the Neanderthal skeleton from the Carmel Cave (Israel), which confirmed the presence of the hyoid bone in our "cousins", the latter allowing the formation of sound elements of speech. Indeed, the Neanderthals, exquisite masters of hunting large animals, used speech to better coordinate their actions during the hunt. And this is already considered an indisputable fact in modern anthropology.

So, if there is language, there must be a process of transmitting the information necessary for survival. In their spare time, in a cave near a fire, Neanderthals also mastered the process of making fire mechanically, older representatives taught their children the tricks of the trade in weapons and tools, hunting, house building, tailoring, religious rites and knowledge of proto-medicine (Tainio et al., 2021; Isakson, 2021; Fil et al., 2003).

Language - as a factor of the ability to win a debate, to defend one's point of view, to demonstrate outstanding physical abilities in defending one's territory, etc. led to the stratification of Neanderthal society. On the "political Olympus", there were leaders who, together with their families, had a privileged position, representatives of the clan - men, women, children, the elderly and people with disabilities, shamans, healers, sorcerers as persons who formed religious, magical, medical and educational knowledge had a special status. According to the ability to perform a certain economic activity, the Neanderthal society was divided into hunters and fishermen, artisans - manufacturers of various tools and weapons, tailors, builders, etc.

Archaeologists have found material values of the Neanderthal culture throughout Eurasia, including weapons, tools, dwellings, rock paintings, etc. Homo sapiens neanderthalensis had a sense of aesthetics; they sewed clothes from animal skins, decorating them with various bone, shell, and patterned decorations (paints were made from natural materials), and were skilled in jewelry, making various necklaces from animal teeth and bones. Such jewelry was also the embodiment of religious preferences, as it protected the wearer from evil spirits and various troubles. It is an indisputable fact that one of the first musical instruments, a bone flute with four holes, belongs to Neanderthal art.

Ancient artists were able to draw animals on the walls of caves using charcoal from hearths. Most of these drawings were informative, telling the cave dwellers about the migration of animals, their breeding periods, the duration of pregnancy of the hunted animals, etc. According to Jean-Claude Marquet of the French University of Tours, the drawings in the La Roche-Cotard cave in the Val-de-Loire district (France), dating back to 57,000 BC, are the oldest Neanderthal cave engravings.

In the Hollow Rock cave in Germany, scientists from Germany and Belgium found spearheads made by Neanderthals 65,000 years before Christ. In the later cultural layers, the tips were made of stone, and in the later ones - of bone. This information led scientists to the conclusion that the spear had a magical significance for Neanderthals. During throwing, the lenticular stone point often destroyed the shaft, as it was attached to the split of the upper end of the spear.

A modification of the bone tip had the shape of an inverted letter "igrek", and it was into this tip that the upper wedge-shaped end of the spear was inserted. And during an unsuccessful throwing attempt, it was the tip that broke, not the spear. The tips were attached to the wooden handle with tar and leather bands. To enhance their impressive power, Neanderthals used an "atlatl" - a throwing device that equalized the strength of both men and women during hunting. This fundamentally changes the idea of the status of Neanderthal women as food gatherers.

German scientists from the Romano-Germanic Centre for Archaeological Research, led by Sabine Godzinski-Windhäuser, examining the remains of deer hunted by Neanderthals (the edges of the wound of the deer's pelvic bone, which proved fatal to the animal) and recreating replicas of their weapons, concluded that the victim was killed

at close range, most likely from ambush. Archaeologists also believe that the Northern Neanderthals generally traveled with animals along their migration routes, as meat was the main product in the diet of the cavemen.

The spiritual values of the Neanderthal culture include, first of all, the harmonization and morality of their existence, religion, funeral rites, etc. Respect for elders and people with disabilities was inherent in the "cavemen". Many Neanderthal sites contain the remains of elderly people. The excavations of these sites confirm the opinion of many scientists that Neanderthals took care of children, the elderly, the disabled, and the sick (Lazorenko et al., 2015).

Among the many skeletons of this hominid species found in the Iraqi cave of Shanidar and studied by Ralph Solecki of Columbia University (USA), the skeleton of a man in his forties draws attention. Archaeologists named the prehistoric representative of Neanderthal culture Nanda. This man received numerous injuries after falling into an abyss and hitting stones. Anatomists who examined Nandi's skeleton pointed out the following facts: the man had defects from birth, his right side was underdeveloped, he lost part of his right arm from the hand to the elbow in childhood, and suffered from arthritis throughout his life.

Nandi had suffered numerous head injuries and had a sore right eye. But his family did not abandon him, because Nandi was a burden to them from the point of view of animal instinct. The care of the healthy allowed the man to live to the age of forty, which is a very old age for Neanderthals. In those distant times, not many people managed to live to a ripe old age. In another burial from the Shanidar Cave (Iraq), a skeleton was found with a rib injury from a sharp object, which scientists believe was an ancient weapon and the owner of the skeleton died in a paramilitary conflict, defending his territory, hunting grounds or his own home (Kiun, 2021).

The findings in the Shanidar cave testify to the primitive medicine, or perhaps not primitive for those times, used for therapeutic and orthopedic purposes by the classical Neanderthal. Eliminating bowel disorders, relieving pain, reducing fever, extracting teeth, and even amputating limbs, etc. were all treated by shamans of the Mustier era. They also knew herbal medicine. While studying the DNA of ancient European inhabitants from the caves of Spey (Belgium) and El Cidron (Spain), an international team of scientists led by Laura Weirich and Alan Cooper from the Australian Ancient DNA Centre at the University of Adelaide found DNA remains from poplar (Populus trichocarpa) bark, which is high in salicylic acid, the precursor of modern aspirin, and willow (Salix alba) bark, a decoction of which was used as a painkiller by ancient people. Therefore, scientists have concluded that classical Neanderthals knew about healing with the help of herbal medicines or plants themselves (Panhelova, 2007).

According to an article published in the Journal of Human Evolution, in 2010, during the excavation of an ancient site in Poland, scientists discovered two Neanderthal teeth: an upper premolar and a third lower molar, the wisdom tooth. Dental measurements of the upper premolar and radiocarbon dating helped experts to establish that it once belonged to a Neanderthal man aged 30, who brushed his teeth with a wooden toothpick 46,000 years ago.

This fact indicates a conscious understanding of the positive impact of hygiene manipulations on the individual health of ancient people. "It seems that the owner of the tooth was good at oral hygiene. We don't know what the toothpick was made of, but it must have been a rather hard cylindrical object that the Neanderthal used often enough to leave a clear mark," explains archaeologist Violetta Nowaczewska from the University of Wroclaw. Further analysis of mitochondrial DNA confirmed that the tooth belonged to a Neanderthal, and the large grooves in the tooth were most likely the result of frequent use of a toothpick.

A few years ago, similar results of oral hygiene were found on Neanderthal teeth in other parts of Europe. In 2013 in Spain, and 2017 in Croatia, researchers found traces of brushing and chiseling on the teeth of representatives of the Mustier culture, which may have been the way ancient people tried to relieve toothache.) "Everyone knows what dental problems are," says David Freyer, author of the study from the University of Kansas, "and the scratches on the tooth clearly show that this Neanderthal was using something in his mouth to get to the damaged premolar and relieve the pain. But unfortunately, no one has yet managed to find toothpicks at ancient Neanderthal sites, and yet we agree that the extinct civilization used them."

"A toothpick is an inconspicuous and simple object - one of the most convenient and ready-made tools at a person's disposal, requiring no parts for assembly, maintenance or instructions for use," summed up engineer Henry Petroski.

It is not surprising that Neanderthals buried their relatives for a reason, and there was a whole ritualistic ceremony. This is confirmed by a burial in the cave of La Chapelle aux Saints in France, where scientists found a skeleton covered with a red cloth in the grave. Flowers, tools, and food (eggs and pieces of meat) were left next to the body.

This fact indicates the beginning of the emergence of religious knowledge and belief in the afterlife. In the Shanidar

cave mentioned above, the burials of a man, two women, and a child were found, decorated with flowers typical of May in the area, the dead lying on pine needles and covered with leather blankets. This confirms the fact that the living Neanderthals had a deep respect for the dead. Modern psychologists see the leitmotif, the origin of religious beliefs in any society, in various phobias (fears). Neanderthals were no exception to the general context, for whom most natural facts and phenomena were not rationally justified, which led to the emergence of the following proto-religions in their minds: animism - everything in nature has a soul.

Totemism - Neanderthals believed that their families had an animal ancestor or ancestress, so they all differed because of different ancestors; magic - beliefs in which, through certain secret and mystical rites, supernatural forces could be made to help Neanderthals; anthropomorphism - giving incomprehensible phenomena and things features similar to their own.

As for the evidence of the Neanderthals' ability to build homesteads, information on this issue can be found in the doctoral dissertation of the American scientist Paola Villa, who dates to the Neanderthal period a plague of bones and skin of large animals and a fire pit on which food was cooked, discovered in Nice (the archaeological site of Terra Amata) by Henri de Lumley in 1966. This place was very convenient, as it had a constant source of food in the form of large colonies of marine mollusks (oysters, mussels) in the offshore zone of the Mediterranean Sea. Terra Amata is an archaeological site that has now been turned into an open-air archaeological museum.

It is located on the slopes of Mount Borin in Nice at a level of 26 meters above the current sea level (Villa, 1983). The study of the Balzi-Rossi caves in Italy by Julien Riel-Salvatore of the University of Colorado and his colleagues provided evidence of the division of Neanderthal housing into three "zones" of comfort. In the first one, in the upper part, there was a "kitchen", as evidenced by animal remains found in this zone and traces of ocher, which was used in the process of leather processing, as glue, and as an antiseptic. The second zone, which was the most spacious, was used for a hearth that heated the sleeping area. The third area was the "workshop" where stone tools were made, as it had the most sunlight necessary for the production process.

The architectural abilities of Neanderthals are evidenced by archaeological research conducted at the sites of the Bukovina region, which is located in Ukraine and Moldova. The dwellings made of animal bones and skins were not stationary, as Neanderthals in these territories led a nomadic lifestyle, hunted animals, and did not stay more than a few weeks at one site. Fireplaces in such dwellings were surrounded by stones, as uncontrolled use of fire often led to fires, as evidenced by the charred bone skeletons of such dwellings.

Therefore, the above-mentioned relevant data of modern scientific research give grounds to state the existence of an independent evolutionary branch of higher hominids - the Neanderthals - in the bowels of the Mousterian culture, which was created and maintained in a permanent state for 200,000 years. Therefore, the idea that Neanderthals were an intermediate link in the overall evolution of homo sapiens is wrong. The anthropogenesis of Neanderthals had its own biological, psychological, and socio-cultural algorithm.

## CONCLUSIONS

In conclusion, I would like to tell an interesting scientific parable. Many years ago, the world-famous American anthropologist Margaret Mead (1901-1978) asked her students what they considered to be the first sign of civilization. The students expected the professor to tell them about fish hooks, clay pots, or processed stones.

But no, M. Mead said that the first sign of civilization in ancient culture was a femur that was broken and then fused. She explained that if a living creature in the natural world breaks a leg, it becomes an object that immediately turns into a sacrifice. With a broken limb, even a predator or a fast-moving gazelle cannot escape from danger, get to the river to drink, or eat properly. It becomes prey for predators, as the bone takes a long time to fuse up. A femur that has been broken and then fused is proof that someone took the time to stay with the person who sustained the injury, bandaged the wound, carried the person to safety, and guarded them until they recovered. Helping another person during a difficult period is the act that begins civilization," said Margaret Mead (Danyliuk, 2013).

The above-mentioned relevant facts make it possible to state that Neanderthals created their own culture and had a level of development corresponding to proto-civilization. Therefore, we have answered the question we posed and can state with a high degree of confidence that physical culture originated in the bowels of Neanderthal society, regardless of whether it was Cro-Magnon, as most physical education scholars believe. Like the Cro-Magnons, Neanderthals prepared for hunting in advance, and according to Salomon Reinach, this action was a progressive platform for the foundation of physical culture, a process of improving motor skills and abilities and eliminating unnecessary locomotion. Thanks to physical culture, Homo

sapiens neanderthalensis lived on our planet for more than 200,000 years, overcoming climatic adversity (they lived in the Ice Age), competition from large predators (saber-toothed cats, cave bears, rhinos) of another Homo sapiens species - the Cro-Magnon.

They left behind informative material artifacts of their own culture, from which scientists are now forming a holistic picture of the lifestyle of "cavemen", including the physical one. Practical reflection made the Neanderthals treat their initial training with deep responsibility. For a certain type of production, adequate muscle groups, skills, and abilities were required to be developed to obtain a quality product. This is indicated by Neanderthal skeletons, which have a natural anatomical deformation of individual bones.

The "tailors" had enlarged bones of the hand, as it was difficult to pierce animal skins with a primitive needle, and the deformed forearm indicates that the individual physically worked breaking large animal bones and extracting bone marrow, which was used as a foodstuff and for making ancient glue. Hunters generally had hypertrophied muscles of the entire skeleton, as they hunted, sometimes fought with wounded large predators, threw heavy stones at mammoths driven into a cliff, etc. A system of systematic and coordinated physical exercises helped the ancient representatives of the Mousterian culture to develop their muscular system and form the skills and abilities necessary to perform hard physical labor.

The most important thing about the physical culture of the "cavemen" is that in Neanderthal society, the achievements of physical culture could be used by all members of the family without any restrictions or exceptions. The life of the future generation and representatives with disabilities depended on coordinated and effective actions during hunting, in which all adult Neanderthals, both men and women, participated. Therefore, the rationalization and efficiency of hunting, which was learned, so to speak, "with the mother's milk", was fully ensured by motor actions, which already in the era of the "classical" Neanderthal took shape as an independent specific aspect of the general Mousterian civilization - physical culture.

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