



Analogy in Farabi's Thought

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Abstract: Thinkers and philosophers have constantly benefited from different approaches of reasoning to explore and justify their ideas. These reasoning approaches are considered as the principle instruments in speculative activities of the thinkers. To this end to achieve the procedure of thinking and the way philosophers achieve objectives, it is necessary to recognize their reasoning strategies. This article intends to survey on the position of analogy in the thinking of Farabi, and to show how he used this type of analogy as one of his basic reasoning methods in exploring his ideas and thoughts.

Keywords: Analogy, Farabi, Reasoning

Introduction

It is not an easy task to talk about the term "Analogy" with its widespread application and the background. Analogy has been recognized in different sciences as an instrument and very effective procedures in reasoning, discovery, and explanation. This expression has been and is being used in mathematics, philosophy, theology, computer and many other different branches of science, while it has been considered as an important instrument and procedure in the discussions on linguistics and pedagogy since long time ago. In this article, an attempt is made to move away from the sole meaning of analogy in logic and consider its general meaning, that is, the concept used in many branches of science (even theology and cosmology).

The word "Analogy" is derived from the Latin word "analogia" with different meanings. Accord-

ing to Aquinas in an interpretation of the Old Testament, analogy was used to show that there is no contradiction between one part of the text and the other. In rhetoric and in grammar of language, the word was used as a procedure for affirmation (proving) and as how to move from guessing about the formation of the words to compare the exact cases with similar ones. Several theologians in the twelfth century used analogy with the same meaning, but in the translations of Pseudo Dionysius the word possesses an ontological meaning and has had applications in measuring the creatures' talents and aptitudes, and in classifying them in major and minor categories. In logic, writers believing that the Greek word "αναλογια" sometimes was called analogy in Latin but mostly was conceptually translated as "proportio" or "proportionalitas" (proportion) which refers to comparing two objects or two parts of the same object. Until 1220, the

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word was used in approximate with pre and post conception, and to 1250, the meaning of proportion was substituted with the pre and post conceptualization. This rendition gave rise to other similar concepts (Stanford Encyclopedia Philosophy, 2009).

The expression of "a priori and a posteriori sense" seems to be derived from the Arabic philosophy. H.A. Wolfsan presents documents indicating that Aristotle truly recognized a word that stood as an intermediary between words with shared pronunciation and shared meanings and this included the cases whose specifications were the application of a priori and a posteriori concepts (Ibid).

The term "analogical" very soon was associated with the word "ambiguous" among thinkers. Robert Grosseteste in his interpretation of "Post Aristotle Analytic" states that Aristotle used the term analogy for the purpose of finding a word through which he could produce connotative (names) according to their prior and posterior concepts. That is why Aristotle used the concept of "Connotative Analogy" (Ibid). He showed that Alexander Aphrodisiac called these types of words "ambiguous" and Islamic philosophers considered the word "being" in the a priori and a posteriori meanings as the most important characteristic of all connotative words. And this concept was a tickling sensation for the West in the Latin in the middle Ages. The most prominent figures using the connotative words in the conceptualization of a priori and a posteriori are Ghazali and Avicenna. Both of these famous figures of the twelfth century used the concept of "connotative word" in explaining the application of the concept of "being" (Ibid).

Therefore, analogy is mingled with two concepts of "vague" and "obvious or clear", in a way that these two have constituted the important sections of an analogic reasoning. Thus, analogy refers to the proportion between two or more parts of two things which are very similar to each other in one or more respects. That is why "analogy" enjoys an exact relation with most of the terms, and whenever

er concepts such as the ones that follow, are put forth: resemblance, correspondence, to be likeness, comparison, similitude, counterpart, and image, resemblance of relations and mapping.

Common shapes of Analogy

In the Greek concept, three forms of analogy are recognizable: the first one includes comparison of two sides of a relation. This type of analogy is called (proportionality). The second type of analogy is the one related to the comparison of two things when one has priority over the other, like the comparison of health with healthy food. This type of analogy is called attribution. Third one was used by theologians to show the similarity between the creator and the creature. That is why creatures who obey the creator in these two fields or they are reflections of it, are called "good" or "Just". This type of analogy is called "imitative" or "reflective" (Ibid).

According to the mentioned issues, the discussion on the proportion of macro and micro cosmoses are two sides of this theory which was expanded by Greek philosophers through which they could be able to explain the human existence and his position in the world. These earlier figures considered individual being of human as the micro cosmos (Mikroskosmos) which is made of the material, and elements of macro cosmos (Makroskosmos or megaskosmos). Cosmos (kosmos) in this concept consisted of order or ascending construction in its common sense and conceptually, of harmony and proportion and finally beauty, which referred to reasoning on the basis of the proportion of parts of an organic construction (system). This meaning of analogy was associated with the social order and/or the social construct which was a reflection toward good governance. Therefore, this was a type of analogy used to compare the society and human, on the one side, and the society and being, on the other, which comprised of different theories related to the macro and micro cosmoses.

Thus, this type of analogy, i.e. recognition with the help of comparison and as what is presented in the following part, is not a strong form of reasoning. As an example, Sohrevardi, "Master of Illumination" does not qualify it as powerful reasoning. The basis is the following formula: object "a" has the qualities of 1, 2, 3, and 4, object "b" has the qualities of 2,3, and 4. Thus, and this is possible that it possesses the quality of 1, as well.

Example- there is a colorless liquid which vaporizes and freezes at certain degrees. It wets and has no taste.

On the other hand, we know that water is colorless, it vaporizes or freezes at certain degrees, it wets, it is tasteless, and solvates salt; so this liquid, most probably is a salt solvent. At this logical stage, the similarity of external or internal signs, are the bases of our judgment and expression of propositions. Most of the researchers consider analogy full of narrations and examples as "narrative analogy", although they haven't considered analogy as a strong shape of reasoning, and even some consider it antireasoning, while, analogy should not be underestimated, because it has significance in research. Analogy does not have the power of absolute proving reasoning, and that is why it should be used alongside other forms of recognition of logic. In the modern science, this procedure is used in the theory of assimilation "modeling" and in cybernetics.

Analogical reasoning

- Common Aspects of Analogy

To find common aspects among the rendered definitions, it has to be stated that several concepts are necessary to be identified in the analogical reasoning. At first there has to be some premises, at the second stage the premises must have common aspects in a way to be able to be compared. The other point is that there must be one or more premises that enjoy more clarity in comparison with others that come along those that enjoy less clarity.

In this relation, the clear part of the premise or premises is recognized as a source of analogy and the other vague and unclear part as the objective of recognition. For this reason an analogical reasoning should have some conditions to possess clarity and exactness. Thus, analogical reasoning is considered as recognition and transference of characteristics from one recognized class (as source) to a new and related class as objective. Before adhering to the definitions and understandings ancient philosophers like Plato, Aristotle and Farabi gave of analogy, to provide definitions of analogy or analogical reasoning, following steps should be taken:

1. To conduct an analogical reasoning, at first there must be suitable similarities, then the sections with peculiarities similar to the intended concept should be found and at last care for the side effects must be taken (Vosniadou and Ortony, 1989: 7).
2. Analogy is an instrument for thinking and describing objects and understanding concepts in the complex domains, through comparing and contrasting the similar signs in one object with known concepts, which is referred to as "source" in analogical reasoning. This type of reasoning can help the thinker in accessing better understanding of the objective which is vaguer and unknown in comparison to the science transferred from the source (Johnson-Laird, 1989: 314).
3. Analogy is the plan of science in a field or subject (considered as source) used in a field or subject (considered as object) for the recognition of the latter (Palmer, 1989: 334-335).
4. Analogy is a combination of reasoning or analogical conceptualization, and inductive reasoning, and is referred to as one of the common strategies, used in interpretation (Brown, 1989: 369).

5. Analogy could also be considered as the by-product of logical reasoning. Analogical reasoning is recognized as a type of reasoning through which the similarities between two objects from among those that exist can be achieved (Russell, 1989:1).

The above mentioned definitions are those that try to give a unique definition from among those presented about analogical reasoning on the bases of their commonalities. As it was mentioned before, analogical reasoning deals with the comparison of two or more things that have commonalities. In this way the less recognized issue is described in comparison with the more recognized one.

- Conditions for a correct analogy

With reference to the issues mentioned a right analogy must meet four conditions to be applied as a correct and exact procedure.

- a. There must be more accurate signs and cases for comparison. Similar points between water and the liquid which is supposed to be proved to be a solvent should be as many as possible, in number.
- b. The relation between the signs under investigation to the general signs of the intended object or phenomenon must be as strong and as close as possible. The condition for a liquid and water to be compared with water should be very strong and close.
- c. The objective of investigation must be only one aspect or only one sign, not from all aspects or from different perspectives. Only the liquid's solvent quality should be the objective. Other cases should be similar.
- d. While investigating, the differences between objects and phenomena should also be compared. If, for example water and the intended liquid have different degrees of density, it should be accounted for in estimation and comparison. In this account the analogical reasoning is the transfer of in-

formation or concepts preserved in mind (known, which is considered as source) to the (given field or concept) which is to be explained. Therefore, the similar aspects used in this process, is of utmost importance. The reason is that between these two things (the subject of source and the subject under description) there is a combination of similarities, because recognition of similarity plays an effective role in key processes related to the analogical reasoning (Vosniadou and Andrew, Op, Cit: 7). Therefore, since in any analogical reasoning some requirements should be met to account for the validity and reliability of that reasoning, in the process of analogical reasoning three issues deserve taking in to account, whose existence or the lack of it could be considered as weak points: First, Accessing to suitable similarities, second, possibilities of accommodating some parts related to the object being compared to the subject of the objective, and third, identifying the side effects of an analogical reasoning on the basis of some general rules(Ibid).

What is, also important and deserves consideration is the domain or the field to which this type of reasoning can be applied which is dealt with in the Islamic philosophy and thought, under a similar topic. However, it is very important to mention that the analogical reasoning, we have in mind, can be of two types from some aspects. First one is the reasoning used between two subjects in two different fields- between domain analogy- and the second one is the reasoning between two subjects belonging to one field or domain,-within domain analogy(Ibid).

What is important in this respect is that when making analogy when it deals with belongingness of a subject to different fields, which can give more accuracy to the analogy and prevent us from ren-

dering weak or wrong analogies. Thus, there is an exact proportion between similarity and analogical reasoning. One of the main strategies used in analogical reasoning is that "the theory of analogical reasoning should explain how a similarity refers to the subject under analogy. Thus, to achieve a suitable analogy and similarity, the audience should recognize and understand some of the similarities between the source of comparison and the object. But, more important point in making analogical reasoning is pointing to the superficial specificities and structural relations (Ibid).

Since, the most important role in analogical reasoning is played by the similarities, analogical reasoning can, also happen in inductive and deductive conditions. So, from the aspect we are dealing with, it could be stated that analogy is used in both inductive and deductive reasoning. This means that making symmetry between major and minor premises when the direction of reasoning is from specific to general, the analogy takes the shape of inductive and when it is from general to specific, the reasoning is deductive (Palmer, Op, Cit: 334-335). In this regard, there are numerous evidences in both the thinking of Plato and of Aristotle, and in those of Farabi which comes in the following.

Greece and the Middle Centuries

- The way Plato and Socrates used analogy

Socrates is one of the most effective figures in the history of thought who has used repeatedly the technique of analogy (techne- analogy) as a suitable instrument to achieve an objective, i.e. accessing a sound and right issue. In this way he could show others that their understanding of a concept under discussion is wrong. One of the famous analogies Socrates used in discussions is comparison and similarity of craft (techne or craft) with virtue, which rightly expresses the relation between specific and general, in Socrates reasoning (Roochnik, 1986: 295-310).

This type of reasoning is repeatedly observed in the articles written by Socrates. Socrates has frequently benefited from analogy in the comparison of issues with each other and has been after the objective of differentiating the superficially similar objects by making analogy and comparison, and while stating the similarities, to disorder the sameness of affairs, to which the audience believes. Thus, analogy changed to one of the main reasoning strategies of Socrates. i.e. deduction between general and specific (virtue, and the components of virtue), analogy between crafts (trainers of the horse and educators of human beings, trainer of the painting, and educator of virtue) (Plato, 2002: 27-28.), analogy between concepts (justice and injustice (Ibid, volume 4, about Justice: 2391-2398), being religious and atheism) and between interior and exterior of objects (Ibid, volume 1, utifron: 229-246), were among analogies Socrates used continuously to make the contradictions around, evident. With this concept about differences between craft and virtue, Socrates, has continuously made his audience to confess this issue that what they recognize as virtue is only a craft or science that does not have anything to do with virtue in essence. Therefore, for Socrates, the use of the technique of analogy could help him prove this concept that what the wrong knowledge and what the right knowledge is about virtue, if and only if such a thing exists. Then, Socrates could achieve the right and wrong concepts of an issue by comparing them and using analogy. The point that the use of intended analogy by Socrates presented was to recognize differences in addition to similarities is what that adds to the power of Socrates reasoning, i. e. what his audience do not pay attention to.

Analogy, however, while is a philosophical reasoning strategy, is an instinctive inner drive which embodies the way man and his relations to being is looked at. If we refer to human thinking at the time no philosophical thinking and its procedures, in platonic sense, had ever developed, analogy and the resemblance of God in the way he was pictured

as a superhuman was an acceptable and common analogy. Analogy, alongside other strategies like definition, differentiation, induction, and deduction are among the strategies used by Socrates to indicate the ignorance of his audience (Louise Gill and Pellegrin, 2006: 208.).

Analogy was used extensively, in Plato's speculations, as well, and has played a crucial role for elaborating the issues, like concepts, situations, and proportions. In addition, closeness of the relation of analogy with the concepts such as metaphor and simile has put these two and analogy in a position to help Plato to use them in order to be able to express his ideology clearly.

Rachana Kamtekar is on this view that Plato considers analogy useful because through which it is possible to rightly identify the objects leading to goodness and it is through this approach that performing good action is possible. It is by making correct similarity with good essence that we can talk about the difference between right and wrong actions, and it is through making determined proportions with goodness that acquiring knowledge in a right way is possible (Kamtekar: 23). With emphasis on this type of analogy and similarity, Plato rendered the "analogy of the cave". What Plato states about the relation between exiting from the cave and accessing the knowledge and recognition, and his claim about the relation between recognition of goodness and performing the right action, will come in the following.

In his fifth book of Republic, Plato by making similarity between the light of the sun and vision comes to the conclusion that the light of goodness plays the same role for intellect and makes different shapes of it. The same way the sun light makes seeing the objects possible for us, the powers of goodness plays the same role for intellect (Lane, 2006: 179). Thus, it can be concluded that not everybody is capable of achieving goodness and accessing knowledge about it and not everybody can be placed in the class of the intellectuals. Observing this point that how Plato could use the analogy

of cave and its relation to the sunlight, and seeing on the one side, and with using analogical reasoning on the other, he could reach philosophical conclusions, which are very important and interesting, which could be shown as follows:

1. The eye cannot see the objects without the sun light, and the mind is unable to recognize the shapes without knowing about the shape of goodness.
2. The eye naturally needs the sun light to be able to see, which is similar to the mind or soul that has to naturally recognize goodness to be able to understand the shapes.
3. Sun makes generation of plants and other kinds of life possible and similar to that is the goodness which causes appearance and generation of shapes possible.
4. Consequently, goodness is the source of fact and science, and, of course, similar to any of them, but not the same as them and, of course benefits from more virtue about them.
5. Goodness is the source of being and it is not a part of them, but in position and power, it is superior to them.

What Hoffmann says about the procedures used by Plato, appropriately indicates the position and the role of sameness and similarity, example, metaphor, and simile alongside one another. Philippe Hoffmann is positive that concerning Plato's speculations, some questions must be answered, beforehand. Form among the questions is like, what pedagogical strategies did Plato use? By Hoffmann, in the works of Plato fifteen strategies or understanding procedures are distinguishable, heavenly inspirations, experiential proving, definitions, divisions, analyses, metaphorical indications, examples, induction, sameness or similarity, mathematics, abstraction, addition, history, and etymology (Hoffmann, 2006: 614). In addition to the above mentioned cases and as it was said in the analogy of the cave, this should be agreed on that for Plato,

analogy is of special importance and, of course, it could be stated that it is the most important type of reasoning for Plato, because of knowledge.

Following the theories of ontology of the old Greek philosophers, Plato in *Timaos*, pictures the world as the "world wide created life". "because God desired everything to be like he himself and as good as possible"..." thus, we are right to say that this world has soul and intellect and is created by the will and the wisdom of God (Plato, *Timaos*, Series of works: 1726). Plato continues to talk about specific and general, which applies to "one is the obedient of the other ...". Thus, it cannot be said that "the world resembles things of the type of its specifics, because what resembles incomplete, cannot be beautiful." Plato continues "complete similarity can be found between this world and what, all creatures, one by one, and by species, are part of it." According to Plato, since "Damborg" the master architect of the world, intended to make the world similar to the most beautiful and the most complete beings that are situated in the world of wisdom, only, made it as a unique live visible being, that encompassed all existent essences which are related to it because of their nature, i.e. a megalon to which psyche is granted and wisdom which is the effect of the divine will. This life of the macro cosmos also, as a model and style that makes a spherical domain (*Sphairoeides*), contains all creatures (Ibid: 1728-1729). Therefore, the world for Plato is a complete whole comprising of different specifics. What supervises this whole requires that specifics be similar to it. Thus, the responsibility of human and city is to picture themselves similar to that general, by looking at it.

On the basis on this analogy, another analogy can be made between the construction of the psych and the construction of the polis in the ideas of Plato. This means that the construct of the world and the ideal structure of the individual's psych, and also the ideal construct of society can all be in conformity with each other, and the parallelism of macro cosmos and microcosmos can be observed in many

of Plato's dialogs. "In the article of *Timaos* where Plato places the concepts of human life in both social and individual aspects on the basis of inviolable order of the world, can easily be observed (Cornford: pp 4-6).

Of course, there are observable differences when applying analogy in Plato's ontological reasoning, in the macro and micro cosmoses, and this difference, per se, has been effective in picturing the city and the way it is managed. "Immortality of psych and mortality of body are from among differences that can be easily observed in Plato's ontology, and that Plato has considered these differences when imaging the UTOPIA (Ibid: 38-39).

This statement by Cornford can be considered important that paying attention to differences in Plato's ideas made him consider polis's (city's) factors as well, in addition to the mentioned objectives in his ontology when reporting about polis (city), and base his political philosophy on Plato's ideas. It is the point which is absent in Islamic political philosophy and is not discussed in this article, although it is one of the consequences of this article when surveying Farabi's thinking.

Other analogies that can be stated in Plato's speculation about the domain of macro and micro cosmos analogies is the common responsibility that he burdens on the shoulder of human wisdom and this is the same responsibility which is possessed by the wisdom of the creator (Ibid: 147). The other one is the analogy between the physical eye and the psychological eye and between the sunlight and truth, and between constructs by God, and those by man, which are among other Plato's analogies (Ibid: 159-175).

- Aristotle and Analogy

From the view point of Aristotle, (being) is used with different meanings, but all the things which are identified with this character, are common in one central point and a specific instinct, and their commonality is not because they share the same name Thus, it should be stated that all con-

cepts are related to a unique substance. Some are called "being" because they are the substance. Some are affections, some others which are currents toward substance or toward the opposite, are corruptions or lack of substance.... We call them non-existent. Thus, to measure things we should always turn to the unique object to recognize other objects. In this way oneness and multiplicity can be added, and they are not in contradiction with each other (Aristotle, 2007, forth book, chapter 2).

The above text presents some important points related to our discussion in this article and to analogy. First, there is a subject called oneness and multiplicity, second, there is a subject called substance and exposure, and third, estimation of affairs, three of which should be considered in unisons. The best place in Aristotle's view that we could talk of analogy is the analogy he accounts for between the role of active intellect in thought and the role of light in the recognition of understanding (Ibid, 430a16-18). By Aristotle, the same way light helps us see the objects, the active intellect, also is the cause of recognition. Aristotle accounts for another type of intellect which is achieved through analogy. "Another type of wisdom or intellect, which is similar to the producer intellect, i.e., the intellect from which all things are derived, in a way through which every category, like light, is the producer of affairs which are placed inferior in the level at the time of creation (Ibid 430a-433a). This means that light, for example causes all potential colors to acquire active position. Comparing active wisdom to art and its comparison with light are among analogies used by Plato and Aristotle, as Davidson maintains. Active wisdom or intellect, according to Aristotle helps human, as the light does, to enable him to distinguish the right affairs from not right ones, or make them understandable. As it was mentioned before about Plato and emphasized by Davidson, this reading of analogy can be found in Plato's ideas, too (Davidson, 1992: 14). Aristotle has used analogical presumptions for other purposes, as well, like analogy between man-

made artificial objects, and nature-made phenomena (Ariew, 2002: 24). To achieve the right issue, alongside other numerous procedures, Aristotle has manipulated analogy alongside metaphor, simile, and parable to strengthen his reasoning, and sometimes used them as independent reasoning.

By reference to Aristotle's book, *policy*, it can be found that he compares the laws of city states and different viewpoints to achieve the right law and the right punishment, when talking about right law and punishment. He also adheres to several other approaches, meanwhile. On the other side, he observes the prevalent condition and gets close to approaches of proving and experiencing and by comparing the laws and views of different city states, dialectically, he tries to achieve the right law, from among these contradictions. Aristotle's studies on laws and management like Cartesians, Spartans, and Athenians, and their comparison are examples in which he uses analogical reasoning based on experiential proving (Aristotle, 2002: 10-35).

- **Analogy between the Micro Cosmos and the Macro Cosmos**

As it was mentioned before deductive reasoning is used in different fields, and thinkers use it for different purposes. The most prominent characteristic of these applications is crystallizing unclear, hidden, or unapproachable issues through comparing them with clarified issues and finding suitable similarities. One of the important and complex applications of this type of reasoning in the Western Theological and Philosophical Tradition is the analogy between micro and macro cosmoses. This means that the analogical reasoning has different applications in different fields. In this Theological and Philosophical tradition, one of the fundamental applications of analogy is finding the proportion of the macro cosmos and its components to the micro cosmos and its components. Following this approach, finding the proportion of human and society as parts of this micro world inferior satellite to

the macro world and its components as the superior satellite has always been interested by philosophers and theologians. Because of this meaning, the comparison of macro and micro cosmoses in Plato and Aristotle's view points, in the Middle Ages, and also in the West Christian and the Renaissance Jewish and in the Islamic philosophy is of utmost importance (Banchetti & Marina :25). This analogy is founded, at least, in the Western thought and its roots can be found in neoplatonic philosophy which has influenced not only the human philosophy and thought, but also the natural philosophy, chemistry and the tradition of Hermes. Especially during the Middle Ages and during the renaissance in the proportion between the macro and the micro cosmoses, one of the important issues has been finding the relation between multiplicity and oneness in the cosmos order, in a way that Greek philosophers and theologians of the Middle Ages tried to explain or explore it by analogical reasoning. Therefore, while it is possible to find the most powerful, greatest, and perhaps, the oldest analogy and similarity in the comparisons related to the macro and micro cosmoses, it has to be indicated that this type of reasoning has a strong and deep relation to that between specific and whole. This means that, specific as a smaller substance, often, should follow larger substance. In many times, also this larger substance refers to the Origin which appears with different names in the history of thought.

What can be found from comparison between macro and micro cosmoses from among the ideas and thoughts, like any other analogical reasoning, is depending on this point that in analogical reasoning an obvious and clarified thing helps a less known or not known thing. Thus, deductive reasoning in the ideas of Aristotle, Plato, and Farabi has two sides. One is using sensible affairs to explain insensible ones in which analogy helps explaining and exploring insensible things and in which the element of obedience of one by the other is not intended, but what can be asked and which is related

to this article, is that in case we intend to look for objectives, origins, and happiness of mankind and the city, the part that is considered as known, is the macro cosmos (the higher world) or the micro cosmos (the lower world)? What is the role of origin in relation with the multiplicity which is observed in the sensible cosmos? The other question is that whether the macro cosmos in comparison with the micro cosmos has the role of explanation, or in addition to explanation it requires obedience of the micro cosmos, too. As it is observed the concepts of oneness and multiplicity are two related concepts of macro and micro cosmoses on one side and the specific and the whole, on the other. Philosophers have always observed these three in relation to one another. More clearly stated, every thinker who confronts the two concepts of macro cosmos and micro cosmos has always dealt with the problem of the specific and the whole, has had to find the proportion of these two to the relations between the specific and the whole. At the same time s/he should also clarify the relation of these categories to the elements of oneness and multiplicity, most of which are done through analogy. Therefore, the role of analogy in comparing the macro cosmos and the micro cosmos with the meaning of analogy is in explaining and clarifying many complex philosophical and theological concepts, in addition to what was mentioned before. Thinkers like Augustine, have put forth major discussions in the framework of the great analogy (comparison of macro and micro cosmoses). Discussions on the issues like time and no time, necessity and contingency, freedom and compulsion, origin and resurrection, and the like (Tymieniecka: x).

By Thomas Aquinas, analogy was a theory Aristotle faked in his Fourth book of metaphysics to be able to explain the concepts of multiplicity and oneness at the first degree, and proportion and sameness based on mathematics at the second stage, when comparing two or more cases (Tallon, 2004: 43-44). Whenever Thomas refers to health

and the substance and non substance being, he, definitely, is referring to Aristotle's fourth book of *Metaphysics*. He refers to the dominant analogy on Ten Intellects whose discoverer is Aristotle, to explain the present theory of analogy in order to explain it more concretely and detailed. In this way a united and unified multiplicity one might get, when exposed to at the horizontal level of categories or one might receive them at a vertical level of essence related to one of them. Using this example he discusses that analogy is explainable by turning things to their original essence (Ibid: 28).

Of course, beside the analogy of macro cosmos and micro cosmos which is referred to as great analogy, there are other analogies common among philosophers, which are used by many of them, the most common among which is the similarity between the society and the body organism. Most of the philosophers, like Islamic philosophers, have constantly used this type of similarity or analogy, because of the special condition of the body which consists of numerous organs with different levels of importance, and their hierarchies. Therefore, a major part of the soul refers to body and has the same construct and the same hierarchy. This comparison can also be found in the article of Teteus. Thus, this is similar to a live organ which gets stronger when responding to an activity. As it can be observed soul, also, gets stronger by efforts. Analogy and comparison can be used from both sides. Maybe, because of this reason that comparison plays the role of a type of reasoning which is used to approach the mind. This comparison is not the same used for comparing macro and micro cosmoses. In this later comparison, it is done from the aspect through which the micro cosmos should obey the macro cosmos for exaltation, while the type of similarity to organs has the role of closeness to mind, which of course signifies reasoning related to the comparability of the micro cosmos to the macro cosmos. Also the comparison between the role of physician in providing health and the role of boss in providing health in polis (city) is of

other types of comparison that Plato has used in his fifth book, and they can be seen in the article of criton and Gorgias (Lane, 2006: 163-164). In this regard, the use of the application of social categories in Platonic city which indicates that there are three levels of spirit (soul) can be indicated, i.e. wisdom (intellect), passion, and brevity. As we know, Plato accounts for the soul of mankind to possess three types of aptitudes and talents to which human beings refer, to acquire position. Plato makes use of this analogy or comparison to show that society also enjoys three levels separate from one another, and since these talents are not similar in value, thus, in societies, individuals should be placed in their suitable positions.

From what was stated about analogy and its application in the philosophical and theological thinking, it could be concluded that Analogy has played an important and, of course, an applied one beside other approaches, in a way that we are not wrong if we say that analogy is used as an instrument for following philosophical objectives. Analogy as an instrument or as an approach has had an important role in meeting the higher order objectives and the recognition of good and right actions. Plato, in this way, has followed the resemblance of man and the creator (Damborg) and believes that Damborghas made human and cosmos similar to each other. Thus human is responsible to find these similarities.

Analogy in Islamic Tradition

- The limitation of Application of analogy in The Islamic Thought Tradition.

Analogy is used in Islamic tradition with the meaning of reasoning, analogically, and of course as an instrument for correct inventiveness in Hanafi jurisprudence and in some other branches of jurisprudence (Adamec, 2009: 12, 147, 158, 205, 280-336). Analogy which is known is Islamic tradition, as Analotighia, has played an evident role in achieving the right conclusion, since past to the

present, and in different thought and religious classes, as one of the conclusion accessing approaches. Islamic trainings justified the application of analogy in determining the situation of man in the world and determining the role of origin and objective and their importance in Islam.

Analogy (analogia), metaphor and simile are used in Islamic thought and in different classes as among Islamic scholastic theologians, legal theorists, philosophers, and mostly, they are used interchangeably. The view points of Islamic philosophers and logicians about analogy or metaphor dates back to the ideas of Aristotle, and although when accommodating the rules of metaphor in the example, they have applied some changes in the expression; no radical change is observed in the original concept.

In this type of reasoning the assertion of a certainly proven affair, is expended to the similar things just because of their comparability. In other words, if two things or parts of the same thing are common and similar in one sense, and one of them according to wisdom or clear terms has special assertion, that assertion can be used for the second one just because of their similarities. Accordingly, in Islamic thought tradition also, which is influenced by the Greek thought, any metaphor or analogy consists of four bases or limits: 1) the minor or a base limit for which the assertion of another thing is proven. This limit is called "example" in logic, "derivative" in jurisprudence and principle, and "absent" in theology .2) the limit of similarity, which is a basis for which a proven decree, is proved for the other (i.e. for the minor limit). It is called "metaphor and principle" in the term of jurisprudence and principle, and "present" or "witness" in the science of theology. 3) The major limit or the real decree which is called "proposition or religious edict" in jurisprudence and "principle and decree" in theology. 4) Intermediary limit or the similar or common aspect, which is called "cause" and "definition" in jurisprudence and "comprehensive" in the science of theology. As an example, in the deduc-

tive proposition, that philosophers and theologians have stated: "sky has happened since it is similar to house in formation". Sky is the minor limit, house is the similar limit, happening is the major limit and being an object is the intermediate limit.

According to Ibn Sahlansavy, one type of analogy is reasoning of the witness on the absent. In this type of metaphor the witness is the sensible affair (thing) and its subcategories and, also the present knowledge like knowing about will and power, and absent is the insensible affair (thing) (Savy, 1993: 212). But nasir-al-dinToosi has stated evidently that witness is the thing in which the existence of decree is actualized, and absent is the thing for which the decree is supposed to be proven, either they are both present, or one is present and the other is absent (Nasir al din-e Toosi, 1899: 333). Surveying Farabi's ideas, especially, in the logical dissertation, it will be evident that how he uses both of them with two different purposes.

In Farabi's ideas metaphor with interpretation refers to two types of analogies. For instance, we will understand that a wall is constructed and has an object, and because of the same meaning, it is this quality of being an object, which provides for the wall the quality of being constructed. Therefore, being agent, thus, it is understood that sky is similar to the wall, because of its being an constructed is predicated on the sky, too. Thus the example can be qualified as follows: the wall is being constructed, the wall is an object, the sky is an object, and thus, the sky is constructed: in fact the example above consists of two analogies derived from the first shape: The sky is an object, any object is constructed. Thus, the sky is constructed. The minor premise of this analogy is very clear, but major premise needs stating and approving, and the second analogy is under the statement of the major promise of the first analogy. Object is the same wall and all similar components. The wall is constructed, therefore, thing is constructed. In this analogy, also the major premise is evident. This analogy is similar to the induction, because, the

intermediary limit is among them in or limits. The difference between metaphor (analogy) and induction is that in analogy the search or survey of one person or one part is enough, but in induction the decree should be found in all components or in most of them.

By Moslem sages, since analogy does not lead to assurance, it is not used in proving, but most of the legal religions except Imamieh have considered it valid and called it analogy. Theologians and dialectologists also consider it valid (Ibid, 336-536). Analogy (metaphor) is used, also in dialogic reasoning and in poetry. Therefore, analogy or metaphor, in Islamic thought, is a conception derived from analogy.

- **Avicenna and Analogy**

It is not surprising, at all, to say that analogy is observed as one of the common reasoning which are effective in the thought and writings of Iranian philosophers of the Middle Ages, Avicenna and Farabi. As an application of analogy in the ideas of Avicenna, its application in the proportion between the macro cosmos and the micro cosmos must be pointed to. One of the pivotal characteristics of Avicenna's theory of ontology is that he thinks that human soul is the manifestation of the micro cosmos in the domain of macro cosmos. He, evidently; puts emphasis on this thought that the construct of human soul, demonstrates the construct of the world and the extant beings as a whole. This viewpoint of him corresponds to the traditional viewpoint that in the relation between macro and micro cosmoses, the micro cosmos is the reflection of the macro cosmos and is related to it. This conformity causes Avicenna to achieve the concept of oneness, because according to him there is no duality in relation to God (Shakouri, 224). In God, essence and being are applied on the same thing and they are not two separate things. God is above all categories and a being superior to all beings, and necessary existent and the creator of all beings in the world. Then, other beings should be similar to him. Of

course, they cannot be God, but they can be similar to him. This is the point that Davidson puts emphasis on. According to Davidson, Avicenna has understood the relation between the individual souls of human with active intellect through analogic reasoning, and has explained it (Davidson, 2003:85). Therefore, nurturing God like human being in the Utopia is the main objective of Avicenna's philosophical system (Shakouri, Op, Cit: 228).

Avicenna has also presented a lively application from the comparison of the effect of active intellect on the soul, on the one side, and the effect of the sun light on the domain of Earth, on the other. This application and the use of light as a metaphor to divide effusive constitution and mystical illumination in the writings of Avicenna and other Islamic philosophers to show the relation between the earthly and divine domains has a common use and application. Of course, Avicenna has started this relation comparing differences between human, plant and animal souls and their being affected by active intellect (khalidi, 2005: xxi. xxiii). Ibn-e tofail also, similar to Avicenna, uses the analogy of the reflection of the sun light on the mirror to show the relation between the issue of God's effusion and it's receiving by human beings (Ibid: 130).

According to Avicenna, existence or being has soul or intellect. Here, Avicenna uses the similarity of being and human. Therefore, according to him, we should account for macro intellect and macro soul, in the world. This is the reflection of creation, as the being of human possesses individual souls and intellects, the whole being, also, possesses one soul and one intellect (Kennedy-Day, 2003: 130).

- **Analogy of Micro Cosmos to Macro Cosmos in Traditional Islamic Thinking**

About the world of Islam, in addition to the Greek philosophical trainings which have been effective in the application of the analogy between the micro and macro cosmoses, we should talk of a probably more powerful training, which is derived

from the elements of origin and objective recognition, which is rendered by the religion of Islam, specially by the Koran. The world that is presented by the Islamic religion trainings alongside all intended origins and objectives, have strong relation with philosophical categories of the whole and the part, of the unique and the multiple, and of the macro cosmos and the micro cosmos. According to this concept, the world in the Islamic trainings is a unified and whole corpus which has special ending and clear origin. The parts as the components of this whole must recognize the origin and must be put in the direction of the ending. It is clear that the only being which is the subject of this discussion is the human. The world intended by Islam is based on the words of Koran and prophetic dictum, and consists of great worlds which extend from material level to divine presence. Therefore, in comparing the micro cosmos and macro cosmos by the thinkers of the Islamic world from Farabi and Avicenna to Mulla Sadra, this point has been very important to know how they presented the theories of metaphysics and creation.

In Islamic mysticism there is conformity and similarity between the existence of mankind and all levels of existence, all levels of the world in its traditional sense and even the divine fact beyond the world, and that is why a thorough recognition of self means recognition of God. If there were no such connection, and if there were no similarity between the macro and the micro cosmoses, there would not be the possibility of making such a relationship. According to Seid Hassan Nasr "it is because of this reason that we can recognize this world and, actually, all levels of the realities of the world beyond the material level. Recognition of metaphysics of the human level is complementary to the fact that the knowledge about it frees us from ignorance and leads us to the high knowledge that is above all illuminations; it illuminates us, and leads us to freedom and ultimate salvation.

The theory of similarity between human micro cosmos and divine macro cosmos is observable in

all scholastic, philosophical and mystical theories presented in the articles of the Islamic thinking. This would not happen unless the macro cosmos against micro cosmos is regarded as a world without fault and defect. Thus, the macro cosmos is an actual world and the micro cosmos as a potential world which should make itself actual, following the macro cosmos.

Sophism has explained and expanded this theory in different approaches. In fact, the idea of perfect human being encompasses, very principally, the conformity of micro and macro cosmoses. In Islamic mysticism we have a reality in our material level which is the most superficial aspect of our being. Above that level, there is an egoistic reality which has numerous levels. Then there is a power of imagination which is in conformity with the imagination or exemplification level of the existence of the cosmos and it related to the world of ego. After that we have mind which is the illustration of contemplating intellect (which is considered the same as soul, instinctively and at a higher level) and exists with different degrees at the level of manhood, and this also conforms to the levels of the cosmos and post cosmos intellect.

But in the Islamic philosophy and mysticism, as its general sense, in accordance with any of the reality levels, there are powers that are able to recognize that specific level and its relations with super and supra levels of being, because at the end, the knowledge is the same as being. It has to be reminded that, according to Aristotle, we approach recognition according to our own being state. Moreover, what we recognize, effects our being state. That is why human beings do not enjoy the same position and capacity when accessing the levels of being. Islamic mysticism has always considered this fact in general hierarchical level of the world and the levels of being, and by relying on it, has tried to accommodate the earthly order alongside the orders of the cosmos. Then it is natural that they establish the sketch of the world recognition on the basis of this order and hierarchy.

Farabi and Analogy

Farabi like many other philosophers of the middle Ages who primarily rely on the works of Aristotle in the concepts of ego, physics, and metaphysics in a period close to him and which are translated during his times. As we know Farabi has written descriptions on these books and articles, which are not left for today. The ontological discussions Farabi got involved with are about subjects such as essence of celestial objects, the constructs of the celestial bodies, understanding of and speculation in them and their relations with God, which are included as important subjects mentioned in his ontology, theology, and in theoretical mysticism and philosophy. Of course, Farabi follows Aristotle in his ontology, but in his interpretations he goes further than Aristotle to the extent that most of them do not appear in Aristotle's works. The prominent examples taken from the Stagirite (the first teacher) include the shape of extant being and materials, the nature of the souls' domain, intellect and the causal relations between the domains of soul and differential intellects (Janos, 2009: 15-16). Since Farabi was familiar with Aristotle, he has written articles about the elements of analogy, and minor analogy. In the article of "Qias", Farabi defines analogy(Qias) and its types. In addition to the definitions and the limits of analogy he gives more elaboration on the concepts of metaphor and simile inside analogy(Qias), and states how they can have roles in clarifying the vague concepts. According to Farabi, analogy has an important role in clarifying the premises and conclusions, and then if we encounter an unclear issue we can clarify it, using analogy. Thus, to make logical the interpretations and things, in most cases we need analogy, so analogy can be continued to be used to the point something is acceptably clear (Farabi, *Almanteghiat e farabi*: 145-6).

According to Farabi, deduction and analogy are two sides of the same coin. Metaphor is having knowledge about a being and using that knowledge

to apply it on another being which is similar to the first one. Therefore, the assertion that we issue is generalizable to both beings. The difference is that the decree for the former being is clear but for the latter is hidden. The example Farabi uses is as follows: "The wall is constructed, anything constructed has a constructor, thus, and the sky has also a constructor" (Ibid: 142).

As it is mentioned, Farabi considers analogy as one of the possible ways to recognize unrecognizable affairs through finding its similarity with known things. The definitions that Farabi gives have principally, commonalities with the definitions presented in this chapter. Therefore, in the analogy intended by Farabi, concepts like "similarity", and "face" or "the faces of similarity" and "analogy" are of utmost importance. Farabi borrows analogy from Aristotle and in his article on micro analogy(Qias- saqir), under the topic of analogy(Qias), he refers to the analogy(Qias) used by Aristotle, which is called analogy(Analoghiah), and calls it, "analogical reasoning" (Ibid: 142-44). If we want to explain analogy intended by Farabi, more clearly, it should be mentioned that he divides affairs to two sections of familiar and unfamiliar or hidden that makes it possible to approach the meaning of the latter by analogy made with the former, appropriately, if and only if we can find the faces of similarity (Ibid).

In Farabi, we should account for his two sided discussion on analogy, Farabi, on the one side makes benefit from analogy in explaining super satellite which is an approach to teach super cosmos to others. In this type of analogy, Farabi is on this idea that the more clear affairs could be used to explain the less clear affairs (Ibid). In this type of analogy nothing is similar to other things and its use is only toward teaching and better understanding. But in the other form of analogy in Farabi's thinking, we meet a type of similarity and dependence. As an example, in the first case, Farabi uses experiential examples that are observed and human being is familiar with them, when explaining super

satellite objects, whose examples will come in the continuation. But the second type of analogy in which similarity is established, refers to the relation between whole and the part and also to multiplicity and oneness, and his epistemology. In this type of analogy there is the relationship of dependence, and Farabi's idea in this type of analogy expresses the dependence of a thing to another. In this type of analogy the micro cosmos is depended on the macro cosmos in origins, endings, and happiness, and the city and human as the most principle of the micro cosmos.

Divine and political works of Farabi show that the prior Islamic philosophers had faced the question about the relation between philosophy and religion, and they have presented this relation in a complex framework and with difficulties, and tried to expand it. Farabi, as the initiator of this relationship in an analogical reasoning proposes that religion is similar to philosophy. He reasons that the idea of real prophet in the divine law should be similar to the idea of real philosopher king (Ibid). Although, Farabi did not use this similarity to mean that all responsibilities and applications like prophet hood, constitution, philosophy and kingdom should be similar, he considers all these cases as justified subjects in philosophical investigations. Philosophy, as Farabi states, should be responsible for power, knowledge and activities of the prophet, constitution, and king which is differentiated and restated by the philosopher.

The other point presented by Farabi is the recognition of the nature of ontological criteria that Farabi considers suitable in his political philosophy, and understanding the role of (Qias) or analogy in this relation. The importance of deductive analogy in recognition or metaphysics training should, also, be understood. In fact, it should be stated that Farabi believes that metaphysics is sufficient to recognize and define the heavenly reasons. But there is, still, a question that, how Farabi presents his ontological ideas in his philosophical articles? The most important question is how he relates his onto-

logical ideas to the other parts of his thinking, like politics and city. What are the role of proof and experiential affair and other reasoning approaches that Farabi has used? Here the researcher meets difficulties, because Farabi's theoretical perspective about proof and affirmation does not easily correspond to the approach and style he used. This is the point that Damien Jonas, also has considered in his article (Janos, Op, Cit: 84-86). From his perspective, "Farabi depends to a large extent, and emphatically, on nonproving approaches, like analogy. But, the question that remains is that what the role of these approaches in the context of Farabi's ontology is. The element of recognition is presented in many of Farabi's ideas through this type of reasoning (i.e. Analogical reasoning). As, following Plato and Aristotle and Islamic trainings, Farabi accounts for the similarity between the sunlight and possibility of seeing, on the one side, and the active role of intellect in acquiring knowledge, on the active role of intellect in acquiring knowledge, on the other, i.e. similarity between the issue of light from the sun and its role in seeing the objects, and the issuance of grace from active intellect and acquiring knowledge (Ibid: 84).

It is important to know that Farabi is strictly depended on metaphysics to recognize and explain the reasons behind heavenly bodies; he also considers metaphysics sufficient for this purpose. But the question is that how Farabi relates his cosmological ideas to the micro cosmos and city and human being is a very important one in recognizing his political ideas. This is confirmed by the interpreters of Farabi whom he has used their interpretations in his articles, Dialectic and rhetorical reasoning are among approaches that could be observed in the works like those of Manteghi and alhorooof. Among other works that Farabi has worked on in the domain of reasoning is making differentiation between proof reasoning, on the one side, and dialectic reasoning, rhetoric, recreational, or poetic, on the other (Ibid). Of course, it is important to consider that Farabi's interpreters do not agree on

the approaches used by Farabi. This difference, on one end of the continuum includes viewpoints that consider Farabi's works non proving, on the other end of the continuum considers Farabi's work processing proving reasoning, while Farabi in his treatise, following Aristotle, acknowledges using proving sciences and mathematics in recognizing "being" and specifically the non material world, but is severely depended on non proving science, like analogy. Farabi in his works doubts about the possibility of accessing directly and without intermediating the creatures of the mega world, specially the science about God, to the extent that we can conclude that Farabi rejects full access to the other world (Ibid). It has to be mentioned that Farabi does not consider accessing to the other world without following intellectual hierarchies, on the one side, and on the other side, he believes analogically that through sensible affairs it is possible to access some of the characteristics of the macro satellite world and finally, to accommodate the city we should have understood the macro satellite world. Thus, for Farabi it is unimaginable to recognize the city, correct city, and the outstanding person without recognizing the origins, endings, and happiness, why the desired first city is ordered by recognizing the elements and in the second degree, finding similarity to that. Therefore, the city and its compartments are shaped in relation with the macro cosmos. But to get closer to the mind, Farabi asserts that the use of analogy in teaching metaphysics will be useful. Origin and essence of the creator is different from other things, but it is necessary for us to know with what type of rhetoric we can talk about his characters." For this reason, Farabi believes that recognition of things such as soul, intellect, the primary being, and all the things separated from materials is not possible through senses....

In fact, what cannot be imagined, cannot be used or studied either, there must be other approaches to be used to understand and imagine them. These methods are called comparison, analogy or similar-

ity, and proportion. This might not happen unless its primary reason seems very difficult (Farabi, Op, Cit: 159-62).

"We are weak intellectually and unable to understand the concept of happiness unless we use analogy and restate how much happy we feel we are." The above statement includes two important points: First it shows that Farabi was aware of human understanding limitations about metaphysical things, especially God. Second, these statements show that analogical or deductive reasoning is considered as an approach to help us access an insight about the intellectual world. This insight, however, is not an assuring one, but the only approach to understand super satellite affairs which is done through application of intellect, but suggests analogy as a training mechanism through which insights can be achieved and applied. Farabi in his book "Macro Music" recommends to the scientists of music to depend on and believe in analogy to understand some of the intellectual things that are beyond their sensual perceptions, the same way philosopher of metaphysics do (Janos, Op, Cit: 84-88).

Thus, in Farabi's works, especially ones like, (Ara's ideas), alsiasat (politics) his thinking is placed on the basis of analogical reasoning between the world beyond on the world below. In fact in both of these two works, analogy is used in both of these, alongside each other. These two works illustrate very well the analogy in Farabi's thinking. In other Farabi's works, also, like in the article (Felaghl) (about intellect) when he explains cosmology, he relies on "similarity" and "analogy" to give metaphysical, cosmological and psychological explanations about creatures or concepts. As an example, in the book "Ara" (ideas) when Farabi defines the concepts like "life" and "intellect" he explains these in relation to God through analogy with objects that exist in this world. In fact God exists and it has intellect, but not in the way other creatures under the micro satellites do, because God is eternal and immortal and has being, while the earthy creatures are mortal and decay able.

Then, through analogy with things that were recognized in humans before, we can get insight about God's essence which is, of course, a limited shape of science (Ibid: 98-99).

In these works, Farabi explains that the analogic approaches make possibility of transference of concepts from one field to another- from the domain of sensual perception to celestial domain of intellect and vice-versa. In other words, common names used in everyday language can be transferred to higher order metaphysical beings and the first reason, and then can be used (Ibid: 99).

But as it was mentioned, the important point is that we must account for the difference between understanding the affairs through analogy and its application because of its closeness to mind and its application in the meaning of similarity. In the first kind, although Farabi tries to use sensible affairs to explain insensible ones in Qias (analogy), it cannot be overlooked that Farabi does not consider the macro cosmos or insensible affairs as the followers of the sensible ones. He, even, does not consider this approach in achieving the truth of the higher world, assuring (Farabi, 2005: 36-8). He, also, does not recognize the sciences accessed through sensible affairs as dependable sciences, he, however, believes that it is the insensible world which is of importance and human and city should be ordered accordingly. Thus, in the analogy Farabi makes between the macro cosmos and the micro cosmos, especially the city, and human, it is concepts, interpretations, constructs, origins, objectives and the meanings that are transferred from the higher satellite world to the lower one, to organize human and city. The dependence of the micro cosmos (human and city) as the followers of the super satellite world is evident. In this type of analogy, as we state, Farabi accommodates similarity analogy. "Similarity" here means that human and city should find themselves in relation to the super satellite world and organize on that basis, thus, dependence of human and city on the higher world is the condition for accessing happiness.

Farabi has discussed about analogy and analogical understanding and its importance, well in his book, "minor Qias". He has presented the discussion using the word "transfer" the way theologians believe to be: understanding from obvious affairs to explain unobvious ones. Farabi in the book "analogy and minor analogy" gives a deep interpretation of this type of understanding. His general objective, in this article, is to state how it is possible to use the direct knowledge about less known affairs (Farabi, Mantaghiat: 173-9). According to Farabi, there are two types of this transfer of knowledge: interpretation and synthesis, that if done properly, make the first type of Qias (analogy), which is by Farabi, analogical interpretations in time, whose origin is the absent affairs, and synthetic analogy in time, whose origin is the present affairs (Ibid: 176-7). On the basis of this approach, Farabi, makes use of the analogy of the present affairs to teach super satellite, which is not concerned in this paper. But in organizing the city, the origin is the absent affairs from which the order and organization of the city is deduced.

This is the same point mentioned by KhajeNasir-al-din-e Toosi. Of course, according to Lamier this differentiation by Farabi is to a large extent superficial, because both of these are acquired by reliance on data gathered inductively, and in principle, they are analytic or interpretive, although on the basis of studies by Usher and Lamier, in Farabi's ideas, the transference and analogical reasoning can be, sometimes, regarded as techniques in philosophical investigations and, more specifically, in cosmology (Lameer, 1994: 215-216). Farabi explains the mechanism of transference from one domain to the other, as follows:

"the procedure of transference of decree is as follows: we understand, by our senses, that a specific affair is happening at a specific condition, and, also understand that a specific thing belongs to specific affairs; consequently, the intellect transfers this condition or thing, from that known affair to similar unknown affair, and therefore, on the basis of

this known affair he issues a decree about that unknown affair (Farabi, Mantaghiat: 175-180).

What Janos tries to discuss about, in his book, is that cosmology of Farabi has used a lot from the analogical reasoning and has explored many of the super satellite conditions through transference of concepts and meanings present in the lower satellite, although he is aware of improvable nature of it ... therefore, Farabi used analogical reasoning to make use of an exact background (introduction) in practice to teach cosmology (Janos, Op, Cit: 104-105), but in picturing the city he conducts an opposite action this time. Farabi transferred whatever there was in his theoretical philosophy including concepts, interpretations, objectives, happiness, origins, and the like, which are included in his metaphysics to picture the city. This is what Farabi called analogy from the present to the absent affairs.

The question that comes to mind and should be answered but Jonas did not pay attention to, is that whether Farabi tries to teach cosmology to others through analogic reasoning or he himself tries to approach his mentality, or he himself approaches recognition of the cosmos, by this approach. Farabi has answered to this question in his book "alhorof" (letters). He states that:

These parts of similarity will be useful only when the acquirer of knowledge, alongside conceptual learning, learns the technical concepts as well. These are concepts whose explanation is done through the words which were familiar to him before recognizing these concepts (Ibid: 108).

In this regard Gyekye believes that analogy through transference or through decree should be considered a non proving approach in Farabi's thinking and considers it as the logic of scientific discovery. On the other side M, Rashed concerns that analogy "in Farabi's philosophy" has mental and not proving values (Kwame, 1989: 36-37). Farabi explains, one more time, the use of analogy in the book of Aristotle when discussing about the application of analogy and transference.

Picturing and imitation through example, or similar cases, is an approach through which we can teach a large body of difficult theoretical issues to the masses and by the similarities to affect their soul and mind. The mass does not need to understand the theoretical issues completely. It is enough for them to learn about these issues through making recognitions and the similarity of the similar problems (Janos, Op, Cit: 111).

But, about organizing the city the question that remains is about the procedure through which one can assess the origins, objectives, and happiness by Farabi. Does Farabi still emphasize on their understanding through recognition of affairs or not? Farabi's answer is quite clear. For him accessing these three is quite rational. Thus, to organize the city, this time, the clearer and the more important affairs for Farabi, is the intellectual world rather than the unintellectual one. On the other side as Farabi states in the book "tahsilal Saadat" (acquiring happiness) it is not possible to access the higher order science through sensible affairs. Thus, another analogy that we talked about and included the concept of dependence in it, talks about relation and its type that exist between the micro and macro cosmoses. In the first type of analogy or at least, Farabi's objective from presentation of analogy is not the relation between these two worlds, but as it was mentioned Farabi uses the affairs and observable things to explain unobservable things and mostly for the purpose of approaching the mind and training. It is because of this reason that the role of intellect and intellectual human is more evident in Farabi's thinking. Therefore, the necessity of dependence of the micro cosmos to the macro cosmos and, in this regard the role of intellect in receiving correct virtue from the active intellect in Farabi's thinking is presented. The point that a philosopher is recognized as a virtuous human and other humans related to the philosopher are regarded as virtuous, is derived from the position that Farabi accounts between these two worlds. Theoretical intellect or wisdom is a power through which the

philosopher understands the origins, objectives, and happiness, and the practical intellect is the power through which the philosopher makes practical what he has accessed through practical intellect. In practicality and not practicality of theoretical trainings, Farabi tries to distinguish philosophers from non philosophers. This picture is similar to the picture that Plato draws from philosopher (or wise person), i.e. a person who possesses both insight and practice, altogether and can make constitution.

Conclusion

One of the most important analogies that strictly relates to the micro cosmos depending on the macro cosmos, is a type of analogy that Farabi makes between the ability and the role of prophet and the importance of the relation between these two and the active intellect. These two are important from this perspective that they both deserve what is issued from the active intellect, of course, one through the power of imagination and one through the patient wisdom (intellect). It is from here that the prophet and the philosopher both deserve to govern the city, because their responsibility in receiving the lights of emanation from active intellect and its application in the city, are similar to each other.

Therefore, in case, analogy of an issue with no importance or less importance is considered, it is possible that the objective of a thinker is not a deeper understanding, but necessity of dependence or one type of dependence between two issues which are compared. Because of this in dealing with political philosophy of Farabi, it is important to know what are the objectives of analogy, to what extent and to where. Other principle questions provided, whose answers are not included in this article, is that whether because of using analogic reasoning it is possible to make fundamentals of political philosophy, or not. It is certain that analogy has not been used by any thinker as an approach to find political philosophy with its components. But the

political philosophy of Farabi is not designed in a way in which analogy is only a philosophical reasoning to explain clearer affairs. Farabi has explained and suggested his political philosophy with dependence on analogy, evidently or hypothetically. Farabi, of course, uses other methods in his political philosophy, like: dividing wholes to parts, inductions, deductions, and metaphors, which provide the possibility of understanding and remembering. Of course, understanding the things with these methods, according to Farabi, is based on the knowledge about their peculiarities.

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