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THE BODY AND ITS SEMANTIC VALUE FROM ANTIQUITY TO THE PRESENT DAY

IL CORPO E IL SUO VALORE SEMANTICO DALL'ANTICHITÀ AI GIORNI NOSTRI

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Abstract
In the educational field, the body has always been at the centre of numerous reflections and the current overcoming of dualism mind body is the result of a long and discontinuous path that has seen the succession of periods characterized by a strong enhancement of the body to others characterized, instead, by a greater attention to the more ascetic and spiritual aspects of the human being, In some cases even denying the body aspect. Here, the paper moves from an analysis of the body, the educational models and their implications in the motor field and highlights the need to think about the relationship mind body even in a didactic context. The recent theories, supported also by the discoveries coming from the cognitive neuroscience, underline just as our cognitive processes are not independent, but strongly interrelated with the perceptive and motor systems, soliciting the didactic research-educational to investigate the role of the body within the process of formation of the person, trying to enhance the connections between mind and body to foster a more conscious and participated learning. These considerations open up the possibility of thinking about teaching and socio-educational intervention from new perspectives such as the embodied approach. It is necessary to continue to investigate the educational action from various angles by recognizing the body a fundamental role also in the learning processes.

In ambito educativo il corpo è sempre stato al centro di numerose riflessioni e l'attuale superamento del dualismo mente-corpo è il risultato di un percorso lungo e discontinuo che ha visto il susseguirsi di periodi caratterizzati da una forte valorizzazione del corpo ad altri caratterizzati, invece, da un'attenzione maggiore verso gli aspetti più ascetici e spirituali dell'essere umano, negando in alcuni casi anche l'aspetto corporeo. In questa sede, l'elaborato muove da un'analisi del corpo, dei modelli educativi e le relative implicazioni in ambito motorio e mette in luce la necessità di pensare al rapporto mente corpo anche in un contesto didattico motorio. Le recenti teorie, supportate anche dalle scoperte provenienti dalle neuroscienze cognitive, sottolineano proprio come i nostri processi cognitivi non siano indipendenti, ma fortemente interrelati con i sistemi percettivi e motori, sollecitando la ricerca didattico-educativa ad indagare il ruolo del corpo all'interno del processo di formazione della persona, cercando di valorizzare le connessioni tra mente e corpo per favorire un apprendimento più consapevole e partecipato. Queste considerazioni aprono alla possibilità di pensare alla didattica e all'intervento socio-educativo da prospettive nuove come per esempio l'approccio embodied. Risulta necessario continuare ad indagare l'agire educativo da varie angolazioni riconoscendo al corpo un ruolo fondamentale anche nei processi di apprendimento.

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Parole chiave: body, dualism, neurosciences, physical education, learning
Keywords: corpo, dualismo, neuroscienze, movimento, apprendimento

1. Introduction

The term corporeity comes from the medieval Latin "corporeitas", derived from "corporeus", body, indicates having a body and also being body, because it is precisely through the body dimension that it is possible to reach every reality and dimension of the person. Man, and his history have seen the succession of periods of celebration of the body to periods of devaluation placing much more interest on the spiritual perspectives of human existence that have, in the most extreme cases, denied the bodily dimension, concept within a dualistic mind-body approach. The reflection on this mind-body relationship has opened a debate that has led a good part of philosophy to give greater importance to the spiritual aspect and to consider corporeality as a marginal component (D'Elia, 2011). However, recent scientific research in the field of neuro-cognitive stress and show that cognitive processes are not independent but closely connected to motor and perceptive systems. This new perspective opens up new research scenarios, in the field of education and teaching, aimed at enhancing these interconnections to foster a more conscious and participatory learning (Frauenfelder, 2018). Teaching research, thanks to the support of a plurality of scientific fields, in recent decades has contributed to breaking the rigidity of some areas of research traditionally regulated by well-established theoretical systems and experimental practices. It is clear how a strong link between science and art, between pedagogy and teaching, between body and performing arts emerges to this day (Welsh & War, 2015).

2. The body in the ancient age

The educational model developed in Sparta, in the tenth century BC, conceived education as a means through which to prepare children for military activity: physical education had the aim of fortifying bodies. Each individual, male or female, sacrificing his personal aptitudes, was completely subordinate to the State that provided for his military formation. Women were also subjected to physical exercises that should have made them capable of generating healthy and robust offspring (Marrou, 2016). As for Athens, instead, the aretè represented the ability to excel in something and, in the motor-sports field, did not assume the warlike characteristics that characterized the conception of the Spartans. The Athenian people, in fact, focused on the value of the athlete, thus developing an educational model based on athleticism and preparing the boys to kalokagathia: ideal of perfection that combines in the same person aesthetic beauty and moral value (Sibilio, 2008). Despite what has been said, Plato's philosophy considered the body and the soul as two distinct substances, independent, requiring the passage from the material, symbolic and objective dimension of an ideal (Galimberti, 1987). Even Aristotle, while adopting an anti-dualist approach, considered man as the set of two elements: the body and the soul. According to this perspective man had to be made of a material substrate that was pure formless possibility represented by the body and a non-material principle called form (Russo, 2011).

The Hellenic conceptions greatly influenced the Roman educational model. The Romans, in fact, developed an extreme and paradoxical conception of the body characterized by spectacular and bloody motor practices, in the amphitheatres, and health-recreational, in the baths. Only later, around the III-II century B.C., did the latter reduce any excessive celebration of the body, resize the motor practices and activities aimed at corporal education, thanks to the advent of the new stoicism. This current focused not so much on the development of physical perfection as on the conquest of moral values (Sibilio, 2001).

During the Middle Ages the spread of Christianity produced a general devaluation of corporeality and of all that concerned it, in order to privilege in every context the spirit, as a dimension of participation in the divine through faith. In these years all those activities, including sports, were eliminated, in which behaviors and values were observed in antithesis with the Christian message. Man, created in the image and likeness of God, could not make excessive and lascivious use of his own body (Ulmann & Di Donato, 1967).

3. From Humanism to the overcoming of mind-body dualism

The enhancement of the individual in its unitary dimension of soul and body began with the advent of Humanism. In this period, in fact, people began to talk about humanistic education because man came to emerge in his physical, psychic, cultural and spiritual integrity witnessing a real revolution that involved many aspects including the school. Gymnastics was conceived as the foundation of the education and training of the physical and not as a means of preparation for war: it was believed that the body fortified by the exercises was better prepared for study and the fulfillment of duty, The well-formed spirit could discipline the body. In addition, there was the birth of pedagogical gymnastics intended as a formative moment of the person and the spread of the games of the medieval tradition such as tug of war, race in bags and pike throwing (Marcelli, 1975).

The profound changes that characterized Europe between the seventeenth and eighteenth centuries gave impetus to the birth of a new philosophical and scientific culture that was opposed to Humanism and that resulted, then, in the Enlightenment. In particular, two methods spread during this period: inductive and deductive. The first, starting from the analysis of sensitive experiences, aimed to arrive at a general and universal definition of the object of study; the second, moving from axioms and postulates, He aimed to derive demonstrations and explain phenomena through an analytical path. The adoption of one or the other method resulted in two different theoretical approaches, in education, different in several aspects: Rationalism and Empiricism. The first saw as the greatest exponent Renato Descartes, a French mathematician and philosopher of the seventeenth century, the second John Locke, a British philosophist and physician of the same period. The rationalist current conceived education as a tool aimed at the formation of a clear reason, supporting the clear distinction between mind and body and considering the latter a non-thinking reality and with a marginal role. The empiricists, instead, considered that the only way to access knowledge was experience through the solicitation of the senses and the body, assigning to the latter and its formation the fundamental role of a privileged channel for the education of man. In the eighteenth century, with the birth of the Enlightenment, the foundations were laid for the development of the first schools of thought on physical education. This current of thought based its roots on the idea that the human mind could be guided only by reason, thus arousing a new reflection on corporeity and movement. In this context, gymnastics began to be seen as a means by which, during the course of evolution, to develop optimal bodily conditions enabling human beings to achieve happiness and well-being. Jean-Jacques Rousseau, Swiss philosopher of the Enlightenment, He believed that physical education allowed to establish a natural relationship between man and things and motor exercises performed an educational function as able to build robust temperaments and protect the body from weaknesses and vices. The philosopher's thought greatly influenced many schools of thought born in Europe in the field of physical education (Barbieri, 2002).

4. The modern age and the new theories of corporeity

In the nineteenth century the body dimension was re-evaluated with the advent of the Romantic culture. This current focused on the enhancement of the phenomenal reality through the experience of the senses emphasizing how the body dimension was the basis of any further learning. Johann Heinrich Pestalozzi, a Swiss pedagogue and educator, attributed a strong significance to the sensory system and the perception that accompany the experiences of the movement. In this context, the value

of corporal education, *gymnastique intellectuelle*, understood as a set of activities, of actions aimed at the harmonious development of the person starting from simple movements of the head, trunk, arms, Legs, hands and feet (Pestalozzi, Becchi & Boldemann, 1974).
Physical education entered the school curriculum and became compulsory only with the development of the modern age. The latter identified itself as a specific discipline with real content and methods, was included in the school curricula, was taught by specialized teachers and in equipped places. In this context Immanuel Kant, an eighteenth-century German philosopher, introduced the concept of integral human formation aimed at ensuring the development of physical, intellectual and moral qualities. The author considered that to achieve this goal it was necessary to encourage physical education and the development of a strong temperament. In this perspective, the motor activity had to be practiced also in the developmental age to allow the subject to develop strength, speed, ability and dexterity. The achievement of a perfect physical condition represented a fundamental component to improve the moral and intellectual qualities of the soul (Barbieri, 2002).
Systemic elaboration of gymnastics was favored by the birth of numerous schools located in Europe during the first half of the nineteenth century. In this period, Friedrich Ludwing Jahn, a German pedagogue, was the greatest exponent of the German school and above all one of the most representative figures of the history of gymnastics and modern physical education by coining the term turner. German gymnastics consists of rules of conduct and at the same time, of physical exercises. Jahn also associated gymnastics with military aims to develop courage, tenacity, resistance to fatigue and pain. The development of these qualities guaranteed the construction of a perfect German community. In the field of gymnastics, traditional and folk games were also fundamental: without games, gymnastics cannot prosper (Barbieri, 2002). Pehr Henrik Ling, a physician and physiotherapist, made his way to Sweden. He said that the organism is constantly struggling with itself to find a balance between three forces: chemistry (nutrition), mechanics (muscle solidity) and dynamics (sensations and perceptions). Gymnastics, in this perspective, influenced the achievement of balance and harmony between the different components of the organism (Casolo, 2002). France, at the same time, saw Francisco Amoros as head of gymnastics. He considered gymnastics as a reasoned science of movements, of their relationships with the senses, with our intelligence and with our feelings: physical activity as a means to foster the development of all human faculties (Naccari, 2003).
In Italian territory, the conflict between the School of Bologna and that of Turin characterized the first half of the nineteenth century. In this period, Emilio Baumann, Italian teacher and doctor, a supporter of the School of Bologna attributed a formative value to physical education. According to Baumann, gymnastics had the goal of achieving perfect harmony between the parts only achievable through the development of physical, intellectual and moral qualities. This concept of gymnastics was defined as rational because it focused on all the factors involved in physical education: anatomy, mechanics of movement, hygiene, physiology, pedagogy and psychology. According to the author, gymnastics had to be: natural, characterized by spontaneous exercises, educational, collective and carried out by professors specialized in the field that is by people who had chosen to dedicate their lives to this activity and who had a complete and exhaustive knowledge. Rodolfo Obermann, Swiss gymnast of the nineteenth century, was the founder of the School of Turin and aimed at the development of a physical education of militaristic type. His gymnastics aimed to provide soldiers with a basic knowledge of gymnastics, adaptable to all types of body, and that would allow the development of strength, ease and courage. Obermann also favoured the development of women's gymnastics (Barbieri, 2002).

5. The body in the current age

The world of nature and the surrounding environment with their infinite activities places the child in a "spatiality of situation" and asks the boy's body to act in an extended space characterized by

problem-situations that continually stimulate him. George Hébert, French teacher, invented at the beginning of the twentieth century the Natural Method of Physical and Moral Education, through which the subject in outdoor, in nature could work on his own body, restoring, during a certain time, the conditions of natural life. The educational exercises, proposed by the author, were carried out by different positions and regulated in order to produce clear and defined effects on various parts of the body (Hébert, 1936). Meadows, bushes, trees, flowers, sand, fields, grass and paths qualify all space as a situation in which the continuous mobility of the subject's body is organized on the basis of concrete tasks, driven by curiosity to explore, touch, take grab, lift through perceptual coordination and motor-sense. Through activities in the natural environment the body inhabits space and time, instead of being passively inserted, immobile and closed to the future. The exercise of the movement in its various forms integrated with proposals of an interdisciplinary nature, playful, but also of observation, if guided wisely can produce catalyst stimuli for a correct relationship of respect for the natural environment and for its varied forms of life (Federici, 2015). In the same years, Georges Demenÿ, a French gymnast of Hungarian origin, draws attention to the natural movement, stressing that this activity, to produce an opportunity for the development of dynamism, must be complete in order to make the most of the possibilities of articulation, without prolonged stops, sudden stops and static efforts, carried out with a progressive speed and a rhythm proportionate to the variety of movement: harmonic. According to the author, the body must perform motor gestures refined to a work of coordination that ensure the right alternation of contraction and muscle decontraction, round, so that the segment in motion designs circles, ellipses and figures to eight. To achieve this, the movements are chained together, so as to be graceful and suitable to be performed with musical accompaniment. Demeny emphasizes the importance of breathing exercises performed immediately after the effort, in order to educate and refine the gesture through the awareness of its morphology and rhythm, to improve knowledge of the body scheme, and to increase the mastery of one's own body. Demeny outlines a scientific, functional physical education (Demenÿ, 1969).

In the 1930s, John Dewey, an American philosopher and pedagogue, proposed an individualized and active education. The author, in education, introduced the idea of starting from the ability and experience of children to come to a knowledge that included theoretical and practical notions. He, with the motto "learning by doing" thought of a school-laboratory, in which one learns through doing. It was fundamental, according to the author, that the learner participate in the school activities in an active spontaneous way. Dewey believed that laboratory practice performed several functions including: promoting learning in free cooperation with others; stimulating the autonomous discovery of problem-solving paths; Offer effective and customized responses aimed at personal improvement, growth and development of new skills; enable procedural knowledge and develop collaboration and flexibility. The educational action, according to the author, began when personal and relational skills were considered. In particular, Dewey believed that laboratory teaching laid its foundations on several principles: the aims of education are established in relation to the needs of the learner; Cooperation shall contribute to the organisation of the learner's skills and the transformation of those skills into competences. It is also important to underline that according to the author, the educational value of school activities was linked to paths that the pupil sees and recognizes as significant for himself and expendable in concrete reality. Identifying the laboratory practice in any condition was the best solution to allow each student to express themselves: the laboratory both as a physical place, organized in a functional way, and as a way of working with specific tools and methods (Dewey, 1968).

In the motor laboratory there was the perfect interaction of the "multiple intelligences" of which Howard Gardner, psychologist and American professor of the twentieth century speaks. The author used this term to indicate that there is not a single intelligence but different forms of it, each independent of the others (Gardner, 1987). Howard Gardner has developed a complex model of intelligence. The latter, according to the author, is configured as a structure articulated in multiple

intellectual forms each of which has specific skills for the solution of certain problem-situations. Gardner identifies nine different, but not exhaustive, intelligences: linguistic, logical-mathematical, spatial, musical, body-kinesthetic, interpersonal and intrapersonal, naturalistic and existential. Intelligences must be conceived as potentially useful scientific constructs and a disciplinary differentiation and articulation is necessary to grasp the totality of each individual (Gardner, 1994). In this perspective, each individual learns through forms of mental representation that are quite different from those of other companions. On the basis of these reflections, it follows that teachers have a supporting role during learning to allow the child to engage to the maximum in an activity and the school takes the aim of promoting the development of intelligences and helping the individual to to achieve objectives appropriate to its intelligence profile (Gardner, 1987). The theory of multiple intelligences has attributed a remarkable educational-formative value to recreational and sports motor activities for the ability to transfer knowledge and knowledge through the body. The kinesthetic component redefines the cognitive dimension of the body emphasizing the potential of the didactic-motor proposals. In Italy, this approach has found ample space in the drafting of the Regulations for the nursery school of 1991. For example, according to Gardner, motor intelligence, if properly stressed, can effectively support the learning of mathematical, spatial, logical and interpersonal skills. In addition, the psychologist considered the existence, also, of a body-kinesthetic intelligence capable of allowing the body to express itself, self-control, manipulate objects, orient itself in space and time, to respond effectively to motor problems that manifest themselves in the most diverse forms (Sibilio, 2002). The motor laboratory stimulates cognitive growth thanks to the integration of operative experiences of sensory, motor exploration and experiences of representation and symbolization. In Italy, thanks to the figure of Maria Montessori, Italian pedagogist of medical training of the twentieth century, the current of new education was established: education was seen as an activity that not only depends on teaching but is shaped by the activity of the students themselves. Educating in the correct way the body-kinesthetic dimension of the person, according to the scholar, predisposes the initiation of the higher functions of the child, using positively the predominance of sensory-motor activities. In this perspective the child could develop through movements, touching, manipulating, the ability to directly experience with the senses the qualities of things. The principle on which this education was based, which we could define as sensory, was that the child could not face directly all the characteristics and qualities of which the objects are composed and then Maria Montessori dismantled this complexity in its simple elements, so that the child can take on certain movements and sensations. It was a question of including in the educational project activities and exercises capable of unlocking the potential by also using the body dimension (Montessori, 1975).

Only in the sixties did the psychomotor approach develop and spread. This current of thought designated a field of intervention aimed, in particular, at the growth and learning of the child from birth up to 6-8 years of age and considered fundamental the unity between psyche and action. Psychomotor practice represented an intervention strategy to find a balance between the motor and psychic functions of the individual, through the use of motor activity. Henri Wallon, French psychologist and politician of the twentieth century, was one of the first to study the relationship between the body and the psyche, starting from the free experience of the subject, from the experimentation, the discovery and the answers that the subject provides (Wallon & Venturini, 1952). It is interesting to note that the schools of Bernard Aucouturier, Andrè Lapierre, Jean Le Boulch and Pierre Vayer, in France, have contributed to the development and spread of psychomotricity. The first two, French professors of physical education of the twentieth century, believed that through movement and muscle tone the child lives on his body emotions and feelings that are transformed into concepts and notions (Aucouturier, Darrault & Empinet, 1984). Jean Le Boulch, French physician of the second half of the twentieth century, analyzed and demonstrated how the formation of his body scheme was favored by the different motor experiences that the subject experiences and assimilates. This method, aimed at overcoming the dualism mind-body still largely present in the

teaching of physical education, was based on the pedagogical concept of unity of the individual who uses and lives the dynamics of cooperative, group work. In this conception the educator will have the task of placing the learner, in an individual or group, in front of problem-situations inherent in motor activity. Finally, Pierre Vayer, physical education teacher and French university lecturer of the twentieth century, argued that the focus of an effective learning environment centered on motor experience requires an educational action and a training context conceived for the child and related to the age and needs typical of childhood. It is essential, according to the author, to put into practice activities that facilitate discovery and knowledge.
From the analysis of these authors emerges the importance that action has on thought and vice versa. In particular, to learn with a true psychomotor approach it is necessary to abandon the pre-ordered patterns and move freely in such a way as to favor sensations and perceptions that will act effectively on cognitive and affective development. The pedagogical reflections on the body, movement, their use for educational purposes and the numerous currents of thought that have characterized the European scenario have allowed us to define the current concept of psychomotricity (Toni & Giovanardi, 2011).

6. The body and the neurosciences

In today's society, to combine the balance between mind, body and psyche contributes the concept of "wellness", in which merges the notion of fitness, good physical and mental fitness obtained through physical activity, and well-being, feel good on a psychological level, social and cultural. This concept contains an essential intent for any individual: to preserve and improve health in order to increase their well-being. All this contributes to underlining the link between body, motor practice and health (Russo, 2011). The interactions between corporeity, expressiveness and learning are now recording a change of perspective that sees the body at the center of a renewed attention. According to this approach, the body assumes the role of extensor of the brain during the learning process, becoming in all respects subject to cognition. The body contributes to underline the active role played by the subject in all training and educational processes, up to the proposal of an enactive teaching that emphasizes the cognitive component of the body and action. The awareness of this new concept of body has led, together with the discovery of mirror neurons (Rizzolatti, 2007) to the development of a new teaching called "embodied" in support of the traditional (Casolo & Melica, 2022).
Contemporary research broadens the cultural and pedagogical consideration of the body as a dimension not identifiable solely with the physical component of the person. Corporeity, in this perspective, represents the reflection of an integral person who is first of all lived, perceived, felt, recognized in a multiplicity of nuances, sensations, activities and paths that we explore starting exactly from the body: play, think, express emotions, communicate, love are activities to which we could not give course without the decisive contribution of the body (Casolo & Melica, 2005). In this perspective, speaking of education to corporeality means recalling the unitary sense of education committed to achieving recognition and acceptance of self-starting from the enhancement of the infinite expressions that the body is able to manifest.

7. Conclusions

Contemporary research has overcome the dualism mind-body conceiving the body and cognitive processes as two absolutely interconnected and related aspects. The way we think, judge, reason, build knowledge, talk... it also depends on how we perceive, what we do and how our body interacts with its surroundings (Wilson, 2002). Numerous experimental tests (Welsh, 2003; Jeannerod, 2007, Barsalou, 2008; Cottini & Rosati, 2008, Iacoboni & Olivero, 2008; Chaddock et al., 2010) have supported this theory and, at the same time, the need to enrich knowledge on the relationship between teaching, body, cognition and action. In this perspective, an adequate education in corporeality and movement acquires a remarkable importance so that the educational path of everyone can be defined

as effective. Every human being, through his body, lives his own environmental context and creates a fundamental space for action for the process of communication and understanding, typical of the didactic action. The body of the learner in its interaction with a specific learning environment (the classroom) in which the stimuli are appropriately arranged by the teacher, is a particular key to access the world of knowledge.

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