

Intellect in Alexander of Aphrodisias and Its Impact upon Muslim Philosophers

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In his treatise "On the Intellect," Alexander of Aphrodisias paraphrases Aristotle's views on the intellect. He refers to four kinds of intellect. The first three include: the potential intellect which resides potentially in man's soul and will be actualized through perceiving the intelligible; the habitual intellect which has perceived certain intelligibles and can perceive some others as well; the Active Intellect which can change the first kind of intellect into the second one. This intellect can perceive its essence. And since its essence is intelligible so it can perceive it through perceiving the intelligibles. The fourth is the acquired intellect and it is a part of the Active Intellect and comes to soul from outside and enables it to perceive the intelligibles. The main objective of this article is to treat Alexander's idea of the intellect and to explore its impact upon Islamic philosophy which can be traced in the similarities between their debates on the issue and the allusions to Alexander's view in the works about intellect written by Muslim philosophers.

Diverse connotations of the word "intellect" in Aristotle made it desirable to his commentators to explain this word in detail and give various accounts of it. On the whole, this issue in Aristotle is divided into two main sections: one on the divine intellects and their specifications that have been mainly dealt with in *Metaphysics*, notably book 12, and the second on the human intellect that have been touched upon in *De anima*. In *De anima* 3.5, Aristotle refers to a kind of intellect, namely "Agent Intellect" in which fifteen lines¹ have been devoted to this issue which constitutes the most controversial lines of his book as well. The point is that it is not clear whose intellect is meant here, how many intellects there are, and exactly what their functions are. In this part of *De anima*, Aristotle seeks to put human psychology in a cosmic perspective. Though his debate is not crucial for psychology, it is essential for appreciating who we are and what our place is in the world.² Intellect, in *De anima*, is considered to be a "part of the soul by which it knows and is wise."³ Aristotle says that it is just like two factors in all nature, one as matter and the other as agent. In other words, we can distinguish two kinds of intellect in the soul: one "which is such as being able to become everything;" and the second

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1. Aristotle, *On the Soul (De anima)*, ed. R. D. Hicks (Cambridge: Cambridge University Press, 1907), 430a, 10-25.

2. Victor Caston, "Aristotle's Two Intellects: A Modest Proposal," *Phronesis* 44, no. 3 (1999), 199.

3. Aristotle, *On the Soul (De anima)*, 429a, 10.

"which acts upon everything, as a sort of state, like light; for light too, in a way, makes potential colors actual."⁴ The former before makes an act of understanding, it is identical with its potential and not actual intelligibles. It must be as with a tablet on which there is nothing written⁵, and in Alexander's words it is like what has not been written on a tablet. The latter is separable, uncompounded, and incapable of being acted on.⁶

The ambiguity of Aristotle's notion of the agent intellect or the intellect in action, whether it resides in the soul or out of it, brought in its wake different views out of which the following four main interpretations are especially important:⁷

1. Some commentators like Alexander of Aphrodisias (fl. A.D. C.200) are of the view that agent intellect means universal, divine and creative intellect. Since the human intellect is not always in action in itself, so it exists in a universal and external being. The potential intellect resides in us and is actualized by an intellect in action.
2. Some figures like Marinus of Tyre (A.D. 70-130) hold that since the creative and divine intellect is not physical in nature, so Aristotle also never referred to it. There is another intellect, inferior to the creative intellect but superior to human intellect, which irradiates our human souls and perfects them. Aristotle calls it psychical intellect, because it stands next above souls whereas the creative intellect is more universal and he is of the view that it is analogous to light, for light stands between the cause of light and the things illuminated. So the relation between the creative intellect and the intellect ranked next to us i.e. the psychical intellect is analogous to that of sun, light, and the thing illuminated.
3. Some ostensible Platonists hold that according to Aristotle both the potential intellect and the actual intellect reside in the soul. The former is always in the soul, and at a certain time is perfected by the later which enters to the soul from outside.
4. Some like Plutarch hold that when the intellect which is in potentiality is perfected, it comes to be in action. Hence both intellects are one and the same in essence, and differ in being perfect and imperfect.⁸

4. Ibid., 430a, 10.

5. Ibid., 430a, 1.

6. Ibid., 430a, 20.

7. It should be regarded that all important Greek commentators on Aristotle except Alexander were Neo-Platonists [Peter Adamson, & Richard C. Taylor, introduction to *The Cambridge Companion to Arabic Philosophy*, ed. Peter Adamson, & Richard C. Taylor (Cambridge: Cambridge University Press, 2005), 4.]

8. John Philoponus, *On Aristotle on the Intellect (De Anima 3.4-8)*, trans. William Charlton, & Fernand Bosier (Ithaca, New York: Cornell University Press, 1991), 63-64.

In his commentary on *De anima*, after referring to these four interpretations, Philoponus says that the fourth opinion is correct and he gives some arguments for it. In addition to what Philoponus says about this issue some philosophers such as Alexander of Aphrodisias and Augustine hold that the actual intellect is identical with God. Alexander is the first to regard the actual intellect as the first cause and the unmoved mover, which is identical with the Aristotle's God.⁹ This thesis has rarely been held after Thomas Aquinas' influential rejection of it.¹⁰

In *De anima* (89, 9-19), Alexander describes the so-called agent intellect as the "first cause, which is the cause and source of the being of all other things," and in *De intellectu*, he describes it as the "first intellect" which "alone thinks nothing but itself."¹¹

In *De anima*, Alexander offers two accounts of the genesis of intellection, one natural and the other metaphysical. The naturalistic, evolutionary account of the genesis of intellection is sufficient without a second and metaphysical account. The metaphysical account is thoroughly consistent with the natural evolution of the intellect. The Active Intellect, by being supremely intelligible, is the cause in other intelligibles of their intelligibility. While the mind itself evolves toward the knowledge of the intelligible form, the intelligibility of that form is caused by the Active Intellect. In this way the Active Intellect is the cause of our intellection indirectly.¹²

The principle that "that which causes a quality in something else possesses that quality in a supereminent degree," is not Aristotelian and Alexander disapprove it in his commentary on the *Metaphysics*. As an example, Alexander points out that sticks, which are not themselves fiery, may, when rubbed together, produce fire.¹³

Alexander's identification of the Active Intellect with God is different from the more common "Averroistic" interpretation according to which there is also a second intellect, distinct from all human souls, but is a separate substance as distinct from God himself. This kind of view can also be found in thinkers earlier than Averroes (1126-1198): not only in Ibn Sina (Avicenna, 980-1037), but still earlier in the Neoplatonist Marinus of Neapolis (450-500) and even before that in the Platonist Albinus (fl. c. A.D. 150).¹⁴ In his *De anima*, by two arguments Alexander tries to prove that the unmoved mover as thought of thought is the cause of our personal thoughts: The first argument is that since it is the superior

9. Alexander of Aphrodisias, *De anima*, in *The "De anima" of Alexander of Aphrodisias: A Translation and Commentary*, ed. Athanasios P. Fotinis (Washington, D.C.: University Press of America, 1980), 89, 9.

10. Caston, "Aristotle's Two Intellects: A Modest Proposal," 201.

11. Ibid.

12. Frederic M. Schroeder, "The Analogy of the Active Intellect to Light in the 'De Anima' of Alexander of Aphrodisias," *Hermes* 109. Bd., H. 2 (1981): 221-222.

13. Ibid., 222.

14. Caston, "Aristotle's Two Intellects: A Modest Proposal," 201.

intelligible so it must be the cause of other intelligibles as well. And the second argument is that since the unmoved mover is the cause of the existence of other things so it must be the cause of the existence of all objects of the intellect.¹⁵ Alexander's view tends to Plotinus view about three intelligible things: the One, Intelligence or nous and the soul.

In his treatise, *On the Intellect* which according to his commentators is vague,¹⁶ Alexander says that according to Aristotle there are three kinds of intellect. His referring to Aristotle in this treatise is controversial. In some of the manuscripts of the treatise instead of Aristotle's name, the reference is given to Aristocles of Messenia that is said to be Alexander's teacher. And some refer to another peripatetic thinker, namely Aristotle of Mytilene who may be Alexander's teacher.¹⁷ But unlike these two opinions, in my view, Alexander refers to the well-known Aristotle because most of Alexander's works were devoted to Aristotle's works, and Aristotle's view of the intellect cannot be ignored by Alexander. In his treatise, Alexander refers to three kinds of intellect:

The first kind is potential or material intellect which is pure potential like matter, and as matter is actualized by form potential intellect is actualized by the Active Intellect. This intellect exists potentially only in human beings and will be actualized by perceiving the intelligibles with the aid of the Active Intellect.

The second kind is the habitual intellect, to which Alexander does not give any particular name. It is an intellect that has achieved the habit of perceiving the intelligibles, like a technician who has learnt a technique and can use it when it is needed.

The third kind is the intellect which causes the first intellect to attain the second stage, and as Aristotle says it is like light. As light makes visible the potential visible colors, this intellect too actualizes the material or potential intellect. It separates form from its matter, and in this way becomes both intelligible in action and intellect in action, just as in perception the sense in action is identical with the sensible in action, and vice versa.

The intellect in action which is intelligible in action is called acquired intellect by Alexander, when it causes the material intellect to abstract, accept and perceive each of the forms that coexists with matter. This intellect is neither a part of our soul nor a faculty of it, but when it enters our soul from outside makes our intellect perfect. This intellect in action which is the acquired intellect in Aristotle's view is separate and immortal.

15. Tim Crane, *History of the Mind-Body Problem* (London: Routledge, 2000), 39-40.

16. David Furley, *Routledge History of Philosophy, Vol. 2, From Aristotle to Augustine* (London: Routledge, 1999), 2/164.

17. Alimorad Davoudi, *Aql dar hikmat mashsha az Arastu ta Ibn Sina (Intellect in peripatetics: from Aristotle to Ibn Sina)* (Tehran: Dekhoda, 1970), 204-205.

The Potential Intellect

In his article on receptive reason, Miira Tuominen argues that according to Alexander, the potential intellect is just a purely receptive capacity in our minds, and in order to actualize, it needs to abstract what is intelligible from enmattered perceptible objects. But a question emerges here: How is it possible for a purely receptive capacity to perform such an abstraction?¹⁸

Alexander had two treatises about the soul: the first one which has been lost, was a commentary on Aristotle's *De anima* and the second was his own treatise on the soul (*De anima*) which is not a commentary but is regarded as a work which is largely based on his commentary on Aristotle's *De anima*.¹⁹

The potential intellect, with which we are born, is itself twofold because each of its two aspects is capable of receiving [the theoretical and the practical disposition, respectively]. It is thus called "material intellect" and also is such, (for everything that is receptive of something is matter for that something which is received).²⁰

Alexander does not speak about our intellect as a corporeal or physical entity and it seems that he denies it. By the word "material intellect" he does not mean a corporeal intellect and in his expression the word "material" means potential and refers to a capacity in mind by which the abstraction can be done. This capacity, which we have from birth, is called material because it is receptive. But when we want to assess how Alexander conceives the receptive nature of the material intellect, some problems emerge. What is it that the material intellect is supposed to receive? How does it receive what it receives? Does he want to say that all human thought is some kind of reception-perhaps even reception of contents from a divine intellect?²¹

Alexander in his thinking stuck to an Aristotelian conceptual framework. According to Aristotle's natural philosophy, in any natural change two factors are operating: one active which affects the other and one passive which receives and undergoes the effect of the other. The condition in cognitive changes like perception is the same. In perception there should be something which is perceptible and something or someone capable of perception. Aristotle thinks that since intellectual apprehension is like perceiving so in it "the intellect must be

18. Miira Tuominen, "Receptive Reason: Alexander of Aphrodisias on Material Intellect," *Phronesis* 55, (2010), 170.

19. Ibid.

20. Alexander of Aphrodisias, *De anima*, 81, 22-25.

21. Tuominen, "Receptive Reason: Alexander of Aphrodisias on Material Intellect," 172.

related to the intelligible in similar fashion as the perceptual capacity is related to the perceptible."²²

Following this path, Alexander argues that the material intellect receives the intelligible objects, because it has a passive or receptive potentiality and the intelligible objects have a potentiality to be received. He assumes that what are received are the intellectual dispositions and not the intelligible objects and the enmattered things that we encounter in the world are potentially intelligible not actually. Alexander claims that the potentially intelligible have to become actually intelligible through a kind of abstraction done by the intellect.

His reception model of intellectual apprehension, however, seems to have a problem:

If the intellect has to operate on the intelligible objects in order to grasp them, it is very difficult to understand how such processing could be understood as reception. In addition, it does not seem compatible with the assumption that the human intellect is passive in any important sense. Further, the notion of potential intelligibility seems at first sight a strange one indeed. Given that intelligibility itself is already a potential notion – it means the potentiality of being conceived by the intellect – what could the potential for such potentiality be?²³

After referring to this problem, Tuominen tries to cast light on the situation from two different angles:

Firstly, the potentiality of intelligible objects refers to their potentiality of being conceived when no one perceives them and this potentiality will become actualized when they are conceived.

Secondly, if the intelligibility of objects is actual rather than potential, why can we not be capable of grasping them from birth? And if all external objects are actually and not merely potentially intelligible, why is this intelligibility not immediately actualized in us who have this intellectual potentiality?

Since Alexander assumes that potentially intelligible material objects need to become actually intelligible by an act of abstraction and this act is performed by human intellect, a well-known problem arises, which has attracted more attention at least since the 1940.²⁴ The problem is as follows: If according to Alexander, it is right that in order to be able to grasp all possible objects, the potential intellect has

22. Aristotle, *On the Soul (De anima)*, 429a 13-17.

23. Tuominen, "Receptive Reason: Alexander of Aphrodisias on Material Intellect," 173.

24. Tuominen refers to some articles written from 1942 to 1982 in which some scholars are disputing whether Alexander's theory is contradictory because of this problem or not (Tuominen, "Receptive Reason: Alexander of Aphrodisias," 174).

to be completely without a nature of its own, how can it perform the abstraction that is needed to receive the intelligible objects? In other words if the intellect had a nature of itself, how could it grasp anything that is alien to it?²⁵

The suggested solutions which have been offered for this problem have been grouped by Tuominen into two classes: those that refer to the Active Intellect and those that do not.²⁶ A representative of the second group is Frederic Schroeder who argues that the potential intellect as a capacity is not in its core passive so there is no problem in assuming that the human intellect abstracts the intelligibles from enmattered objects. This solution is problematic. Though Alexander denies that the potential intellect is passive in the sense of being affected in the ordinary sense, he accepts that it is passive in the sense of being receptive. The problem is how the abstraction Schroeder refers to, could be understood as being passive in this latter sense.²⁷

The first group tries to solve the problem by referring to the Active Intellect.²⁸ There is a passage in Alexander's *De anima*, Sorabji says, in which Alexander claims that the Active Intellect gives the material intellect its proper disposition:²⁹

And since there is a material intellect of a sort, there must also be a productive [or active] intellect, which comes to be the reason for the disposition of the potential intellect.³⁰

25. There is a compilation of texts of unknown authorship which is called *De anima* book II but later it has been named *Mantissa*, a supplement. In a section of this book that was later known as *On Intellect*, the argument has been explained as follows: If the intellect had a form, its own nature would prevent it from grasping external things, because it would constitute an obstacle to grasping those things (Tuominen, "Receptive Reason: Alexander of Aphrodisias," 175). An English translation of *On Intellect* is available in Frederic M. Schroeder, & Robert B. Todd, *Two Greek Aristotelian Commentators on the Intellect*, ed. & trans. Frederic M. Schroeder, & Robert B. Todd (Toronto: Pontifical Institute of Mediaeval Studies, 1990), and of the whole *Mantissa* in R. W. Sharpless, *Alexander of Aphrodisias, Supplement to On the Soul*, trans. R. W. Sharpless (Ithaca, NY: Cornell University Press, 2004).

26. Tuominen, "Receptive Reason: Alexander of Aphrodisias," 175.

27. *Ibid.*, 176.

28. This solution is often connected with the claim that the treatise on intellect in the *Mantissa* has been written by Alexander and in it the problem is solved by referring to the active intellect (Tuominen, "Receptive Reason: Alexander of Aphrodisias," 176).

29. R. Sorabji, *The Philosophy of the Commentators 200-600 AD: A Sourcebook I Psychology* (London: Duckworth, 2004), 104.

30. Alexander of Aphrodisias, *De anima*, 88, 23-24. The example of a teacher's intellect as an actual intellect that perfects student's intellect does appear in the ancient commentary tradition and it is attributed to the historical Philoponus, but there is no hint to it in Alexander (Tuominen, "Receptive Reason: Alexander of Aphrodisias," 181).

Sorabji does not resort to this passage to solve the problem. To do it he needs to accept that to be able to abstract the intelligible objects from the enmattered perceptible things requires a divine intervention, but this is not Sorabji's claim. According to Sorabji, the potential intellect is able to perform abstraction from such things only when they are present and if they were absent, to be able to abstract them, the potential intellect needs to be helped by the Active Intellect. But, Tuominen says, it seems slightly counterintuitive to say that I am able to abstract concepts from present perceptible objects but not capable of thinking of them while they are absent. Despite Sorabji's view if we are able to use concepts at all, we will also be able to use them independently of whether things in their scope are present or not.³¹

But despite the debate between Sorabji and Tuominen it seems to me that the problem is not related to the presence or absence of things, because we sometimes do abstract some intelligible notions from immaterial things like logical or mathematical entities which are incorporeal and because of this they have nothing to do with the presence and absence of things. What is more important in the problem is the potentiality of material intellect which makes it incapable of performing abstraction. To go from a potential situation to an actual situation, intellect needs an actual intellect and since it is potential in itself so there should be an active intellect to actualize it. Because of this Muslim Philosophers argued that the Active Intellect should be out of the potential intellect and they identified it with one of the divine intellects who gives material intellect ability to abstract intelligibles from the embodied intelligibles. As an objection to this view, Tuominen says:

It may be asked whether the intelligibility that the Active Intellect is supposed to give to sublunary things, is potential or actual. If the former, it will not solve our problem, because the problem is how the potentially intelligible objects may be made actually intelligible. If the later, the suggestion goes beyond what Alexander claims. According to Alexander, there are no actually intelligible forms in sublunary things.³²

The reply which can be given to this objection is that the Active Intellect gives the intelligibility to the potential or material intellect and not to the sublunary things and what it performs is to help potential intellect to ascend to be actual intellect. And this process takes place for potential intellect by abstracting the intelligibles from sublunary things which are potential intelligibles. So it is wrong if we think that potential intelligibles will become actual intelligibles by the act of the Active Intellect and their existences will be

31. Tuominen, "Receptive Reason: Alexander of Aphrodisias," 178.

32. *Ibid.*, 179.

independent from any intellect. According to Aristotle and Alexander the location of actual intelligibles is the potential intellect in which there is no intelligible at first and then by abstracting the intelligibles it becomes actual intellect. Thus the human intellect which is material and potential at the first, abstracts potential intelligibles from sublunary things by help of the Active Intellect and by this act it attains some actual intelligibles and thus changes into an actual intellect. And as the critic accepts the impact of the active intellect is upon the human intellect not on the sublunary things:

It is important to emphasize that the notion of the Active Intellect does not appear in Alexander's account of the human intellect at all. The only reference ... is in a separate context in which Alexander discusses the Active Intellect. There he mentions ... [that] the Active Intellect is a cause, or is explanatory, of the actualization of the human intellectual potential. In another passage,³³ he seems to assume that the mere existence of the unmoved mover is sufficient for the intelligibility of the material things to be actualized in our minds.³⁴

The difference, however, between Alexander's and Muslim peripatetic philosophers' view about the Active Intellect is that he identifies the Active Intellect with God while they identify it with the tenth intellect. In emanation theory, Muslim Peripatetic philosophers such as al-Farabi (872-951) and Ibn Sina (980-1037) believe in ten intellects from which the first intellect is emanated from God and the emanation vertically goes to the other intellects in a way that each later intellect is emanated from the former intellect until the final intellect which is the tenth intellect.³⁵

Can the Habitual Intellect Perceive Itself?

By resorting to the following two reasons, Alexander argues that the habitual intellect can perceive itself:

1. The intellect in action is nothing other than the intelligible in action. So when it perceives them it perceives itself too, and if it fails to perceive itself it means its nature is something other than intelligibles. And this is

33. Alexander of Aphrodisias, *De anima*, 88, 24-89, 11.

34. Tuominen, "Receptive Reason: Alexander of Aphrodisias," 179.

35. They attribute three function to this intellect: 1) To cause the motion of the sublunary world, 2) Granting intelligibles to the soul, 3) Granting substantial forms to the beings of the sublunary world.

wrong. Just as in sensation, the sense becomes united with the sensible and perceives itself; the intellect too perceives itself through perceiving the intelligibles.

2. It is due to its nature as an intelligible that the intellect perceives itself, not because of being an intellect. And as it perceives all intelligibles, it perceives itself as well.

Moreover, Alexander refers to the reason behind Aristotle's attention to the acquired intellect.

Just as in sensation, in Aristotle's view, there are three elements: the sense organ which is passive, the sensible which is agent, and the sense perception which is its product, similarly there are three elements in the intellection: first, the material intellect which is passive, second the agent intellect which leads the material intellect to be actualized, and third, the intellection which is the act of that intellect. Besides, as in the case of sense perception the sensible is real, similarly in the case of the intellect too the agent intellect must be real. There must be, thus, an active intellect to prompt the material intellect and the habitual intellect to think. This intellect is the same intellect that has been acquired from outside.

The acquired intellect is immortal and it enables the material intellect to perceive the intelligibles just as the light enables the eyes to see things. It is, indeed, the cause of our intellection.

But intellect is composed of, first, the faculty which is the instrument of divine intellect and in Aristotle's words is material intellect, and second, the act of it. We can-not think if we lose either of these two things. Just as a technician sometimes works with tools and sometime without tools, the divine intellect too sometimes thinks without an instrument and sometimes uses instruments to make some changes in physical matters. If the material intellect acts as an instrument for the divine intellect, then; it does not require the divine intellect to be physical and mortal.

At the end of his treatise, Alexander says that we can-not exercise intellection independently, that is from the early days of our lives we have only the material intellect and it will be actualized by the acquired intellect. And just as in sense perception the external sensible things never come into our sense organs, similarly the acquired intellect while exercising intellection is separate and is depended on the soul. Thus it resides in the soul rather than in the body.³⁶

The ambiguity of Alexander's view of the intellect brought in its wake different interpretations.³⁷ The ambiguity pertains to the second intellect

36. Abdurrahman Badawi, *Shuruh 'ala Arastu, mafqudaton fi'l-Yunaniyyah wa Rasail ukhra (Starts: Ala Aristotle, Mafkudat Fional-Yuniyyah and Russell Ukrara)* (Beirut: Dar al-Mashriq, 1971).

37. Davoudi, *Aql dar hikmat mashsha az Arastu ta Ibn Sina*, 209-210.

rather than the first and the third intellect, i.e. the material intellect and the Active Intellect.

Two functions are attributed by Alexander to the second intellect: first, in a phenomenalist interpretation of it, it is a set of intelligibles like what has been written on a tablet. Second the power of abstracting the form from the matrix. This intellect is called actual or habitual intellect as well. The dispute is on the intellect that comes from outside the soul and causes the material intellect to be actualized.

There are three approaches towards this intellect: Some believe that it is the same habitual intellect, some others consider it as the Active Intellect, and the third group holds that it is an intellect different from the active and the habitual intellect. On the whole, it can be concluded from the Arabic text of Alexander's treatise that there are three intellects in the human soul:

1. The material intellect which resides in man from his birth, is only a potentiality in the human soul and is actualized by perceiving intelligibles.
2. The intellect in action or habitual intellect which comes into being after perceiving the intelligibles and after its realization. It can exercise intellection and derive universal concepts from individuals.
3. The acquired intellect which is a part of the divine intellect and comes to our souls from outside and enables us to perceive the intelligibles. This intellect must be regarded as a part of the divine or Active Intellect which is separated. Thus, the Active Intellect is God who is outside and a part of his intellect comes to our soul and enables us to think. Thus the Active Intellect is both within and outside our soul.

The Analogy of the Active Intellect to Light

As we saw, in a well-known analogy, Alexander likens the Active Intellect to the light:

In all things that which is especially and supereminently what it is, is the cause to other things of being such as they are. That which is especially visible, such as light, is the cause to other things of their being visible and that which is especially and primarily good is the cause to other good things of their being good. Other things are judged to be good by their contribution to this. That which is especially and by its own nature intelligible is, it is

reasonable to maintain, the cause of intellection of other [intelligibles]. Such an entity would be the Active Intellect.³⁸

By reducing this analogy to Plato's analogy of the sun to the Good,³⁹ some commentators consider it a Platonic analogy and they conclude that by this analogy Alexander means the Platonic notion of participation, and by this analogy Alexander wants to say that the actualization of intelligibles is through their participation in the Active Intellect. Some critics like Moraux criticize Alexander for his lack of Aristotelian orthodoxy in his use of the Platonic analogy. And some other commentators reduce Alexander's analogy to the Aristotle's analogy⁴⁰ in which he says that we should distinguish two intellects in human soul: One which can be rendered to intelligibles and because of this it is like matter which can accept all forms, and the second which actualizes the intelligibles. These two intellects are material intellect and agent intellect respectively. Aristotle likens the act of the second intellect to the act of light by which the potential colors become actual colors.⁴¹

Alexander says "That which is especially visible, such as light, is the cause to other things of their being visible."⁴² If the analogy of light follows the account of light itself, and the illumination is a joint effect which proceeds from the relation between the illumined and the source of light, so would intelligibility be a joint effect which proceeds from the relation between the Active Intellect as source of intelligibility and the potentially intelligible. But in the analogy of light, Alexander speaks about light as the supremely visible and does not speak about the source of light. But he has already⁴³ described the Active Intellect as supremely intelligible. In the account of light itself he speaks both of the source of light and of light as supremely visible. So in his opinion, these two factors are causes of visibility, but in his analogy there is no mention of the source of light.⁴⁴

Since Alexander says that good things are judged good by their contribution to being good, so we should extend the notion of judgment and not that of contribution, to the instances of visibility and intelligibility. In contrast to the platonic view, therefore, we should say that the visibility of visible things and the intelligibility of intelligibles are not judged because of their contribution to visibility and intelligibility respectively. Nevertheless, in the pattern of causation

38. Alexander of Aphrodisias, *De anima*, 88, 26- 89, 6.

39. Plato, *The Republic*, ed. with critical notes, commentary and appendices James Adam, intro. D. A. Rees (Cambridge: Cambridge University Press, 1963), 508Cff.

40. Aristotle, *On the Soul (De anima)*, 430A, 14-17.

41. Schroeder, "The Analogy of the Active Intellect to Light in the 'De Anima', 215.

42. Alexander of Aphrodisias, *De anima*, 89, 1-2.

43. *Ibid.*, 88, 25.

44. Schroeder, "The Analogy of the Active Intellect to Light in the 'De Anima', 218-219.

in which visibility and intelligibility are produced, the visibles or intelligibles make their own contribution to visibility or intelligibility.⁴⁵

Some commentators like P. Merlan, speak of two kinds of intelligibles in Alexander, namely transcendent and immanent. The cause of the being of the transcendent intelligibles is the Active intellect who thinks them eternally. And the causes of the intelligibility and being of immanent intelligibles are the transcendental intelligibles. So the human intellection is caused by the Active Intellect indirectly. But a question may arise here as to how we can reconcile these two notions: from one side the Active Intellect as a supreme intelligible is the cause of the intelligibility and existence of the immanent intelligibles, and from the other side these intelligibles exist through the address of human intellection. To answer Merlan's question, Schroeder resorts to his interpretation of the analogy of the Active Intellect to light with reference to Alexander's theory of light itself. He says:

As the source of light is supremely luminous, so is the Active Intellect, as ultimate source of intelligibility, supremely intelligible. By being supremely intelligible it is cause of intelligibility in the second order of intelligibles just as the source of light, by being supremely visible, is the cause of visibility to other visibles.⁴⁶

He furthers his argument by stating that just like light which is a joint effect of the source of light and the potentially transparent when they are brought into juxtaposition, the juxtaposition of the Active Intellect and the potentially intelligible is formed in the soul. The immanent intelligibles have no being and intelligibility before being abstracted by human mind. And after abstraction they are brought into juxtaposition with the Active Intellect and then they are brought into being and rendered intelligible.⁴⁷

Yet it seems that the best answer to that question is to state that in his analogy, Alexander wishes to say that as the light helps and makes the visible things to be observed by act of illumination, so is the Active Intellect the cause that helps and makes intelligible things to be abstracted by making enable the human intellect to abstract them. In his interpretation, Schroeder refers to the separation of the being and the intelligibility of the immanent intelligibles, but I think there is no need for this separation because the being and the intelligibility of the immanent intelligibles are the same, and because of this the Active Intellect is the cause of one thing, which its being and its being intellected are the same.

45. *Ibid.*, 219-220.

46. *Ibid.*, 224.

47. *Ibid.*

The Impact of Alexander's View Upon Muslim Philosophers

Alongside the great works of ancient Greek philosophy, Alexander's treatises had been translated from Greek into Arabic and Syriac by some translators⁴⁸ and were studied later on by Muslim philosophers.⁴⁹ At least two things indicate the influence of Alexander's view of the intellect on Muslim philosophers. The first one is their allusion to him in their books and the second is the similarity between their debates on the intellect notably the divisions which they make on the intellect. Though Aristotle has not written any book on the intellect, Alexander has a treatise allocated to the intellect⁵⁰ and following him the first Muslim philosophers, al-Kindi (801-873) and then al-Farabi have written two distinct treatises on the intellect.⁵¹

- I. **Al-Kindi (801-873):** Even though there is no mention of Alexander in al-Kindi's treatise, some scholars believe that the similarity of divisions made on the intellect by two philosophers shows that al-Kindi was influenced by Alexander.⁵² In al-Kindi's words the divisions of the intellects are as follows:

48. Some of them are well known: Hunayn ibn Ishaq, Ishaq ibn Hunayn, Abu Uthman Said al-Damishqi, Abu Bishr Matta, Abu Yunus and Yahya ibn Uday.

49. In his books *Arastu ind al-Arab* (Aristotle in the Arabic World) and *Shuruh ala Arastu mafquda fi al-Yunaniyyah wa rasail ukhra* (Commentaries on Aristotle the original Greek texts of which has been lost and some other treatises), Abdurrahman Badawi has offered nineteen treatises of Alexander: nine treatises in the first book and ten treatises in the second.

50. *Maqalah fil aql ala ray Arastatalis* (A Treatise on the Intellect According to Aristotle's View). The Arabic translation of this treatise made by Ishaq ibn Hunayn, has been published by Badawi, 1971.

51. *Risalah fil-aql* (A Treatise on the intellect) or *Risalah fi mahyyat al-aql* (A Treatise on the Nature of the Intellect) written by al-Kindi and *Fi maani al-aql* (On the Meanings of the Intellect) written by Al-Farabi.

52. Though it has been stated that al-Kindi's treatise depends on Philoponus' treatise, what is undeniable is that to give their understanding of Aristotle's theory of the intellect as presented in his *De Anima*, the late ancient authors such as Alexander, Themistius, and Philoponus had distinguished between several kinds of intellect and this taxonomy of intellects which starts with Alexander reached al-Kindi from Philoponus [Peter Adamson, "Al-Kindi and the reception of Greek philosophy," in *The Cambridge Companion to Arabic Philosophy*, ed. Peter Adamson, & Richard C. Taylor (Cambridge: Cambridge University Press, 2005), 40, 50]. The detailed debate of Philoponus about Alexander's view on the intellect shows that the impact of Alexander upon al-Kindi was through him and through al-Kindi this impact goes to the later Muslim philosophers.

1. The first intellect or the intellect which is always actual and makes the potential intellect in our mind become actual intellect.
2. The second intellect in which the intelligibles appear and work.
3. The intellect in human soul which turns from potential mode into actual mode.
4. The intellect which is potential.⁵³

These kinds of intellect to which al-Kindi did not give any name are equivalent to the kinds of intellect in Alexander's words. The first intellect in al-Kindi is equivalent to the Active Intellect in Alexander with the difference that unlike Alexander in al-Kindi the first intellect is not identified with God. The third and fourth intellects in him are equivalents to acquired and potential intellects in Alexander. But the second intellect in him has no equivalent in Alexander's division of the intellect.⁵⁴

- II. **Al-Farabi (872-951):** In spite of al-Kindi's treatise on intellect in which there is no mention of Alexander, al-Farabi refers to Alexander in his debate about the intellect explicitly.⁵⁵ In his treatises he refers to Alexander several times. For example once to his incomplete commentary on Aristotle's Lambda⁵⁶ and once to his summary on the sense of "what is predicated on the whole" in which he moves away from what is attributed to Aristotle⁵⁷ and once to his view that the intellect is the noblest part of the soul.⁵⁸ So it can be concluded that he was familiar with Alexander's books and views and because of the similarities between his views and Alexander's, his interpretation of Aristotle's views on the intellect is influenced by Alexander's interpretation.⁵⁹

Al-Farabi refers to four kinds of intellect, namely potential intellect, intellect in action or habitual intellect, acquired intellect, and the Active Intellect. The first

53. Al-Kindi, *Rasail al-Kindi al-falsafiyah (The Philosophical Treatises of al-Kindi)*, ed. Mohammad Abdolhadi Abou Raydeh (Cairo: Dar al-Fekr al-Arabi, 1950), 353-354.

54. Davoudi, *Aql dar hikmat mashsha az Arastu ta Ibn Sina*, 225-231.

55. *Ibid.*, 265

56. Al-Farabi, *Rasail-e Falsafiye Farabi (Farabi's Philosophical Essays)*, trans. Saeed Rahimian (Tehran: Elmi and Farhangi Publishing, 2008), 58.

57. *Ibid.*, 78-79.

58. *Ibid.*, 102.

59. David Reisman says that al-Farabi's "theory of the intellect appears to be based on a close reading of Alexander of Aphrodisias" and overall his debate on the soul was informed by the commentary tradition including pseudo-Alexander of Aphrodisias and Plotinus between him and Aristotle (David Reisman, "Al-Farabi and the Philosophical Curriculum," in *The Cambridge Companion to Arabic Philosophy*, ed. Peter Adamson, & Richard C. Taylor (Cambridge: Cambridge University Press, 2005), 52, 60.

intellect is purely potential. The second intellect lifts form from its matrix and makes actual intelligibles which were already potential intelligibles. In this stage the intellect, the intelligent, and the intelligible are the same. The third one can perceive the separate intelligibles which are separated from matter. The fourth one is that which actualizes the potential intelligibles and by giving separate intelligible to the human soul actualizes its rational faculty. This intellect is the tenth intellect in the hierarchy of separated intellects by which human soul communicates with God.

The relation of the Active Intellect to the potential intellect is like the relation of the sun to insight faculty. The difference between Aristotle and al-Farabi in this regard is that the Active Intellect in the former is analogous to light while in the latter it is analogous to the sun. The relation among four intellects, in al-Farabi,⁶⁰ is like the relation between matter and form as the habitual intellect is the form of material intellect and at the same time is matter for the acquired intellect.⁶¹

III. **Ibn Sina (980-1037):** In his books Ibn Sina refers several times to Alexander as "the excellent of ancients,"⁶² the man whose word is the soundest among Aristotle's followers.⁶³ Though Ibn Sina is somehow influenced by Alexander in his division of the intellect, he criticizes him and unlike him he holds that the potential intellect is a stage of human rational soul in which he has no actual perception of the intelligibles. In his glosses on Aristotle's *De Anima*, Ibn Sina says that identifying the Active Intellect with God is rooted in our ignorance and it is a kind of unmindful of God.⁶⁴ He says that according to Aristotle the potential intellect and the soul owner of it are unmixed with and abstracted from matter not only when it intellects but also before that and its immateriality is not because of its non-existence but because of its having a quality and mode that requires not mixing with matter. Then he objects Alexander's interpretation of Aristotle:

I do not know how Alexander allows himself to attribute to the man [Aristotle] that he says the potential intellect which is this dispositional

60. Al-Farabi, "Maqalatun fi maani al-'aql" (An Essay on the Meanings of the Intellect), in *Islamic Philosophy*, vol. 12, ed. Fuat Sezgin (Frankfurt: Publication of the Institute for the History of Arabic-Islamic Science, 1999).

61. Davoudi, *Aql dar hikmat mashsha az Arastu ta Ibn Sina*, 233-256.

62. Ibn Sina, *Al-Nijat min al-gharq fi Bahr al-Zalalah (Salvation from Submerging in the Sea of Misleadings)* (Tehran: Tehran University Press, 1985), 636.

63. *Ibid.*, 635.

64. Sina, Al-Taaliqat ala Hawashi Kitab al-Nafs li Arastu li Ibn Sina (Ibn Sina's glosses on Aristotle's *De Anima*), in *Arastu ind al-Arab (Aristotle in Arabic World)* (Kuwait: Vokalat al-Matbouat, 1978), 92.

faculty, is hylic and material and that the soul which has this faculty is hylic and material.⁶⁵

In the next mention of Alexander, he says that Alexander and his followers made mistake in interpreting Aristotle's view about how intellect exists after its separation from the body. They argue that in separation the intellect will remain as it was before its union with the body but this is not right because what Aristotle wants to say is that it will remain with the same degree of happiness that he had achieved by intelligibles without any increasing or decreasing of intelligibles and it will be alive forever.⁶⁶

In his works Ibn Sina also refers to four kinds of the intellect in the human soul, namely material intellect; habitual intellect; intellect in action; and acquired intellect. The habitual intellect knows the axioms, evident principles, and primary intelligibles. To attain secondary intelligible, the intellect needs the middle term and achieves it in two ways: thinking and conjecture, the high degree of which is insight in which the intellect attains the middle term suddenly without thinking. The degree of conjecture in individuals is different. Conjecture is a kind of habitual intellect and the high degree of it belongs to the prophets which is called the Holy Intellect or Holy Spirit as well. In anything the prophets' intellects are inspired by the Active Intellect.

In relation to the intelligible forms, the intellect in action is like a perfect faculty which can perceive them. At this stage, the secondary intelligibles are attained and the human soul can use them when needs them. In relation to the intelligible form, the acquired intellect is like an absolute action. The actuality of this intellect is attained from an intellect which is continuously in action. At this stage, the human intellect will ascend to its highest degree, so the acquired intellect is a stage of human intellect which benefits from the Active Intellect wherein the actual intelligibles come into being.

The Active Intellect resides outside the human soul and it is, in fact, the final intellect of the intellects of the spheres which are ten in number, though in his *al-Shifa*⁶⁷ and *al-Nijat*,⁶⁸ Ibn Sina says that the hierarchy of intellects ends up in the Active Intellect which administrates our souls, but in *al-Ta'liqat* the expression "Active Intellects" is used frequently.⁶⁹ Of course, by the Active Intellects, he

65. Ibid., 101.

66. Ibid., 106.

67. Sina, *al-Shifa, al-Ilahiyyat (Healing, Theology)* (Tehran: Naser Khosro Press, 1984), 407.

68. Sina, *Al-Nijat min al-gharq fi Bahr al-Zalalah*, 657.

69. Sina, *Al-Ta'liqat (Glosses)* (Qum: Islamic Advertisement Office, 1990), 56, 57, 70, 102, 116.

means the divine intellects. In his *al-Isharat wa 'l-tanbihat*⁷⁰ he says that the rational soul perceives the intelligibles through communicating with the Active Intellect.

In *al-Ta'liqat*, he says that when we see something in a dream we first exercise our intellection and then imagine it. It means that the intelligible is transferred by the Active Intellect to our intellect and then it is transferred to our imagination. And when we learn something we first imagine it and then we exercise our intellection. When we decide to know something our souls are ready to accept it from the Active Intellect.⁷¹

IV. **Mulla Sadra (1572-1640):** In his magnum opus, *al-Asfar*, Mulla Sadra refers to Alexander several times. Honoring Alexander he says:

Alexander of Aphrodisias is one of the prominent philosophers rumored because of his excellence and chastity. In regard to his view and knowledge, he is one of the great companions of Aristotle and his speech is more firm and stable and his writing is firm and stable and strong. And Shaykh [Ibn Sina] in his *Shifa* and *Mabda wa maad* describes him as the excellent of ancients.⁷²

Mulla Sadra says that according to Alexander, the souls which fail to elevate to the stage of actual intellect, are mortal.⁷³ He entitles one chapter of his book "Explaining the meanings of the intellect by citation of Alexander from Aristotle."⁷⁴ In this chapter he discusses about three meanings of the intellect: potential intellect, actual intellect and the Active Intellect. In another place of his book, he says:

Most of the souls who are perfect in knowledge will unite with the Active Intellect, and the brutal imperfect souls will go to hell and they do not elevate

70. Sina, *Al-Isharat wa 'l-tanbihat (Remarks and Admonitions)* (Qum: Bustan Ketab Press, 2002), 325-326.

71. Sina, *Al-Ta'liqat*, 96.

72. Mulla Sadra, *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 5, ed. & annot. Maghsoud Mohammedi (Tehran: SIPRin Publication, 2002), 398.

73. Sadra, *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 3, ed. & annot. Maghsoud Mohammedi (Tehran: SIPRin Publication, 2004), 522.

74. *Ibid.*, 461-465.

to the world of the separate souls. Some philosophers like Alexander and even Ibn Sina believe in the mortality of the imperfect souls.⁷⁵

In a more detailed discussion about the intellect Mulla Sadra refers to various levels of it as follows: material intellect, habitual intellect, intellect in action, acquired intellect, and the Active Intellect. The first intellect is pure potentiality and the second one has attained the axioms and evident truths. This intellect has the power to ascend to the level of intellect in action. This level is not called intellect in action since the intelligible is not attained only through perceiving evident things as the corporeal thing does not come into being as a matter unless it has special nature. The strength in this intellect leads to a holy faculty. Apart from knowing axioms, the intellect in action can know the theoretical principles as well. But if these theoretical principles were not present to him immediately after paying attention to them, it is called intellect in action. And if the theoretical principles were continuously present to him it is called the acquired intellect. And if at the level of the acquired intellect the intellect sees the intelligible forms in God, it is called the Active Intellect.⁷⁶

Conclusion

In his *De anima*, Aristotle discusses two kinds of the intellects: the material intellect which is potential and in itself nothing but a capacity to the intellect and the agent intellect which in itself is actual and turns the material intellect into the intellect. Owing to the ambiguity of Aristotle's words concerning the agent intellect, different interpretations of it have been offered by the advocates of peripatetic philosophers after him. This essay has discussed two different views on the intellect and its divisions. The first view was put forward by Alexander who believed in four kinds of the intellects and identifies the agent intellect, or in his words, the Active Intellect with God; and the second view was posed by Muslim philosophers who, following Alexander, spoke of three kinds of the intellects in human being and one more as the Active Intellect. But the difference among them is that unlike Alexander, Muslim philosophers drawing on the emanation theory came to the conclusion that there are several intellects that are emanated from God. They identify the Active Intellect with the tenth or final intellect of the hierarchy of the intellects. At the end and as a conclusion of my assessment of these views I have to state that both views are far from what Aristotle says. Though in *De anima*, Aristotle refers to the agent intellect briefly

75. Sadra, *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 7, ed. & annot. Maghsoud Mohammadi (Tehran: SIPRin Publication, 2001), 402.

76. Sadra, *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah*, vol. 3, 454-455.

and with ambiguity, in *Metaphysics* he speaks in detail about more or less 50 kinds of the intellect which are unmoved movers of celestial motions. It seems that we can identify the agent intellect of *De anima* with the intellects of *Metaphysics*. If Alexander's view is to be accepted, the outcome of the discussion would be that there is only one God and one Active Intellect and they are the same and this view differs from the intellects of *Metaphysics* who are several in number. If Muslim philosophers' view is to be accepted then it should be confirmed that there is just one Active Intellect which is out of the human mind and cannot be identified with God. This view differs from what Aristotle says about the agent intellect in *De anima*. Regarding these considerations we can say that both views on the Active Intellect are, indeed, two independent views about it, though there is relatively a trace of Aristotle's view in both of them. But as far as other intellects are concerned the situation is different. It can be concluded that despite the existence of a few differences in their expressions, Alexander and Muslim philosophers followed the Aristotelian's path and argument.

Bibliography

- Adamson, Peter. "Al-Kindi and the reception of Greek philosophy." In *The Cambridge Companion to Arabic Philosophy*, edited by Peter Adamson, & Richard C. Taylor. Cambridge: Cambridge University Press, 2005.
- Adamson, Peter, & Taylor, Richard C. Introduction to *The Cambridge Companion to Arabic Philosophy*, edited by Peter Adamson & Richard C. Taylor. Cambridge: Cambridge University Press, 2005.
- Al-Farabi. *Rasail-e Falsafiye Farabi (Farabi's Philosophical Essays)*. Translated by Saeed Rahimian. Tehran: Elmi and Farhangi Publishing, 2008.
- _____. "Maqalaton fi maani al-'aql" (An Essay on the Meanings of the Intellect). In *Islamic Philosophy*, vol. 12, edited by Fuat Sezgin. Frankfurt: Publication of the Institute for the History of Arabic-Islamic Science, 1999.
- Al-Kindi. *Rasail al-Kindi al-falsafiyyah (The Philosophical Treatises of al-Kindi)*, edited by Mohammad Abdolhadi Abou Raydeh. Cairo: Dar al-Fekr al-Arabi, 1950.
- Alexander of Aphrodisias. *De anima*. In *The "De anima" of Alexander of Aphrodisias: A Translation and Commentary*, edited by Athanasios P. Fotinis. Washington, D.C.: University Press of America, 1980.
- Aristotle. *On the Soul (De anima)*, edited by R. D. Hicks. Cambridge: Cambridge University Press, 1907.
- Badawi, Abdurrahman. *Shuruh 'ala Arastu, mafqudaton fi'l-Yunaniyyah wa Rasail ukhra (Starts: Ala Aristotle, Mafkudat Fional-Yuniyyah and Russell Ukrara)*. Beirut: Dar al-Mashriq, 1971.

- Caston, Victor. "Aristotle's Two Intellects: A Modest Proposal." *Phronesis* 44, no. 3 (1999).
- Crane, Tim. *History of the Mind-Body Problem*. London: Routledge, 2000.
- Davoudi, Alimorad. *Aql dar hikmat mashsha az Arastu ta Ibn Sina (Intellect in peripatetics: from Aristotle to Ibn Sina)*. Tehran: Dekhoda, 1970.
- Furley, David. *Routledge History of Philosophy, Vol. 2, From Aristotle to Augustine*. London: Routledge, 1999.
- Philoponus, John. *On Aristotle on the Intellect (De Anima 3.4-8)*. Translated by William Charlton, & Fernand Bosier. Ithaca, New York: Cornell University Press, 1991.
- Plato. *The Republic*, edited with critical notes, commentary and appendices by James Adam, & Introduction by D. A. Rees. Cambridge: Cambridge University Press, 1963.
- Reisman, David. "Al-Farabi and the Philosophical Curriculum." In *The Cambridge Companion to Arabic Philosophy*, edited by Peter Adamson, & Richard C. Taylor. Cambridge: Cambridge University Press, 2005.
- Sadra, Mulla. *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 5, edited & annotations by Maghsoud Mohammedi. Tehran: SIPRin Publication, 2002.
- _____. *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 3, edited & annotations by Maghsoud Mohammedi. Tehran: SIPRin Publication, 2004.
- _____. *Al-Hikmat al-muta'aliyah fi'l asfar al-arba'ah al-'aqliyyah (The Transcendent Philosophy in Four Intellectual Journeys)*, vol. 7, edited & annotations by Maghsoud Mohammedi. Tehran: SIPRin Publication, 2001.
- Schroeder, Frederic M. "The Analogy of the Active Intellect to Light in the 'De Anima' of Alexander of Aphrodisias." *Hermes* 109. Bd., H. 2 (1981).
- Schroeder, Frederic M., & Robert B. Todd. *Two Greek Aristotelian Commentators on the Intellect*, edited & translated by Frederic M. Schroeder, & Robert B. Todd. Toronto: Pontifical Institute of Mediaeval Studies, 1990.
- Sharpless, R. W. *Alexander of Aphrodisias, Supplement to On the Soul*. Translated by R. W. Sharpless. Ithaca, NY: Cornell University Press, 2004.
- Sina, Ibn. Al-Taaliqat ala Hawashi Ketab al-Nafs li Arastu li Ibn Sina (Ibn Sina's glosses on Aristotle's De Anima)." In *Arastu ind al-Arab (Aristotle in Arabic World)*. Kuwait: Vokat al-Matbouat, 1978.
- _____. *Al-Shifa, al-Ilahiyyat (Healing, Theology)*. Tehran: Naser Khosro Press, 1984.
- _____. *Al-Nijat min al-gharq fi Bahr al-Zalalah (Salvation from Submerging in the Sea of Misleadings)*. Tehran: Tehran University Press, 1985.
- _____. *Al-Ta'liqat (Glosses)*. Qum: Islamic Advertisement Office, 1990.
- _____. *Al-Isharat wa'l-tanbihat (Remarks and Admonitions)*. Qum: Bustan Ketab Press, 2002.
- Sorabji, R. *The Philosophy of the Commentators 200-600 AD: A Sourcebook I Psychology*. London: Duckworth, 2004.

Tuominen, Miira. "Receptive Reason: Alexander of Aphrodisias on Material Intellect." *Phronesis* 55, (2010).