

The Conceptual Metaphor in Avicenna's Logical Discourse

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Abstract

In this paper, we aim to reveal the applied models of conceptual metaphor in Avicenna's philosophical discourse through his human experience in logical thinking by adopting the major metaphorical classes formed from the three types of metaphor, structural, directional, and ontological, according to the linguistic structures. We found that his logical language is full of metaphorical structures with different dimensions, such as clarification, influence, persuasion, motivation, and suspense, because its basis on material foundation perceived by senses makes it more effective in terms of influence and persuasion.

Keywords: *Conceptual Metaphor - Logical Discourse - Avicenna - Conceptual System - Metaphorical Structures.*

The Research in the semantic field or research into the nature of meaning represents a scientific revolution in the field of cognitive linguistics, especially by focusing on the so-called "conceptual metaphor," which believes that meaning is a construction of mental representations in the brain, as it is a mental process based on the automatic connection between existents, which is subject to experience. Individuality and the reality of the language user, and therefore it differs from metaphor in the ancient rhetorical perspective.

The conceptual metaphor appears in all our mental representations extracted from life experience and the lived reality in the social environment. Therefore, we tried to trace some conceptual metaphors at the level of the philosophical discourse of "Avicenna" through his logical thought that expresses his human philosophical experience, where the search resulted in the logical expressions that built on the conceptual metaphors of Avicenna by exploiting the modern metaphorical lesson and its sections according to both Lakoff and Johnson, which are represented by structural metaphors, directional metaphors, and ontological metaphors. They are full of conceptual metaphors of various types, which represent a rich text for metaphorical analysis, and therefore it must be providing brief definitions for each type so that we can highlight them in the field of logic according to Avicenna:

1 - Structural metaphor:

It uses familiar objects in our daily lives and our physical experiences as systematic connections upon which it is based in constructing certain perceptions of mental fields. George Lakoff defines it as "the structure of a conceptual system based on another conceptual system, such as our structure of the argument system by means of the war system in the metaphor, argument is war."1.

Or it is the one that "constructs a metaphorical concept through another concept"2, as the metaphor of "argumentation is war" is a conceptual metaphor that builds one of our daily activities.

We find that argumentative activity in our culture, according to Lakoff and Johnson, “is built by the words of battle”³, such as Metaphorical structures:

- You cannot defend your claims.
- He attacked all the strengths of my reasoning.
- His interceptions hit the target.
- I demolished his argument.
- I have never defeated him in a debate.
- It refutes all my proofs.

Likewise, the metaphor “time is money,” which is achieved through the linguistic structures mentioned by George Lakoff and Mark Johnson in their book “Metaphors We Live By”:

- You're making me waste my time.
- This process saves you hours.
- I don't have time to give you.
- It cost me an hour to repair the wheel.
- I don't have time to lose.
- It took me a lot of time.

2 - Directional metaphor:

It is a type of conceptual metaphor that expresses how the physical environment works. Therefore, it was exploited as a space orientation resulting from the positioning of the body in the surrounding world, primarily through metaphorical mental thinking. According to George Lakoff, it is: “We have built some patterns based on our spatial experience, as beings who define directions such as up, down, right, left, center, and margin...And this is how our experience teaches us, for example: that positive things are above and negative things are below, and therefore we explain happiness based on experience.” The highest, and we build misery based on the experience of the lowest, so that we obtain the metaphor of happiness/above and misery/below.”⁴

The connection of the directional metaphor with space directions is summarized in the dualities (high - low), (front - behind), (up - down), and the main controller in this is the human mind. Language alone cannot encompass conceptual metaphor, regardless of its type, but rather extends it to a broader and more comprehensive field, which is represented in what happens in the mind before linguistic verification, which is what controls our language and all the actions we do and what we think and believe, and perhaps it is better. An example that **expresses the duality (above - below) is the burial of the dead in the earth, which is lower, and the ascension of the soul to the heaven, which is higher.**

3- Ontological metaphor:

It works to embody the abstract in a concrete by looking at it through what is human, which gives it an interpretive authority capable of giving it meaning. According to George Lakoff, it is “the structure of abstract systems based on the structure of physical systems, as is the case in the metaphor of love as a journey.”⁵; that is, these metaphorical structures indicate

the existence of a group of correspondences that carry out a penetrating process between the target and source fields, giving meaning to the phenomena in this world through what is human.

The pattern of thought is largely metaphorical; It happens that we understand one conceptual field through another, through a network of relationships or interconnections called projections, as this proposition contributes to determining the meaning and understanding its contents for the individual, because our ability to understand and perceive the external world through the experience and metaphors by which we live is determining... For meaning and building it, through the formation of major conceptual metaphorical layers represented by structural, directional, and ontological. Metaphor represents part of our thinking, and it builds our perceptions and experiences, as it builds linguistic systems for them in the mind and gives them meaning. Both Lakoff and Johnson believe that “the ordinary conceptual system that guides our thinking and behaviour has an essentially metaphorical nature”⁶; this means that our daily lives are governed by metaphorical conceptual patterns that we do not feel.

Returning to Avicenne, his logical language is full of illustrative conceptual metaphors, which, according to the view of George Lakoff and Mark Johnson, mean: “a fundamental mechanism in achieving human understanding, and it also constitutes a mechanism for creating new connotations and new facts in our lives.”⁷ With examples that bring the meaning closer to the reader’s mind; Which is considered a special language in its conception, as it is an explanatory and interpretive language with its definitional and explanatory parts, as the logical language [which is characterized by complexity and ambiguity in light of other knowledge] cannot stray far from metaphor, representation, and analogy, no matter how much it may seem to us, since it is a language that describes existing things, and as an example of... We find that Avicenna “interprets the comparison of light to a ‘lamp’ (like his light as a lamp) on the one hand that it is a metaphor to indicate the hylomorphism mind, on the one hand that the hylomorphism mind is fully prepared to benefit from the mind already learned, just as the lamp is prepared to be illuminated due to the proximity of its walls.”

Which makes the reflection of light more and more intense.”⁸ The same applies to the metaphor “life is a journey,” as it starts in its conception of life “from our knowledge that imagines life as a journey, and in all journeys there must be a traveller, a path that we take during the journey, and a place where the traveller ends, and the traveller must That the traveller has a place in mind, whether he is aware of it or not, and the similarity between the traveller and the one who lives life is represented by the travelled path, the lifespan of life, the resting point, the starting point, the ending point...etc.”⁹

It is clear from the metaphor of “**life is a journey**” that the source field exercises its authority over the target field, as the metaphor “is the realization of a certain concept through another perception, or the capture of a concept through another concept. The original field or the source field exercises authority over the transmitted field.” To it or the target field, our conceptual system related to journeys exercises authority over our understanding of life, so metaphor represents authority over our conceptual systems.”¹⁰

It also cannot deviate in its metaphors from the real reality in which it arose, or from the boundaries of the environmental and cultural experience that surround it. Therefore, language is considered “a manifestation of our conceptual systems that establish our culture. To understand the metaphor, our linguistic practice must be consistent with our conceptual systems.” Our culture and life experience.”¹¹

We found the presence of “diagnostic” metaphor in Avicenna’s discourse, as this type is considered one of the types of conceptual metaphor. In which objects, materials, and non-human entities are viewed as humans, performing their functions and being characterized by their characteristics, since “these metaphors allow us to understand a large and diverse number of experiences related to non-human entities through human incentives, characteristics, and activities.”¹²

As we explained that the purpose of conceptual metaphor is to achieve understanding, through the process of projecting what is unclear and incomprehensible, or what has no (abstract) material basis onto what is close, understandable, or clear. This type of conceptual metaphor contributes to the fact that “we give meaning to phenomena in this world through what is human, so we understand them based on our motivations, goals, activities, and characteristics.”¹³

Let us look at some examples mentioned in Avicenna’s logic according to the following metaphorical and diagnostic investigations:

1 - Metaphor of wisdom as a seeing being:

We extracted this diagnostic metaphor, which falls within the field of ontological metaphors, from the title of a book written by “Avicenna” on wisdom, entitled “The Eyes of Wisdom,” where he described the wisdom that distinguishes people of knowledge from perception, deliberation, and a deep understanding of the truths of things and existing things.

According to God Almighty’s saying: “**And whoever is given wisdom has indeed been given much good**”¹⁴, and He made it a person who sees with the eye, which is the organ responsible for sight in living beings, which allows us to understand many of the experiences associated with non-human entities based on their projection onto human entities according to the definition of “Lakoff and Johnson” in their book, that the diagnostic metaphor in which we characterize a thing as if it was a person.

The metaphor of “wisdom is a person” allows us to give meaning to wisdom through what is human, especially since wisdom is limited to the human type. We understand wisdom and everything related to it by relying on our motivations, goals, activities, and characteristics. Therefore, this metaphor played a motivational role in this context.

The title of the book and its content, as it excited the reader about the content of the book, by giving a meaning to wisdom as something abstract through what is human, so we feel the piercing power of wisdom’s sight considering that it is not limited to one or two eyes, but rather is equipped with a large number of eyes.

2 - Metaphor [Logic is a legal instrument]:

This conceptual metaphor is evident through the metaphorical expression achieved by “Avicenna” in his talk about the purpose of logic in his saying: “What is meant by logic is for a person to have a legal device that protects him from being taken astray in his thought, and by thought here I mean what happens when a person agrees to move.” About matters present in his mind, imagined or believed.”¹⁵ And also in his statement in the book “Deliverance”: “I began by citing the sufficiency of the art of logic because it is the tool that protects the mind from error in what we imagine and believe in, and leads to true belief by giving its reasons and following its paths.” ¹⁶

In this regard, **Nasr al-Din al-Tusi** says in his explanation of the phrase “logic is a legal instrument”: “This is a drawing of logic, and the drawings of a thing may differ according to different considerations...Logic is a science in itself and a machine compared to other sciences. Therefore, the Sheikh expressed it in another place as “mechanical science”¹⁷; It becomes clear through this metaphorical expression that we are faced with a conceptual metaphor represented by the metaphor of logic as a legal machine, after which (logic) was projected as a target field onto the source field (the legal machine). Logic is an abstract and ambiguous concept. Therefore, this metaphorical, conceptual thinking achieves understanding and intelligibility; by projecting it onto what is understandable, clear, or close to human experience in life. Man is an expert on machines, their functions, and components, and he has projected this experience onto logic. Logic is a machine in that it protects a person from going astray in his thinking, just as a machine protects a person from error in counting, for example.

In addition to the fact that the purpose of logic is to facilitate human life away from confusion and distraction, semantics also facilitates human life, and through it he can save effort, money and time. In addition to the fact that the machine is composed of parts and components, logic is also “a theoretical and practical nature at the same time.” It is a science because it contains laws, rules, theoretical studies, and a machine that leads to extracting the unknown from the sciences, or [in other words] it is: mechanical science, as it is sometimes called. “¹⁸.

That is, it consists of laws, rules, theoretical issues, and a practical aspect, which is represented by the mechanical work that leads to extracting the unknown based on the evidence through the processes of analogy and projection, which appears in ancient Arab philosophy in the phrase “measuring the absent from the present.”

From this it becomes clear that “logic is a conceptual concept to which the word machine is attributed a metaphorical reference”¹⁹, and that the word “machine” is a word that belongs to a metaphorical field, other than the field that is expressed in the words of “Avicenna.” Therefore, it can be said that this conceptual system was formed by the image of the machine. Which was borrowed from the first conceptual field represented in the industrial field. To a second metaphorical field, which is the intellectual field, as it is a new metaphorical image that expresses the extent to which it directs intellectual activity, and perhaps it is a clear indication from the Arab philosopher “Avicenna” that there is a technical side to logical intellectual activity, and metaphor in this sense has a rhetorical spirit that reflects a deep, precise, and concise understanding.

This is because “representational approximation and comparing things with their counterparts makes it easier to identify the theoretical alliances that exist between them, and perhaps it is what helps to place the sciences in general structures that combine them. Were it not for the metaphorical approximation, man would not have been able to explore the circles of alliance occurring between them. This is why the machine was a comprehensive metaphor in which mathematics, engineering, and science were included.” Arithmetic, logic, and other machine sciences.”²⁰

- The metaphor of eternity/bowl:

The “bowl” metaphor, represented in Avicenna’s saying: “Eternity is the bowl of time because it surrounds it”²¹, is a type of ontological metaphor that is considered ever-present in our thought and in our daily discourses.

The human being is a being that represents a part of the world in which he lives, and he has separating boundaries that distinguish it from the rest of the beings. It can also be considered a substance or content of a container more comprehensive than it. It can also be considered a container/bowl for other substances, since things, according to this type of metaphor, represent containers for them inside and outside, and they have space, content, and a framework that encloses them. We find that the Apostolic logical discourse includes this type of metaphor, which is “the metaphor of eternity as a bowl/container,” as it is noted through this metaphorical expression that eternity is large in concept than time, and represents its container while time represents the material for this bowl/container. Eternity includes time and time is included in it.

Therefore, the metaphor of “time is a bowl/ container” is “a transfer of concepts from their moral side to their material side, where they serve as the justification and argument that proves the validity of their claims. The material evidence in the metaphorical statement is presented as a strong support for the argument, which makes it irrefutable and irrejectable.”²²

– The metaphor “time/space”:

We determined the metaphor of “time is space” from the words of “Avicenna”: “As for time, it is something other than its quantity and place, and it is a matter through which there is a “before” that does not have a “after.” This priority has it for itself and for others through it, and so does distance, and this is before and after. Connected to infinity, and that which in itself is before something is itself becoming after something, and it is not that “before” that it is movement, but rather another meaning, and likewise it is not stillness, nor are any of the conditions that appear, for in themselves they have meanings other than the meanings with which they are. “Before” and “after” as well as “with”, because “with” has a concept that is not understood as the thing being in motion”²³.

In this regard, we should point out a universal truth: It is that years consist of months, months consist of days, days consist of hours, and hours consist of minutes, as the direct metaphorical projection requires that minutes, hours, months, years, centuries, and eternity have the same speed, and there is a paradox in the standard metaphorical analysis of time as a space in the existence of A source field for moving objects that involves speed, where speed actually seems to require time, and is relevant to our perception of time.

The same moving object can have different speeds, because we also project our subjective experience of time and events onto temporal units. In “our subjective and conscious experience we do not have a reliable measure of time, but we do have strong feelings about the pace of events.”²⁴

The structure of the “**slow clock**” is the clock upon which we project our personal experience of the events of that hour; for this reason, we can say, “For me, hours were minutes, but for others, minutes were hours.” Therefore, some exceptionally fast watches can have the speed of “normal” minutes, just as some very slow minutes can have the speed of “normal” hours, and not it is as if units of time can move quickly or slowly, but they can also stop completely, as in the example “time stops.”

We can provide a mystical explanation for Avicenna’s statement: “As for time, it is something other than its quantity and place, and it is a matter by which there is a “before” that does not have a “after.”²⁵ In the topology of the field of bodies moving in space, all Moving objects are in different locations, and it is unusual (except in the case of trains) for them to

follow the same path, but as for time we are all in the same place and the same times pass us along the same path.

In the topology of the field of moving partitions in space, observers are usually in different locations, which is why they may experience the speed of objects differently, but in time space, all observers are in the same location; It is not their relative positions that explain the difference in perceived speed, but rather their positions toward events that explain the difference in speeds²⁶.

As for Avicenne's statement: "These priors and afters are connected without end", It can be explained in the topology of the field of objects moving in space, because space is very orderly, space is continuous and things are permanent, and neither extensions of space nor the things in it disappear.

Notable times can be mixed with time units, to the point that we find notable times - the beginning of which we fear will be sooner - moving faster in time space. For example: If Monday is very important and we are worried about what will happen on this day, then we say about That is: "Monday is staring me in the face," even if there are several days between now and Monday the 27th. In order to understand the threads of this process, we can summarize it as follows:

Recognizing the diagram "Time is Space" based on the phrase taken from "The Eyes of Wisdom" will inevitably avoid us from falling into any kind of problems, as the arrangement of space is presented according to the arrangement of time, and conclusions are obtained directly for the source domain and projected onto the target domain, which is indicated by the theory of conceptual metaphor.

We have obtained the new perception of the field of time through projection from space. For example, it is a fact that time is measurable, stable, and relates to the space.

- The metaphor "Logic is the servant of other sciences":

This metaphor is identified through the following metaphorical expression:

"Abu Ali called it the servant of the sciences, as it isn't the intended one itself, but rather it is a tool to the sciences, so it is their servant, in the other side: "Abu Nasr called it the head /leader of sciences because of its effective ruling on them. It will be its ruler."²⁹

It appears from the first metaphorical expression that the "science of logic" was imagined as a person, or rather a servant, who serves the other sciences regardless of the type of service provided. The servant usually performs tasks on behalf of his master to ensure his comfort and facilitate his affairs, as he is his means of achieving them.

The same thing is true with the science of logic. The sciences, in turn, need the science of logic and are based on it. Any science built on myths and legends is destined to become extinct and disappear.

Accordingly, the sciences seek help from the logic to maintain their existence and survival on the one hand, and on the other hand, the second metaphorical expression considered the logic as the main one; Because of his power and authority, so the logic is the highest of the hierarchy of authority, and its decisions are effective and his rulings are implemented. Through the process of projection, we find that the phrase "**Logic is the chief science**"; It means that it is the one speaking about it, and the sciences are based on logic and its rulings as well, and it follows from this that every science departs from the rule of the logic is an abnormal

knowledge, as is the case with one who disobeys the ruler (the boss); he is an outcast, hated and punished. Based on this metaphorical perception in Avicenna's logic, the structure of "metaphor reflects a similarity in human thinking about many concepts."³⁰ The similarity appears here between the role that logic plays in its relationship with other sciences and the role that the servant plays in his relationship with his boss. And the same goes for the metaphor: "Wisdom is an all-seeing being."

The conceptual metaphor in logical discourse has an interesting explanatory, influential, persuasive, and motivational role that is embodied through "simplifying the language of logic, emptying it of abstract meanings, and filling it with material meanings that are tangible to eyes."³¹

Therefore, we found the philosopher "Avicenna" concerned "primarily with the logical dimension of the rhetorical statement in the mind and soul of the addressee and how to persuade him"³², so that the metaphorical expression for him represents "a brief analogy without its introduction (the minor and the major) and it was satisfied with the result, so that the relationship between two sides of the metaphor becomes a relationship of union and merging through participation, problematization, and proximity, where the importance of the metaphor depends on the recipient's easy awareness of the interaction between the two introductions, the two sides of the metaphor."³³ so, its reliance on a material foundation perceived by the visible senses makes it more effective in terms of influence and persuasion.

We can say, by analysing different models of Avicenna's logic, that his conceptual metaphor has an explanatory and influential role for many concepts in logic. Which is characterized by ambiguity and abstraction; it is a mental mechanism that is relied upon to clarify what is abstract or what is far from our sensory perception. By using our experiences and the interaction of our bodies with the external environment, we have therefore recorded an intellectual intersection between Avicenna's logical perceptions and the physical, cultural and social environment of "Avicenna". It also carries a rhetorical spirit that reflects a deep and precise understanding, with an accomplished nature.

The conceptual metaphor [in addition to the explanatory function] takes on **the function of influencing and persuading** the logical contents, by simplifying them and removing them from their abstract meaning. The metaphor that is subject to the authority of the senses is more influential on the recipient and more convincing to him.

On this basis, **the more the metaphor is built on a material basis and perceived by the senses, the more effective it is**. And its effectiveness in achieving the persuasive function.

The statements:

- 1) George Lakoff: *The Gulf War or Metaphors that Kill*: Translated by: Abdul Majeed Jahfa and Abdul Ilah Salim (providing the translation), p. 13.
- 2) George Lakoff and Mark Johnson: *Metaphors We Live By*, p. 33.
- 3) *Ibid.*, p. 23.
- 4) George Lakoff: *The Gulf War or Metaphors that Kill* (providing translation), p. 13.
- 5) *Ibid.*, p. n.
- 6) George Lakoff: *The Contemporary Theory of Metaphor*, translated by: Tariq Al-Numan, 2nd edition, 1993, p. 8.

- 7) George Lakoff and Mark Johnson: *Metaphors We Live By*, p. 189.
- 8) Aisha Al-Hudayri: *Philosophy of Language and Meaning*, pp. 546, 547.
- 9) Muhammad Al-Saleh Al-Buamrani: *Theoretical and applied studies in cognitive semantics*, p. 197.
- 10) *Ibid.*, p. 198.
- 11) *Ibid.*, p. 200.
- 12) George Lakoff and Mark Johnson: *Metaphors We Live By*, p. 53.
- 13) *Ibid.*, p. 54.
- 14) Surat Al-Baqarah: 269.
- 15) Avicenna: *Signs and Warnings*, explained by: Nasr al-Din al-Tusi, edited by: Suleiman Dunya, first section, Dar al-Maaref in Egypt, 1971, pp. 117, 119.
- 16) Avicenna: *Deliverance*, p. 3.
- 17) Avicenna: *Signs and Warnings*, p. 117.
- 18) Ibrahim Madkour: *Al-Shifa*, Introduction, p. 54.
- 19) Muhammad Al-Arabi bin Masoud: *Metaphor in Scientific Discourse*, p. 204.
- 20) Muhammad Al-Arabi bin Masoud: *Metaphor in Scientific Discourse*, p. 208.
- 21) Avicenna: *Commentaries*, p. 78.
- 22) Muhammad Al-Arabi bin Masoud: *Metaphor in Scientific Discourse*, p. 208.
- 23) Avicenna: *Eyes of Wisdom*, edited and presented by: Abdul Rahman Badawi, Kuwait Publications Agency, Dar Al Qalam, Beirut, 2nd edition, 1980, p. 26.
- 24) Raouda Jediwi: *The metaphorical system of Algerian political discourse in light of the events of the Arab Spring, a cognitive approach*, p. 264.
- 25) Avicenna: *Eyes of Wisdom*, p. 26.
- 26) See: Rawda Jediwi: *The Metaphoric System of Algerian Political Discourse*, p. 264.
- 27) *Ibid.*, p. n.
- 28) Al-Thanawi: *Exploration of the Terminology of Arts*, p. 44.
- 29) *Ibid.*, p. n.
- 30) Muhammad Al-Arabi bin Masoud: *Metaphor in Scientific Discourse*, p. 203.
- 31) *Ibid.*, p. 211.
- 32) Abbas Arhailah: *The Aristotelian influence on Arab criticism and rhetoric until the eighth century AH*, p. 492.
- 33) *Ibid.*, p. 499.

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- 1) George Lakoff: *The Gulf War or Metaphors that Kill*: Translated by: Abdelmajid Jahfa and Abdel-Ilah Selim (providing the translation), Toubkal Publishing House, Dar Al-Bayda, Morocco, 1st edition, 2005.
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- 3) George Lakoff: *The Contemporary Theory of Metaphor*, translated by: Tariq Al-Numan, 2nd edition, 1993.
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- 10) Ibn Sina: *Eyes of Wisdom*, edited and presented by: Abdul Rahman Badawi, Kuwait Publications Agency, Dar Al Qalam, Beirut, 2nd edition, 1980.
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- 12) Muhammad Ali Al-Thanawi: *Exploration of the Terms of Arts and Sciences*, edited by Rafiq Al-Ajam and Ali Dahdouh, Lebanon Library, Beirut, vol. 1, 1st edition, 1996.
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