

Al-Kindi

(a. 185-256 A.H. / 805-873 A.D.)

Theory of Knowledge

7. Sense data and Reason:

Al-Kindi's main goal of philosophy is to know Allah the creator of this world. A second goal that is related to the first is to prove in metaphysics *creation ex nihilo* (creation from nothingness), that the world is not eternal. But what sources of knowledge shall we use to achieve these goals?

Al-Kindi furnishes some epistemological premises to start with before getting into his metaphysics. He stated that human perception and knowledge are of two kinds:

1. Perception by the senses.
2. Knowledge through the intellect.

The existents are of two kinds:

1. Particulars, which are perceived by the senses, and
2. Universals, which exist in the mind.

The sensory perception is achieved through the contact of the senses with sensible particular objects. And since the sensible objects are in continuous motion and in a constant changing, therefore knowledge based on sensations is unstable and localized to the perceiver.¹

The sensory perceptions take images of the sensory objects and send them to our mind, which establishes them in the area of imagination, then the imagination conveys them to the memory; and the sensible object is represented in our soul. For this reason sense perception is closer to the perceiver himself, and far from the essential nature of the sensible object, also it is subjected to the contributing factors of making perception.

Another reason that sensory experience is not reliable because sensible materials exist in particular bodies, therefore sensory perception will relate to particular objects. According to al-Kindi knowledge of the particulars can not help to establish philosophical insights, since philosophy aims at knowing universal concepts, such as: species, genera, human soul, infinity, God, etc...

8. The mind, or the intellect is more qualified in establishing philosophical knowledge in dealing with universal concepts. This knowledge is superior to that of the senses, because it is possible to be validated and rendered certain by the intellectual principles that are necessarily true, such as the law of non-contradiction.²

Al-Kindi gave an example:³

If the universe is a body, then:

**Either it is infinite in quantity, or
is quantitatively finite.**

¹ Al-Kindi (1948): p. 85.

² Al-Kindi (1948): p. 87.

³ Al-Kindi (1948): p. 87.

The universe cannot be quantitatively infinite,
(Al-Kindi will prove later on how actual infinity is impossible and contradictory)

Therefore, the universe is quantitatively finite.

Al-Kindi concluded from this form of reasoning that we reached the conclusion here with some kind of necessity. Its form does not exist in the soul as sense perception exists in it. In sensation there is no necessity only probability. Thus the intellect, but not the sensory perception, is more entitled to study the subject of metaphysics. Al-Kindi realized that there is a limited domain for sensation, which is the natural sciences, while in non-physical subjects or in mathematical sciences proves by demonstrative reasoning, is necessary. In metaphysical subject we have to be rationalist in order to reach conclusions that are valid and necessarily true.

Al-Kindi's solution to the conflict between rationalism and empiricism came from his realization of the importance of physics, mathematics, and metaphysics to reach the truth.

His example mentioned is disjunctive syllogism of the form:

Either P, or Q

Not P

Therefore, Q

This form is only valid when one of the disjuncts is denied in the second premise. It is a deductive form of reasoning and its validity based on the necessary connection between the premises and the conclusion. Of course this form of reasoning has nothing to do with observation and sense experience thus it is formal and has certainty.

Al-Kindi said:

“[W]hoever examines things which are beyond nature, i.e., those which have no matter and are not joined to matter, will not find for them a representation in the soul, but will perceive them by means of intellectual inquiries.”⁴

Al-Kindi thinks that different fields of knowledge since they have different subject matter must have different methods of study too. The perception and understanding of fields such as linguistics, physics, mathematics, and metaphysics, is different because their subject matter is not similar. Al-Kindi's methodological classification of sciences is based on the subject matter of each field of study:

“We ought, however, to aim at what is required for each pursuit, and not pursue probability in the science of mathematics, nor sensation or exemplification in the science of the metaphysical; nor conceptual generalization in the principles of the science of the physical; nor demonstration in rhetoric, nor demonstration in the principles of demonstration. Surely if we observe these conditions the pursuits which are intended will become easy for us but if we disobey this, we will miss the objectives of our pursuits, and the perception of our intended objects will become difficult.”⁵

⁴ Al-Kindi (1974): p. 64.

⁵ Al-Kindi (1974): p. 66.

9. The Soul and the Theory of Intellect (al-'Aql):

The theory of intellect is significant in Islamic philosophy for three reasons:

First: it manifests the indisputable interest of Muslim philosophers in reason and rationality.

Second: Its interaction with Islamic religion, especially the issue of prophecy and philosophy.

Third: Its impact on philosophy in the Middle Ages.

Al-Kindi wrote treatises on the soul and one treatise on the intellect. The soul according to him is a simple substance, non-material, uncompounded, and imperishable. It has three powers: the rational, the passionate, and the appetitive. While the last two functions to preserve the growth and life, the rational power of the soul is that which controls the other two, and seek perfection through the exercise of reason.⁶

Al-Kindi, as we discussed earlier, made a clear distinction between sensational perception (faculty of sensation) and the knowledge acquired by reason (faculty of reason). The first perceives what is particular and material, while the rational power conceives the universal, non-material, principles of knowledge such as the principle of non-contradiction, species, and genera. The gap between these two faculties is so big, however, al-Kindi linked both of them by another power in the soul that he called the representative faculty (al-Musawwirah also called takhaiyul or fantasia). This power is nothing more than an inner ability in the soul for imagination when the sensory object is absent. The senses cannot produce an image of a horse or an ox with wings, but the representative faculty can put together sense data of an ox and that of wings of a bird, producing an image that did not exist before in the data of senses. This faculty works best at two levels:

First, in sleep, when the power of sensation is almost not functioning, the representative power of the soul can pull some of the sensibles, which are stored in the memory, and produce a composite images that are not similar to objects in reality and might not be real at all, such as a dream about a winged ox, or a flying man. Some of the representation during sleep might be about the future, but the validity of these is contingent upon the strength and purification of the soul.

The issue of having future knowledge based on the power of representation will play from now on a major role in its relation to prophecy, and the superiority of philosophers to prophets in knowledge, especially with al-Farabi and Ibn Sina.

Second: in the time of pure and intense concentration, where the distraction of the outside sensible objects and their affect on the soul being reduced to the minimum, the inside power of imagination is more free to act,⁷ as for example at the moment of aesthetic creativity.

10. The Theory of Intellect (al-'Aql).

Al-Kindi wrote a treatise *On Intellect (Fi al-'Aql)* was translated twice into Latin; one was by Gerard de Cremona.⁸ Al-Kindi distinguishes four kinds of intellects:

For more details about **Aristotelian ideas, Alexander, Ross and others** please see: **The Essence of Islamic Philosophy, By Mashhad Al-Allaf**

⁶ Al-Kindi (1950): Vol. 1. p. 255.

⁷ Al-Kindi (1950): Vol. 1. p. 284.

⁸ Al-Kindi (1950): Vol. 1. pp. 351-352.