

## MIND AND SOUL? TWO NOTIONS IN THE LIGHT OF CONTEMPORARY PHILOSOPHY

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Are mind and soul two separate entities? The question is legitimate because of the meaning that is commonly given to terms “mind” and “soul”. The term “mind” is mostly used in modern scientific and philosophical language to indicate an entity, which some say is not really distinct from the body (monists), but is reduced to the body (materialists) or otherwise resolves all bodies in itself (idealists), while according to others it is really distinct from the body, forming a second world distinct from that of body (dualistic) or even causes a third world, distinct from both the body and the mind (Popper). The term “soul” is used in traditional philosophical language, and especially in religious language, to indicate a separate entity from the body, which in some cases even pre-exists the body, becoming incarnate from time to time in different bodies, and in any case survives the body, going toward prizes or punishments after the death of the body. Both of these meanings, in my opinion, are deviant, precisely because they lead to believe that mind and soul are entities, namely entities existing in themselves, in the same way that bodies are. The real problem therefore is not whether mind and soul are two distinct entities, but first of all whether they truly are existing entities in the same manner as the bodies.

The term “mind” and the term “soul” both derive from the ancient Greek word *psychê*, which is at the basis of a whole family of other terms commonly used in science, philosophy and everyday language, such as “psychic”, “psychology”, “psychiatry”, which have the advantage of not alluding to existing entities in the same manner as bodies, but rather indicate properties, or dispositions, or behaviours, or processes, in short, phenomena without an existence of their own but belonging, so to speak, to subjects that are generally human beings or even animals, and therefore bodies.

However, the term *psychê* in ancient Greek was used with very different meanings, basically two, the first of which is at the root of both the common concept of “mind” and the common concept of “soul”, while the second is at the root of the family of words that start with “psycho”. The first meaning is the one that has had more luck in the history of Western culture. It dates back to the Orphic religion, whereby *psychê* is a “demon”, a sort of intermediate being between man and god, which pre-exists the body and

with the birth of man (or animal) is incarnated, namely enters the body, lives with it in a more or less conflictual relationship throughout the life of the body and then leaves the body upon the latter's death, to be incarnated in a different body of man or animal better or worse depending on its merits or its faults, or continues to live independently from any body in a world better or worse than this, again depending on its merits or its faults.

This concept of *psyché* was taken up in antiquity by philosophers such as Pythagoras and in particular Plato, who determined its immense fortune. From Plato, in fact, it passed on to Christianity, where it gave rise to the dualism between “spirit” and “flesh” and the dogma of the immortality of the soul, decreed by the Church in the Renaissance (sixteenth century), which has remained until now in the Catechism of the Catholic Church. However, it found an extremely effective philosophical formulation in the early modern period with Descartes, one of the fathers of modern philosophy and science, who, to save the dogma of the immortality of the soul, conceived it as a substance, whose essence consists of thought, entirely independent of the body and capable of acting, that is living, independently of it and surviving it: the *res cogitans*. *Psyché* thus took on, already in the antiquity, the Latin name of *anima*, which means “soul”, and, in the case of man, where the soul proves capable of performing functions exceeding those of the other animals, that of *mens*, meaning “mind”.

The Cartesian dualism of body and soul, or mind and body, however, was immediately exposed to numerous and extremely serious difficulties, such as justifying the causal actions performed by the body in relation to the soul (feelings, emotions, desires) and those carried out by the soul with regard to the body (movements, alterations), so the Cartesian demonstration of the substantiality of the soul was judged (by Kant) a “paralogism”, namely an erroneous reasoning, and the dualism of body and soul was solved either in a materialistic monism (Lamettrie, Holbach, and others) or in an idealistic monism (Berkeley, Fichte, Bradley, Gentile and others). In the philosophy of the twentieth century it gave rise to the so-called *Mind-Body Problem*, on which there is endless literature both from the philosophical side, namely by the so-called “philosophy of the mind”, and by the scientific part by the so-called Artificial Intelligence, “cognitive sciences”, or the neurosciences.

The most vigorous denunciation of Cartesian dualism was made in the twentieth century by Gilbert Ryle, editor the oldest philosophical review in the English language, not surprisingly called *Mind*, and author of an important book entitled *The Concept of Mind* (1949). In its critical part the book destroys what the author calls the Cartesian “dogma of the ghost in the machine”, showing that it arises from a “category error” of common

language, namely that of placing the “mind” in the same category of entities to which they belong the bodies. In its constructive part, however, it conceives the mind as a set of “dispositions” or “skills”, which give rise to a series of objectively controllable behaviours. For this reason Ryle’s concept was mistaken for a form of behaviourism, and his book – as Daniel Dennett, one of the scholars of the current philosophy of the mind, acknowledged in the preface to the new edition – had long been underestimated, while it is still fully relevant to this day.

What is not yet recognized is the fact that Ryle put forward again without saying so (no philosopher is cited in his book), the other major concept of *psychê* developed in antiquity, the one contained in Aristotle’s *De anima* (in Greek *peri psychês*), according to which *psychê* is not a substance distinct from the body, as the Orphists, the Pythagoreans and Plato would have liked, but is the “form” or “first act” of an organic body, that is of a body that is formed by organs, equipped with life in potency, that is, capable of living (*De anima* II 1). Therefore – says Aristotle – it makes no sense to say that the soul feels pain and joy, courage and fear, gets angry, feels and thinks. This in fact would be like saying that the soul can weave or build a house. We must say instead that man feels compassion, learns or thinks through the soul (*ibid.*, I 4). That Ryle was Aristotelian, as was John L. Austin, another great representative of the Oxford School, teacher of the current philosopher of mind John Searle, is now admitted by all, because Oxonian philosophy as an analysis of the common language did nothing but take the logic and ontology of Aristotle (in this case his doctrine of categories). But the importance of the Aristotelian conception of *psychê* has been recognized by those “philosophers of mind” that explicitly referred to it, interpreting it first in a physicalistic key, namely as a reduction of psychic phenomena to physical phenomena (Feigl, Slakey, Matson), then in a functionalistic key, that is, by assimilating the *psychê* to a computer program (Fodor, Dennet and the first Putnam), and finally in a correctly hylomorphic key, that is, as the form of a living body (Martha Nussbaum and the last Putnam, in *Word and Life*, 1995). Finally it was embraced by the *Catechism of the Catholic Church* (Vatican City 1993), which refers explicitly to the Aristotelian definition of the soul as *forma corporis* (§ 365), accepted by the Council of Vienne (1312).

To understand how this could happen it is necessary to understand exactly the concepts of “form” and “first act”. Form is not a metaphysical entity, as those who give the term “metaphysics” the meaning of “mysterious”, “hidden” and “misleading” believe, but it is the way a certain matter is organized and functions. For example, a sensible form visible to the naked eye is the wheel, which allows a certain matter (stone, wood, metal, rubber)

to roll and thus perform a series of functions that would not be possible without it (this is neurobiologist Roger Sperry's example). An intelligible form, one that is understandable by means of a concept, is the formula of water (*formula* in fact means "little form"), H<sub>2</sub>O, which is not one of the components of the molecule of water (two hydrogen atoms and one oxygen atom), but without which there would be no water. Now, neither the form of the wheel nor the formula of water are matter and yet exist, denying, therefore, any form of monism, materialistic or idealistic, but they are not entities in themselves, and therefore deny any form of dualism.

Even clearer is the notion of "first act", which Aristotle explains with the example of possessing a science, say geometry, which is different from using it (second act), for example by demonstrating a theorem. As the first act of a body having life in potency, the soul is therefore the actual possession of the ability to live in a body that serves as a tool, where the subject of life is neither the soul nor the body, but the living being itself. Aristotle says that if an axe were a living being, its soul would be the ability to cleave, and if the eye were an animal, its soul would be sight. An eye without sight, like a painted eye or a stone eye, is not a true eye, but only an eye "by homonymy", that is in name only, like a dead man is a man in name only. The soul in short is simply what makes the difference between a living organism, be it a human being, an animal or a plant, and a dead body, that is a corpse. In order for this soul to be present it is not necessary for the living being to act out the functions which the soul makes him capable of, but it is sufficient that they are present as a capacity, or – in the language of Scholastics – as "active potency", corresponding to the Aristotelian "first act".

Life is a series of different functions, of which the basic ones are feeding and reproducing. These functions also belongs to plants, which therefore, according to Aristotle, have a soul, the vegetative soul. Perceiving and moving, functions typical of animals, are added to the above functions and belong to the sensitive soul. Finally, we have thinking and willing, functions proper of human beings, which are added to the above and belong to the intellectual soul, i.e. the human soul. What distinguishes these various kinds of soul? Modern genetics has determined that the differences between genera and living species, and even between single individuals of the same species, depend on the DNA sequence, the acid content in the cell nucleus. Therefore, a famous biologist, Max Delbrück, Nobel laureate for medicine, wrote that Aristotle, with his notion of soul as form, that is as a programme, pioneered the discovery of DNA (in *Of Microbes and Life*, ed. by J. Monod-E. Borek, New York 1971, pp. 50-55). Indeed DNA is matter (i.e., composed of molecules containing proteins and I do not know what else), but the "sequence"

of its components, which distinguishes a plant from an animal and from a human being, and even a human individual from another, is a “formula”, that is a form. Accepting this view, Hilary Putnam wrote that the soul understood in the Aristotelian sense is not just a programme comparable to computer software, because the programme is compositionally plastic, that is, it can be performed by various kinds of matter, while the soul is computationally plastic, that is, it has the ability to carry out different programmes.

Aristotle believed that the main organ in an animal, the one managing all of the soul’s functions, was the heart, because he had seen that it was the first organ that was formed in the chick embryo (thus discovering what Harvey then called “epigenesis”), while modern science has shown that it is the brain and has succeeded in identifying some of the processes that occur in it, thanks to the neurosciences. The soul, understood in the Aristotelian sense, is the ability of the brain, or of the entire organism through the brain, to carry out these processes, ranging from the most basic functions, called physical, to the higher and more complex ones, called psychic. Indeed, the brain can perform its functions only if it is alive, that is, if its encephalogram is not flat: the soul, understood in the Aristotelian sense, is what distinguishes a living brain with a non-flat encephalogram from a dead brain with a flat encephalogram. It is then up to the neurosciences, or to the philosophy of mind, to understand and explain how to carry out these functions. The difference between so-called physical, or biological functions, and so-called psychic or mental functions, consists in the fact that the former are carried out by means of organs, that is, by bodily tools, and in this sense are material, while the latter do not require other organs – in addition of course to the brain to which they belong – and therefore are inherently immaterial. This was already recognized by Aristotle, when he said that the intellect does not take on material qualities, such as heat and cold, and has no organ (*De anima* III 4, 429 at 24–27), and was confirmed by Searle (*Mind: A Brief Introduction*, Oxford, 2004), who showed that conscience is not ontologically reducible to the brain, even though it is causally attributable to brain processes.

The problem raised at this point by the supporters of the soul is if a soul understood in this way, i.e. in the Aristotelian sense, can survive the body. The answer seems likely to be negative: indeed, for which subject would such a soul have the ability to carry out certain functions? And what functions could it carry out without the body if, according to Aristotle, even thought requires, as a starting point, the images provided by the senses, that is, by the body? Thomas Aquinas, who was Aristotelian, was very much aware of this when he said that the soul, after the death of the body, is no

longer a person (*S. Th.* 1, 29, 1 ad 5m; *Pot.* 9, 2, ad 14m, *C. G.* 4, 79), and when he stated, against the Averroists, that the subject of thought is the “individual man” (*hic homo*). The Christian faith, in its original formulation, suggests a belief in the resurrection of the whole person, body and soul, even before its belief in immortality understood as the survival of the soul separate from the body. Indeed, the Apostles’ Creed recites, “I believe in the resurrection of the flesh” and the Nicene–Constantinopolitan Creed states, “I believe in the resurrection of the dead”. The Church herself, in the prayer for the dead, says, “Eternal rest grant unto them O Lord”, thus comparing the condition after death to sleep. The very canon of the Mass exhorts us to pray “for those who have fallen asleep in the hope of resurrection”. But this is obviously a matter of faith, not philosophy or science.

Another problem arising from the results of the neurosciences is the existence of freedom, or free will, i.e. the question of whether our actions, or rather our decisions, are just the result of neurological processes that take place in our brain or if it is our will that causes them to happen. The consequences of the denial of freedom would in fact be disastrous for ethics, because they would destroy any moral responsibility, and there would be no difference between Socrates and Genghis Khan, or between Gandhi and Hitler. Benjamin Libet’s experiments are often quoted in support of this denial, from which it appears that our awareness of a decision takes place with a delay of about 500 milliseconds compared to the neurological process that initiated it, which therefore appears to be unconscious, and therefore involuntary (*Mind Time: The Temporal Factor in Consciousness*, Cambridge, MA, 2004).

This too is an old problem that dates back to the interpretation of a passage of Aristotle (*Metaph.* VI 3), where the philosopher shows how certain events are the necessary result of a chain of actions and therefore are neither planned nor willed by the person who started the chain. The Stoics interpreted this phenomenon as “destiny” (*heimarmenê*), while Alexander of Aphrodisias in his *De fato* confuted them, showing that the passage of Aristotle acknowledges the concurrence, in determining the chain, of human initiative and a series of accidental causes that change its course. This is the ancient debate on “determinism”, in which Cicero also participated in his *De fato* and which developed during the Renaissance with Pico della Mirandola (*Adversus astrologiam*) for example.

In fact Libet himself acknowledges to the conscious will the ability to permit or prohibit actions started at a subconscious level, that is, those that according to Aristotle are produced by desire (*orexis*) and according to Freud by *libido* (the inability to control desire was termed *akrasia* by Aristotle in book VII of the *Nicomachean Ethics*). In short, the subject of the action, the

one who decides and acts accordingly, is neither the subconscious nor conscience, neither desire nor will, but man. This was also repeatedly expressed by Thomas Aquinas who, following Aristotle, always indicated in the individual man (*hic homo*) he who not only thinks but also wills and loves (*De malo*, q. 6, art. un.).

The manuals of scholastic philosophy (see for example Sofia Vanni Rovighi, *Elementi di filosofia*, Milan, 1953, vol. IV) taught that freedom cannot be proved, because if it were provable, it would no longer be freedom, but necessity. Freedom is a matter of experience, such as the fact of experiencing pleasure or pain. We feel we are free, we have experienced the power to carry out or not carry out a certain action or to choose among different actions. A sign of this is what the English moralists (Shaftesbury, Hume) called “moral sense”, such as the guilt and remorse that we feel when we think we have done a bad deed, and the satisfaction we feel in the opposite case. British psychologist Richard Holton (*Willing, Wanting, Waiting*, Oxford 2009) has argued recently that moral sense proves the existence of the brain’s free will. For him the experience of free will is demonstrated by the experience of forming decisions and keeping resolutions, which require an effort on the part of the agent.

The fact that the moral sense is the product of evolution, especially the evolution of social life, as claimed by Patricia Smith Churchland (*Braintrust: What Neurosciences Tell Us About Morality*, Princeton, 2009), based on the study of what happens in the primate brain, does not mean that moral judgements have no value (for example, a judgement such as “torturing a child is a cruel action”, according to Putnam, is a valid judgement, whatever its origin). Even Euclidean geometry, or Gödel’s mathematics, are products of evolution, like all human activities, but that does not mean that the Pythagorean theorem or Gödel’s incompleteness theorems are not valid. We must not confuse the origin of a proposition with its truth-value.