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**Averroes' Doctrine of Material Intellect in the Long Commentary
on the De Anima of Aristotle**

Aristoteles'in De Anima'sı Üzerine Büyük Şerh'te İbn Rüşd'ün
Heyulani Akıl Öğretisi

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Öz

İbn Rüşd, Aristoteles'in akıl yorumunun, *Ruh Üzerine*'de ortaya konulduğu şekliyle, noksan olduğunun farkındaydı. Bu Aristoteles düşüncesinin anahtar bir boyutunun boşluklarla dolu olduğu anlamına geliyordu. İbn Rüşd *De Anima* üzerine yazdığı şerhlerde bu boşlukları doldurmak için mükerrer girişimlerde bulunmuştur. İbn Rüşd için problem şuydu: "Eğer insanlar bedenli varlıklarsa, algıdan daha fazlası nasıl mümkün olacaktır?" İbn Rüşd nihayet *De Anima Üzerine Büyük Şerh*'te düşünme ve anlamamanın heyulani aklın yeni bir tasavvurunda temerküz eden tam ve tutarlı bir açıklamasına ulaştığına inanır. Buna göre, faal aklın yanında, ayrıca sayı olarak bir ve tüm insanlar için ortak bir heyulani akıl vardır. Mevcut makale bu heyulani akıl fikrini tetkik etmektedir. Heyulani aklın, İbn Rüşd'de, tümel manaların üretilmesi ve tutulması için gerekli kişilerüstü, tikel-olmayan ve empirik-olmayan bir taşıyıcı olarak işlev icra ettiği gösterilmektedir. Bu fikir, öyle görünüyor ki, insani bilişsel deneyimin bedensel ve duyusal özelliklerini bilginin noetik ve kavramsal unsurları ile, esas itibarıyla ontolojik bir açıklama çerçevesinde, tutarlı bir şekilde bağlantılamayı amaçlamaktadır.

Anahtar Kelimeler: heyulani akıl, faal akıl, bilgi, duyu algısı, deneyim, *Ruh Üzerine*.

Abstract

Averroes was fully aware of the fact that Aristotle's account of intellect as propounded in *De Anima* was incomplete. This meant that the key facet of Aristotle's thought was fraught with gaps. Averroes made repeated attempts in his commentaries on *De Anima* to fill the gaps. The problem for Averroes was this: "if human beings are enmattered entities, how will anything more than sense perception be possible?" Averroes believes that finally in his *Long Commentary on De Anima* he has achieved a full and coherent account of thinking and understanding that centers on a new notion of the material intellect, according to which, together with the active intellect, there is also a distinct material intellect, numerically one for all human beings. The present article explores in detail this idea of material intellect. It is shown that material intellect, for Averroes, functions as the transpersonal, non-particular and non-empirical subject required for the production and containment of universal

meanings. The idea seems to aim at connecting consistently the embodied, sensible forms of human cognitive experience with the noetic, conceptual element of knowledge within a basically ontological account.

Key words: material intellect, active intellect, knowledge, sense perception, experience, *De Anima*.

Introduction

Averroes' interpretation of Aristotle's idea of intellect (*nous*) mainly presented in *De Anima* aroused widespread attention in the late Middle Ages and was widely read and discussed. At issue was the novel interpretation Averroes brought to the notion of the material intellect. Averroes' final and full position concerning the ontological and epistemological status of intellect (material and active) can be found in his *Long Commentary on the De Anima of Aristotle*.¹ His theory of mind proved intensely controversial among the scholastics primarily because of its religious implications. But the attraction it evoked in the philosophical audience never vanished till the early 16th century. For instance, Aquinas, a careful reader of Averroes' commentaries, reached an interesting conclusion: the doctrine of material intellect involves the absurd consequence that "this human being does not understand" (*hic homo non intelligit*) (Aquinas 1968: # 65-66).² Aquinas thought that Averroes, at a very crucial point, misconceived Aristotle's meaning. Aquinas' criticism was followed by similar ones of others fighting against the so called "Latin Averroism". We can nonetheless surmise that Averroes' doctrine of intellect has been pivotal in triggering new and profound discussions about mind and thus in paving the way for the eventual transformation of philosophy in the 17th century Europe.

Averroes made strenuous efforts to produce a coherent account of Aristotle's views on intellect because he rightly observed that there was a serious disagreement in the commentary tradition about the issue of intellect and that

¹ Averroes, *Long Commentary on Aristotle's De Anima*, ed. Richard C. Taylor (New Haven: Yale University Press, 2012). The text is abbreviated as LCDA followed by page numbers. The page numbers given follow Taylor's translation. For the original Arabic terms I consulted the Turkish-Arabic bilingual edition of Averroes' *Middle Commentary (talkhis)* on Aristotle's *De Anima*: İbn Rüşd, *Psikoloji Şerhi*, trans. Atilla Arkan (İstanbul: Litera Yay., 2007).

² See also D. Black (1993) and Brian F. Connolly (2007).

the issue belonged to the very core of Aristotle's thought. Prior to the *Long Commentary* which was the achievement of his late years he changed his mind several times concerning this matter (Taylor, 2004a: 123-124, 2004b: 297). Here I will attempt to explore Averroes' final position as expressed in the *Long Commentary* and therefore will not discuss the earlier accounts outlined in the short and middle commentaries.

As is well known, the key question that Averroes wrestles with in his commentaries on Aristotle's *De Anima* concerns the nature of the material intellect. But Averroes found himself before a rather demanding task; he had to reconstruct several pages of brief, terse and cryptic remarks (made in *De Anima*, III, 4-8) into a full theory. To make better sense of the question we should turn to its origin in Aristotle's *De Anima*.

1. Aristotle, *De Anima*: The Problem.

Aristotle observes that we do not always think (430a5-6); we go from not-thinking and not-knowing state to a thinking and knowing one. He makes a distinction, accordingly, between two functions of intellect or two different sorts of intellect. One is characterized by "becoming all things" and the other by "making all things" (what the commentary tradition calls, *nous poietikos*) (430a15-17). The former is purely potential and receptive while the latter is purely active or productive. When we know X, the former comes to receive the essence of X, the intelligible form of X that, Aristotle thinks, constitutes the reality of X. The active side, on the other hand, renders what is potentially knowable/thinkable actually knowable/thinkable. Insofar as we need to speak here of potential and actual states of knowing/thinking, the matter and form distinction, Aristotle suggests, must obtain in the case of intellect, as well (430a10-14). So there must be a potential side to the intellect.

What give rise to this interpretation are several theses put forward in *De Anima* (III, 4-6) concerning intellect and its activity. These are as follows³: (1) thinking and sense perception, though categorically different, follow more or less the same model in the way they work; both require a receptive capacity through which identification with the object takes place. While the function

³ Here I closely follow Richard C. Taylor (2004a: 108). See also Myles Burnyeat (2008: 33-43).

(e.g. seeing) is potentially identical to the object (e.g. red), it becomes actually identical when it takes place (429a13-18); (2) intellect and its activity must not be mixed with anything else, otherwise this would create a distorting effect for its operating which will make it impossible that anything can be thought. This purity condition thus makes sure that everything is an object for intellect (429a18-21); (3) the only thing that defines this intellect cannot be anything other than the ability to receive (429a21-22); (4) this potentiality attributed to the intellect is what makes it possible for the soul to think and judge (429a 23); (5) being a potentiality, it does not exist before it thinks (429a24); (6) because it must be pure, it is unmixed with body and is not the functioning of a bodily organ (429a24-27), as distinct from sense (429b5-6); (7) It is the place of all forms potentially (429a27-29); (9) this potential intellect must be able to think itself after having become some of its objects (429b6-10); (10) it must be able to distinguish the particular thing from its universal essence (429b11-21); (11) it must be incorporeal because its objects are incorporeal (i.e. essences separable from particulars, from their instantiations in matter) (429b21-23); (12) what is intellectual must be simple and impassible (429b24); (13) because it becomes identical to what it thinks, it must be potentially everything thinkable but actually nothing until it thinks (429b31-32). In this sense, Aristotle argues, it bears a resemblance to a writing tablet. He says that “what it thinks must be in it just as characters may be said to be on a writing-tablet on which as yet nothing actually stands written” (430a1-2); and (15) the idea that thinking (just like sense perception) requires identification with the object of thinking (“what thinks and what is thought are identical”) leads to the assumption that its objects cannot be particular material entities (430a2-3), but their universal essences. Because of the individuating effect of matter, two things can be identical only in terms of their essences. Knowledge is the knowledge of essences at which point mind (*nous*) becomes one with the essence in question. This requires the removal of particularity and thus matter from the object of knowledge. In addition to these characteristics, Richard Taylor calls our attention to another point that he thinks is important for Averroes; it is capable of knowing privations such as evil or black (430b22ff). Averroes also takes heed of Aristotle’s remark in *On the Generation of Animals* (2.2, 736 b27) where Aristotle says that *nous* enters human soul from outside implying that *nous* is not a

specific faculty of the soul, that is, not something having the human substance as the subject (*hypokeimenon*).

Given all these points it seems proper to pose the question; how is it possible that something like thinking (which Aristotle identifies as *the* divine activity itself) takes place in hylemorphic complexes like human beings? Given that we are embodied beings and that thinking becomes identical with its objects, is it possible that we can think things separate from body? Can it really be the activity of human soul which is as a whole the functioning of the body? This would seem a genuine *aporia* in Aristotle's sense. Aristotle himself promised an explanation (431b18-19), but as Averroes indicates (LCDA: 388) the promise was never fulfilled. Thus Averroes knew that Aristotle's account of intellect, perhaps the very center of his metaphysics, was incomplete. But before framing his own view about the nature of thinking and how it stands in relation to the human psyche, he looked carefully at the solutions provided by the former commentators, in particular, by the two of them; Alexander of Aphrodisias and Themistius. A discussion of relevance of Ibn Bajja as well as al-Farabi and Avicenna, though each is important to Averroes' interpretation of intellect in a broader context, is excluded here not only due to the limitations of space but also due to the fact that we focus here Averroes' primary sources in his coming up with his mature notion of material intellect. But it should be pointed out that Averroes, both in the *Middle Commentary* and in the *Long Commentary*, rejects altogether Ibn Bajja's identifying material intellect with imaginative power (LCDA: 313). As will be clear from the following discussion, this is impossible mainly because imaginative power is part of the human soul, whereas both material and active intellects must be detached from any physical substratum. He also thinks that al-Farabi follows Alexander's position (LCDA: 346) and that Avicenna completely diverged from Aristotle's true teachings in metaphysics, especially concerning the issues of soul and intellect (LCDA: 374-375).

2. Alexander's and Themistius' Solutions

Alexander's mature views on intellect can be found in a short text called *De intellectu*.⁴ Here Alexander makes it clear that Aristotle speaks of two different sorts of intellect, one is human and the other divine. The former is what he calls "material intellect" (*hylikos nous*), while the latter is active or productive intellect (Schroeder and Todd, 1990: 46, 48). By the term material intellect (*hylikos nous*), Alexander does not mean that there is also a physical sort of intellect, but rather that there is a sort of intellect defined by potentiality and receptivity characteristic of matter (*hyle*). He conceives of the material intellect as a disposition (*epitedeiotes*), found in the human soul, for intellectual thought, thus ultimately a capacity and function belonging to a form-matter complex. If material intellect is just a disposition of the human soul (to receive the intelligibles), it must be something corruptible, along with its substratum, the body. Thus for Alexander's account, material intellect is not a distinct substance, but rather a property of a substance, more precisely, a rational receptivity of the human subject as an organism. As Averroes interprets it, Alexander makes it something mixed with the body and thus dependent on the body (LCDA: 313). This, he thinks, openly violates some crucial points set forth in Aristotle's *De Anima* (listed above). It, above all, violates (2) and (6) (see LCDA: 308-313).

To make his point Alexander appeals to the writing tablet analogy used by Aristotle himself in *De Anima* (430 a1-2). For him writing tablet was the human psyche (as the first actuality of the body), the writer was the active intellect, whereas the material intellect corresponds to the suitability of the tablet to be written upon, that is, the unwritten aspect of the tablet. As the tablet is being written upon, this potentiality becomes actualized. As Davidson puts it; "Just as the writing tablet possesses a capability for receiving writing, the human organism or human soul possesses a capability for receiving thought, and the material intellect is simply that capability" (Davidson 1984: 176). It thus appears that the active intellect (as the separate, unmixed and impassible divine intellect) is the cause of all human thought in that it renders

⁴ On historical issues surrounding *De Intellectu*, see Frederic Schroeder and Robert B. Todd (1990: 4-31). *De Intellectu* was translated into Arabic in the 9th century (probably by Hunayn ibn Ishaq) and became an important reading for almost all of the Muslim peripatetics.

an intelligible in potentiality into an intelligible in actuality, whereas our capability to undergo such realization is called material intellect.

This is, Alexander holds, what Aristotle means when he says that there is a sort of intellect which exists by becoming all things (i.e. the material intellect), and another which exists by making all things (i.e. the active or productive Intellect). The material intellect as the disposition of the human soul for intellectual thought is mortal just like the human substance which is its substratum.

Themistius frames his own interpretation of intellect in reaction to Alexander. He distinguishes four kinds of intellect; actual, potential, productive and passible intellects.⁵ Themistius associates the passive intellect (*nous pathêtikos*), or what he also calls common intellect (*koinon nous*), with the imaginative faculty and suggests that this alone is destructible, for it is mixed with the body and so destined to pass away together with the body. In contrast with Alexander, Themistius understands the potential (material) intellect as a distinct entity that is incorporeal, unmixed and unaffected. Though it is in our soul, it is *essentially* an impersonal principle separate from things corporeal and, by implication, from human beings considered as soul-body complexes. Like the productive (active) intellect, it is eternal, and immune to generation and corruption. He also rejects Alexander's identification of the productive intellect with God in Aristotle's sense (set forth in *Metaphysics*, XII).

More precisely, Themistius argues that there exists a potential and an actual intellect in the soul of each individual human being. Yet they are for their functioning dependent on their relation to one transcendent, productive intellect (*nous poiêtikos*). We human beings who possess actual and potential intellects in their souls share this unique intellect and thereby are able to perform intellectual understanding and produce universally communicable thoughts. The productive intellect, he suggests, is the source and reservoir of all intelligible forms which it thinks continually and eternally, while a particular person's intellect composed as it is of actual and potential sides thinks not

⁵ In Averroes' language, these are respectively; acquired intellect (al-'aql al-*mustafād*), material intellect (al-'aql al-*khayūlānī*), active intellect (al-'aql al-*fa''al*) and passive intellect (al-'aql al-*munfai*l).

only occasionally and for a limited time, but also in the form of sharing the thinking activity of the productive intellect. This unique productive intellect is “form for us”, on account of being the very source of the actuality of actual intellect in us. Thus Themistius sees the productive intellect as the intrinsic formal cause of human thought, the principle that functions to actualize our potential intellect. The images stored in our potential intellect are abstracted and thereby rendered actual intelligibles (i.e. understood) by means of the illuminating power of productive intellect *qua* abstractive factor. Productive intellect is thus not only “form for us”, but also in a special sense, “in us”. This means, among others, that it is productive intellect that represents the human essence, our real self, for it is the exercise of intellectual power that distinguishes us as human beings. Themistius lays a special emphasis on the point that the unity of knowledge and possibility of discourse requires the role of the productive and potential intellects⁶, a point which, as we shall see, proves immensely important for the account Averroes develops in the *Long Commentary*.

The potential (material) intellect, as Themistius understands it, corresponds to “noetic matter” for the operation of the productive intellect which is both separate (transcendent) and “in us”. This noetic matter should be perfectly apt to be formed by what it receives so that intellectual understanding in human beings can take place. Consequently: (i) Each individual has its own potential intellect. (ii) The productive intellect is the abstractive factor whereby the potential intelligibles present in the images provided by potential intellect are transformed into actual ones. (iii) This productive intellect is the eternal source of all intelligibles. (iv) The abstracted (understood) intelligibles are received and stored by the potential intellect of each individual human being. Positing such a potentiality for intellect is required for it is, as Myrna Gabbe puts it, “the state from which our thoughts and abilities develop, and

⁶ “There is no need to be puzzled if we who are combined from the potential and the actual [intellects] are referred back to one productive intellect, and that what it is to be each of us is derived from that single [intellect]. Where otherwise do the notions that are shared (*koinai ennoiai*) come from? Where is the untaught and identical understanding of the primary definitions and primary axioms derived from? For we would not understand one another unless there were a single intellect that we all shared.” (Themistius 2013: 103.36-104.3).

the condition that enables us to transition from one thought to the next" (Gabbe 2010: 217). The following will make this clear.

3. Averroes' (Final) Solution in the Long Commentary on *De Anima*

Averroes' interpretation of the material intellect in *The Long Commentary on De Anima* (*al-Sharh al-Kabir li Kitab al-Nafs li Arastu*) mainly follows Themistius' account (at least to the extent he understands what Themistius is saying, on the basis of an inadequate Arabic translation of the *Paraphrase of the De Anima*), but with crucial revisions and additions such that it is not easy at all to call his account Themistean.⁷ He, first of all, notes that on Aristotelian principles we can think of an indestructible entity free of matter (like the material intellect) only as an incorporeal substance, or reversely, any incorporeal substance could be nothing but an intellect (LCDA: 349-363).⁸ The existence of these entities (intellects as separately existing incorporeal substances) is, moreover, required if metaphysics, rather than physics, is to be the first science as Aristotle stipulates in *Metaphysics* (Book VI, 1027a), that is, if the study of metaphysics as the study of being *qua* being is to be possible at all.⁹

His next move is to reject the plurality of material intellects, that is, the view (held by Themistius) that each human individual has a material intellect of his own. Averroes comes to see that the material intellect, just like the active one, must be one single incorporeal substance shared by all human beings and serving all human beings (LCDA: 322). Given this starting point, it is also clear that Alexander's notion of the material intellect as a disposition becomes automatically ruled out. Actually in his early accounts (principally in the *Short* and *Middle* Commentaries), Averroes seems happy to consider the material intellect to be a disposition possessed separately by each individual (see Davidson 1992: 258-282). In *The Long Commentary*, however, he not only rejects the Alexandrian view that it is a disposition, but also the Themistian view that each human being has his own separate material intellect.

⁷ For a good discussion of this issue, see Taylor (2013).

⁸ See also Averroes (1986: 147).

⁹ For a detailed discussion of this issue, see Taylor (1998).

But it should be made clearer why the material intellect cannot be a disposition of any kind. It cannot, because a disposition, on Aristotelian principles, Averroes thinks, cannot be independent of the bodily subject and of the bodily functions. If one first characterized it as disposition, it would then be simply empty to say that it is separate from body or all sorts of corporeal subjects. This would lead to insuperable difficulties regarding the ontology of intelligibles which are supposed to reside in this disposition. For one thing, if it was the case that intelligibles were received and stored by a disposition which ultimately could not but be a bodily function, intelligibles would be inevitably distorted. This is because such a reception (by a bodily substratum) necessarily results in their being pluralized, particularized and thus changed, given that matter is the principle of individuation. Further, an intelligible residing in a bodily substratum can only be an intelligible in potency, not in act. This is in turn incompatible with the possibility of verbal communication and the unity of science, as Themistius calls attention. So Alexander is wrong in conceiving of the material intellect as a disposition of the human soul (LCDA: 344).

Intelligibles, accordingly, must reside (after they are somehow grasped) in a subject immune to all possibility of change, but also be accessible to the human knowers; they must reside in a subject unmixed with matter (LCDA: 300-303). This can only be a noetic substratum existing beyond all particularity. That is to say, the material intellect cannot be viewed as a disposition, but only as “a subject of disposition” (LCDA: 344-345). But because its whole function consists in receptivity and it is nothing before it thinks it must be characterized in terms of potentiality and possibility (LCDA: 304) which both Alexander’s phrase (material intellect, *hylikos nous*) and its counterpart in Themistius (potential intellect, *dunamei nous*) are meant to denote. Therefore, Averroes’ material intellect (*‘aql al khayūlānī*) is not a determinate particular, not a “this something” (*al-mushār ilaihi*) like corporeal entities (LCDA: 304), because this is irreconcilable with its receptive function, as suggested above. He calls it a distinct kind of being, indeed the fourth one besides matter, form and composites of matter and form (LCDA: 304-305, 326). Hence precisely for the same reason, this distinct kind of entity called material intellect can neither be a form nor an entity possessing a form of its own; if it was itself a form or

having a form of its own this would hinder the reception of other forms, the forms of things to be known. It is thus on account of this receptivity requirement that the material intellect cannot be an intellect in act that will necessarily be a (incorporeal) form.

Averroes, as just indicated, also argues that the material intellect must be one for all human beings (LCDA: 322), not many. This means, contra Themistius, that each human being cannot have a material intellect of his own, but must share one, unique material intellect common to all human knowers. This consequence is dictated by the nature of intelligibles. If an intelligible in act is in more than one subject, it cannot be the same intelligible for all those who understand and talk about it. It will change in this case according to the subject, but the essence of horse must be universal and invariable, thus one, for all knowers. If it is not the same essence of horse we all have in mind we will still need to demand the correct description of this essence itself. "In this way the thing understood will have a thing understood, and so it proceeds into infinity" (LCDA: 328), with the result that knowledge of things is impossible (LCDA: 328, 392-393). We will thus face a version of "the third man argument" (Taylor 2004b: 300).

This requires that intelligibles *in act* be present in a subject proper to their ontological nature, that is, in a noetic space (the material intellect) which can then function as the repository of intelligibles in act. Once we grasped an intelligible, that intelligible stands ready (in act) in the material intellect and it becomes afterwards easy to access it, to bring it to mind repeatedly, at wish. What functions as the link or the means to this eliciting is in each case a certain image we have of the intelligible in act. This suggests that our acquired intellect has at its disposal not the intelligibles themselves but the images that bear reference to these intelligibles in act, by providing spontaneous access to them for repeated considerations. The material intellect, in turn, is the noetic "thesaurus of the referents" (Themistius, 2013: 123, cited at Taylor, 2013: 8) of our words and concepts.

But Averroes' theory requires that the human subject must be able to enjoy a special kind of connection or conjoining (*ittiṣāl*) with these separate, cosmic intellects, i.e. the active intellect and especially the material intellect,

simply because thinking process necessarily entails the human subject's joint action with them; without considering their involvement intellection and knowledge remains simply inexplicable.¹⁰ This leads Averroes to a renewed account of the process resulting in the acquisition of scientific knowledge (intelligibles). Key is a new look at Aristotle's remark in *Posterior Analytics*.

So from perception there comes memory (*mnēmē*), as we call it, and from memory (when it occurs often in connection with the same thing), experience (*empeiria*); for memories that are many in number form a single experience. And from experience, or from the whole universal that has come to rest in the soul (the one apart from the many, whatever is one and the same in all those things), there comes a principle of skill (*technē*) and of understanding (*episteme*) (*Posterior Analytics*, 2.19, 100a3-8).

This remark of Aristotle should be complemented with another one asserted in *De Anima* that there can be no thought and reasoning without the cognitive role of *phantasmata*, images gained from sense perception (427b, 431b, 432a). Aristotle believes that the discriminatory capacity to perceive is universal to all animals, but only some have the extra capacity to preserve sense perceptions through memory (*mnēmē*). Though required, this is still not enough for the presence of higher thinking related cognitive functions, such as judgement (*hypolepsis*), calculation (*logismos*), thought (*dianoia*) and above all, understanding (*nous*), since the capacity for thinking requires that one be able to form from many particulars one universal. Of all the animals this is unique to human beings. Though Aristotle sometimes presents the spectrum of soul's cognitive powers as a sort of continuum, the question remains how the thorough-going naturalism of his epistemology accords with the unmixed, incorporeal character of intellectual thinking (as alluded to above). Now, Averroes with his notion of conjoining (*ittiṣāl*, literally "continuity") grounded in a novel interpretation of the material intellect attempts to systematically connect the embodied experience with the noetic one.

Averroes' account of knowledge is, on the one hand, motivated to be firmly rooted in sense experience, but it demands, on the other, the final, cru-

¹⁰ For the crucial role Averroes attributes to human conjoining (*ittisal*) with the active and material intellect for thinking and knowledge, see LCDA, Book 3, Comment 36.

cial touch of the noetic act upon what is acquired from sense experience. The process whereby experience is formed follows the hierarchy of the powers of the human soul, which Averroes (in accord with Aristotle) describes as follows; four senses, common sense, imagination, cogitation and memory. What we get through sense perception, namely the proper sensibles, are unified by the common sense, and then turn into intentions (*ma'ani*) in the imagination. Stated in the empiricist language, impressions give rise to ideas in the mind. In Averroes' description of the cognitive process the function of cogitative power gains a particular importance, for it is what makes the intentions suitable for the intellectual operation.¹¹ For this, cogitative power is to discern the individual form from the more sensual imagined form, even though it still remains an individual sensible form, the form of a *this*. The structure of an individual as an intention in mind is not the same as a definition. It does not count knowledge, for knowledge is of the universal. But when you are cognizant of the individual forms, you can distinguish individuals from one another. This individual form is still an exemplary picture and thus perceptual and imaginative in character. A definition, by contrast, is not a matter of representing or conceiving the individual form, but grasping the form that is universal to all instances of the same species. While the individual form is the form of *this* Y, the universal form is the form intrinsic to *all* Ys.

These refined, true images as the intentions of individual forms are then placed in the memory which serves the function of retaining and, when required, remembering them. Notice that human memory is, on this account, unable to contain the definitions (intelligibles in act), but only the individual forms of the perceived particular objects as images. Though the most spiritual one, memory like cogitation remains in the final analysis a bodily function (see Black 1996: 161-187). Notice also that the internal cognitive powers of the soul (imagination, cogitation and memory) are powers basically to deal with images in varying levels. Stated in the vocabulary of the modern philosophy, the-

¹¹ Cogitation (*fikr* or *tasawwur*), presumably *dianoia* or *logismos* of Aristotle, Averroes stresses, is found only in human beings (LCDA: 428), i.e. in beings who are in contact with the separate intellects, the transcendent noetic principles and are able to exercise conjoining with them. For a detailed discussion of the crucial role of cogitative power in Averroes' epistemology see Taylor (2000: 111-146).

se “true images” got from sense perception are representations, that is, cogitations that directly and objectively represent things. The point with “true image” thus serves to emphasize the direct ties of images with the entities outside the soul. Surely, Averroes, following Aristotle, presents us a picture of the world built upon the metaphysical realist presuppositions. As Caston notes concerning Aristotle:

All human understanding presupposes *phantasmata*—it actually grasps its objects “in” *phantasmata*—and so cannot take place without certain bodily activities. (Caston 2009: 337)

Averroes following Aristotle believes that sense and thinking belong to two different ontological orders. That is, when we pass from the realm of sense (the final stage of which is memory) to that of thinking we pass to a categorically different ontological order, and correspondingly to an epistemological order. We pass from the realm of the particular to that of the universal. But the universal is in a sense in the particular, is *in rem*, and not *ante rem*, as Plato argues. Hence Averroes thinks that the intelligible is found in the image, albeit in a state of potentiality.¹² It is the function of intellectual thinking to abstract the intelligible found in potentiality in the particular image, and thus render it an intelligible in act. It is important to note that the image is ultimately got from sense experience, and is supposed to be true to it, so that the intellectual thoughts we form are reflective and informative of reality.

To repeat, the whole nature of the material intellect consists in receptivity and potentiality. Recall that sense perception is also essentially receptive in Aristotle’s view. And receptivity in both of them entails discernment and apprehension. But unlike sense perception which abstracts the sensible form (e.g. red), the discernment peculiar to the material intellect is based on receiving the immaterial, universal form (the intelligible, e.g. the definition of horse), i.e. form denuded of all particularity (thanks to the abstractive power of the active Intellect). Then the mode of reception and discernment exercised by sense perception and the material intellect are different; while the former is ultimately due to a hylemorphic subject, to a determinate particular, and is

¹² “intelligibles are the intentions of the forms of the imagination separated from matter” (LCDA: 374).

therefore a physical process, the latter is performed by a noetic subject, which is therefore an act free of any physical aspect. But in both sense perception and intellectual perception, identification with the object necessarily takes place, a requirement that seems posited in order to ensure objectivity.

Thus the image or representation is transferred from one order into another (LCDA: 351) by our cogitative faculty, whereby its essential structure can now be made intelligible. That is to say, the individual knower himself (his cogitative faculty) provides the content, the perceptual object which is then intellectually recognized and clarified by the involvement of separate intellects. This is again another difference of Averroes' account from that of Themistius who argues that the active/ productive Intellect contains *a priori* all the intelligibles in act such that human knowing only consists in receiving these intelligibles from it. Averroes, by contrast, insists that all the material of knowledge is provided by the particular human knower and has its origin in sense perception. This means that intelligibles are ultimately derived, through sense experience, from the real things of the concrete world, and therefore are genuinely informative about them. As the efficient cause of the human knowledge, the active intellect only functions to transition the intelligibles from potentiality to actuality; it does not know or think anything of this world (LCDA: 353). Averroes sums it up as follows:

For to abstract is nothing other than to make imagined intentions intelligible in act after they were [intelligible] in potency. But to understand is nothing other than to receive these intentions. For when we found the same thing, namely, the imagined intentions, is transferred in its being from one order into another, we said that this must be from an agent cause and a recipient cause. The recipient, however, is the material [intellect] and the agent is [the intellect] which brings [this] about. (LCDA: 351-2)

But if the material intellect is one single subject of intellectual apprehension serving all humans and shared by all of them, then would not it be the case that when a specific person understands something, all other human beings, too, understand it at the same time and in the same way, a result which is surely fallacious? (LCDA: 318) Given the unicity of the material intellect, one should accept the counter-intuitive result that cognitive operations are in

fact collective and not carried out by human beings individually. Another worry Averroes gives heed is more ontological in nature; if the active intellect and material intellect (as, respectively, the active and recipient causes of human knowledge) are both eternal, their products (i.e. intelligibles in act) should also be eternal. Thinking must thus be assumed to be an activity in which intelligible thoughts are being produced continuously and eternally. If so, both our images and sense perceptions from which these images are formed must be eternal and subject to eternal production, because such thinking activity presupposes the perceptual data presented to it (LCDA: 307-308). These difficulties lead Averroes towards thinking of the role of the embodied human subject more carefully.

We should recall that Averroes has argued that it is necessary that the genuine items of human knowledge (*intelligibles in act*) occupy solely a noetic subject free of all particularity and corporeality. But now he should also show that this constituted body of knowledge has a crucial support in embodied human subjects as the individual agents and possessors of this knowledge. In response to this he suggests that we should view intellectual understanding in terms of two subjects (LCDA: 316, 329). Again crucial is the structural parallelism between thinking and sense, as argued for by Aristotle. Averroes here seems to appeal to a correspondence that obtains between two subjects, one the subject of truth and the other the subject of existence. More precisely, if I see a shade of red in an apple, my perception is *true* only in virtue of the red sense object, but my sight of red itself is an existing thing in virtue of my seeing act which is the first actuality of my eyes. The same model applies to thinking as well. My intellectual grasp of horseness (the universal essence of the species horse expressed in a definition) is *true* only in virtue of the (refined) images formed by the cogitative power of the soul, while this intellectual grasp (identical with the intelligible essence of horse in act) is a reality (the intelligible in act) in virtue of being received by and residing in the material intellect, the substratum of all intelligibles in act. An intelligible in act exists only in the material intellect, but it is generated by our cognitive efforts (all functions of sense experience) working in conjunction with separate intellects.

To sum up, we can speak of two subjects here; the first is the one in which the intelligible is in potency, namely the imagined intention or the rep-

resentation provided by the human knower, while the second is the one in which the intelligible in question is in act, namely the material intellect. In reference to the former, that is, in reference to what sense experience provides, the intelligible can be said to be true, while in reference to the latter the intelligible can be said to be an existent. As a result, without the cogitation of the particulars formed into an image (representation) by an individual human knower it will not be possible to intellectually understand the universal. Such understanding will therefore only belong to the particular human knower, the subject of truth. As Davidson puts it; "Through images in the imaginative faculty, the soul becomes conscious of intelligible thoughts. Consequently, although men share a common material intellect, each still owns his personal, individual actual thoughts, and thoughts are not shared" (Davidson 1992: 290).

Now we need to characterize more precisely how the active intellect and material intellect (as separate intellects) work together in the intellectual operation which produces intellectual knowledge of reality. As it can be seen, in the whole process leading up to the intellectual understanding of universals, three factors are at play; the embodied human subject, the active intellect and the material intellect. The human subject presents, by means of the cogitative power, the required true images (representations) derived from sense experience to the active intellect. The active intellect as abstractive cause intellectually illuminates the essence of the image and turns this potentially intelligible cognition into an intelligible in act, and does this not as an extra job but just by being what it is. The third is the material intellect which thinks and understands (discerns and receives) this revealed essence and becomes its subject of existence. The intelligible understood (in act) now becomes impressed and placed in the material intellect accessible for later considerations with facility.

Averroes explains this by appealing to the light analogy familiar from Aristotle's *De Anima*, book III (and from Plato's *Republic*, Books V-VII). The analogy runs as follows.¹³ Just as light makes the medium actually transparent after it is potentially transparent, and allows the color to be actually seen after it is potentially visible, and our sight becomes one with the sensible form

¹³ For problems with this light analogy, see Black (1999: 159-184).

of color abstracted, so the active intellect reveals/ abstracts the essence present in the cognition and this intelligible in act becomes available for intellectual apprehension-reception by the material intellect. As indicated, the whole function of the material intellect is a special sort of receptivity, and, as different from sense perception, what is received-perceived here is not the particulars, but universals. Whereas the active intellect abstracts only the essences potentially present in the images (which are themselves the objects derived from sense experience and given the structure of refined image by the internal powers of the soul), the material intellect is able to perceive and receive (understand) solely the essences actualized (i.e. intelligibles in act).

To explain Aquinas' conception of the role of the active intellect in knowledge Anthony Kenny draws a nice analogy: "One can think of the agent intellect as like the lantern a miner carries in his helmet, casting the light of intelligibility upon the objects a human being encounters in his progress through the mysterious world" (Kenny 1993: 47). Kenny's metaphor is quite apt. Even though Kenny employs it to illustrate Aquinas' position (for whom the active and material Intellects are simply the powers of the human rational soul), it applies equally well to Averroes' view of the function of the active intellect. The active intellect's own activity, the self-thinking activity, constitutes a luminosity analogous to the light of the sun. It both enables our sight and makes things visible. But while sun makes particular things visible, the active intellect makes *essences* visible. In this intellectual self-transparency essence becomes fully transparent when our cognition is conjoined with its intellectual activity. This special light of the active intellect functions to reveal the essence of things when their images or representative intentions are supplied to it by the imaginative faculty. This function of revealing the essence present in the images is what is called "abstraction" in the Aristotelian terminology. Once essences are abstracted from particularity, from the perceptual material, they move the material intellect and are simultaneously discerned and received by the material intellect.

The crucial point is that the active intellect does not supply any content of the scientific knowledge; the content is supplied solely by the human subject and ultimately through sense experience. This is again one of the significant points where Averroes disagrees with Themistius. The intelligible is already

ady found in the true image (representation) such that the only function of the active intellect is to draw out this into actuality. That is, this pure intellectual activity as pure intellectual luminosity is what enables the universal form present in the particular form be self-evident. Such form, once uncovered (by the active intellect), can now be impressed or deposited in the material intellect, as the recipient cause, just like the lighted color imposing its form on the eyes.

Averroes also speaks of two additional functions of the active intellect; (i) the active intellect is also at work whenever we are engaged in reasoning or deliberation that requires the exercise of the primary propositions. That is, any form of reasoning on the part of human beings necessarily employs the primary propositions and this is impossible without the involvement of the active intellect (LCDA: 396). (ii) the active intellect is also necessarily at work in the acts of syllogistic inferences through which we form new propositions from the already known ones. This suggests that each and every stage of knowing activity presupposes the involvement of the active intellect. The realized (theoretical) knowledge in both cases becomes an asset stored in the material intellect, one which we can now re-access whenever we *will* (LCDA: 395).

In parallel with these intellectual processes the embodied human subject, too, gets formed intellectually, for these noetic principles (active and recipient) are in a sense in us and thus these processes do in a sense take place in us. Our soul only possesses the material conditions of forming intellectual thoughts, i.e. sense powers dependent on bodily organs. This is called "intellect in us" or *aql al munfail*, following Aristotle's designation, *nous pathetikos* (430a24), the passive intellect. Aristotle, in *Metaphysics*, seems to compare its relation to intelligibles to bat's eyes towards daylight (993b). It actually comprises all the cognitive powers of the soul as the first actuality of an organic body, namely four senses, common sense, imagination, cogitation and memory. It is, Averroes suggests, not really an intellect, but called intellect only in an equivocal sense, for an intellect is by nature separate (from all things corporeal) and therefore unmixed and unaffected (LCDA: 329, 332, 349-363, 379). But intellect is involved in all thinking. And because human thinking goes from potentiality to actuality, to account for human thinking one should appeal to the involvement of not just one but two intellectual principles, one

as the principle of act and the other as the principle of potency, that is, one as the active cause and the other as the receptive cause. We are born with a capacity to conjoin with these separate intellects, the agent and recipient causes of intellection, on the basis of the cognitive powers of the soul. This capacity in turn is designated as *'aql al-mustafad*, the acquired intellect. When this capacity is exercised and we become familiar with intellectual thought, with the intelligible structure of things to some extent, this theoretical knowledge acquired is ontologically retained in the material intellect (the subject of all intelligibles in act), but we can now re-access to it easily owing to the images corresponding to these intelligibles whereby theoretical knowledge can be said to be an asset of our souls. This operational presence of theoretical knowledge in our souls is called *al-'aql al-nazarī*, the theoretical intellect. *Al-'aql bi'l malaka* (*intellect in habitu*, intellect in positive disposition) is in turn the gained ability, consequent upon intellectual exercise and scientific study, to re-access the intelligibles in act stored in the material intellect.¹⁴ It is the determination of the human soul by the active presence of the intelligible forms assimilated through scientific study.

These three intellectual dispositions can in fact be termed together as the imaginative faculty because it engages either in the image formation or in the image-intelligible connection. The latter takes place either (i) in the form of presenting the refined image to the intellectual operation (thereby alone we reach the universal out of the particular experiences, that is, we comprehend the universal or the intelligible from out of its particular instances given in the images) and forming new knowledge, a new intelligible in act or (ii) in the form of re-eliciting the already gained intelligible in act (placed in the material intellect) through its images in our memory. What we have in our minds are not the intelligibles in act but images or representative intentions that bear reference to these intelligibles.

A crucial point regarding which Averroes follows Themistius' interpretation is the view that the active intellect and the material intellect are immanent causes "in" us, and that this immanence is compatible with their separateness or transcendence (indicated above). The active intellect and the material

¹⁴ See Richard C. Taylor, "Improving on Nature's Exemplar", pp. 126-127, LCDA: 397-399.

intellect are in a sense both in our souls, but being "in" here does not mean that our soul is the ontological subject of them, which is impossible for the reasons discussed above; that they are "in" our souls just denotes their being functionally or operationally present in our souls (see Hyman 1981: 190). This is also the same as the functional presence of the intelligibles (in act) in our souls. This functional existence of the separate intellects or what amounts to the same, of the intelligibles in act, in the human soul is another description of what Averroes means by '*aql bi'l malaka*, intellect in positive disposition.

This idea is coupled with another that the active intellect is the form for human soul, form here in the sense of a principle through which matter is put into work and is actualized; the active intellect stands in relation to human soul in just the same way as form stands to matter. Human soul actualizes its proper (intellectual) potentials thanks to the agency of the active intellect in the depths of human soul. This is to say that the active intellect is the final form of human beings insofar as the intellectual/ theoretical perfection is the supreme end of human existence as Aristotle maintains in *Nicomachean Ethics* (Book 10). The happiness represented by the theoretical activity is the perfect form of happiness, the happiness of God. Thus in theoretical activity we participate the purely intellectual divine life and share its happiness consequent upon the most perfect activity, intellection (*noesis*). Thus the ultimate end of human life is happiness which is supremely realized in the intellectual understanding of the world. The active intellect is in this sense the intrinsic formal cause of this development of human mind.

However, the most original side of Averroes' account is concerned with the material intellect, as already suggested. As the recipient potency of all intelligibles, the material intellect "is what it is in potency all the intentions of universal material forms" (LCDA: 304). It is the sole intellect that has the forms of material entities (i.e. the material forms) as its content; it is the repository of material forms understood. The active intellect "understands nothing of the things which are here" (LCDA: 353). This means that actual knowing and understanding takes place by and in the material intellect and, to that same extent, by and in the embodied human subject.

Averroes (following *On the Generation of Animals*, 2.2, 736 b27) argues that the material intellect as one single eternal incorporeal intellect shared by all humankind joins each human being from without or outside, subsequent to birth. It gets linked with the human being (as an embodied subject) operationally and in a nonessential way through the refined images of the cogitative power (LCDA: 388). But precisely in doing so it also joins human beings to one another in a higher plane, because it alone provides the standards by virtue of which human discourse becomes grounded in universality. By sharing one common noetic language human beings come to enjoy the common basis of the universal communication that transcends all the boundaries of historical, cultural and natural relativity. Whenever the individual human knower, with an already acquired body of theoretical cognition, enters into reflection, he gets instantly conjoined with the active intellect, where the material intellect acts as the common ground (between the embodied human subject and the active intellect). The material intellect is the subject and ground of noetic universality with which we are instantly in contact in any noetic moment that is fundamental for the theoretical as well as the practical dimensions of human life. It is the space of meaning in which noetic act takes place. Human beings, on Averroes' account, owe what is distinctive of them, their rationality and thus their humanity, to that conjunction with the material intellect and active intellect (see LCDA, Book 3, Comment 36). This implies that we can be said to be human not in virtue of a specific faculty or property that is a structural part, a *per se* component of the human organism (LCDA: 388), but thanks to this peculiar attachment to the material intellect "operationally present in us". It thus appears that intellect is not the *real* part of the essence of the human soul. We cannot assert, like Descartes, that human soul is essentially an intellectual substance, a thinking thing (*res cogitans*).

Finally it should be noted that Averroes is also quite open to the possibility that his formulation of the material intellect had never been considered by Aristotle himself (LCDA: 315, 345). Be that as it may, Averroes urges, Aristotle should accept this formulation because, given the Aristotelian premises propounded in *De Anima*, this is the most fitting explanation.

4. Concluding Remarks

As is well known, Averroes' account of material intellect has found both its admirers and critics among the scholastic circles, its only audience for a long time. We, in the beginning already indicated Aquinas' critique. Aquinas argues that for Averroes it is not the particular human subject that understands and knows (Aquinas 1968: # 65- 66). Averroes, surely, comes to the conclusion it is *through* the material intellect that man thinks and knows when man thinks and knows. But the material intellect is at work (perceiving-receiving) only by means of human subjects; it *is* (functional) only insofar as human subjects with their cogitative powers come to conjoin with it (and the active intellect). This happens either in the form of re-accessing the intelligible in act already deposited in it or by forming an intelligible in act out of refined images (sensory material) thanks to the help of the active intellect as abstractive cause. In both cases we co-act with noetic principles, which Averroes following a tradition of commentary calls conjoining (*ittisāl*). Remember that the whole nature of the material intellect is marked by possibility and potentiality. It is therefore clear that without human species there could be no functioning material intellect. It is a transcendent, noetic space of meaning with which we are somehow intimately attached. Then intellectual understanding takes place as a result of conjoining, one constitutive part of which is the embodied human subject supplying perceptual material to be intellectually "read" and made intelligible. If one also adds to this the two-subject view discussed above, some of Aquinas' worry can perhaps be allayed.

But part of the issue underscoring Aquinas' attack is whether for human beings intellectual self-awareness is immediate or not. Averroes' position implies that it is not immediate, but a later achievement developing in time (and is impossible without the role of separate intellects in human soul), whereas Aquinas insists that it is (see Black 1993). Aquinas is also concerned to ground the immortality of the human soul by identifying intellect as the *real* part of human soul, whereas Averroes' whole argument, it should be accepted, results in a rejection of such a possibility.

On the other hand, Averroes may be construed as arguing that in the noetic acts that are the ultimate origin of our meanings in the concrete world we live, the roles of three distinct conditions come together *in* the human soul; (i) The embodied human subject who is cognitively capable of synthesizing

sensory data of particular things and events into cogitations (true, refined images). (ii) The pure act of thinking, the purely actual form (i.e. the active intellect) which actualizes the intelligible forms (universal meanings) potentially present in the true images, just as form in the mind of artist actualizes the form found in the material. (iii) A noetic substratum (noetic receptor-cum-memory, i.e. the material intellect) that perceives-receives these universal meanings thereby also keeping them available to repeated and spontaneous considerations of the human subject. These three conditions, one might suggest, are necessary ones for the possibility of complete cognition.

Material intellect as the unique space of universal meanings shared by all human beings is the common ground that effectively interconnects human beings. It should be characterized as transcending the natural order, yet also as isomorphic with it (if our knowledge is to be about the world). If communication is grounded in universal meanings, and if universal meanings should obtain as invariant standards across all the human subjects who need to entertain them in thought and in speech and if universal meanings are things *we* somehow produce, Averroes' argument seems interesting; once formed, these universal meanings should reside in a subject other than the souls of human beings, that is, in an incorporeal, transcendent substratum as proper to their ontological character. Averroes then, following Aristotle's distinction between sense and thinking, suggests that one should place thinking/understanding somewhere beyond natural world, which in turn requires that the embodied human subject should be somehow conceived of as marked by a capability of conjoining with this transcendent noetic subject and thereby of taking part in thinking, so that embodied experience can be regarded working in connection with the noetic one. Thus this account aims at accommodating the role of embodied experience in knowledge, while also bringing it in conjunction with the universalizing role of noetic principles *operational* in human soul whereby universal meanings are produced, communicated and retained.

Finally, Averroes draws attention to the similarity between God and human beings with respect to the phenomenon of knowing (LCDA: 399). Like God our knowing itself makes things, is the cause of its objects. We make the essences of things of this world (that is, we turn them into intelligibles in act, after they are intelligibles in potency) acting in conjunction with the material

and agent intellects. Averroes finds here one further reason why the human species must be eternal (LCDA: 322-324); human beings are required for the functioning and thus for the existence of the material intellect since human beings are required for the production of intelligibles in act.¹⁵ This is, in one respect, analogous to Kant's basic epistemological insight (notwithstanding the key difference that Kant makes a radical distinction between appearances and things in themselves) in that both thinkers argue that human knowers must be actively involved in the production of what is knowable, "objects" in the case of Kant, and Intelligibles in the case of Averroes. But further study is required to develop this preliminary point.

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¹⁵ "... without the imaginative power and the cogitative [power] the intellect which is called material understands nothing." (LCDA: 359)

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