

## Time and Space in the Philosophy of Mulla Sadra and Kant

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**Abstract:** This research investigates the opinions of Mulla Sadra and Kant about the time and space and compares similarities and differences. Time and space in Mulla Sadra philosophy exists in the outside world and also in material world but their presence is not independent from material creatures but they are demonstrated due to their essence. Mulla Sadra considers for extensions for physical creatures: intransient extensions in three directions length, width and depth which are referred as space and fourth extension which is called time. But time and space in the philosophy of Kant are matters that are real in the mental world and have no demonstration in the outside world and they are just molds in which sensory data organize and transform to cognition and objects cannot be recognized out of time and space.

**Key words:** Mulla Sadra, kant, time, space, Iran

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### INTRODUCTION

Human is totalizer creature in his nature who thinks to infinites and always wants to cope the barriers in his way. Time and space are barriers that human has tried to cope them but human can neither be in the past nor travel in the future. He also cannot be present in several places in a moment. These limitations have had always regret for human: I wish I could return to 10 years before and started again... I wish I were in another place right now... therefore, human thinks about time and space that sometimes lead to fantasies like time machine and sometimes to most valuable theories. Because time and space cannot be understood with senses and they are not certain creature like tree or mountain, discovering their reality and nature is difficult and this difficulty has created different and contradictory opinions in this regard. Sometimes these two are considered and perceived, sometimes subjective and sometimes external but what is clear is that everywhere time is considered with higher precision and depth, it has led to innovations and solution of many philosophical problems as evidenced in the Mulla Sadra and Kant philosophies. Therefore, this research aims to study the opinions of these two philosophers about time and space.

### SPACE IN THE MULLA SADRA PHILOSOPHY

In Islamic philosophy, the importance of explaining space concept reveals when we know that we need correct understanding of space concept for

understanding other concepts like abstract, material, etc., Mulla Sadra, by considering space as certain concept, finds 4 common characteristics among them: space with known characteristic and features is a clear issue, i.e., the thing in which body transfers from and to that and body stays in it and has position. This means that we can refer to it as here or there and it has quantity and can be measured and has fractions, half, one-third, one-fourth and no two bodies enters in it.

Mulla Sadra says: "all who have conflicts about the space, agreed on the four above-mentioned signs such that their conflict is not only literal but their opinions about the reality of space is different (Tabatabaee, 1994). Also, Mulla Sara refers to 5 quotations about the reality of space and enumerates following problems for it:

- Space is the matter of body
- Space is the face of body (Tabatabaee, 1994)

Allameh Tabatabaee has not considered these two opinions reliable and knew them different from four main characteristics of space.

From these quotations and opinions, matter or face of space do not conform to four statements, because space is demanded or left by movement while matter and space is not so. Compound body can be attributed to the matter and for example, we can say: wooden door or iron door while it is not attributed to the space (Tabatabaee, 1994).

Space is the surface of body that crosses the object, whether contained or containing (Tabatabaee, 1994). The most important criticism of surface theory is that if the

possibility is surface (contained or containing), it is necessary that it is mobile and immobile at the same time, like immobile fish in the running water or immobile bird in the sky when wind blows because their containing body transforms in every moment, they should be mobile while we are observing their immobility with our eyes. Also, we describe this space as full or empty and this characteristic is true about dimension not surface (Tabatabaee, 1994).

Space is internal surface of containing body which is tangent to outer surface of contained body and Aristotle has said this and Farabi and Avicenna have followed him (Tabatabaee, 1994).

A criticism of this theory is if we assume that a fish is in the running water, the water surface tangent to his body changes continuously and according to this theory, we should say that its space changes continuously while we assumed that the fish is static and has no change of space (Mesbah, 2004).

Another point that should be considered is that this definition has consisted of two basic concepts: one is internal surface of contained body and the other is it being tangent with outer surface of containing body but surface belong to "quantity" category and "tangent", according to the theory of Aristotle is "extra" category and sum of these two categories do not develop third category. On the other hand, being tangent is the added state for this surface and therefore, it cannot be considered as nature of it and therefore, it is quantitative category (Mesbah, 2004).

Space is a dimension equal with dimensions of body and based on this, it is natural dimension and abstract. This quotation is attributed to the Plato and stoics, Mohaqeq Toosi and Mulla Sadra (Tabatabaee, 1994).

The most important criticism on the abstract natural dimension is that its necessity is intercepting two values which is impossible because this theory means that body with three extended dimensions in three directions accurately penetrate in another definite value and these two values are transformed to a determined value which is not hidden from anyone, except that for justifying it, we consider reason of avoidance as matter with value or form or both (Tabatabaee, 1994).

This quotation seems strange, since abstract creature, although it is sample and Isthmic, it has no relation with material creatures and it cannot be considered as container. It is probable that there was an error in the speech or the meaning of "abstract" is not its common meaning but it confirms that Mirdamad has denied attribution of this quotation to the Plato. According to this probability, we can interpret this saying as: space is the volume of world if it is considered separately (Mesbah, 2004).

It seems that first concept of space does not belong to concepts like human, animal, color or shape but it is a parallel concept including attribution and addition to an object with space and for understanding this concept, we should measure two things from a certain point of view in order to consider one as the space of the other and this indicates that space is not substantive concept to determine its category but it is an abstract concept (Mesbah, 2004).

Space is a function of universe and before its emergence or after its destruction, there is no space such that we cannot consider volume or space as an independent creature and consider independent creation for it. Basically, concepts like volume and surface indicate facets of bodies that mind considers them separately and therefore, these issues are material nature. By looking carefully, it is clear why space belongs to bodies and it is characteristics of material creatures because the origin of abstraction is nothing except volume of body (Mesbah, 2004).

#### **TIME IN MULLA SADRA PHILOSOPHY**

During Islamic thought history, time has considered from different views such that both scholars and different philosophical schools have considered it seriously. Since, emergence of Islamic speech is precedent to the emergence of Islamic philosophy, we can say that scholars have dealt with time before philosophers. In speech, time is considered during creation and emergence of the world. Scholars, in order to know world as occurred that needs cause and effect, consider time as a subjective, unreal and perceived. According to scholars, time is result of intercepting known occurrences with unknown occurrences (Kapelston, 2008).

There are various opinions that Avicenna has expressed them in Shafa and Mulla Sadra has referred to it in Asfar:

- Some have denied the presence of there i.e. it has no external source and abstraction origin but it is perceived
- It has no external sample but it has abstraction origin and it is philosophical secondary comprehension
- Time has no unique presence, it is between two phenomena
- Time is physical nature
- The movement including past and future and present is time
- Time is movement of sky, not other movements
- Time is one complete round of sky, not less
- Abo-al-Barakat Baghddi says: time is the quantity of existence

- Some scholars like Plato and his followers have said: time is a distinct and self-sufficient nature

According to above-mentioned opinions, there is two general opinions about time: first, opinion of those who do not believe time and considered it imaginary and those who believe time but have difference about the existence and its nature.

Mulla Sadra in Asfar has two discussions about the time: one is discussion about the proving time and one discussion about the nature and manner of time. Mulla Sadra has stated two method for proving time: natural scholar's method and theological scholar's method.

And what has guided us to the time is that we see that one of two mobile bodies in a distance have traveled more distance and the other less distance while both bodies have moved in the same time and ended with each other and sometimes we see that the distance traveled by two bodies is same but they are different in the beginning and end of movement. Therefore, it become clear that in the world, there is one quantity and ad variable called time that values of movement and difference between them is determined by it and this quantity is instable creature. But values of bodies are fixed and unchangeable issues (Sadra, 2012).

Allameh Tabatabaee states the method of theologians for proving the presence of time as following: we see events around ourselves that some of them occur after others such that what occurs next is halted to past events such that it makes the sum of before and after impossible. This type of transposition is different from other transpositions in one thing because in the transposition of cause or part of it to effect, the halt is not such that stops the sum. This is a clear introduction that there is no doubt in it. On one hand, the thing known as "before" divides into before and after such that it was seen in all accident. This means that before and after cannot be summed and therefore, the more we continue division, there will be two sections "before" and "after", although this division ends in infinite. Therefore, there should be one connected quantity during accidents because if there was no quantity, there was no division. If there was no connection, after would not hold in before and they were separate. In other words, if there was no connection, there was no interface between before and after and if was not stable, sum of before and after occurred. This is what we call "time" (Tabatabaee, 1994).

After proving the presence of time, Mulla Sadra deals with nature and manner of time. Mulla Sadra, by using opinions of predecessors, presents his special opinions. Mulla Sadra, by accepting positive points in the statement

of the predecessors about time and by relying them, eliminates weaknesses and compensates shortages and deficits of their theory and as a result, he presents a new theory that solves time and movement problem concurrently and it is one of the most valuable initiatives of him in the philosophy. Positive points are: time is a continuous and dividable issue and in one sense, it belong to totality; time and movement have close and inseparable relationship and no movement occur without time such that realization of time without movement and continuous transformation is not possible because passing components is gradual transformation for the thing that has time (Mesbah, 2004).

But the opinion of Mulla Sadra is different from his predecessors. Time has close relationship with change and movement and difference in this case leads to difference of opinion about the time. Before transcendent theosophy, movement and change was limited to the fourth widths but Mulla Sadra proved the movement in the substance. Therefore, all material world is in change and movement and lack of change occurs in the abstracts and nature is same as movement. He considered time and movement as external demonstrations of objects while according to them, they have analytical demonstrations and they have not independent presence and they are separable only in the mind analysis container. He allocated movement to the demonstrations and denied not-mediated attribution of time to objects while the basic movement is movement in the substance, because it is impossible that something without movement in its nature, can pass by mediating other issue; therefore, time should be directly attributed to them and considered as the fourth dimension for them. According to Mulla Sadra time is the dimension and extension that each physical creature has, in addition to space dimensions (length, width, thickness) (Mesbah, 2004).

## **TIME AND SPACE IN THE PHILOSOPHY OF KANT**

Scientific and intellectual life of Kant includes two periods before and after criticism which before criticism, Kant was follower of Leibniz and in addition to writing books and philosophical thesis, he studied and had scientific writings. In the ear after criticism philosophy, Kant has established a new philosophical system that the book "criticism of pure intellect" was its result.

In this period, Kant is influenced by Hume and his works give certain directions to the studies of Kant. He was influenced by Hume but he was not his follower. In

fact, philosophy Kant was a response to the empiricism of Hume which stopped recognition and made science useless but Kant believed the recognition, therefore, he tried to present a new plan and study the ability of mind in recognition.

Kant refers to the case which is not in the subject and indicates a new science as compilation case and a case which is mentioned in the subject and did not indicate a new subject is analytical case. In another classification, Kant called the case that needs experience for being true or false as posterior or post-experience and the case which do not need experience as priori or precedent.

Hume considers priori cases in the science while Kant believes the presence of these cases in the science and in his philosophical system by dividing science to mathematics, natural sciences and metaphysics, deals with priori cases which are empirical and have totality.

But Kant presents the time, space and its characteristics under the title of "transcendental senses" (Hartnack, 2013).

Time and space are two evidences that all identifications and verdicts are based on the mathematics because all mathematical concepts should first imagine in the evidences and concepts of pure mathematics should be imagined in the pure evidences (Avicenna, 2011). Kant divides mathematics into geometry and arithmetic and by introducing time and space as priori faces of evidences which is the basis of mathematics, he first introduces nature and characteristics of space as geometry priori and time as arithmetic priori.

### **SPACE IN THE PHILOSOPHY OF KANT**

Kant proves with 4 reasons that space is priori form of intuition. First, space is not empirical concept which is resulted from external experience and it rejects abstract space.

Second, space is a necessary and priori imagination which is a foundation of all external evidences. No one can imagine that space do not exist absolutely but we can imagine that nothing exists in this space. Third, space is not a rational concept but it is pure intuition. We can imagine only one space although, we can divide this space to different parts with different sizes. These parts are sections of space not its constituents. And fourth, space is not a concept but it is priori evidence. This concept may have various instances. We can speak about the parts of sections of space but none of them are instances of space (Hartnack, 2013). Geometry is compiled in term of Kant and it is priori in terms of characteristics of space because it is the science in which we can issue

priori opinions about the concepts of space like direct lines and the shortest distances. Condition of issuing this verdict is priori space.

### **TIME IN THE PHILOSOPHY OF KANT**

Kant deals similarly to the issue and mentions 4 causes for proving intuition of time. Time is not an empirical concept. We do not obtain concept of time by using abstract. Instead, if we do not assume time, we cannot have any experience. Time is a necessary imagination. No one can imagine the world without time. Time is not a rational concept but it is priori intuition. We can talk about parts and different points in the time. But they are parts of a time not its ingredients. Time is not consisted of separate time parts. We cannot talk about the time unless we assume it. Therefore, time is not a concept but it is an intuition.

Time as a priori intuition is the necessary condition for issuing priori verdicts in the arithmetic. Figures form by adding consecutive units. These consecutive figures determined the priori intuition (Hartnack, 2013).

According to Kant, time and space are subjective issues but their presence in the mind is an independent presence. Both of these imaginations are only intuitions since if we eliminate the empirical intuitions of bodies and their changes, time and space will remain; therefore, they are pure intuitions and ground for empirical intuitions and their elimination is not possible (Kant, 2011).

### **CONCLUSION**

Major similarities of Mulla Sadra and Kant about time and space is that according to both philosophers, time and space are not perceived issues and they exist but Mulla Sadra believes that time and space in the outer surface, Kant believes the subjective time and space and their independence. According to Mulla Sadra, space is a clear imagination but time is not clear and needs to be proved. According to Kant, time and space have no abstract origin.

An important point about the time and space from Mulla Sadra and Kant views is the difference between their views. Kant view is epistemologic. He believes that time and space does not belong concepts and mental imagination but they are part of structure of mind which are known by sensory data and any recognition from outer world is in the scope of time and space which are mental structures but time and space have no reality in the outer world. Mulla Sadra has epistemological view toward time and space. Time and space are four dimensions of

physical creatures, i.e., they are part of their structure. We can say that according to Kant, time and space are part of structure and basis of mental presence of things and according to Mulla Sadra both of them are basis of external presence of objects.

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