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Allamah Misbah's Puzzle about the Emergence of the Soul in the Philosophy of Mulla Sadra

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ARTICL INFO	ABSTRACT
    	SUBJECT AND OBJECTIVES: Purpose in this paper is to examine the criticism, explore the main issues raised, show how these issues are related to contemporary philosophical discussions, and suggest how Sadra's position might be defended. Two kinds of defense will be suggested: first, we can surmise from Sadra's works how he might have responded to the criticism; second, we can consider how a position like Sadra's could be defended in view of contemporary philosophy. **METHOD AND FINDING**: This research is a qualitative research with a critical analysis approach. One of the distinctive features of the philosophy of Mulla Sadra is his doctrine of the soul. He held that the soul evolves from the body. The human soul has its beginnings in material existence, but it evolves beyond the material and achieves eternal immateriality. **CONCLUSION**: The idea that the incorporeal soul as a seperable substance, might have begun its existence as a corporeal substance and then changed into an incorporeal substance has been criticized by Allamah Misbah. His criticism raises a number of issues in the philosophy of mind, metaphysics, and Islamic theology.
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Introduction

One of the distinctive features of the philosophy of Mulla Sadra (1571-2; 1635-6) is his doctrine of the soul. He held that the soul evolves or emerges from the body. Not only humans and animals, but rather all corporeal existents, even rocks, exist in the material and non-material realms.

The human soul has its beginnings in material existence, but it evolves beyond the material and achieves eternal immateriality just as the fetus begins its existence with the womb of its mother but develops in such a way as to achieve a separate existence.

This idea is encapsulated in the slogan that the soul is corporeal in origin but spiritual in survival (Jismaniyat al-Huduth wa Ruhaniyat al-Baqa), or that the soul is corporeal in its inception and spiritual in its sempiternity. *(Rizvi, 2009: 86)*

Mulla Sadra's philosophy is deeply indebted to Islamic mysticism or Sufism, and his doctrine of the soul may be considered a philosophical elaboration of the position expressed in the famous lines of Jalal al-Din Rumi: *(Ref: Lewis, 2000: 417)*

I died to mineral, joined the realm of plants
I died to vegetable, joined animal

I died in the animal realm, became man
So why fear? When has dying made me less?
(Rumi, 1990)

The idea that the incorporeal soul as a seperable substance, might have begun its existence as a corporeal substance and then changed into an incorporeal substance has been criticized by Allamah Misbah. *(Ref:*

Kanzian and Legenhausen, 2010; Quoted by: Misbah Yazdi)

His criticism raises a number of issues in the philosophy of mind, metaphysics, and Islamic theology. Based on this. two kinds of defense will be suggested: First, we can surmise from Sadra's works how he might have responded to the criticism; Second, we can consider how a position like Sadra's could be defended in view of contemporary philosophy.

Theoretical Foundations of Research

Sohravardi (d. 1191) is known to be the source for Mulla Sadra's idea of the variable intensity of being, "Tashkik Wujud". According to him, if two things differ, the difference might be due to their being of different species and genus, or having the same genus, but being of different species, or due to

being two instances of the same species, but with accidental differences.

This much is uncontroversial; However, Sohravardi also held that things might be different, like two beams of light, where the only difference between them is a difference in the intensity of the lights.

Mulla Sadra applied this idea to existence. Things could differ with regard to the varying intensities of their existence. Furthermore, changes in the accidents of a substance could be explained as due to changes in the intensity of the existence of the substance in one respect or another.

When a substance becomes more perfect, Mulla Sadra suggested, this change is a reflection of an increase in the intensity of the existence of the substance. Changes in a substance might occur through

the external application of an accident, as in the dying of a shirt; but change could also have its source in changes within the substance itself.

Change does not only occur with the exchange of accidents, as in ordinary motion, when a substance exchanges one location for another. A substance itself may change without a loss of individual identity by an increase or decrease in the intensity of its existence. Mulla Sadra called this kind of change in a substance substantial motion, "Harakat Hawhariyah".

Identity is based on continuity, not on the retention of a substantial form, whether this substantial form is delineated through essential attributes or is constituted by a haecceity. Motion, or change, occurs not only with the exchange of accidents. The changes internal to a

substance may have the result that a corporeal substance changes into a spiritual substance.

Armed with these two concepts, the variable intensity of existence and substantial motion, Mulla Sadra used them to explain the evolution of the soul. *(Ref: Legenhausen, 2014; Kanzian and Legenhausen, 2010; Hajatpour and Elkaisy-Friemuth, 2021)*

We begin with a corporeal substance, which develops various powers until those associated with life are achieved. The soul begins as an entelechy, as a corporeal power and natural form.

In keeping with the Aristotelian tradition, the soul (nafs) is the principle of life for all living things, including plants and animals. This develops from its elementary corporeal form into a sensible

soul with various levels, then the cognitive and reflective soul, and finally the rational soul, which is reached only for some human beings, and usually when they are about forty years old. *(Mulla Sadra, 2008: 126)*

The soul is not an inner person who steers the ship of the body, according to Mulla Sadra. *(Mulla Sadra, 1981: 139)*

The soul remains a corporeal power, an entelechy, as long as it has not developed an intellect. With the emergence of the intellect, what has developed exceeds the bounds of corporeality; and the soul becomes an immaterial substance, even while attached to the body as its perfection, form, and power. *(Ref: Homazadeh, 2020: 380)*

There are also provisions made for the separability of the souls after death for those who do not make it to the stage of the fully rational spirit. The soul stands as an intermediary stage between the sensible and intellectual realms, a barzakh (isthmus) between the body and the spirit, which was identified with the intellect. *(Massi Dakake, 2004)*

Thus the soul is the junction of the two seas *(Ref: Quran, 18: 60)* of corporeal and spiritual things; its being the last of the corporeal realities is a sign of its being the first of the spiritual ones. If you consider its substance in this world, you will find it the principle of all the bodily powers, employing all the animal and vegetal forms in its service; But if you consider its substance in the world of the Intellect, you will find that at the beginning of its fundamental nature it is pure potential without any form in that world; but it has

the capability of moving from potency to actuality with regard to the Intellect and the intelligible. *(Mulla Sadra, 1981: 148)*

The question of the soul was one that perplexed philosophers in Europe as well as those in Muslim countries, all of whom drew upon Platonic, Aristotelian, Stoic, and Neoplatonist or post-Aristotelian Platonist sources to attempt to reconcile the conflicts between religious and philosophical views of the soul, and between different philosophical accounts, especially between the Platonic and the Aristotelian.

If we compare the views of Aquinas and Mulla Sadra on the origination of the soul, *(Ref: Rezazadeh, 2011)* we find that both were engaged with many of the same debates about how to understand the views of Plato,

Aristotle, the Neoplatonists, and Ibn Sina. Although Aquinas and Mulla Sadra agree on many points, they differ about the incipience of the soul.

For Aquinas, God creates the soul as an immaterial entity and attaches it to the body when the body has developed in such a manner that it can be suitably receptive to the soul.

For Mulla Sadra, on the other hand, the soul emerges from the body as its corporeal form and only then develops by substantial motion in such a way as to become independent of the body, so that what was the form or entelechy of the body becomes the psychic material that can take on an intellectual form.

The problem raised by Allamah Misbah is whether it would not be more sensible to accept a view of the origin of

the soul more similar to that offered by Aquinas and by the majority of Muslim theologians and philosophers prior to Sadra.

Allamah Misbah's Puzzle about the Generation of the Soul

The root of the puzzle about the generation of the soul raised by Allamah Misbah may be traced back to the conflict between the Platonic and religious views of the soul, on one side, and the Aristotelian views, on the other.

The origination of the source of the differences of opinion about the soul in the conflict between Platonist and Aristotelian philosophies is discussed by Mulla Sadra in his "Asfar": *(Mulla Sadra, 2008: 286)*

On the Aristotelian hylomorphic view, the soul is the form of the individual human being, and the body is the matter. This seems to imply that the soul cannot exist without the body, contrary to the predominant religious views and the views of the Neoplatonists, who held the soul to be immaterial and immortal.

The depth of the difficulty is expressed by Evelina Miteva at the end of a study of the European debates on the issue in the thirteenth century:

> *Probably the problem of the soul as form of the body and at the same time an immortal substance could not be solved in a consistent philosophical manner; Because, by its nature, the soul is "stretched" between the realms of the corporeal and of the spiritual, and this tension is what makes it human. (Miteva, 2012: 100)*

Mulla Sadra's innovation is to suggest that the corporeal human substance can change

gradually until it is no longer inseperable from the body.

His efforts are to allow for the generation of the Neoplatonist immaterial immortal soul from the Aristotelian corporeal entelechy; even goes so far as to chide Ibn Sina for treating the Theology of Aristotle as if it had been written by Plato. *(Mulla Sadra, 1981: 144)*

It is in regard to the instant of the generation of the soul as corporeal entelechy and spirit that Allamah Misbah poses his question:

Whether there is a definite point at which [material substance] is transformed into a human spirit. If we want to picture this, is it the case that the substance continues in a straight line [mere persistence through time] and then at some point shoots off at an ascending angle [perfecting substantial motion]?

The answer to this question is not clear from the writings of Mulla Sadra. There are two possibilities:

First, we could say that the ascending motion starts at some specific point, that is, one part of the motion is constant, and then at a certain point it begins to ascend.

Second, that the ascending motion was there from the start, that is, that there is no specific point, but from the very first there is a curved line, although until now the curvature was not perceptible and we did not notice it.

If it is said that this perfecting motion does not start at any definite moment, but has a long history for which no starting point can be found, then the question will be raised as to how to justify the temporal coming to be of

the soul on the basis of this theory, for in this case it would appear as though the ascending motion were present from the start.

If, on the other hand, it is said that the ascending motion began at a certain moment, the implication will be that this motion can be analyzed into two motions:

A constant motion that continues within the body, and an ascending motion that begins at a certain point. In that case, we cannot say that the body was transformed into the soul, but that the soul came to be attached to the body at the point the ascending motion begins. *(Ref: Kanzian and Legenhausen, 2010; Quoted by: Misbah Yazdi)*

The question posed here takes the form of a dilemma. No matter which horn of the dilemma we choose, the result will be contrary to the claim that a corporeal substance changes into an incorporeal one. The two horns of the dilemma are:

1. There is some specific point at which the substantial motion takes place by which the human soul appears.

2. The substantial motion was there from the start so that there is no specific point at which the change occurs from the corporeal to the spiritual.

If we take the first option, it would seem that we have identified the point at which the soul becomes attached to the body, contrary to the claim that the soul evolved or emerged from the body. If we take the second option, it seems that the soul was present from the beginning and there is no evolution or emergence at all.

The First Horn: The Point of Emergence

Suppose that there is an instant, some threshhold, at which point we no longer have a mere corporeal form, but an immortal soul.

In Aristotle's Generation of Animals, there is a discussion of when in the development of the embryo, the various stages of the soul appear: Nutritive, sensitive, and finally rational; and this exposition of the problem was followed by the Christian and Muslim medieval philosophers, and by Mulla Sadra.

Aristotle gives notice of the difficulty of the question of when the rational soul appears.

Hence arises a question of the greatest difficulty, which we must strive to solve to the best of our ability and as far as possible. When and how and whence is a share in reason acquired by those animals that participate in this principle?

It is plain that the semen and the embryo, while not yet separate, must be assumed to have the nutritive soul potentially, but not actually, until like those embryos that are separated from the mother, it absorbs nourishment and performs the function of the nutritive soul. For at first all such embryos seem to live the life of a plant. And it is clear that we must be guided by this in speaking of the sensitive and the rational soul. *(Aristotle, 1984: 736a24-736b20)*

Plainly those principles whose activity is bodily cannot exist without a body, e.g. walking cannot exist without feet. For the same reason also they cannot enter from outside. For neither is it possible for them to enter by themselves, being inseparable from a body, nor yet in a

body, for the semen is only a residue of the nutriment in process of change. It remains, then, for the reason alone so to enter and alone to be divine, for no bodily activity has any connexion with the activity of reason. *(Aristotle, 1984: 736b21-736b28)*

Of course, today we would say that the activity of reason is not independent of the activity of the brain, or of the central nervous system; but Aristotle and Mulla Sadra do not argue in this way at all.

Mulla Sadra argues that it is not only reason that does not require a body, but also the imagination. In dreams we see things in the imagination without using our eyes. So, the seeing of the imagination is not dependent on the organs of vision. From here, a leap is made to the generalization that imagination does not require corporeality.

Sadra uses this to explain how religious teachings about rewards and punishments can be understood to apply to incorporeal souls after the death of the body. *(Mulla Sadra, 2008: 184-186)*

As for those faculties that require a corporeal basis, such as Aristotle's example of walking, Mulla Sadra argues that dependency does not indicate the source. The same material may grow or fail to grow depending on whether it is exposed to sunlight.

By analogy, Sadra claims that the material conditions for various powers or perfections of the soul are not sufficient for their actualization, the source of which must, therefore, be from the divine light of existence.

So, while Aristotle thought that it was only reason that enters the soul from outside

and is divine, Mulla Sadra extends this to all the faculties.

Matter alone and its principles are not sufficient for the appearance of any of the perfections of the soul, whether nutritive, animal, or rational, although the vegetable soul will appear when the corporeal arrangement is suitable. Some of these perfections will die with the death of the body, such as the power of nutrition and locomotion; while others, the imaginative and rational, will continue after death.

The point in time at which the imaginative faculty will be activated will be some time between the activation of the nutrient faculty and the rational faculty.

In keeping with the assumption of the first horn of Allamah Misbah's dilemma, we are supposing that there is some particular moment at which the body is connected to an immortal soul.

Allamah Misbah suggests that this would be the moment at which an immaterial soul becomes attached to its body.

To the contrary, Mulla Sadra might respond that what happens at this moment is not the attachment of something else, but the development of powers, by divine grace, in what was already present.

In response, one could say that in this development from a corporeal substance to an immortal and incorporeal one, there is a change from one sort of substance to another. The point of change is to be explained by the attachment of a new substance to the body, a soul.

The response of Mulla Sadra is to be found in his answer to the question of how many souls a person has at

any given time. This is an old problem that was debated among post-Aristotelian philosophers for centuries, whether pagan, Christian, Jewish or Muslim. *(Dales, 1995)*

Had he been acquained with Aquinas, Mulla Sadra would surely have agreed with him that in the human being, the soul includes the vegetative soul and the animal soul, for Sadra emphasizes the unity of the embodied soul despite its existence at different levels, and he cautions that the vegetable soul in the human should not be imagined to be just like the vegetable soul in a plant.

Aquinas and Sadra both explicitly reject the idea that the soul is in the body like a captain in his ship. *(Dales, 1995: 140)*

If the soul can be united as one individual despite having powers that are corruptible and dependent on the body and others that are immortal and immaterial, then the persistence of the individual soul can be maintained as it crosses the threshold from the stage when its soul is corporeal to the stage when it is spiritual. Even if we assume that this change happens instantaneously, it need not be interpreted as the introduction of an extra soul, an immortal one, in addition to the corporeal soul that preceded it.

Perhaps Allamah Misbah would respond that we have already agreed, following Ibn Sina, that the rational soul is an immortal substance and is not to be identified with any corporeal substance.

When the soul becomes immortal, a new substance is attached to the human body that did not exist before. We cannot say that this was

previously corporeal, because it is essentially immaterial.

Mulla Sadra might have responded that the continuity between the organic substance and the immaterial one is sufficient to justify the claim that it is the same individual, the soul, that was corporeal and became immaterial through substantial motion, through the exchange of a merely corporeal substance for an immaterial one.

The soul retains its individual identity despite the change in substance. This continuity on which individual diachronic identity is based will be present even if, in accordance with the first horn of the dilemma, the substantial change occurs at some particular instant.

The Second Horn: Beginningless Emergence

The second horn of the dilemma begins with the assumption that there is ascending substantial motion, that is, change within the substance of the individual human being that involves its becoming more perfect or acquiring powers, from its beginning. It is not clear what the beginning is. Conception?

Allamah Misbah says that the ascending motion might have a long history with no clear beginning at all. This seems to indicate that he is not speaking of an individual but of the stuff that will later find its way to become organized as a human body.

One might also raise the question of the beginning of the soul phylogenetically: Was there not evolutionary development in successive species until the human soul appeared, that is, living creatures with rational powers?

Even if Ernst Haeckel's slogan, ontogeny recapitulates

phylogeny, has been refuted by modern biologists, the phylogenetic question may help to rebut the implication of the second horn of the dilemma.

The question in the second horn is how to justify the temporal coming to be of the soul if the ascending motion were present from the start. Phylogenetically speaking, we can trace the development of organisms through the geological periods until vegetable life, animal life, and finally human life appear.

From the beginning of the earth, we might surmise, there was ascending evolutionary motion, changes that brought with them the appearance of creatures with powers or perfections not present in earlier species. This would not mean that humanity or the human soul was somehow present even in the microorganisms, not even in potency, until the matter is appropriately formed. So, the suggestion that the ascending motion would be an indication of the presence of the human spirit or rational soul would have to be rejected at the phylogenetic level.

There can be evolutionary progress through species, ascending substantial motion, without the final stage being present as long as there has been ascent. The same could be said at the ontogenetic level.

The embryo can develop gradually until it is in possession of a soul without the implication that the soul was there from the start of the ascending motion that led to its generation.

The problem with this rebuttal of the second horn is that the Neoplatonist view of the soul to which Mulla Sadra

is committed is not so easily reconciled with Aristotle.

Sadra writes:

These souls prior to their descent in the bodies were distinguished from each other by the active intelligible dimensions and aspects preceding their natural beings in essence, and not by receptive accidents prior to their quiddities.

There is an indication of it in his [i.e. the Prophet's] saying, may the blessing of God be upon him and upon his progeny, that: "We are the preceding ones and the posterior ones"; and his saying: "I was a prophet when Adam was between water and clay". (Mulla Sadra, 2008: 300)

Furthermore, Mulla Sadra cites verses of the Quran and narrations like those mentioned in this quote that indicate the existence of souls prior to their corporeal generation. Although he explicitly asserts that the religious texts are consistent with the physical generation of the soul in the body, his explanations of the matter are not easy to comprehend.

In The Wisdom of the Throne, he writes:

The human soul has a form of existence preceding the body, without this entailing the transmigration of souls, and without necessitating the pre·eternity of the individual soul, which is the well·known view of Plato. (Mulla Sadra, 1981: 140)

This can be interpreted in at least two ways. First, Sadra might mean that the soul has two forms of existence: one in which the soul exists prior to the body and another in which the body comes first.

This would make sense if we consider that according to Sadra, reality can be divided into three levels: sensible, imaginal, and intellectual. The sensible and imaginal realms each has its own forms of motion and, hence, its own time, since time is the measure of motion.

With regard to sensible existence, the body comes about prior to the soul. With regard to its spiritual existence, however, the soul may be said to be with God, that is, not in the temporal natural world, in a spiritual time that places it prior to the body and the things in the sensible world.

According to a second interpretation, we could say that the particular soul of Adam is to be distinguished from the general human soul, which is the form of the universal: the human, or an immaterial intellect. The individual human souls are drawn from Adam at some other level of existence to admit the lordship of God in a figurative sense.

The admission of God's lordship is implicit in the immaterial form of the human soul, which includes the souls of all humans.

At the same time, I am not certain whether either or both of these interpretations was intended by Sadra, although there are various indications for both in his writings. *(Ref: Mulla Sadra, 2008: 275-280, 298, 523-525; Ibid, 2014: 64-67; Obudiyyat, 2012: 309-318)*

Regardless of which interpretation is correct, Mulla Sadra clearly holds that there was substantial motion at the corporeal level (ascending motion) prior to the generation of the human spirit, which first takes the

form of a vegetable soul, meaning that it has the ability to be nourished and to grow, and gradually the physical organization of the body is further perfected so that the animal soul appears, i.e. the body develops the sense organs and is capable of locamotion.

The ascending motion has no instant when it splits off from the horizontal motion of physical time; but that does not mean that the body has always possessed a soul.

Another answer to the second horn of the dilemma is suggested by Mulla Sadra's panpsychism. As Sajjad Rizvi explains, Mulla Sadra has a very simple proof that all things are conscious. Like knows like, and so what is conscious can only know what is conscious; But all things can be known. Hence, all things are conscious. *(Rizvi, 2009: 84-87)*

Rizvi's work is commendable not only for its analysis but also for pointing out the historical links of Sadra's view with sources in the Neo-platonists.

Nevertheless, the soul of the human being does not consist in the simple amalgamation of the souls of the material parts of one's body.

The soul requires a corporeal vehicle. It begins by emergence from the body and at some later stage becomes immaterial. While panpsychism is sometimes ridiculed, it has recently been revived in analytic philosophy of mind precisely because of the type of difficulty posed by Allamah Misbah's second horn.

Panpsychism has been recently defended by Michael Tye. Tye argues that consciousness must have

existed all along with the body in order for it to have taken the developed forms of consciousness characteristic of human beings.

Since the soul does not attach to the body at any specific instant, it must have been there in some primitive form right from the start. Of course, the sort of consciousness possessed by a quark is not going to be very sophisticated. Tye calls it undirected or bare consciousness. *(Tye, 2021)*

Tye contends that panpsychism allows for the emergence of the consciousness characteristic of the human mind from what, by comparison, is merely corporeal, although the stirrings of consciousness are already present in all things, and the human soul becomes incorporeal by advancing beyond its primitive levels. *(Tye, 2021: 77)*

Jumping Between the Horns: Fuzzy Logic

Allamah Misbah's dilemma is based on the assumption that either there is a first moment when ascending substantial motion occurs and the human spirit animates the body or that the ascending motion was always present and the spirit was there, too, although in a tenuous way. However, there is another possibility:

The ascent and appearance of the soul might have no definite first moment and yet they may have appeared gradually, so that prior to this gradual appearance they did not exist at all. This third possibility can be illustrated by means of fuzzy logic.

Fuzzy logic was introduced by Lotfizadeh in 1965. *(Ref: Belohlavek et al, 2017)* Remarkably, Zadeh was motivated to develop fuzzy set theory because of vague

biological concepts. It has been suggested that the concept of life or of a living system does not have a clear definition by means of which everything could be classified as either living or non-living. Some see this as reason to use fuzzy logic for such concepts.

It seems impossible to obtain a clear-cut definition for the concepts life and living which can satisfy all scientists. Life, and especially the progressive transition from non-living to living matter, is a concept to which traditional Aristotelian logic cannot be applied.

Fuzzy logic provides a natural way of dealing with these types of problems in which class membership lacks sharply defined criteria. *(Bruylants et al, 2010: 142)*

It is remarkable that Mulla Sadra was able to conceive of the gradual emergence of

spirit from a physical body given that the Aristotelian logic with which he operated was bivalent.

Within a bivalent logic, one in which propositions are either true or false and one proposition cannot be more true than any other true proposition, it is impossible to adequately formulate the idea of gradual change of any sort, such as the substantial motion through which a vegetable soul emerges from the body when the body gradually comes to life, and then gradually becomes an animal soul, until it gradually comes into possession of an eternal human soul, and this ascends through levels until it becomes the rational soul, if it gets that far. Gradual change of this kind gives rise to the sorites paradox.

Consider the sorites paradox with regard to the transition

of a human being, "S", who comes into the possession of spirit. We begin by obersving a series of stages. In the early stages of the series, the proposition, "S possesses an incorporeal spirit" or "S has an immortal soul" is false; but in the final stages of the series, it is true. Of course, this is contrary to the view that all human beings possess a soul, to which many people are strongly committed.

It can be said that in the earlies stages, the body is corporeally human, but not yet spiritually human. Although this will meet with strong resistance in many quarters, we will assume it is true without further argument in order to examine the logic of gradual change.

Suppose we use a bivalent logic and observe that if "S" does not have an immortal soul at time "tn", and at a subsequent time, "tn+1", the condition of "S" is similar in relevant ways to what it was at "tn", then "S" will still fail to have an immortal soul. Since the change is assumed to be gradual, at any successive times tn and "tn+1" the condition of "S" will be relevantly similar at both times.

By iteration of the supposition, using a bivalent logic it would follow that "S" never comes into possession of an immortal soul. If a change is gradual, successive stages will be similar; and this will prevent a change from not having a soul to having one. An argument with the same structure could also be used to demonstrate the impossibility of a change of color from dark to light.

Coming into the possession of various kinds of soul consists in having life with

various powers. Powers can be stronger or weaker, just as light can be more or less bright.

Consider the power of reproduction. Occassional replication is not enough for the power to reproduce; but the power to reproduce does not entail that the process of reproduction will always be successful.

The boundary between occassional replication and the power of reproduction necessary for the possession of a vegetable soul is blurry, that is, no non-arbitrary criterion can be given to demarcate exactly when the boundary is crossed.

Since the boundararies are blurry between the living and the non-living and between the stages at which a soul comes to possess the powers by means of which the types of soul are distinguished, there will be borderline cases along the way, cases in which it is neither determinately true or false that something has a soul of a given type. Although the concept of soul in Western philosophy draws on the Aristotelian tradition, the fundamental problem of the fuzzy line between the living and the non-living remains in more recent discussions of the nature of life; *(Ref: Cleland, 2012)* who recommends that attempts to define life be abandoned

Recall that Mulla Sadra holds that the possession of a rational soul in humans is not attained by all, and when it is, it is usually when one is about forty years old. He is not imagining that on a particular day conditions are met so that the rational soul becomes attached to person who lacked reason the previous day.

The rational soul is not a fortieth birthday present; But if we use a bivalent logic, we must assume that there is some threshhold before which one did not have a rational soul, i.e. the power of reasoning, and after which this soul becomes attached to the body.

If we reject the assumption of bivalence, and replace it with a fuzzy logic, we will be able to explain how there can be blurry boundaries, borderline cases, and a solution to the sorites paradox. Nicholas Smith argues that the key to the introduction of a fuzzy logic is to replace the supposition mentioned above by what he calls closeness. *(Smith, Vol. 3: 2015)*

Our earlier supposition was that if "S" does not have an immortal soul at time "tn", and at a subsequent time, "tn+1", the condition of "S" is similar in relevant ways to what it was at "tn", then "S" will still fail to have an immortal soul.

In fuzzy logic this supposition is rejected and replaced by closeness, which in our example means that that if "S" does not have an immortal soul at time "tn", and at a subsequent time, "tn+1", the condition of "S" is similar in relevant ways to what it was at "tn", then the condition of "S" at "tn+1" will be close to what it was at tn with regard to the possesson of an immortal soul.

Smith explains this in terms of closeness to being true or false; *(Ref: Ibid)* but essentially the same point could be made about full or partial membership in the set of things having a soul or about the nature of the possession of a type of soul.

Since what is at issue in Allamah Misbah's dilemma is the possession of an immaterial soul, I will transpose Smith's explication of how fuzzy logic treats vaguenss according to the following schema:

If "S possesses a soul" is less true at tn than it is at "tn+1", then "S" is less in possession of a soul at tn than "S" is at "tn+1".

In bivalent logic, the values of a proposition are just true and false, whereas in fuzzy logic, true and false are the extremes of a spectrum of values.

In fuzzy logic possession of a soul is not an all or nothing affair. Possession of a soul can be weak, sporadic, or insignificant. Then this state can gain in intensity until one is in full possession of an immortal soul.

I think that Allamah Misbah might have responded to this suggestion by pointing out that what is at issue here is not something that might fade in or out of existence, like a shade of grey. The issue is one of identity. The soul is not just a power or a possession; a person simply is her soul. If "a=b", and "b" is necessarily an immaterial substance, then there is no way for "a" to be corporeal, ever. He might have used an argument similar to one against vague identity, due to Gareth Evans: *(Ref: Evans, 1978)*

Suppose things may be either vaguely or definitely identical, and that "a" is vaguely identical to "b". Clearly, "a" is definitely identical to "a". Hence, Evans concluded, "a" and "b" are definitely non-identical, since one has a property the other

lacks, namely being definitely identical to "a".

In response, Mulla Sadra might have made use of fuzzy identity theory, had it been available; although this is not the only way in which Evans' view has been countered. *(Ref: Akiba and Abasnezhad, 2014; Bacon, 2018; Parsons, 2000)*

There are several ways to approach fuzzy identity. First, identity could be viewed like any other two-place predicate which will be used in formula that do not need to have a specific truth value. The truth value could be given as a value between 0 and 1, which Smith calls standard fuzzy logic truth values, "sftv's". *(Ref: Smith, Vol. 3: 2015)*

There are, however, a number of other ways to assign values that are surveyed by Smith in his review of how to tackle the objection to fuzzy logic that

by using "sftv's", artificially high precision is imposed on the interpretation of fuzzy predicates and sentences, since it must be specified exactly how true they are.

One solution to the problem favored by Smith is fuzzy plurivaluationism, could be applied to identity statements to allow for fuzzy identity, when identity statements need not be definitely true or false, but are to be interpreted by not just one value between 0 and 1, but by a plurality of models that use "sftv's", subject to various constraints.

In two valued logic, and a semantics in which "v" is the function that gives the semantic value of the constants in the object language, a statement of the form "Rab" will be true if and only if the pair consisting of the pair

"<va", "vb>" is a member of the set of pairs, "vR".

Fuzzy logic may be given a similar semantics, but one that allows for fuzzy set membership, so that "<va", "vb>" can be a member of "v=" to some extent, so that the value of an identity statement will be an "sftv". In this case, the fuzziness of an identity statement will be due to the fuzziness of the interpretation of identity.

To apply a constraint Smith suggests for fuzzy plurivaluationism to the case of identity, if "a" and "b" are very similar with regard to their identity conditions, "v(a=a)" and "v(a=b)" must be very similar in respect of truth on every acceptable model, given that identity is taken to be a vague predicate. *(Smith, 2015: Vol. 3: 1272)*

It seems that Allamah Misbah would not be persuaded by these sorts of approach. He might have objected that fuzzy identity is not real identity.

Real identity, as Evans argued, is governed by the rule that allows that from "a=b", we can substitute "a" for "b" in any (extensional) formula in which it occurs while maintaining the validity of the arguments in which they occur. From "b" is incorporeal and "a=b", we should be able to conclude that "a" is incorporeal.

Graham Priest has argued that the substitutivity rule needs to be restricted for fuzzy identity, and to insist on its being unrestricted begs the question against fuzzy relativity. *(Priest, 1998; Ibid, 2008)*

Furthermore, substitutivity is already restricted to extensional contexts; so, one cannot argue that identity requires unrestricted substitutivity.

Also, Stewart Shapiro makes similar observation in his contribution. *(Ref: Akiba and Abasnezhad, 2014: 234-235)*

Allamah Misbah might also have argued that it is self-evident that identity is a transitive relation. If "a=b" and "b=c", it follows that "a=c". Fuzzy identity, however, is not transitive. This might be taken as reason enough to dispense with fuzzy identity altogether.

The proponents of fuzzy identity, however, admit that in fuzzy logic, modus ponens, the substitutivity of identicals, and the transitivity of identity are all invalid.

In defense of fuzzy logic, Priest argues that in argument that utilize these rules, if the premises are close enough to the truth, the conclusion will also be close to true. This might explain why these principles seem to be self-evident to us, although they are invalid. *(Priest, 2008: 576)*

Conclusion

The discussion begins with the presentation of a dilemma by Allameh Misbah for Mulla Sadra. We could formulate the dilemma as a reductio ad absurdum.

The proposition to be refuted is that the soul begins its existence as a corporeal entity. If this is true, there must be some instant at which it ceases to be merely corporeal or the immaterial level of its essence was present from its inception. If it ceases to be merely corporeal at some point, then it did not begin its existence as a corporeal entity but as an immaterial one that is introduced or attached to the body at the instant Sadra would say that it ceases to be merely corporeal.

So, given the first horn of the dilemma, we must reject the proposition to be refuted.

The soul does not begin its existence as a corporeal form.

If, on the other hand, the substantial motion that lifts the soul from its corporeal state to the spiritual one was there from the start, then at its inception the soul was not merely corporeal, contrary to the proposition to be refuted.

The structure of the dilemma can be pictured like this, where "C" is the proposition that the origin of the soul is corporeal; "A" is the claim that the soul becomes incorporeal at some specific instant; and "B" is the proposition that the soul had an immaterial level of existence from the start:

1. C → (A or B)
2. A → ~C
3. B → ~C
4. C → ~C
5. ~C

In this paper, three ways to defend Mulla Sadra's position are suggested, "C":

First, one could argue against (2), the first horn of the dilemma;

Second, one could argue against (3), the second horn of the dilemma;

Third, one could jump between the horns by arguing against (1), that is, by claiming that "C" requires the acceptance of neither "A" nor "B".

Of course, whether any of these three defenses is credible depends on the evaluation of the details of the argument. I have tried to show that all three are plausible enough to suggest how the conclusion, "C", could be reasonable resisted.

However, it is the jumping through between the horns with the help of fuzzy logic that promises the greatest

gains in logical acumen if the necessary arguments were to be worked out in detail. This does not mean that this strategy is the one that will most likely be found convincing.

At the same time, there remains the question of which strategy would have appealed to Mulla Sadra, if he were to consider Allamah Misbah's dilemma. Here, I am inclined to think that he would have endorsed the strategy of taking on the second horn, because this fits best with his panpsychism.

I am sure that Allamah Misbah would be able to raise difficulties with each of the three strategies that I have proposed here and that his keen insights would have revealed aspects of the problem.

Acknowledgment

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