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Evolution of Perception: Farabi to Avicenna

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ABSTRACT

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Maintaining strong flavor of Aristotelian theory of perception, Farabi as well as Avicenna have appended new phases to the theory. Depicting imaginary perception with its crucial jobs, Farabi explains these three activities: storing sensory forms, composing and decomposing sensory forms, as well as imagery. What Farabi names the imaginary faculties, is conceptualized as three inner perceptions, i.e., imagination, estimative and memory faculties in Avicenna's works. Evolving existing theories of perception, Avicenna delivers an account of five inner perceptions. Beforehand Farabi did not consider any difference between imaginary perception and motekhayelah. However, he mentioned one faculty doing both activities and was usually calling it motekhayelah and sometimes imaginary perception. Conceptualizing imaginary perception with its functions, Farabi deals with three primary activities: storing sensory forms, composing and decomposing sensory forms, and imagery. In other words, Avicenna defines what Farabi calls the imaginary faculties as three inner perceptions, i.e., imagination, estimative and memory faculties.

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Introduction

Inner perception theory plays a key role in issues of epistemological mindset. Any ambiguity in inner perception theory results in various sophisms and destroys its role from efficiency. Here we study the problem of inner perception with comparative historical approaches of Farabi (339-258) and Avicenna (373-428). Farabi in terms of innovative theories about various roles of perception and Avicenna in terms of expansion in concepts of perception faculties are important for the purpose of the field.

Some features of Aristotle's theory of perception are included in Farabi as well as Avicenna's theory of inner perception. Most of Aristotle's views on inner perception theory could be seen in his book about human soul called *De Anima* (Aristotle, 1995, 427a18-429a4). Explaining the nature inner perception, Aristotle first gives a negative account about what imaginary perception does not include. He emphasizes on the difference of imagination with thinking, judgment, opinion, belief, conviction, reason, perceiving, knowledge and intelligence. He thinks that imagination is different from thinking and judgment. Although imagination can't be created without perceiving, judgment is not found without imagination. Therefore, the difference between thinking and judgment is obvious, because imaginary perception is in our control when we want and we can imagine a picture (Aristotle, 1995, 427b14-19).

The idea that imaginary perception under human power and desire do not merely mean being devoid of imaginary perception because thinking is arbitrary too. Therefore, thinking is bound to logical criteria that we can obtain by following them whereas imaginary perception is not bound to logical criteria and barriers. The other point is that imaginary perception can rely on practical wisdom due to its characteristics, under human power and desire. Because the affairs belonging to practical wisdom are under human power and free will, whatever belonging to practical wisdom is worthy to be judged. We have dealt in detail this issue in problems of imaginary perception topics.

Aristotle differentiates between imaginary perception and opinion. His argument is that we are not free in forming opinions and cannot avoid error or correct alternation.

In addition, when we think that something is horrible or threatening, immediately interests and emotions are produced inside our body as well as for something reliable. But when we just imagine, we won't have those regrets and are like those who are watching a nice or horrible scene painting (Aristotle, 1995, 427b20-24).

Besides, opinion goes together with belief. Because without belief in what we have opinion power, we cannot have opinion whereas most animals have imaginary perception not belief. Moreover each opinion is with belief, each belief is with conviction and each conviction is with reason. But some animals have imaginary perception without reason (Aristotle, 1995, 428a18-23).

Aristotle separates imaginary perception from perceiving by the reasoning that the perceiving is potential or actual. For example, visual potential and act of seeing and imaginary perception occur in both absences as in dreams. The second reasoning is that perceiving is always available unlike the imaginary perception. The third reason is that if the actual imaginary perception and perceiving were the same, all animals should have imaginary perception. But it is not so. For example, there is no imaginary perception in ants, bees and worms. The forth reason is that perceiving is always true unlike imaginary perceptions. The fifth reason, when our sensory feelings pay attention to the objects carefully, we don't say that we imagine this object is for example a human. But when our sense perception is vague about that object, we say that sentence that maybe it is true or not. The sixth and the last Aristotelian reason is that visual imaginary perception appears even while our eyes remain closed (Aristotle, 1995, 428a5-16). He separates imaginary perception from the affairs which are always impressive like knowledge or intelligence, because imaginary perception can be an error (Aristotle, 1995, 428a17-18).

Studying the differentiation of imaginary perception from perceiving and opinion, Aristotle shows that imaginary perception cannot be opinion in addition to perceiving, or opinion resulted from perceiving or combination of both. This is impossible, both due the things we have mentioned and the reasons that objective opinion cannot differentiate from objective perception (Aristotle, 1995, 428a24-29).

Aristotle describes what imaginary perception *is not*. But what *is* the imaginary perception? He reckons imaginary perception as a movement that cannot be created without perception. It means that it will occur just in sensitive creatures and in to objects belonging to them. And since movement can be produced from actual perception and has a similar characteristic to the perception itself, then this movement cannot be separated from the perception or in the creature without perception. Therefore, a person having imaginary perception is the agent of many things and receptive to them (Aristotle, 1995, 428b11-17).

The characteristic of imaginary perception is that it is similar to perception except that perception has to do material objects and imaginary perception does not have one (Aristotle, 1995, 432a9).

Aristotle concludes that if the imaginary perception does not have other features except above mentioned ones, then it should be a movement that results an actual reaction from a perceptive origin (Aristotle, 1995, 429a1-2).

Mentioning in appellation of imaginary perception to a Greek name *phantasia* from *phaos*, Aristotle stresses that imaginary perception belongs to the perceiving act and the most important sense is vision being impossible without light (Aristotle, 1995, 429a1-4).

A word of warning is in order. Farabi has not used the term *phantasia* and Avicenna has used *phantasia* and *bantasia* as meaning *sensus* communis.

Motekhayelah and khiyal are not considered as two faculties in Aristotle's works as we could see later in conceptualization of Muslim philosophers especially in Avicenna that formed under than the five

senses. Therefore, *takhayol* and *khiyal* are used as synonyms in the literal translation as imaginary perception.

Farabi's Theory on Inner Perception

Unlike what we have understood about Aristotle, Farabi does not point out *what is imaginary perception* as a problem. He does not follow its essential analysis or its conceptual analysis. In such situations as in planning, one can obtain what is imaginary perception from his view by an indirect approach. Therefore, we will address his opinion about different perceptions, i.e., sensory perception, imaginary perception and intellectual perception and self-intellective faculties including the faculties of sensation, *motekhayelah*, and rational.

Farabi conceptualizes intellective faculties from both theoretical wisdom and practical wisdom whereas sages after him paid attention to intellective faculties through theoretical wisdom like Avicenna.

Farabi does not consider any difference between imaginary perception faculty and *motekhayelah*. He mentions one faculty doing both activities and often calls it *motekhayelah* faculty and sometimes imaginary perception faculty (Farabi, 1992, 51-58).

Avicenna explains these distinctions. Basically we cannot see Avicenna's explanation about fifth inner senses as we found in Farabi's works.

Farabi does not express separately about nature of perception. But he points to the kinds of perceptions in his other discussions. For example, he expresses in his talking about the first lover and pleasure that he enjoys in it. Because of feeling or imaginary perception or rational science (Farabi, 2003, 85; 1997, 71) and says in his analysis of psychical faculties that the science will be realized by rational, *motekhayelah* or sensory faculties (Farabi, 2003, 156).

In his opinion, rational faculty is responsible for intellectual perception, *motekhayelah* faculty for imaginary perception and appearance senses for the sensory perception.

Avicenna completed this theory. He conceptualizes estimation as a kind of perception. We cannot see this term in Farabi's works. Farabi has defined estimation as an imaginary perception for something that is not existent. (Farabi, 1987, 162).

Farabi has not defined faculty in his discussions about self-faculties. Avicenna believes that faculty means both doing origin and acceptance origin. Because the affairs out of self includes movement and perception and faculty about perception means acceptance of origin and stimulation means action from origin. There is no preference to refer faculty to one of these two cases and if one uses the term of faculty for both perception and stimulation faculties, namely both acceptance and doing origins; it will be due to sharing of terminology (Avicenna, 1983, 7).

Farabi explains self faculties according to its existing order and expresses their activities (Farabi, 2004, 10; 2003, 151-155). Among these faculties is sensitive faculty including touch, sight, auditory, taste and smell senses. There is a dominant sense over appearance sense that is the focus of all sensory perceptions, and senses act like its spies and each is responsible for a special case from information and a special area of the body estate whereas the *motekhayelah* faculty does not have several servants and agents in the body and will act lonely (Farabi, 2003, 153-154).

Motekhayelah faculty preserves the tangible images that are stamped in the self and also it combines some images with others or divides an image to some parts and therefore creates a new image. After motekhayelah faculty, rational faculty will be created that the human can think by it.

Farabi has emphasized conceptualization of perception faculties from practical wisdom in various situations (Farabi, 2003, 152; 2004, 11; 1997, 33). He knows rational faculty as a faculty that human can differentiate between beautiful and ugly ethics and acts through it and thinks that which action should be left or continued and in addition finds that beneficial and harmful and enjoyable and ornery, whereas *motekhayelah* can just perceive the beneficial and harmful and enjoyable and ornery,

and sensitive can perceive just enjoyable and ornery (Farabi, 1997, 33).

One of the definitions obtained through collection of an object's definitions and works that is called compound particular. Therefore, regarding the activities of *motekhayelah* faculty, important thing is to reach what it is.

Farabi has defined three important activities for *motekhayelah*. First, it preserves sensory perceptions after cutting sensory relation. Second, it combines or decomposes them. These combinations and decompositions are various and *motekhayelah* faculty governs them desirably. Their results are sometimes relevant and sometimes irrelevant (Farabi, 2003, 154). For example, it will combine bird wing with the horse body or invent a Pegasus. The third activity is imitation and illustration. Only *motekhayelah* faculty can illustrate through the sensory and the intelligible. Even *motekhayelah* can imitate the intelligible in the ultimate perfection like the first principle and the non-materials. Of course, it is illustrated by the most complete and highest objects such as beautiful objects and in contrast, it imitates the incomplete intelligible by incomplete and posts and the ugly sensory.

Since Farabi does not analyze what imaginary perception is, we focus on his other views like of human faculties, Utopia ranks, stage of universe and body members.

He begins description of this similarity with the stages of universe. Creatures are continued from the most completed one to the most incomplete one. The last stage is that the creature's doings are just for service and other things are not realized after him and never does actions as headship. The first creature that is superior never performs service and the middle creatures perform headship rather than their lower creatures to serve the first creature.

So there will be an order and relationship and cooperation and community among stage of universal and the stage of society are the same. The status of the first header is like God in the universal system. The same relation can be found in body members and also in self faculties (Farabi, 1991, 63-66). This similarity means *motekhayelah* faculty is under the service of rational faculty and sensitive faculty is under the service of *motekhayelah* faculty. In terms of stage and headship and design, the rational faculty is the first and *motekhayelah* and sensation are next in status of headship.

Avicenna's Theory on Inner Perception

What is imaginary perception can be conceptualized from two positions in Avicenna's discussion: the first is where he explains kinds of perceptions and the second is where he divides internal faculties.

Imaginary perception theory has been ordered and developed consequent to perception theory and perception faculties. Avicenna first studied kinds and essences of perceptions in *al-Isharat va al-Tanbihat* and then analyzed internal perception faculties and rational soul (Avicenna, 1997, 308-404). He studied internal and external perception faculties, rational soul and kinds of perceptions in *al-Shifa* and argued in detail about each internal and external senses (See: Avicenna, 1983, 33-171).

Avicenna has divided perceptions into four kinds: feeling, imaginary perception, estimation and intellection in most of his works (Avicenna, 1983, 51-53; 1986, 344-346; 1995, 277-278; 1985, 102-103; 1984, 23; 1953, 30-33).

Until there is a relation between external senses and external object, sensory perception is resulted, if not, it is imagined and its idea is exemplified inside. Like Zayd who we saw him and then we imagined him while he is absent.

Perception of particular meanings and belonging to the sensory are called estimation. Like Zayd's kindness or hostility. Intellection is resulted when Zayd is imagined as a human, meaning that this meaning has been realized in others too.

Avicenna has tripartite divisions of perception and does not mention the estimation (Avicenna, 1997, 322-323). In *Sharh al-Isharat*, Tusi has all four divisions and tells the reason why the Avicenna did not mention estimation that sensory and imaginary conceptions are created alone and illusory perception is not possible without participation of imaginary perception and imaginary perception makes it particular and individualized. Because estimation is the perception of intangible meanings like the qualities and relations specific to a material object (Tusi, 1997, 324).

After analyzing kinds of perceptions, Avicenna studied internal intellective faculties. In his opinion, internal perception faculties include *sensus communis* or *bantasia*, imaginary perception or illustrated, estimation, *motekhayelah* or thought. He discussed these faculties with examples which we will discus later (Avicenna, 1997, 331-346).

We see rain drops in straight line and a point which is turning quickly as a circle; these apprehensions are through sense, not imaginary perception or recollection. On the other hand, only the opposite idea will be stamped in the eye and the opposite idea of the rain drop or the point turning is a point not a straight line or circle. Therefore, the first painted idea will remain in one of human faculties and the current idea will join it and all sensory apprehensions will be gathered in that faculty. This faculty is called *sensus communis* or *bantasia*.

The second faculty is imaginary perception that will retain the sensory after getting hide against external senses. Having these two faculties of *sensus communis* and imaginary perception, human can rule about the color and taste. For example, this black date is sweet and this yellow lemon is sour.

The third faculty is estimation that understood intangible detailed meaning in detailed tangibles like sheep that knows the intangible meaning of horror in the wolf and the lamb that knows the intangible meaning of kindness in his mother.

The forth faculty is memory to retain particular meanings. This faculty is except imaginary perception which retains particular forms. One of the other human faculties can separate and combine the forms that sense would conceptualize and the particular meanings that estimation has them and also it can separate and combine between forms and meanings. If this faculty will be worked with wisdom is called thought and if with estimation, will be called *motekhayelah*.

Tusi has called this faculty representation because it occupies in perceptions. Avicenna has determined a position for each kind of these five faculties in brain.

Comparing and Contrasting Farabi and Avicenna

Historical study of the views of the Farabi and Avicenna concerning inner perception theory, explains the evolution of this theory and the persistent effect on posterity and innovations and inventions of each of them. Aristotle has done researches on the nature of the inner perception which are accepted by Farabi and Avicenna as the basis-material hence they were not elaborated. He analyzed imaginary perception as distinct from feeling, thought, belief, opinion, science and intellect, in addition to the imaginary perception and feeling being similar and its relationship with the judgment. These insights were kept in the later philosophy.

Aristotle used the word *phantasia* for imaginary perception. Farabi has not used this word to imaginary perception and nor to any other thing. Avicenna applied the words *bantasia* and *phantasia* based on common sense. While Aristotle called the common sense as *sensus communis* (Aristotle, 1995, 425b27, 450a1, 686a31)

Farabi does not consider the conceptualization of imaginary perception or its distinctiveness from dubious and similar concepts as a problem. He received the teachings of Aristotle via tacit means and deals with activities and capabilities of imaginary perception and its civil status. As Aristotle considered imaginary perception and *takhayol* with a word *phantasia*, Farabi too does not consider duality between imaginary perception and *takhayol* in the infinitive and between imaginary perception and *motekhayelah* in the meaning of faculty.

He stated three tasks for *motekhayelah* based on three imaginary forms

that can be distinguished: imaginary form that is sensory and is obtained from common sense, imaginary form that *motekhayelah* makes with possession in the first imaginary forms and their analysis and synthesis, and imaginary form that *motekhayelah* is invented by the representation of the intelligible and the sensory.

This tri-partite division is used in the conceptualization of the creativity of imaginary perception. Especially the performance of imaginary perception in imagining from the intelligible makes possible the power and specific capacity in order to form ideas and works of art. All three types are common in clear and distinctive features of substantive that Aristotle has expressed.

Farabi has also considered the ability of *motekhayelah* in understanding helpful and harmful, pleasurable and painful affairs.

Avicenna conceptualizes inner perceptive faculties. The faculties are based on a branch called *motekhayelah* and thought is considered as representation in five types and if they are considered as two faculties they are six types.

Are there any relation between faculties of imaginary perception and *motekhayelah* in Avicenna with *motekhayelah* faculty in Farabi? Avicenna knows the imaginary perception as a treasury of common sense which is responsible for maintaining the sensory forms, namely the first task of *motekhayelah* Farabi is independently for Avicenna imaginary perception. Avicenna's *motekhayelah* is responsible for analyzing forms and their composition. It means to carry out the second activity of Farabi's *motekhayelah*. Avicenna considers perception as passion category and takes from dominion in forms to act of *motekhayelah* (Avicenna, 1983, 35). He does not consider the third activity of Farabi's *motekhayelah*, namely the representation. It should not be mentioned in addition to the perceptions and interactions of faculties.

In summary, the same interaction which Farabi considers for *motekhayelah*, Avicenna considers for two faculties, namely imaginary perception and *motekhayelah* and does not consider the representation. It

can be said that Farabi's *motekhayelah* includes Avicenna's estimative faculty because Farabi considers *motekhayelah* faculty capable of understanding pleasure, pain, benefit and detrimental affairs. It means Farabi's *motekhayelah* can find meanings in all these.

While Avicenna considers estimative faculty responsible for perceiving the sensory, as Farabi has not differentiated the estimative faculty, it is not necessary to separate the memory—that is, the treasury of partial meanings. It seems that Avicenna considers Farabi's *motekhayelah* faculty as one of the four faculties of imaginary perception, *motekhayelah*, estimative and memory. It is basically impossible to separate the sensory affairs in particular meaning from the sensory forms. So Avicenna in his book of *Isharat va Tanbihat* divides the perception in three kinds of feeling, imaginary perception and intellection and put estimation in his other works.

Another point that needs mentioning is that in some works of Farabi we can see inner cognitive faculties. In *Fusus al-Hikam* the faculties of representation, imaginary perception, memory, thought and *motekhayelah* are defined using the same terms as Avicenna's works (Shanab Ghazani, 2003, 67). Also, the common limit phrase is mentioned between the outward and the inward that exponents are stated for it equivalent of common sense. (See: Shanab Ghazani, 2003, 164; Astarabadi, 1980, 320) In addition, in *Uyun al-Masayel* we have *motekhayelah*, imaginary perception, recollection and thought without a definition for them. (See: Farabi, 1930a; 1930b, 9-10)

Various methods can be used to clarify this issue. One is that Farabi uses different phrases in different places, for the validities of cognitive faculties and he expresses their differences are in terms of brevity and detail. This probability is altered, because Farabi in *motekhayelah* activities has not named detailed names of faculties.

In addition, Farabi defined estimation as follows: 'the estimation is that we have something in imaginary perception while it does not exist' (Farabi, 1987, 162). This definition is equivalent to lexical meaning of

estimation and does not resemble Avicenna's conceptualization.

Another possibility is that Farabi changes his opinion. This possibility is not very notable. In other words, the path is not clear for such a change in the works of Farabi. Another difference is that some works do not belong to Farabi, as some Arab and European researchers denied belonging *Fusus al-Hikam* to Farabi while some have attributed it to Avicenna and also there are serious doubts in the document of *Uyun al-Masayel* and *al-Daavy al-Qalbiyeh*. (See: Georr, 1946, 31-39; Pines, 1951, 121-126; Strauss, 1934, 99-139; Michot, 1982, 50-231; Cruz, 1950-51, 23-303; Rahman, 1979) Their approach is mainly referring to the terms, concepts and theories contained in these books and have deduced most of the arguments from topics of the soul.

Conclusion

Maintaining strong flavor of Aristotelian theory of perception, Farabi as well as Avicenna have appended new phases to the theory. Depicting imaginary perception with its crucial jobs, Farabi explains these three activities: storing sensory forms, composing and decomposing sensory forms, as well as imagery.

What Farabi names the imaginary faculties, is conceptualized as three inner perceptions, i.e., imagination, estimative and memory faculties in Avicenna's works.

In other words, Farabi conceptualizes *motekhayelah* faculty as a faculty responsible for keeping the sensory forms, their possessorship and representation of the intelligible and the sensory by them. However, Avicenna conceptualizes faculties of imaginary perception, *motekhayelah*, estimative and memory rather than Farabian *motekhayelah* faculty.

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