

Considering Inheritance as One of the Consequences of the Soul-Body Relationship in Aquinas, Avicenna, and Mulla Sadra

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ABSTRACT

Inheritance is one of the most important issues that has been discussed empirically in genetics since the late nineteenth century. One proper philosophical context of such issue can be traced back in the body-soul relationship debate. This paper goes through the position of Aquinas, Avicenna, and Mulla Sadra, as three different Aristotelian philosophers, to examine how their thought in the issue of soul-body relationship can open a window to the matter of inheritance and which one can better prepare a philosophical ground for such empirical topic. According to Aristotle, the soul is the form of the body, and the body is the soul's matter. This necessitates a mutual relationship. Although accepting this relationship, both Avicenna and Aquinas disagree with Aristotle on the problem that how the soul can be an immaterial component. But according to Mulla Sadra, basically, the matter-form relationship deepens and even indicates a kind of unity in a graded reality. This means that it is a longitudinal relationship—the soul is the continuation of the existence of its own body and is its higher level, not something strange and independent. Therefore, whatever exists in the body, exists in the soul and hence, the role of matter in inheritance becomes more meaningful.

Keywords: *body-soul relationship, heredity, potentiality, matter-form relationship*

Inheritance has been an important and fundamental topic in various fields of genetics and epigenetic. Transmissible genetic factors include both positive and negative material traits and epigenetics, a newer branch, deals with the transfer of moral-educational traits. Therefore, it can be said that heredity includes both genetic and epigenetic traits and has a significant role in other sciences such as psychology, ethics, and education. The present study claims that this important issue can be also traced in certain philosophical contemplations. By refocusing and re-analyzing the mechanism of soul's genesis and its relationship with the body, this paper illustrates the importance of inheritance and its role in shaping the characteristics of the soul according to St. Thomas Aquinas (1225-1274) and Avicenna or Ibn Sina (980-1037) -as two representatives of the Peripatetics- and Sadr al-Din Muhammad Shirazi, more commonly known as Mulla Sadra (1572-1641). The result is that this issue becomes much more prominent in Mulla Sadra's view. According to the Peripatetics, following Aristotle, firstly, the quality of matter has a fundamental

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role in receiving the form, and secondly, this matter-form relationship is so tight and close. Hence, in human growth and perfection, the physical dimension is of paramount importance and even after the creation of the soul and its connection to the body, their growth will be mutual and interactive; that is, the properties of the body, in peripatetic view, are effective in creating the strengths and weaknesses of the soul and its characteristics. In Sadra's viewpoint, however, properties of the body are the very properties of the soul and its different manifestations, in fact.

Since we have found the base of this idea in the way which matter and form are related, we begin first with a brief introduction to the body, which includes matter and form, and then discuss the soul and its relation to the human body from the viewpoint of these three philosophers. In the peripatetic view, man is a being composed of body and soul, which are two substances. Peripatetics, following Aristotle, divide contingents (creatures) into two general types: substance and accident. Substance is then considered to include five types of body, matter, form, soul, and intellect. The body is composed of form and matter and, according to Peripatetics, its existence is self-evident. They have defined the body and its bodily form as a substance in which three intersecting lines that are perpendicular to each other can be assumed. As for the existence of matter, however, they have put forward certain arguments to prove it, including two well-known arguments through 'potentiality and actuality' and 'joining and separation'.

The body itself, which is composed of matter and form, can become matter for new forms, such as man, which is composed of soul and body (which itself is composed of matter and form). This is where we can talk about the prime matter and the secondary matter. It can help to better understand what Aristotle means by the matter which is the principle of individuation as he says, "*even though all things are from the same first nature... and though the same matter is as a principle to generated natures, yet at the same time, there is something which is proper or domestic to everything*" (Taylor 1801: 199). It can also give a better understanding of the subtle difference between *body in general* and *the human body* as the difference between the *specified* and the *unspecified*, or as Aquinas says the *the designated and the undesignated* (Thomas & Maurer 1949: 36-7):

What we must realize is that the matter which is the principle of individuation is not just any matter, but only designated matter. By designated matter I mean that which is considered under determined dimensions. This kind of matter is not part of definition of man as man, but it would enter into the definition of Socrates If Socrates could be defined. The definition of man, on the contrary, does include undesignated matter. In this definition we do not put this particular bone and this particular flesh, but bone and flesh absolutely, which are the undesignated matter of man.

Peripatetics believe that there is a coherent, necessary, and existential relationship between matter and form. None of them exists without the other. They give reasons for this. For instance, they argue that if we assume that the prime matter, which has no actuality and is mere potentiality, exists without form, it will be composed of two aspects: 1) potentiality, because it is assumed that it is prime matter; and 2) actuality, because it is assumed that it exists and everything which exists, has actuality. Therefore, the first matter must be composed, while it is basically considered as mere potentiality and is simple in this sense:

This corporeal matter cannot exist devoid of form in actuality. One of the things that quickly clarifies this is [what] we have shown: namely, every existence that has something in actuality existing in it [that is] realized and subsistent and in which there is also a disposition to receive another thing—[every] such existence is composed of matter and form, the last matter not being composed of matter and form (Avicenna 2005: 57). We will have a detailed discussion about the soul-body relationship according to each of these philosophers in the coming parts.

Aquinas

Concerning the soul, peripatetic philosophers such as Aquinas, following Aristotle, believe that the soul is the form or actuality and perfection of the body. Aristotle's definition of the soul is as follows, "*the soul is the first act of a physical organic body*" (Thomas & Zedler 1968: 23). According to Aquinas, this definition includes all types of plant, animal, and human souls. Because the soul is what we live and perceive and move and think through. And he goes on to say that the soul is the form and not matter. The soul is the actuality of the natural body, and it encompasses all the faculties of the soul, including the rational soul. Aquinas cites evidence from Aristotle in this regard and says, "*by intellect I mean that by which the soul thinks and believes...[and] knows and understands . . .*" (Thomas & Zedler 1968: 27-8).

According to this claim and the definition of the soul, the human soul should also be deemed as the form of the body. Aquinas insists on this and even at the beginning of *On the Unity of the Intellect* asserts that he is trying to refute Averroes' viewpoint about the possible intellect (or in his words, 'material'). Averroes takes the possible intellect as a substance separate in its being from the body and not united to it in some way as its form. However, Aquinas believes that, though a form of the body, the soul cannot become mortal by the destruction of the body.

What this study emphasizes is that the soul is the form of the body and has a necessary relationship with it. According to Aquinas, there is a reciprocal relation between matter and form as essential characteristics of essence without which the essence cannot be defined (Thomas & Maurer 1949: 34-6):

The definition of natural substances includes not only form but also matter... nor can it be said that the definition of a natural substance includes matter as something added to its essence, or as something outside its essence... It is evident, therefore, that essence embraces both matter and form. Neither can it be said that essence signifies the relation between matter and form, or something added to them, because this would necessarily be accidental or not belonging to the thing, nor the thing could be known through it, both of which are characteristics of essence. For through form, which actualizes matter, matter becomes an actual being and this particular thing. Anything that comes after that does not give matter its basic actual being, as accidents do... the being that a composite substance has is not the being of the form alone nor of the matter alone but of the composite.

Despite believing in such firm relationship between soul and body, and in generalizing Aristotle's definition of the soul to the intellectual soul, Aquinas takes the soul as an immaterial substance which can subsist after body. He quotes Aristotle to say, "It is indeed clear therefore that the soul is not separable from the body, or that certain of the soul's parts are [not separable], if it naturally has parts, for it is the act of the certain parts themselves. But truly nothing prevents certain parts [from being separable] since they are not the acts of anybody". Aquinas explains (Thomas & Zedler 1968: 23):

This cannot be understood except with reference to the intellect and will, which pertain to the intellectual part. From this it is clearly shown concerning that soul which Aristotle had defined above in a universal way as the act of the body, that it has some parts which are acts of some parts of the body, but also some which are acts of no body. For it is one thing for the soul to be the act of the body and another for part of it to be the act of the body.

According to Aquinas, Aristotle shows the difference between reason and other powers of the soul according to the way it acts (Thomas & Zedler 1968: 30):

This therefore is what Aristotle is trying to point out when he says: 'If therefore understanding is like sensing, either it will surely suffer from an intelligible object,' inasmuch as intellect would be injured by an excessively intense intelligible object as sense by an

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excessively intense sensible, 'or something of this kind, yet different.' That is: or understanding is something like this, that is like sensing, but different in this respect that it is not possible.

So, reason is different from sense. Aquinas, following Aristotle, believes that the possible intellect is not a power in the body and is not mixed with the body because the intellect does not have in act any of the natures of sensible things. If it were mixed with a body, it would have some of the corporeal natures and it would surely become of some kind, either hot or cold, if it were to have an organ like a sense faculty. This therefore is the meaning of the expression, "not to be mixed with body," that intellect does not have an organ as the sense does. Now that the soul, or at least the intellectual part of it, is incorporeal, how does it relate to the body? Aquinas puts it this way (Thomas & Zedler 1968: 33):

Now how it is possible that the soul is the form of the body, and some power of the soul is not a power of the body, is not hard to understand if one would consider [the point] in other things as well. For we see in many instances that a form is indeed the act of a body made of a mixture of elements, and yet it has some power which is not the power of any element, but which belongs to such a form by reason of a higher principle, for example, a celestial body; just as a magnet has the power of attracting iron, and jasper of checking the blood flow. And gradually we see that the more noble the forms, the more they have powers that transcend matter. Whence the highest of the forms, which is the human soul, has a power totally transcending corporeal matter, namely the intellect. So therefore, the intellect is separate because it is not a power in the body, but is a power in the soul; moreover, the soul is the act of the body.

In sum, the soul is stated to be both an abstract form and a concrete particular thing, which seems contradictory, but Aquinas accepts that the soul is a thing and a state, an abstract form and a live thing. As a state and a thing, the soul is able to outlast its body. For Aquinas, all states are particulars individuated by their bearers, but at least one state (that of human organization) can float free of its bearer. The consequence of this, for Thomas's philosophy regarding the afterlife, is obvious: the soul can disconnect from the body after its death and remain in an altered, but substantial, state until the resurrection of that body (Krista 2012).

It seems that Aquinas, as a Christian philosopher, on one hand seeks to prove the physical aspect of the soul and believes that the soul is the physical form of the body and on the other hand, wants to justify the immortality of the soul. Therefore, he makes such arguments and also uses Avicenna's opinion as a confirmation of his words. It seems, however, that from Avicenna's point of view, the potential intellect is also incorporeal. Basically, Avicenna did not consider the human soul as the form of the body from the very beginning, rather, he considered it as a spiritual thing. Although he considers the faculty of intellect to be one of the faculties of the soul and accepts Aristotle's definition, he considers this first perfection from the beginning of something distinct from the body that has been connected and added to the soul by the primary causes. This view, which distinguishes between soul and body, has compelled him to speak of temperament and the vaporous soul as the mediator between soul and body.

Avicenna

According to the Peripatetics, from the combination of simple elements, different species of mineral, vegetable and animal forms come into existence, respectively. Compound forms are caused by temperament which is a special quality that is shaped through the interaction of contradictory qualities among the elements. The temperament is potential to receive a certain specific form, a form that must be compatible with the temperament. In fact, Avicenna, following some of his predecessor peripatetic philosophers, such as Farabi, states that after the creation of

the basic and simple elements, temperament arises from their mixing and gathering, which is the result of the interaction of different qualities. Since such interaction leads to many different results, he refers to the creation of different temperaments and says that each temperament is ready for a certain species. The farther the temperament is from moderation, the farther it is from perfection, and the closer it is to moderation, the closer it is to perfection. The mildest temperament possible deserves human being nature (al-Ṭusi 2004).

Avicenna accepts the Aristotelian definition of the soul as 'the first perfection for the natural organic body'. Aristotle considered the relation between the soul and the body at the beginning of creation to be of the kind of relation between matter and form. This means that the soul is being created with matter and it is not eternal. The soul, in the beginning, is pure potentiality. Avicenna also does not accept the prior existence of the soul but considers it as being created 'along with' the body, nor 'in' the body, neither 'united' with the body. There is a crucial sentence in some of his works that reads, 'to be alerted to the existence of the soul as something other than the body' (Hasse 2000: 85). For Avicenna, the soul is separate and independent from the material body, that is why we can define it as the perfection of the body, not as its form in fact, because every form is a perfection of its subject, but not every perfection can be the form, like the captain that is considered as the perfection of the ship, not as its form (Avicenna 1983). He asserts in *al-Zawīyah fi al-Ma'ad* that the body in its entirety is not something which enters the concept 'human being' (Hasse 2000: 85), rather, it is used as a tool by the soul to acquire theoretical and practical success and happiness. That is, although Avicenna considers the soul as being created in time and not as an eternal being, but unlike Aristotle, he does not accept it as a form which is inherent and imprinted in the body, "*The relationship between the soul and the body is not in the sense that the soul is imprinted in the body, but in the sense that the soul is occupied with the government of the body so that it is conscious of that body and the body is influenced by its actions*" (Rahman 1952: 64).

But if Avicenna considers the soul to be an immaterial existent that is independent from body, how can it relate to the body? He refers to a principle accepted by the Peripatetics which assumes that "*Every non-eternal (hadith) is preceded by a subject which carries its possibility of existence.*" That is because the non-eternal is a possible being, not a necessary being nor an impossible one, otherwise, either it would have existed forever or it would never come to existence, respectively. The possibility of existence is a property, thus, an accident that precedes the temporal being in existence and obviously needs a subject to carry it. As for the soul in particular, he says (Rahman 1952: 59–60):

The attachment of the soul to the body is not the attachment of an effect to a necessary cause. The truth is that the body and the temperament are an accidental cause of the soul, for when the matter of a body suitable to become the instrument of the soul and its proper subject comes into existence, the separate causes bring into being the individual soul, and that is how the soul originates from them... whenever a new thing comes into being it must be preceded by a matter which is prepared to receive it or to have a relationship with it.... If an individual soul were to come into being without an instrument through which it acts and attains perfection, its being would be purposeless, but there is nothing purposeless in the nature. In truth, when the suitability and preparation for such a relationship exist in the instrument, it becomes necessary that such a thing as a soul should originate from the separate causes.

Therefore, if a soul wants to be realized, its possibility of existence must stand in an existent particular subject, that is the body. This possibility is neither the possibility of the occurrence of the soul 'in' the subject (body) nor the possibility of the occurrence of the soul 'from' the subject. Rather, it is the possibility of the soul 'accompanied by' the subject being prepared to act as an instrument for the soul's acts and perfection. Therefore, he justifies the relationship between the immaterial soul with the material body.

He also uses another concept to explain the relation. He speaks of a mediator between the immaterial soul and the material body, which is known as the vaporous soul, a very subtle body that is spread all over the body via the vessels and nerves and lets the soul control and move the organs of the body. According to Avicenna, since the soul is one, then it must have only one direct attachment to the body through which it can manipulate other parts and organs. The birthplace of the vaporous soul and the first organ to be created is heart (Avicenna 1983).

Mulla Sadra

While agreeing with Aquinas and Avicenna in accepting the five divisions of substance, and the definition and existence of the soul, Mulla Sadra, distances noticeably from them in explaining the soul-body relationship, and consequently the role of inheritance. Avicenna did not accept the unified composition (*tarkib ittihadi*) of the soul and body and Aquinas explicitly rejected it. This is the main difference between their view and that of Mulla Sadra. Let us begin with the matter-form unity and then go on to deal with body-soul relationship in Sadra's view. He declares, "*The composition between the matter and its form is a unified composition like the composition between genus and differentia. So obviously there is a strong correspondence between the two necessitating the unification*" (Mulla Sadra 2008: 550).

He distinguishes between two kinds of compositions: the composition by way of annexation (*tarkib indimami*) and the composition by way of unification (*tarkib ittihadi*). The first is where one thing is attached to another object, so that each of them maintains its own special nature and distinct existence after the combination, like a combination of stone and brick. The latter is such that a thing transforms in itself and *becomes* something else. Here, there is one single thing which includes the entity of the two components and the compound, for instance, a matter which is united with a new form and constitute a new essence, like a fetus that evolves to become an infant and gradually to a wise man (Mulla Sadra 1981: vol. 5, 283).

Unlike the composition through annexation, the unified composition necessitates a longitudinal relationship between the components, not a horizontal. It means that the relationship between the components is the relationship between an incomplete existence and a perfect one, a potential existence and an actual one. The existence of form is not distinct from the existence of matter so that it subsequently is *added* to matter; rather, the form is the same matter that has evolved and reached a higher stage of existence and perfection. Therefore, in the outer world, matter and form are not two distinct objects so that part of the body is called matter and the other part is called form! Rather, the body as a whole is matter, and the body as a whole is the form. It is mind that takes two different concepts from the two aspects of the body. Matter is the imperfect and potential aspect, and form is the complete and actual one. Therefore, the two components in the unified combination are one thing in reality and are divided into two parts only when analyzed in the mind. Sadra tries to prove the existence of such composition by arguments in which he uses and refers to his predecessors' accepted principles, one of which is the fact that the characteristics of the soul, as the form, and body, as the matter, can be attributed to either side (see Mulla Sadra 1981: vol. 5, 283–87). He claims that some other preceding philosophers (most probably Sadr-al-Din Dashtaki (829-903 AH) also believe in such composition between soul and body (Mulla Sadra 2008: 219):

The unifying composition between the soul and body has been established by us, as has been the view of some recent [philosophers]. So, the soul takes the qualities of the body as the genus, for it [soul] is the principle of differentia and the completion of its essence, though the soul is not qualified if it is considered as form and the body as matter. It is known that the consideration of genus and differentia is other than the consideration of matter and form. In the first consideration, just as the bodies are qualified by the attributes of the souls, so are the souls qualified by the attributes of the bodies. That is why you indicate to your soul as [for instance]: "I am a writer, I am sitting".

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Mulla Sadra argues that the soul's difference with a pure immaterial intellect (*`aql*) lies in its relation to the body, a relation that penetrates to the entity of the soul and enters its definition. Thus, he criticizes the kind of accidental relation occurred between an agent with the instrument they use (Morris 1981: 139):

The 'soul-hood of the soul' (*nafsiyyat al-Nafs*) is not a relation accidentally occurring to its being, as the commonality of the philosophers claimed in likening its relation to the body to that of a ruler to his city or of a captain to his ship. No, the soul-hood of the soul is nothing but its mode of being-not like the relation of ruler, captain, father, or anything else that has its own proper essence and only falls into relation with something else after already being in that essence. For one cannot conceive of the soul's having being-so long as it is soul (and not pure intellect)-except for a being such that it is in connection with the body and utilizing the bodily powers.

As we discussed before, according to Avicenna, the potentiality of the soul is in the body without the presence of the soul itself in the body. Peripatetics like him have distinguished between the potentiality of the soul and the soul itself, while according to Mulla Sadra, if there is a potentiality of the soul in the body, the existence of the soul must also be in the body. The potentiality of an object is always related to that object, it is the weakest level of its existence. Therefore, the soul, with its weakest level of existence, is present in body and is united with it and its first actual level originates from body. That is the innovative Sadrian principle claiming that 'the soul is corporeal in its origination and spiritual in its survival' (*jismaniyyat al-huduth wa-ruhaniyyat al-baqa'*) (Mulla Sadra 2009: 208-09).

In the *Wisdom of the Throne*, explaining soul's different existential stages from its beginning to its progression to the afterlife, he describes the origination of the soul and its relationship to the body (Morris 1981: 131-32):

The human soul has many stations and degrees from the beginning of its generation to the end of its goal and it has certain essential states and modes of existence. First, in its state of attachment to the body, it is a corporeal substance; then it progresses gradually in intensity and develops through stages of its creation until it becomes self-subsistent and separates from this world to the next and returns to its Lord. It is corporeal in its origination but incorporeal in its survival. The first thing to be generated in its state of attachment is a corporeal faculty, then a natural form, then a sensing soul in its levels, then the reflective and recollective, and finally the rational soul. It acquires the practical and then the theoretical intellect to the limit of being an actualized intellect and finally the Active Intellect.

Sadra's understanding of the soul here is a manifestation of the 'substantial motion' (*al-harakah al-jawhariyyah*), a gradual and evolutionary movement which exists throughout the natural world and also includes the human's body from its weakest levels of existence and first steps of origination. The fetus and embryo go through different physical and then vegetable and animal stages. Each stage, which is a compound of matter and form, becomes matter for the next form. Any new form, in fact emerges from and is the higher existential level of the previous matter (formerly a combination of matter and form itself). This new form along with the matter, is considered as a matter to accept the next form. The body goes through substantial motion until it reaches the most delicate, balanced and the most capable natural level of matter that is the nearest to the borderline of immateriality-the human brain. After explaining the disagreement between Hippocrates (c. 460-c. 370 BC) and Muhammad ibn Zakariyya' al-Razi (865-925) about the creation of the first organ of the body, Mulla Sadra (2008: 124) states that:

In the animal matter the first among the faculties which come into existence are the vegetal [faculties], especially the nutritive. Then after traversing the vegetal degrees there gradually come into existence the animal faculties in it from the direction of the Principles, then the psychic [faculties]. The analogy makes it requisite that from the faculties of nutrition and growth which are in the fetus, the liver is generated first, because according to them it is the principle of the vegetal faculties. What is generated after it is the heart, because it is the mine of the animal faculties, and after these two what is generated from among the organs is the brain because it is the fountainhead of the faculties of perceptions which is the goal of the first two faculties. This is so if we consider the ordering in time according to the preparation of the perfection of materials. This is from the lowest to the highest [degree], and from the basest to the most eminent [level]. If we consider the ordering from the [aspect] of cause and caused and the priority in eminence and existence, however, then the prior one is the brain, as Hippocrates holds, then the heart, then the liver and then the rest of the organs.

The brain, which has undergone many physical evolutions, becomes the highest matter for receiving another substantial transformation called perception. In this first perception, which is the perception of the 'I', the body is also there; that is, the body is also part of the 'I' or, more precisely, it is the 'I'. The brain is the highest state of this body, but it is now the weak state of the 'I'. This is a very important point in this theory. For although Aristotle also considered the human psyche to be the act of his organism, in the sense that the soul originates from the body and is not separate from the body, he was unaware of the fact that the human psyche is the action of their brain. For him, the organ from which mental activity arose was the heart. Descartes and physiologists after him, by their experiments on animals, claimed that the brain is the command of the body. As we saw above, totally unaware of his contemporary, Mulla Sadra took Descartes' side and declares the same belief.

The important point in Sadra's theory is that if the brain has a causal relationship with other organs, that is, it causes the management and movement of other organs, it indicates the simultaneous development of the brain and the emergence of the soul and consciousness and emphasizes that the ultimate level of the evolution of the body coincides with the emergence of the first state of consciousness. It is precisely this state that is responsible for the causation toward other organs, since the body, namely the brain, cannot be the cause of another body in itself. What causes the motion is the brain that has reached the level of consciousness, that is, has become united with the soul and its physical manifestation.

The question of how consciousness causes the body to move has not yet been elaborated among philosophers, especially those who somehow believe in the duality of soul and body. This mechanism is not observable in the field of science either, that is, its mechanism has not been observed and only the effects, results and consequences of this effect have been studied. Recently, some philosophers of mind, such as John Searle, have addressed this issue in some way. Explaining how consciousness can function causally to move the body, Searle says that consciousness is not something distinct from the body, but a higher-level biological feature of the brain. He tries to illustrate this with an example from Roger Sperry (Searle 2007: 48-9):

Consider a wheel rolling downhill. The wheel is entirely made of molecules. The behavior of the molecules causes the higher-level, or system feature of solidity. Notice that the solidity affects the behavior of the individual molecules. The trajectory of each molecule is affected by the behavior of the entire solid wheel. But of course, there is nothing there but molecules. The wheel consists entirely of molecules. So, when we say the solidity functions causally in the behavior of the wheel and in the behavior of the individual molecules that compose the wheel, we are not saying that the solidity is something in addition to the molecules; rather, it is just the condition that the molecules are in. But the feature of solidity is nonetheless a real feature, and it has real causal effects. Of course, there are many disanalogies between the relation of solidity to molecular behavior, on one hand, and the relation of consciousness to neuronal behavior, on the other. I will explain some of them later, but now I want to focus on the feature

that we have just explored and suggest that it applies to the relation of consciousness and the brain. The consciousness of the brain can have effects at the neuronal level even though there is nothing in the brain except neurons (with glial cells, neurotransmitters, blood flow, and all the rest). And just as the behavior of the molecules is causally constitutive of solidity, so the behavior of the neurons is causally constitutive of consciousness. When we say that consciousness can move my body, what we are saying is that the neuronal structures move my body, but they move my body in the way they do because of the conscious state they are in. Consciousness is a feature of the brain in a way that solidity is a feature of the wheel.

According to Mulla Sadra's theory, the brain, which is the highest and most noble organ of body, is itself the material cause for the emergence of consciousness, but when consciousness emerges and the 'I' is formed, another state and evolution is created in it, and this state is the cause for its moves and basically animates other human organs. The evolving brain has the most intense potential and is waiting for a stimulus to ignite. This course of brain development is also discussed in the modern natural sciences. The development of neural system in the hierarchy of animals begins with the simplest type in the lowest levels and then gradually becomes more complex in higher stages. In unicellular animals, there is no nervous system at all. In these animals, the protoplasm is stimulated. Then in the hierarchy of animals we reach a point where muscle is formed, then the tissues and fibers and the nervous system itself and then the central nervous system, that is the brain, and spinal cord are formed and ready to be stimulated (Norman 1961).

All in all, according to Mulla Sadra, the soul is essentially related to the body and in fact emerges from a particular body and is the continuation and evolvment of the existence of that same body. Therefore, the qualities and characteristics of body are transferred to the soul, rather, they are its own characteristics.

To conclude, according to Peripatetics such as Aquinas and Avicenna, as well as Mulla Sadra, matter accepts the form of the human soul after receiving mineral, vegetable, and animal forms. Receiving each of these forms is based on the type of combination of matters with each other and the degree of moderation of the temperament. The closer the matter to moderation, the more complete form it deserves to receive. In the case of human existence, according to the principle, "*Every non-eternal (hadith) is preceded by a subject which carries its possibility of existence,*" each of body and soul's potentials, as well as the matter that carries that potential, must exist before they come into existence. In other words, in every matter that takes on a special form, there is a special property which is the potential of that form, or more precisely, the more modified temperament of that matter.

According to Avicenna and Aquinas, the relation of form and matter is a relation of necessary concomitance, that is, every bodily form must necessarily have its own matter and special potential. While accepting the necessary relation between matter and form, Mulla Sadra has a very serious difference in the quality of this relationship and, consequently, the relationship between body and soul with the peripatetic. Because, unlike them, he considers the combination between matter and form and thus, the combination between body and soul as a unified combination. Avicenna and Aquinas speak of a special and modified matter and potentiality "accompanied by" the form, but Sadra speaks of one thing, that is, the evolved "matter". Here, the form is the existential higher aspect of the body, not a distinct part of it in outer world. As a result, the soul, which is the form of the body, is the same body(matter) in a higher level. They are one single reality with two aspects: potentiality (lower aspect) and actuality (higher aspect).

The unified soul-body relationship proves, justifies and underlines the importance of heredity, including the transfer of both genetic and epigenetic traits, in the formation of the soul or 'I'. Therefore, in Mulla Sadra, we can more firmly claim the transfer of non-physical traits such as moral, educational, and spiritual ones. Heredity can be a convincing answer to justify the differences people have in various fields, "*The source of the souls' difference in understanding is*

their difference in substance (matter) . . . and the difference in substance is due to the disparity in sperms." (Mulla Sadra 1987: vol. 1, 578).

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