

{129} 1. **This, then, is what we have received from the ancients concerning the soul. Now, however, we will begin in another way to determine what the soul is with a definition which is more comprehensively inclusive.** (2.1, 412a3–6)

After he had responded to the opinions of the ancients, he began now to inquire concerning [the soul's] substance. He said: **This, then, is what we have received**, etc. That is, this, then, we said in response to the opinions which we have received concerning the soul. Next he related that we must begin by knowing its substance and [that we must] contemplate this until we know a definition which is more universal and more comprehensively inclusive of all the parts of the soul. He said: **Now, however**, let us begin, etc. That is, now, however, let us begin to speak about the soul as does someone who finds nothing useful about the soul in the ancients. First we ought to find a definition which is more universal for all its parts. For universal knowledge ought to precede knowledge which is proper [to a specific kind of soul]. His account is [something which can be] understood in its own right.

2. **Let us say, then, that substance is one of the [various] genera of beings. Of substances, one kind is substance as matter, which is not a determinate particular¹ per se. Another is form, by which it is said {130} of a thing that it is a determinate particular. And there is a third, which is what is composed from both of these. Matter is that which is in potency, while form is actuality. Form exists in two ways,² one is like knowing and the other is like theoretical understanding.³** (412a6–11)

Since he wished to know a universal definition for all the parts of the soul, and it was, as it were, clear that it is located in the genus of substance, he began

1. That is, a determinate particular entity. See Book 1, n. 25.

2. The translator rendering the text from Greek into Arabic apparently took καὶ τοῦτο διχῶς, "and actuality is of two kinds" (Aristotle, *De Anima* [1984]), with τοῦτο to refer to form, while the Greek referent seems rather to be ἐντελέχεια, as in *ibid.* The alternate Arabic translation has the ambiguity of the Greek: وذلك على جهتين (*ibid.* [1954]); "and that is so in two ways."

3. τὸ δὲ ὡς τὸ θεωρεῖν; والآخر كالتفكير; (Aristotle, *De Anima* [1954]). At 412a23 τὸ θεωρεῖν corresponds to the Latin *aspicere*, "pondering," and at 412a26 τὸ θεωρεῖν corresponds to the Latin *scire*, "knowing." In the alternate Arabic translation the text at 412a23 is corrupt, while at 412a26 the Greek is rendered by التفكير (*ibid.*)

to distinguish in how many ways substance is said and in what way it is soul. He said that substance is one of the [various] genera of beings, that is, of the beings having priority in being, of which soul is one. For to assert that the soul is an accident is unacceptable in view of what primary natural knowledge⁴ provides us. For we hold the opinion that substance is more noble than accident and that the soul is more noble than all the accidents existing here. After he had related that substance must in general be asserted as the genus of beings such as those, he began to distinguish its kinds. He said: **Of substances one kind is substance**, etc. That is, all the things of which substance is said exist in three ways, one of which is as prime matter, which per se is unformed and not something in act per se, as was said in the first book of the *Physics*.⁵ The second is form, by which an individual becomes a determinate particular. Third is what comes to be from both of those. That form exists and is substance is clear, for it is [known to exist] because it is apprehended by sensation, and it is substance because it is part of the [entire] substance and, likewise, when part of this substance is destroyed, the [entire] substance is destroyed. Likewise, prime {131} matter is substance because it is one of the parts which is such that when it is destroyed, the [entire] substance is destroyed, namely, the individual. Next he began to describe substance which exists as matter and [substance] which exists as form. He said: **Matter is that which is in potency**, etc. That is, matter is substance which is potentially, while form is substance by which this substance which is form potentially is actualized. That form is found in two ways. One is insofar as it is in act, [although] nevertheless there does not arise from it an action which is naturally constituted to arise from it, just as [no action arises] from a knower who does not make use of his knowledge. The second is insofar as that action arises from it just as it is in the case of a knower when he knows. The first form is called the first actuality, while the second is called the final [actuality].

3. **Bodies are the things which are properly called substances, and chiefly natural bodies, for they are the principles of the other bodies. Among natu-**

4. *Prima cognitio naturalis*. It seems likely that Averroes is following Themistius, who remarks that there has already been sufficient discussion of these matters in the accounts on the principles of nature generally. Themistius, *De Anima Paraphrase* (1899), 39.5–6; (1996), 56. In the Arabic it is remarked that this is على ما لخص في مبادئ الطبيعة بأسرها (*ibid.* [1973], 43.1–2); "according to what has been summarized in regard to the principles of nature generally." If that is correct, he is here stating that the principles of natural philosophy or physics assumed in this science of psychology (which is a subdivision of natural philosophy) include the doctrine of substance and accident and preclude consideration of the soul as an accident.

5. *Physics* 1.7, 191a8–12.

ral bodies some have life and some do not. To speak of life is to speak of being nourished,⁶ growing, and suffering diminution. Hence, every natural body which shares in life must be a substance and it is a substance insofar as it is composite. (412a11–16)

After he had shown us the number of substances, he began to explain to us which of these deserves more to have this name. He said: **Bodies [. . .] which are properly called**, etc. That is, composite bodies have {132} this name substance more properly insofar as it is more commonly used [of them] and chiefly [for] natural bodies, for they are the principles of artificial bodies. Next he said: **Hence, every natural body which shares in life must**, etc. That is, a natural body must be a substance; indeed it deserves more to have this name **substance**. Next he expounded [the meaning of] this name **life**. He said: **To speak of life is to speak of being nourished**, etc. That is, I understand by life the principle which is common to everything alive, namely, to be nourished, to grow, and to suffer diminution in an essential way. This is what is characteristic of plants. For this name, life, was said in the Greek language of everything which is nourished and grows.⁷ Animal, however, is said of every body which is nourished and has sensation. In Arabic they seem to signify the same thing, yet only an animal which lacks the principle of nutrition and sensation at the same time, not just the principle of sensation and motion alone, is called dead. He said in an essential way⁸ because we do find in addition to what is living something which is similar to growth and diminution and [which nevertheless] is not living.⁹ After he had explained that it is necessary for every body having life to be a substance, he explained what sort of substance. He said: **and it is a substance insofar as it is composite**. That is, a living body must be a composite substance, and it is this individual.

6. τὴν δι' αὐτοῦ τροφήν. See n. 8 below.

7. Cf. Themistius, *De Anima Paraphrase* (1899), 39.30–31; (1973), 44.13–14; (1996), 57.

8. *Essentialiter*. There is nothing in the Latin of the Text of Aristotle corresponding to this word. In the *Middle Commentary* (2002), at 43.17–18, however, Averroes says, “and I mean by ‘life’ that which has nutrition, growth, and diminution, and that essentially—that is, by means of an internal principle.” وأعني بقولنا حياة ما له تغذ ونمو ونقص وذلك. بالذات، أي بمبدأ فيه. The corresponding Greek text has, “by life we mean self-nutrition (τὴν δι' αὐτοῦ τροφήν) and growth and decay—that is, by means of an internal principle.” My translation. *Essentialiter* may indicate the presence of the Greek δι' αὐτοῦ as بذاته in Averroes' Text as he possessed it, while the Latin translator's Arabic manuscript may have been faulty, dropping this from the Text but retaining it in the Comment.

9. Cf. Themistius, *De Anima Paraphrase* (1899), 41.30–42.2; (1973), 49.7–50.1; (1996), 59. There natural growth in living things is contrasted with ‘growth’ in the side of a stone by addition.

4. Because the living body is a body and is of a certain sort, it is impossible for the soul to be a body. For a body is not one of the things which are in a subject. Rather, {133} it is as subject and matter. Hence, the soul must be substance insofar as it is the form of a natural body having life potentially. (412a16–21)

After he had explained that the living body is a substance insofar as it is a composite of substance as matter and substance as form, he began to inquire concerning the soul whether it is a substance which is composite, namely, a body, or [whether it is substance] as form. For to say that the soul is matter is unacceptable, and this is self-evident. He said: **Because the living body**, etc. That is, the soul is not substance as composite. For a composite body having life is not a living body insofar as it is just body, but insofar as it is a body of a certain sort. It is, then, living by something existing in a subject, not by something not existing in a subject. But the body is substance insofar as it is a subject. After he had provided the propositions from which it follows that the soul is not a substance insofar as it is body but insofar as it is form, he said: **Hence, soul must be substance insofar as it is the form of a natural body having life potentially**, etc. That it is not a substance as body will be shown in the second figure¹⁰ through those two propositions mentioned earlier, namely, that the soul is in a subject and the body is not in a subject. For that [the soul] is substance as form is clear from the fact that it is a substance in a subject. For this is characteristic of form, namely, that it is a substance in a subject. It differs from accident, since an accident is not part of this composite substance, while form is part of this composite substance. Moreover, it is said in an equivocal way that form is in a subject and accident is in a subject. For the subject of an accident {134} is a body composed of matter and form and it is something existing in act and does not require the accident for its being. But the subject of form does not have being in act, insofar as it is subject, except through form, and it requires form in order to exist in act. This is chiefly the case for the first subject, which is not altogether free of form.¹¹ Because of the similarity of those,¹² several of

10. That is, the second figure of the syllogism.

11. That is, the corporeal form. “In medieval Arabic and Jewish philosophy three views were held concerning the nature of this corporeal form. Avicenna was of the opinion that the corporeal form is identical with the predisposition for receiving corporeal dimensions, but not with the dimensions themselves. Algazali agreed with Avicenna that the corporeal form is not identical with the dimensions, but he identified it with cohesion. Averroes, disagreeing with both, maintained that the corporeal form is identical with the indeterminate three dimensions.” Arthur Hyman in Averroes' *De Substantia Orbis* (1986), 41, n. 7. Also see Hyman (1965).

12. Namely, of substantial form and accidental form.

the theologians erred and said that the form is an accident. On the basis of this it will be explained fully that the soul is not substance as matter. For matter is substance insofar as it is a subject, while soul [is substance] insofar as it is in a subject. He said: **having life potentially**, etc. That is, the soul must be substance insofar as it is the form of a natural body having life to the extent that it is said to have that form potentially, so that it carries out the actions of life through that form.

5. **That substance is actuality; it is, then, actuality of such a body. Because actuality is said in two ways, one as knowing and the other as pondering,**¹³ **it is clear that this actuality is like knowing, since the being of the soul is present in that.**¹⁴ **Wakefulness is similar to [the exercise of knowledge in] study, while sleep is similar to the disposition of a thing when it can act but is not acting.** (412a21–26)

After he had explained that the soul is substance as form and [that] forms are the actualities of things having forms and [that] they are of two sorts, he began to show that actuality is in the definition of soul as a genus. He said: **That substance is actuality**, etc. That is, because substance which exists as form [135] is an actuality of the body having form—and it was already explained that the soul is form—it is necessary that soul be the actuality of such a body, that is, the actuality of a natural body having life potentially, insofar as it is made actual by the soul. After he had explained that the soul is an actuality, he explained in how many ways actuality is said. He said: **actuality is in two ways**, etc. That is, because actuality is in two ways, one as knowledge

13. Note that *scire* corresponds to ἐπιστήμη and *aspicere* to τὸ θεωρεῖν, which are translated respectively as “knowledge” and “reflecting” in Aristotle, *De Anima* (1984).

14. *Quoniam apud ipsum est esse anime* is a corrupt text which corresponds to the Greek ἐν γὰρ τῷ ὑπάρχειν τὴν ψυχὴν καὶ ὕπνος καὶ ἐγρήγορσις ἐστίν, “for both sleeping and waking presuppose the existence of soul.” Aristotle, *De Anima* (1984). The alternate translation has mention of sleep and waking but is also faulty in its own way and appears to omit the underlined text (omitted apparently by homeoteleuton either in the Greek tradition or on the part of the translator from Greek): αὕτη δὲ λέγεται διχῶς, ἢ μὲν ὡς ἐπιστήμη, ἢ δὲ ὡς τὸ θεωρεῖν. φανερόν οὖν ὅτι ὡς ἐπιστήμη· ἐν γὰρ τῷ ὑπάρχειν τὴν ψυχὴν καὶ ὕπνος καὶ ἐγρήγορσις ἐστίν. “Now there are two kinds of actuality corresponding to knowledge and reflecting. It is obvious that the soul is an actuality like knowledge; for both sleeping and waking presuppose the existence of soul.” Ibid.; emphasis added. والانتلاشيا على جهتين: أحدهما كعلم بوجود، لأن النوم واليقظة إنما يكونان بوجود النفس (ibid. [1954]); “Actuality is of two sorts, one like knowing with existence because sleep and wakefulness are only with the existence of the soul.” Aristotle, *De Anima* (1954). The *Middle Commentary* (2002), at 44.10–12, may be dependent on Themistius. Averroes’ quotation in the Comment below indicates the problem was in his Arabic Text.

existing in the knower when he does not use his knowledge and another as knowledge existing in a knower when he is using it. Next he began to show in which of those two ways it is said that the soul is an actuality. He said: **it is clear that this actuality is as knowledge**. That is, because it was already explained that the soul is the actuality of a natural body, and actuality is said in two ways, then it is clear that the actuality by which it is alive and by which [the body] differs from a body which is not alive is existing in it as knowledge [exists] in the knower. Next he provided the reason for this. He said: **since the being of the soul is present in that**. That is, since the soul is found in the being of that actuality in the thing which is alive, not in the being of the other actuality.¹⁵ After he had shown that the actuality taken in the definition of soul, which is the substance of the soul, is that which is just as knowledge existing in a knower when he does not use it, he provided an example of this. He said: **Wakefulness is similar to**, etc. That is, when an animal is sleeping, the soul will then be in it as the first actuality. This is like the being of knowledge in the knower at a time at which he does not exercise it in study and not like the being of ignorance in one who does not know. For it is clear that in sleep an animal has a sensitive soul but is not using sensation, just as one who knows has knowledge but is not using [136] it. The disposition of the soul during wakefulness in animals is like the knowledge in the knower when he uses it. This is in the sensitive soul. The nutritive soul, however, is never found in animals except as a final actuality, unless someone asserts that there is some kind of animal which is not nourished at some time, namely, at a time at which it remains in stones, such as large frogs, which store nothing and remain in stones for the whole winter, and likewise for several [kinds of] snakes.¹⁶ Accordingly, this will be common to the sensible and nutritive soul with the same intention. If not, then the actuality taken in these will be by equivocation. Whatever way it may be, when one understands there to be difference between the being of both of those, then there will be no harm in taking this in an indefinite way in this definition, since it is impossible to do otherwise. He said: **and sleep is similar to the disposition of a thing**, etc. That is, the disposition of the soul in sleep in animals is similar to the disposition of a thing at the time at which it can act but does not act. This is a description of the first actuality and from this we can understand the description of a final actuality. [This final actuality] is the disposition of a thing by which a being acts or is acted upon at the time at which it acts or is acted upon.

6. **In the same person knowledge is prior in being [to its exercise]. For this reason the soul is the first actuality of a natural body having life potentially.**

15. That is, the second actuality.

16. Averroes here refers to various species of hibernating animals.

And [this] is insofar as [the body] is something having organs. The parts of plants are also organs, but they are very simple, for example, the leaves are coverings and garments for the fruits, while the roots are similar to a mouth, for food is absorbed in those two ways. (412a26–b4) {137}

After he had explained that the soul's genus is [that of] actuality which is like knowledge existing in a knower when he is not using it, he began to relate that this actuality precedes the second actuality in being and that because of this one ought to add in the definition that the soul is the first actuality of a natural body having life potentially. He said: **In the same person knowledge**, etc. That is, in the individual the actuality which is like knowledge precedes in being the actuality which is like [the exercise of knowledge in] study. After he had related this, he began to relate that because of this we ought to state this intention in the definition, so that by this it may be distinguished from the final actuality. He said: **For this reason the soul is the first actuality**, etc. That is, for this reason it should be stated in the definition of the soul, etc. Next he said: **And [this] is insofar as [the body] is something having organs**. (Here there is a blank space in the manuscript.)¹⁷ It is a body insofar as it is something having organs, and a body having life potentially is first and foremost a body having organs. After he had related that every living body is something having organs, which was clear in animals but not immediately evident in plants, he began to show that organs also exist in plants. He said: **The parts of plants are also organs**, etc. His account concerning this is clear. What he said concerning plants is clear, for the leaves are for plants like the hide in animals and the roots are like the mouth, since each takes in food. He meant this when he said: **for food is absorbed in those two ways**, namely, the roots and mouth and other openings which pass through to those. {138}

7. **If, then, something universal should be said in regard to every soul, we will say that it is the first actuality of a natural body having organs. For this reason we should not investigate whether the soul and the body are the same, just as we should not investigate this in regard to the wax and the shape nor the iron and the shape¹⁸ nor generally in regard to the matter of anything and in regard to what has that matter. For since one and being are**

17. *Ita cedit in scriptura locus albus*. Since there is no problem in the Text on which Averroes comments, this seems to be a remark on the part of the Latin translator.

18. *Neque in ferro et figura* has no corresponding Greek text. The alternate Arabic translation has *كان الموم وطبعته شيئاً واحداً*, "the wax and its shape are one thing," where Badawi corrects the manuscript's *الموم وطبعته القوم وصنعتهم* apparently with *الموم وطبعته* to agree with the Greek. This addition in the Text of Averroes, however, may be related to the manuscript text which Badawi corrects in his edition of the alternate text. See Aristotle, *De Anima* (1954).

said in many ways, the actuality is that of which this is said in the primary intention. (412b4–9)

If, then, something universal, etc. That is, if, then, it is possible to define the soul by a universal definition, no definition is more universal than that one nor is any more appropriate for the substance of the soul. It is that the soul is the first actuality of a natural body having organs. He put forth this account in the form of a difficulty, when he said: **If, then, [. . .] it should be said**, etc., to excuse himself from the difficulty which occurs in regard to the parts of that definition. For actuality in the rational soul and in the other powers of the soul is said in an almost purely equivocal way, as will be explained later.¹⁹ For this reason one can raise questions and say that the soul does not have a universal definition. For this reason he said: **If, then**, etc. As if he is saying: if, then, it is conceded to us that it is possible to find a universal account which includes all the parts of the soul, this will be that account. Next he said: **For this reason we should not investigate**, etc. That is, it had been explained that the soul is the first actuality of a natural body and that something which is alive has this being only from the fact that it has soul. Hence, we should not raise questions {139} as to how the soul and body, although they are two, become [one and] the same, just as we should not raise questions about this in the case of the wax and the iron with the shape existing in them, and generally in regard to the matter of anything whatsoever and a thing which exists in that matter. For, although these names, one and being, may be said in many ways, nevertheless the first actuality in all those, namely, the form, deserves more to have this name, one and being, than what is compounded of matter and form. For a compound is called one only by the unity existing in the form, for matter is not a determinate particular except through form. If matter and form were existing in act in the composite, then the composite would be said to be one only in the way in which that is said for things which are one by contact and by being bound together. Now, because matter differs from form in the composite only potentially and the composite is not a being in act except through form, then the composite is said to be one only because its form is one. By this he hinted in a way at the question which follows for those who say that the soul is a body, [the question of] how it is that what is compounded from soul and body becomes one.

8. **We already said, therefore, what the soul is universally. It is a substance in this intention, namely, insofar as this body is what it is.**²⁰ **For, if some tool**

19. See below {405} and {397}.

20. The corresponding Greek, οὐσία γὰρ ἡ κατὰ τὸν λόγον. τοῦτο δὲ τὸ τί ἦν εἶναι τῷ τοιῷδὲ σώματι, is rendered, "It is substance in the sense which corresponds to the account of a thing. That means that it is what it is to be for a body of the character

were a natural body, such as an axe, then the sharpness of the axe²¹ would be its substance and soul in this intention. For this reason, when that [sharpness] has been taken away, it {140} will not be an axe later on except equivocally. Now [the axe] will be an axe later on, for the soul is not the quiddity and intention of a body such as that, but it is of a natural body which is such that it has [in it] a principle of motion and rest. (412b10–17)

Since he had earlier said that the soul is a substance, [and then] next explained that it is form and actuality, he began here to set out the way in which one can be certain that natural forms are substances. This is necessary in this passage. He said: **We already said, therefore**, etc. That is, it was therefore explained from what we said what the soul is universally. According to what we said in this definition, the soul is substance in the intention in which we say the thing by which this natural body exists is substance, not in another way. Next he provided an example from artificial bodies and spelled out the difference between natural and artificial bodies in this. For the beings of artificial things are accidental. For this reason some thought that it was so concerning natural bodies. He said: **For, if some tool**, etc. That is, the forms and beings of natural bodies are substances. Since for if some tool were a natural body, such as an axe (that is, if we imagine it to be a natural being), then the axe's sharpness would be its substance. Next he provided the reason²² for this. He said: Likewise when that [substance] is taken away,²³ etc. That is, it is necessary in the case of the axe, if it were a natural being, that its sharpness be its substance. For the only thing called an axe is what is compounded from {141} matter, namely, iron, and form, which is the sharpness. If the sharpness is removed and the axe were a natural body, then

just assigned" (Aristotle, *De Anima* [1984]); وفي الجملة قد قيل ما النفس وأنها الجوهر على ما في الحد ، والحد هو الدليل على ما هو الشيء في آتيته ، فإنه في جرم صفته كذا وكذا (ibid. [1954]); "For we already said what the soul is universally and that it is the substance according to what is in the definition. The definition is the indication of what the thing is in its being. Then <we said> that it is in a body whose nature is such and such." The *Middle Commentary* (2002), at 45.1–4, has, "This discourse has now clarified the fact that the soul is substance qua the perfection which is the form. For in that it is the soul by virtue of which the body is what it is—that is, the soul is predicated of the body as quiddity, and that which is so predicated is substance, so the soul is substance."

21. The Text here provides an interpretation of the corresponding Greek text, which merely has τὸ πέλκει εἶναι, "being an axe." Aristotle, *De Anima* (1984). This may be based on Themistius (*De Anima Paraphrase* [1899], 42.22; [1973], 51.5; [1996], 60), as Ivry indicates. See *Middle Commentary* (2002), 171, n. 11.

22. *Rationem*.

23. *Et similiter ista cum abstracta est* corresponds to the Text's *Et ideo, cum istud est abstractum* but takes the subject to be *substantia*, not *acumen* (sharpness).

the axe would not exist because the matter and form would not exist, unless it were called an axe equivocally. The substance is what is such that its removal results in the destruction of this substance for it is part of it. But part of the substance is substance. Next he said: **Now [the axe] will be an axe later on**. That is, now, however, because the axe is an artificial body, even though sharpness has been taken from it, nevertheless later on it will be called an axe because of its shape, for the shape proper to it is the same in it both with and without sharpness.²⁴ What he said will be evident from what I say. For it is self-evident that this name axe, whether it be natural or artificial, is said of that compound from that which is, as it were, a form in it and from that which is, as it were, matter [in it]. Furthermore, it is clear in itself that axe is said of one of the individuals possessing substance. In this way this name which is said of it insofar as it is an individual possessing substance must be said of it according to matter and form at once. Hence, each must be substance, for the parts of substance are substance. In this way, when form has been taken away, this name must be removed from it, namely, the name which indicates it insofar as it is an individual. Or might we say that this name is said of it only as matter alone, for instance, insofar as it is an iron body? Then the form will be an accident in it, and then, if the form is removed, it will be necessary for this name, which is said of it insofar as it is called an individual substance, to remain. But because the matters are removed and no being remains except equivocally when the forms of natural things are removed, {142} then, when we assert the axe to be a natural body and the sharpness which is in it as form is removed, the matter must be removed and no being must remain. When, therefore, the form is removed according to this intention, immediately this name axe is removed, which indicates it insofar as it is an individual possessing substance. For by the removal of the form the matter is removed; and when the matter and form are removed, nothing remains of these which are indicated by this name insofar as it indicates one of the individuals possessing substance, unless it be a different individual, and then it is called an axe only equivocally. Natural forms, therefore, are substances because, when they are removed, the name which indicates the being insofar as it is an individual possessing substance is removed. Likewise the definition which is according to that name [is removed], for the genus and difference of which one indicates the matter and the other the form are removed. For instance, when sensation is removed from flesh, the flesh remains only in an equivocal way, as the flesh of something dead. Because when an artificial form is removed, the matter is not removed but remains in name and definition (since when the shape

24. The corresponding text of the *Middle Commentary* seems to presuppose an explanation such as is found here in the *Long Commentary*. See *Middle Commentary* (2002), 45.8–10.

of the axe is removed, it remains the same iron as before in name and definition), then it is necessary and right that its name remain, namely, axe, which indicates this instrument insofar as it is an individual possessing substance, although sharpness is removed. This was because the name is said in natural things first from form and second from the compound. In artificial things, it is to the contrary, namely, because [it is] first [said] from matter and second from the compound. In artificial things, then, it indicates the individual possessing substance according to its first signification because it signifies matter. In individual natural things possessing substance it indicates it according to its first signification since [143] it signifies form. For this individual is a determinate particular only through its form, not through its matter.

For matter has no being in act in natural bodies insofar as it is matter, and being is not in act except as having form. This is quite clear in the forms of simple things, since when the form is removed, nothing remains. In artificial things nothing is a determinate particular except by its matter, not by its form. In this way the difference between natural and artificial things will be explained to you and you will understand what Aristotle says, and the difficulty which induces the belief that forms are accidents is removed. Next he said: **For the soul is not**, etc. That is, concerning the soul it is the contrary of what is the case for sharpness, for its name is removed from something alive by the removal of the soul, and [the name] remains in the axe, although the sharpness is removed. For the soul does not belong to the same sort of body as that in which the sharpness exists, namely, to a body of an artificial instrument but to a natural one.²⁵ He meant this when he said **such**. What he called a **principle of motion and rest** is the disposition of a natural body.

9. **One should consider what is said concerning this in regard to the members [of the body] also. For if the eye were an animal, then vision would be its soul. For that is the eye's substance, what it is according to its intention. The body of the eye is the matter of vision, which, when [vision] fails, is called an eye only in an equivocal way, just as is said regarding a stone eye.**²⁶

25. *Anima enim non est talis corporis in quo est acuitas, scilicet corporis artificialis organici, sed naturalis*. While there are no significant variants for this entire sentence indicated by the editor, the thought would seem to require that *organici* be taken with *naturalis*, yielding a contrast between an artificial body and a natural organic body. The problem, however, is more satisfactorily resolved by reading *organi* with manuscript C in lieu of *organici*. In the *Middle Commentary* (2002), at 45.4–5, Averroes explains that the axe is “an artificial instrument,” آلة من الآلات صناعية.

26. The Greek adds καὶ ὁ γεγραμμένος: “the eye of a statue or of a painted figure.” Aristotle, *De Anima* (1984). The alternate translation retains the Greek as أو مصورة في الحائط (ibid. [1954]); “or painted on the surface.” Note that Averroes evidences knowledge

What is said concerning the part should be taken in regard to the whole body, for the relation of part to part is just as [that] of the whole sensory power to the whole of that which is able to have sensation. (412b17–25) [144]

After he had explained that the soul is with respect to the body just as form in matter (for in natural bodies form more appropriately has this name substance than does matter) and that the individual is an individual only through form (because it is an individual only insofar as it is a being in act, and it is a being in act through its form, not through its matter), and had explained this with argument, he now wants to show this by way of example. He said: **One should consider what was said [. . .] in regard to the members [of the body]**. That is, what was said in regard to the soul, that it is substance because when it is removed, the name is removed from the thing which is alive, is confirmed in the members [of the body] to which the particular powers of the sensitive soul properly belong. Next he provided the eye as an example of this. He said: **For if the eye were an animal**, etc. That is, since the relation of vision to the eye is just as the relation of the soul to the body, if we imagined the eye to be an animal, vision would necessarily be its soul. For vision, then, would be the substance of the soul with respect to what it is²⁷ and the eye would be the matter of that soul. Next he said: **which, when it fails**, etc. That is, [this is] because it is clear in the case of vision that when it fails, the eye does not remain [in existence] afterwards except in an equivocal way, just as the eye made of stone or fashioned on a wall, which does not have any of the intention of the eye except for the shape alone. And because vision is the substance of the eye, it is clear that the soul ought to have such a disposition with the body, namely, that, when it is removed, the name is removed from the thing which was alive and it does not remain alive except in an equivocal way. For instance, when animality is removed from some individual, the animal does not remain an animal except in an equivocal sense; hence soul is substance. Because he had already asserted first [145] that it is so for the part just as for the whole and that it is possible for us to have certainty concerning the whole by considering

of the correct text when he paraphrases this passage in his Comment: “just as the eye made of stone or fashioned on a wall.” Cf. Themistius, *De Anima Paraphrase* (1899), 43.2; (1973), 52.8; (1996), 60–61.

27. *Secundum illud quod est*—that is, with respect to form. This passage is very close to what is found in the *Middle Commentary*: مثال ذلك أن العين لو كانت حيوانا لكان البصر نفسها وصورتها، ولكن هذا هو جوهرها الذي به العين هي ما هي. ولكانت موضوع البصر نفسه وصورتها، قوة البصر هي هيولى هذا الحيوان. “The eye, for example, were it an animal, would have sight as its soul and form, for [sight] is [the eye’s] substance through which the eye is what it is. Accordingly, the subject of the faculty of sight would be the matter of this animal.” *Middle Commentary* (2002), 45.14–15.

this in regard to the parts, he began to show in this passage the way in which judgment about the whole and [judgment] about the part are the same. He said: **for the comparison of part to part**, etc. That is, it must be for the whole just as it is for the part in regard to this intention, since the relation of some member according to its particular sensitive form in being the substance of that member is the relation of the whole of the sensory power to the whole sensitive body. What he said is clear. For the relation of vision, which is part of sensation to the eye, is just as the relation of the whole of the sensory power to the whole body. Because the relation is the same, and vision is [the eye's] substance, the soul will therefore be substance.

10. **What has the potency to live is not that from which the soul has been removed, but that which has soul. But seed and fruit are body of such a sort potentially. For just as cutting and seeing are actualities, so too is being awake. Just as vision is a power belonging to an instrument, so too is soul. The body, however, is that which is in potency. Just as the eye is vision and a member [of the body],²⁸ so too the animal is soul and body.** (412b25–413a3)

Because in the definition of soul he had included potency, which is said in an equivocal way, he began to explain what intention he means and to complete the explanation of that and of the first and the second intention by this same sort of explanation from which he began, namely, by way of example. He said: **What has the potency to live**, etc. That is, when we say of the body, [146] that it is what has the potency to live, we do not mean by this just what we say in regard to what does not have a positive disposition and form by which it is able to act and be acted upon (as we say that the seed and the fruit have the potency to live and that the menstrual blood has the potency to have sensation or to be moved). Rather, we say this in regard to what has in act a soul by which it acts or is acted upon, but at that [particular] time neither is acting nor is being acted upon, such as a sleeping animal. After he had shown this concerning the potency which is the first actuality, he provided the difference between that and the potency which is not the soul in its own being. He also began to show by example the difference between the first and the second actuality in things having forms. He said: **And just as cutting and seeing, etc.** That is, just as cutting in the axe and seeing in the eye are final actualities of those things, so too wakefulness is the final actuality of a sensitive animal. He

28. ἡ κόρη, "the pupil," is given in the Greek and reflected in the alternate translation: وكما أن الحدقة هي العين و البصر (Aristotle, *De Anima* [1954]). Note that while the Greek says "the pupil *plus* the power of sight constitutes the eye" (ibid. [1984]), the Arabic has "the pupil is the eye and the power of vision."

said this because it is clear that the relation of cutting to the instrument when it cuts and of vision to the eye when it sees is just as the relation of the action of the senses to the animal while awake. For wakefulness is the use of the senses. Just as that disposition is the final actuality of the eye, so too wakefulness is the final actuality of an animal. Next he said: **Just as vision is a power belonging to an instrument**, so too is soul. That is, just as vision, when an animal does not make use of it, is said to be a potency by which the eye sees, so too we say that the soul is the potency by which an animal lives, when the animal is not acting by those actions of the soul. Next he said: **The body, however, is that which is in potency**. That is, the body of the animal, however, is that which receives that potency or that which is said to have that power. It is called potency because [147] sometimes it acts and sometimes it does not; it is [also] called potency at the time in which it is not acting. Next he said: **Just as the eye is a member [of the body] and vision, so too the animal is soul and body**. That is, just as this name eye is said of that member which is a composite body and of the power of vision which is in it, so animal is said of soul and body. His account in this chapter is clear.

11. **It is not unapparent that neither the soul nor a part of it, if it is naturally constituted so as to be divided, is separate from the body. For it is the actuality of certain parts.²⁹ But nothing prevents it from being the case in regard to certain parts, because they are not actualities of some thing [which is] part of the body. Besides, it was not explained whether the soul is related to the body as the pilot to the ship.³⁰ This, then, is how we should reach this [definition] concerning the soul, according to example and description.³¹** (413a4–10)

After he had included in the universal definition of the soul that it is the actuality of a natural body, he began to explain how much is apparent from

29. The Greek is much clearer: "From this it is clear that the soul is inseparable from its body, or at any rate that certain parts of it are (if it has parts)—for the actuality of some of them is the actuality of the parts themselves." Aristotle, *De Anima* (1984).

30. *Gubernator*. The Greek has πλωτήρ, "sailor." Aristotle, *De Anima* (1984). Alexander has κυβερνήτης, "pilot," at Alexander, *De Anima* (1887), 20.28ff.; (1979), 29, as does Themistius, *De Anima Paraphrase* (1899), 43.29; (1996), 60–61. The Arabic version of Themistius has الريان *al-rubbân*, indicating one in control. The alternate Arabic translation has ركاب السفينة (Aristotle, *De Anima* [1954]), indicating the one in charge of the ship. The *Middle Commentary* has الملاح, "sailor." *Middle Commentary* (2002), 46.18. The *Middle Commentary* divides the Text here. See *ibid.*, 46.21.

31. τύπω μὲν οὖν ταύτη διωρίσθω καὶ ὑπογεγράφθω περὶ ψυχῆς. "This must suffice as our sketch or outline of the nature of soul" (Aristotle, *De Anima* [1984]); ولكن يُجْعَلُ أن النفس على المجاز بهذه الحال بجهة التمثيل (ibid. [1954]); "However, it is maintained that the soul exists analogously in this disposition by way of example."

this definition concerning separation or non-separation [from the body]. He said: **That the soul**, etc. That is, it is evident that it is not unapparent from what was said in the definition of the soul that it is impossible for the soul to be separate from the body either according to all [its] parts or through some part of it, if it is naturally constituted to be divided. For it is apparent that certain of its powers are actualities of parts of the body insofar as natural forms are made actual through matter. But it is impossible for such a thing to be separate from that through which it is made actual. {148} Next he said: **But nevertheless nothing prevents**, etc. That is, but this is not clear in regard to all its parts since it is possible for someone to say that a certain part of it is not the actuality of some member of the body or to say that although it is an actuality, nevertheless some actualities can be separate, as the actuality of the ship by the pilot. Because of these two [considerations], then, it does not seem clear from this definition that separation is impossible for all of the parts of the soul. Alexander says that from this definition it is apparent that none of the parts of the soul are separate.³² We will speak about this when we speak of the rational power.³³ Next he said: **In this way, then**, etc. That is, just so much knowledge, then, has been provided by such definitions which have been brought forth by way of example and in accord with universal accounts, as we have done here. That is, they do not make the thing known in a perfect way such that all the characteristics which follow for that thing are apparent from that [definition]. For this reason, after we have investigated each of the parts of the soul according to the definition proper to each, this intention and the rest of the intentions which should be sought concerning the soul will then be apparent.

12. **Because what is clear—which is more near in account to what should be understood—arises from things which are [in themselves] obscure but more apparent [to the senses], we should also seek to follow that course in regard to the soul. For it is necessary not only that a defining account show what the thing is,³⁴ but also that the cause be found and [made] clear in [the account]. Now, however, the intentions of definitions are like conclusions, for instance, squaring {149} is finding an equilateral surface consisting of right angles equal to a rectangle. This definition is the intention of the**

32. Cf. Alexander, *De Anima* (1887), 29.22–30.6; (1979), 44–45, where Alexander argues that the soul's higher powers, which are actualities of the soul, cannot exist separate from prior powers; and (1887), 20.26–21.33; (1979), 29–31, where he rejects the analogy of the soul and the pilot as an argument for the separability of the soul as actuality from the body of which it is the actuality.

33. See {393–394} and {396–397}.

34. For "what the thing is" (*quid est res*) the corresponding Greek text has τὸ ὅτι, "the mere fact." Aristotle, *De Anima* (1984). The original translation may have been

conclusion. But one who says that squaring is finding a mean in a thing has given an account of the cause. (2.2, 413a11–20)

The knowledge acquired from this definition is not sufficient for knowledge of the substance of each and every part of the soul. This definition is universal for all the parts of the soul and [is] said of them in many ways. Such definitions are not sufficient for knowledge of the thing in a perfect way when they are universal univocally, much less when they are universals [predicated] in many [differing] ways. For we should seek afterwards to know by an appropriate knowledge each and every one of the parts which are gathered under that definition, since the definition is not said of them in a univocal way. Hence, he therefore began here to show the way to knowledge of definitions which are appropriate to each of the parts of the things not known and [to show] the reason why definitions are not sufficient in regard to such things. He said: **Because what is clear—which is more near**, etc. That is, because the natural way for knowing the proximate causes for things is to go from things obscure by nature [though] apparent to us, which is to go from things which are posterior to things which are prior in being, as was said in the *Posterior Analytics*,³⁵ it is necessary for us to proceed in that way in knowing the definitions proper to each of the parts of the soul. There is no way to know such definitions, namely, those which are composed from proximate causes proper to the thing, since they are unknown, except from posterior things [here] with us. Next he said: **For it is necessary not only that a defining account show**, etc. That is, the reason {150} why such universal definitions are not sufficient for knowing a thing is because it is necessary that the account which defines perfectly not only show the genus of the thing, as many definitions do, but a defining account ought to show the thing's own proximate cause existing in it in act, namely, the form, not the genus. After he had made this known, he related what sort of definition is the definition which he seeks in regard to every part of the soul and of what sort of definition is the definition mentioned earlier. He said: **Now, however, the intentions of the definitions are like conclusions.** That is, that definition which we now seek is similar to definitions which are like a principle of demonstration. But the universal definition mentioned earlier is similar to definitions which are like a conclusion of a demonstration. After he had explained this, he provided an example concerning definitions

quod est res. The Text here also omits ὥσπερ οἱ πλείστοι τῶν ὁρῶν λέγουσιν, "as most now do." Ibid. The alternate translation has فَإِنَّهُ يَنْبَغِي لِلْحَدِّ أَنْ لَا تَكُونَ فِيهِ دَلَالَةٌ عَلَى آتِيَةِ الشَّيْءِ فَقَطْ دُونَ أَنْ يَبِينَ عَنْ عِلَّتِهِ (ibid. [1954]); "For the definition requires that there not be in it an indication of the being of the thing alone without making its cause evident."

35. *Posterior Analytics* 1.2, 71b33–72a5.

which are like a conclusion, if they are not known to be in the thing defined or it is the cause sought in regard to them, and concerning definitions which are not like a conclusion of a demonstration, but are, if they are self-evident, a principle of demonstration. And if they are not known, then it is impossible for them to be explained to be in the thing defined except by an argument. He said: **For instance, squaring**, etc. That is, an example of universal definitions which are like a conclusion of a demonstration is to respond to one asking what something squared [is] that it is a surface possessing right angles and [lines of] equal lengths [and] which is equal to a rectangle. Next he provided an example of a definition which is like a principle of demonstration. He said: **But one who says that squaring**, etc. That is, but one who defines something squared as something which is a surface possessing right angles [made up of lines] of equal length, made on the line mediate in relation to the sides of the rectangle which will be made equal to it, [this person] defines something squared by a definition which is like a principle [151] of demonstration, since he defines it by a proximate cause. When he said: **Now, however, the intentions of the definitions are like conclusions**, he did not mean that this definition brought forth for the soul is a conclusion of a demonstration, but he meant that it is of the genus of those definitions, insofar as such definitions are universal. For this reason he said: **are like conclusions**. For those definitions either are conclusions or are similar to definitions which are conclusions. Moreover, he did not mean that the definition sought here in regard to each of the parts of the soul is from among the definitions which are like a principle of demonstration, such that they are self-evident, because they are not known from our viewpoint and the method for coming to know them is from things posterior, as he said. But he meant that it is of the genus of those definitions. For such definitions either are a principle of demonstration or are similar to definitions which are like a principle of demonstration. For this reason his account ought to be read in this way: **but the cause be found and [made] clear in [the account]**. That is, the account defining the soul in a perfect way ought to be such that the proximate cause is evident in [the definition]. That definition is from among the definitions which are similar to definitions which are principles of demonstration, inasmuch as it is a proper definition.³⁶ However, the definition which we provided now for the soul is from among the definitions which are similar to definitions which are conclusions of a demonstration, insofar as it is general for all the parts of the soul and in it the proximate cause was not brought forth.

13. **Let us, then, begin the inquiry and say that what is alive is distinguished from what is not alive by living. And, [152] because to live is said**

36. That is, the definition is specific, not generic.

in many ways, we will say that a thing lives if any one alone of these is found in it, for instance, understanding, sensation, motion and rest in place, to take nourishment and to suffer diminution, and to grow. (413a20–25)

Earlier he had made known the definition of the soul in a universal way and he had made known how much knowledge of a thing such definitions give and that they cause knowledge in a diminished way, not perfectly, since they are universal and like a conclusion of a demonstration. [He had also made it known] that the definition which should be sought in regard to each of the parts of the soul is similar to proper definitions which are like the principles of demonstration. In the case of such definitions, since they are not clearly existing in what is defined, as happens in the case of the parts of the soul, it is necessary to proceed to the knowledge of these from posterior things which are more known to us, namely, composites. He said: **Let us, then, begin the inquiry**, etc. That is, let us say, then, that because it is known to us that what is alive differs from what is not alive only by life, but living is said in many ways, that is, on the basis of many actions which are in it, it is clear that everything of which one of those intentions or one of those actions or more than one is said is alive. He meant this when he said: **if [. . .] any of these is found in it**, etc. Next he enumerated the actions ascribed to life. He said: **For instance**, to understand, to have sensation, to move itself and to rest in place, **to take nourishment and to suffer diminution, and to grow**. That is, those actions ascribed to life are of four kinds, one is to understand, the second to have sensation, the third to be self-moving and to be at rest in place, the fourth **to take nourishment**, to grow, and **to suffer diminution**. {153}

14. **For this reason all plants are thought to live, for there exists in them a potency, a power, and a principle through which they receive growth and suffer diminution in two contrary places. For they do not grow and suffer diminution³⁷ upward and not downward, but rather upward and downward alike. Everything which is nourished necessarily lives and lives only so long as it can take nourishment.** (413a25–31)

Because life is more implicit in the motion of nutrition and growth and diminution than in the other actions which he enumerated, he began to explain that this action is ascribed to the soul because it is impossible for it to be ascribed to the powers of the elements from which the bodies which carry out the actions of nutrition and growth are composed. He said: **For this reason all plants**, etc. That is, because the motion of nutrition and growth and diminution was enumerated by us in the actions of a thing which is alive, we hold the

37. *Et diminuuntur* has no corresponding Greek. The alternate translation accords with the Greek. See Aristotle, *De Anima* (1954).

opinion that all plants are living in which we see existing a principle by which they carry out the motion of diminution and growth in two contrary places, namely, upward and downward. For a body simple or composed is moved toward one direction. For if it is simple, it will be moved either upward or downward; if composed, it will be moved in accord with the dominant element. Because a body which can grow seems to be moved in both directions by the same principle, namely, branches and roots, this principle must be neither [a simple nor a composite body], neither heavy nor light, and such a thing is called soul. Because growth is an actuality of the action of nutrition, it was necessary that the principle {154} which carries out nutrition be of the genus of that which carries out growth. Therefore, the principle of nutrition is necessarily the soul. For this reason every animal is said to be living so long as it is nourished.

15. **It is possible for this to be separate, but it is impossible for the others to be separate from this in mortal things. This is apparent in plants, for in them there is not even one power different from this one among the powers of the soul.** (413a31–b1)

After he had enumerated the genera of the powers of the soul, he began to show the ordering of those powers to one another. He said: **It is possible for this to be separate** from other things. That is, it is possible for this principle which exists in what is alive to be separate from the other principles of the soul which we enumerated, namely, from sensation, motion, and understanding. Next he said: and **it is impossible for the others to be separate from this in mortal things**. That is, and it is impossible in things which are naturally constituted to die for this principle, the nutritive, to be separate from the other principles of the soul, that is, from sensation, motion, and understanding. He said this because heavenly bodies clearly seem to have understanding and to be self-moving, but not to take nourishment or to have sensation. For this reason he said: **in mortal things**, since it has been explained that these are not mortal. Next he said: **This is apparent in plants**, etc. That is, it is apparent that this principle which is nutrition and growth is separate from the other powers of the soul on the basis of what is sensibly seen³⁸ in plants. For in those there seems to be none of the powers of the soul {155} except that one. He directed the response against those imagining that plants have sleep and wakefulness.

16. **To live, then, is said of every living thing in virtue of this principle; animal, however, [is said]³⁹ in virtue of sensation. For [even] all the things**

38. I read *sensibiliter* with manuscript C.

39. The Greek *πρώτως*, "for the first time" (Aristotle, *De Anima* [1984]), is omitted here. The alternate translation has *أجل حسه من الأحياء من أجل حسه* (ibid. [1954]); "Among living things the animal precedes the rest by its sensation."

which do not move themselves and do not change place but only have sensation are called animals, and we are not content to call them just living. (413b1–4)

He wants to show the difference between this power and the power of sensation in virtue of the terms asserted by them. He said: **To live, then**, etc. That is, when one says that something is living in this language, namely, Greek, it is said only of things which live in virtue of this principle, i.e., nutrition and growth, and [is] not [said] in virtue of another [principle]. Next he said: **animal, however**, etc. That is, this name animal, however, is said only of everything which has the principle of sensation, inasmuch as it has this principle alone, although it may not have the principle of motion in place. The sea sponge and many of the things possessing shells which have sensation and yet are not self-moving are evidence of this. They are called animals, not just living things.⁴⁰

17. **The first sense existing in all these is touch. And just as the nutritive can be separate from touch and every sense, so too touch can be separate from the other senses. I understand by nutritive the part of the soul in which plants also share. All animals seem to have the sense of touch.** (413b4–9) {156}

The first power of sensation which is by nature prior in being to the other powers of sensation is the sense of touch. For as the power of nutrition can exist in plants separate from touch and from every [other] power of sensation, so can touch exist separate from the other senses. That is, when it is found, it is not necessary that other senses be found [with it], but when the other senses are found, [the sense of touch] is necessarily found. It is therefore by nature prior to the other senses, as nutrition is naturally prior to the sense of touch. Next he said: **All animals seem to have the sense of touch**. That is, of all the types of senses that sense is more necessary for all animals. For every animal has the sense of touch, but not the sense of sight or some other [sense], although a perfect animal [does have all the senses]. His account is clear.

18. **The reason why each of those two occurs should be said later.**⁴¹ **Here, however, it should only be said that the soul is the principle of those things which we mentioned, namely, of the nutritive, sensitive, discerning, and moving [powers].** (413b9–13)

The reason why the nutritive power seems to be separate from the other powers and to precede them by nature, and likewise touch with the other

40. Cf. Themistius, *De Anima Paraphrase* (1899), 44.28–29; (1973), 56.7–9; (1996), 62.

41. *De Anima* 3.12.

powers of sensation, should be said later, namely, the final cause. He did this at the end of this book.⁴² Next he said: **Here, however**, etc. That is, here it was only explained that the soul is divided into these four genera and that its substance {157} is in those principles. Later he will be investigating other things which should be sought out.

19. **Is each of those, then, a soul or a part of soul? If it is a part of soul, is it a part insofar as it is separate in intention alone or [insofar as it is separate] in place also? That some of these things are so is not difficult to know, but in regard to some others there is difficulty.** (413b13–16)

After he had explained that the powers of the soul are more than one and had asserted this position as self-evident, he said: **Is each of those, then**, etc. That is, is then each of those principles existing in an animal a soul or not; and if it is soul, is it a soul per se or [is it] a part of soul; and if it is a part of soul, is it a part and [also] something different in being and in place from the body in what is alive? [These are questions which] ought to be investigated. He means by his having said, **Is [each . . .] a soul or a part of soul?**, is it possible for one of those to be in an animal without the soul or is it impossible for it to be in an animal without something else of which it is a part? After he had related this, he began to show their different dispositions in each kind of animals. He said: **That some of these things are so is not difficult**, etc. That is, that those powers in certain animals are the same in subject and different in definition is not difficult. In regard to certain others, however, it is difficult and involves difficulty. Likewise, whether every one {158} of those principles is in the soul or not, in regard to certain [ones] is clear and in regard to certain others, obscure.

20. **For just as there is something in plants which, if divided, lives and is separated from the other parts, as the soul which is in it is the same in species in all plants⁴³ but potentially many, this occurs in another way for the soul of annelidan animals⁴⁴ when they are divided, for each part has sensa-**

42. See *De Anima* 3.12–13, 434a22ff. Cf. below [532].

43. *In figura in omnibus vegetabilibus*. The corresponding Greek text has τῆς ἐν αὐτοῖς ψυχῆς ἐντελεχείᾳ μὲν μιᾷς ἐν ἐκάστῳ φυτῷ, "in their case the soul of each individual plant was actually one." Aristotle, *De Anima* (1984). The problem seems to have arisen in the translation of the Greek ἐντελεχείᾳ into Arabic. The problem is not found in the alternate translation, which accurately renders the Greek: من أجل أن النفس: بمعنى الانطلاشيا التي هي تمام لجمعها التي في أجزائها نفس واحدة ، In his Comment Averroes has no difficulty with the text and understands it in accord with the original Greek, perhaps thanks to the alternate translation.

44. For example, earthworms.

tion and locomotion. Everything having sensation has desire and imagination, for where sensation is found pleasure⁴⁵ is also found. And where those are found, appetite⁴⁶ is necessarily found. (413b16–24)

After he had related that it is not difficult in the case of most animals to explain that those powers are the same in subject but many in intention, he began to show this. He said: **For** as there is **something** belonging to plants which, if cut, etc. That is, we see that certain plants live as parts with a life proper to plants although divided, after [the parts] are separated from one another, so that the soul in that plant is as it were one in form in act in that plant and potentially many. That is, it may be divided into souls which are the same in form as the soul existing in it. And so the same is likewise the case for a certain kind of animal, namely, the annelid, because after they are divided, the parts perform those actions of life which that animal used to. After he had stated that after {159} that kind [of animal] is divided, the parts have all the actions which the whole had, he began to relate how this is apparent in them all. For someone might say that a part does not have any of the actions of the whole in the case of this animal which you have mentioned, with the sole exception of sensation and motion, not the other parts of the soul, namely, imagination and desire. He said: **Since each part has**, etc. That is, we said that all the powers of the soul in this animal are seen to be the same in subject because we perceive that after [the animal] is divided, each part has sensation and locomotion. Everything having sensation and motion necessarily has desire and imagination.⁴⁷ For, where sensation exists, there necessarily exist pleasure and sorrow in the apprehension of a sensible thing. And where there is pleasure and sorrow,⁴⁸ there will necessarily be motion toward what is pleasurable and motion away from what causes sorrow. But the object toward which there is motion is not actually causing delight or sorrow. Hence, [the object] must be imagined and desired. In every part of that animal, therefore, there exists a sensitive, desiring, and imaginative soul causing locomotion. For when locomotion is due to pleasure and sorrow, the two powers will necessarily be there. But, nevertheless, you ought to know that in certain animals the power of imagination is always joined with sensation except when the object of sensation is absent. Such an animal is maimed. However, in those which are sound [imagination] is [also] found in the absence of sensible objects.

45. The Greek text has καὶ λύπη τε καὶ ἡδονή, "pleasure and pain." Aristotle, *De Anima* (1984). The alternate translation also omits mention of "pain," which is added by the editor from the Greek: فهناك ألم و لذة (ibid. [1954]).

46. *Appetitus*: ἐπιθυμία: شهوة. Aristotle, *De Anima* (1954).

47. Cf. 428a9–11. Also see Averroes' Comment on this passage.

48. Cf. Themistius, *De Anima Paraphrase* (1899), 45.38; (1973), 59.9; (1996), 64.

21. **Nothing, however, has yet been explained about the intellect and the theoretical power. But, nevertheless, it seems {160} that this is another kind of soul and that it alone can be separated, as the eternal is separated from the corruptible.** (413b24–27)

After he had said that for every one of those principles we should inquire whether or not it is soul, he began to explain a power which does not seem to be soul, but in its case it is more clear that it is not soul. He said: **The intellect and the theoretical power**, etc. That is, regarding the intellect in act, as well as the power which is made actual by intellect in act, it was still not explained whether or not it is soul, as was explained concerning the other principles, since this power does not seem to use a bodily instrument in its action as do the other powers of soul. For this reason it was not clear from the earlier account whether or not it is an actuality. For everything [which is such that] it is evident or will be evident in regard to it that it is made actual insofar as forms are made actual by matters is necessarily soul. After he had explained that this is obscure in the case of the intellect, he began to show, in regard to this intention under investigation, which of those two contradictory parts is more clear in the opinion of people and how it seems, [at least] until this is explained by demonstrative argument later.⁴⁹ He said: **But, nevertheless, it seems to be another kind of soul**, etc. That is, but, nevertheless, it is better to say, and seems more to be true after investigation, that this is another kind of soul and, if it is called a soul, it will be so equivocally. If the disposition of intellect is such as this, then it must be possible for that alone of all the powers of soul to be separated from the body and not to be corrupted by [the body's] {161} corruption, just as the eternal is separated. This will be the case since sometimes [the intellect] is not united with [the body] and sometimes it is united with it.

22. **It is clear that the other parts of the soul are not separate as some say, but that they are different in intention. For the being of something in sensation is different from its being in cogitation. For sensing is different from cogitating.**⁵⁰ **And [it is] likewise for each of the other [parts] mentioned earlier.** (413b27–32)

49. Averroes' position is that the theoretical intellect is an actuality of knowing as a consequence of the presentation of the potentially intelligible intentions of imagination, cogitation, and memory to the agent intellect and the subsequent reception of the actual intelligibles in the material intellect due to the activity of the agent intellect. He holds the theoretical intellect or theoretical intelligibles are perishable insofar as they are present in perishable human individuals but eternal insofar as they are present in the material intellect. See below, Book 3, {389–390, 399–402, 407}.

50. The Greek text has αἰσθητικῶ γὰρ εἶναι καὶ δοξαστικῶ ἕτερον, εἴπερ καὶ τὸ αἰσθάνεσθαι τοῦ δοξάζειν. "If opining is distinct from perceiving, to be capable of

After he had explained that it is not clear in the case of the intellect whether or not it is separate, although it is more clear [in its case] that it is separate insofar as it is not [identical with] soul, he began to spell out that the contrary is the case in regard to the other parts of the soul and that they do not seem to be separate. He said: **It is clear that the other parts of the soul**, etc. That is, it is clear from the accounts mentioned earlier concerning the definition of the soul that the other parts of the soul are not separate. For it was explained in the cases of each of them that it is the actuality of a natural body having organs. For actuality is the end and completion of what is perfected; but the end is not separate from that of which it is the end; hence, those parts of the soul must not be separate. After he had explained that for some of these powers there is difficulty as to whether or not they are separate and that for some it is clear that they are not separate, he began to show what that is which seems to exist in a clear way in all [these powers], i.e., that these four kinds⁵¹ {162} are different in intention. He said: **But nevertheless it is clear that they are different in intention**, etc. That is, but nevertheless it is self-evident that all those powers are different in sense and intention and that the being of the power which is constituted by sensation is different from the being of the power which is constituted by contemplation since the action of any of those is different from the action of what corresponds to it [in the other]. For sensing, which is the action of the power of sensation, is different from understanding, which is the action of the power of intellect.⁵² Next he said: **And [it is] likewise for each of the other [parts] mentioned earlier.** That is, and it likewise is apparent in the diversity in intention and definition belonging to the other powers mentioned earlier, because they also differ in actions.

opining and to be capable of perceiving must be distinct." Aristotle, *De Anima* (1984). Averroes' alternate translation differs from the Greek as well: وذلك أن بعضها حسّاس و بعضها مُرَوِّ ، والفرق بين هذين بَيِّن ، وكذلك سائر ما قيل منها: الواحد غير الآخر (ibid. [1954]); "For some of them are sensitive and some are capable of reflection. The difference between these is evident. And likewise for the rest of what is mentioned with them: one is different from the other."

51. That is, "the nutritive, sensitive, understanding, and moving [powers]." Book 2, Text and Comment 18, 413b13 {156–157}.

52. Averroes' meaning here is that sensing and thinking are different intentional actions, as is also the case in the *Middle Commentary*, where he writes, وذلك أن معنى أن يحس الإنسان غير معنى أن يروى ، وكذلك الأمر في مباينة سائر القوى التي عددنا بعضها لبعض. Ivry renders this as "The intention that a person senses is other than that which he thinks; and there is a similar difference in the other faculties, each of which we have enumerated." *Middle Commentary* (2002), 50.12–13. I understand part of this passage of the *Middle Commentary* somewhat differently: "The intention of a person's sensing is other than the intention of a person's reflecting."

23. Since certain animals have all those and certain have only one,⁵³ both that this causes difference between animals and why should be investigated later.⁵⁴ Something similar to this also happens in the case of the senses. For certain [animals] have all the senses, certain certain [of them], and certain one. And [that one] is that which is without qualification necessary, namely, touch. (413b32–414a3)

Since certain animals have those four powers, certain have certain of those powers, and certain have only one, what kinds of animals they are, the fact that this brings about difference between animals, and why these occur in animals {163} should be said later. For what happens to animals in regard to the four powers of the soul which we have enumerated similarly happens to animals in regard to the powers of sensation alone. For certain animals have the five powers of sensation, certain only [have] certain, such as the mole, and certain [only have] one, namely, touch, such as the sea sponge. His account in this chapter is clear by itself.

24. Because that by which we live and perceive is said in two ways, we also speak likewise in regard to the thing by which something is known, of which one is knowledge and the other the soul, for by each of those we say that we know. Similarly we say in regard to the thing by which one is healthy that one is health and the other is some member of the body or the whole body. Of these knowledge and health are a certain form and an intention in act for those two recipients. For one receives knowledge and the other receives health. For it is thought that the action of the agents is only in what receives the affection and disposition. And the soul is that by which we primarily live, perceive, and discern. It is, therefore, necessary that it be an intention and a form, not, as it were, matter and subject. (414a4–14)

Now he has returned to explain that the soul is substance as form, not as matter, and not as a composite of these, namely, a body. He said: **Because that by which we live and perceive**, etc.⁵⁵ That is, because it is self-evident that the

53. The Greek text adds here $\tau\iota\sigma\iota\ \delta\epsilon\ \tau\iota\ \nu\alpha\ \tau\omicron\upsilon\tau\omega\upsilon\tau\omega\upsilon$, "some certain of them only." Aristotle, *De Anima* (1984). Averroes' alternate translation is also imperfect: أن ينبغي أن نعلم أنا قد نجد جميعها في بعض الحيوان ، ونجد الواحد منها في طائفة من الحيوان (ibid. [1954]); "We must know that we may find all of them in some animals and one of them in a group of animals." Note, however, that Averroes' Comment appears to follow what we find in the Greek, perhaps because just a few lines below, at 414a3, the triple division is again stated.

54. *De Anima* 3.12–13.

55. Arabic fragments correspond to Book 2, 24.18–19: ثم قال >> أن الشيء الذي به (Long Commentary Fragments [1985], 38).

actions of nutrition, sensation, knowledge, and the other {164} powers of the soul are ascribed to us for two reasons, of which one is by reason of the power itself and the other by reason of having that power. For instance, sensation is ascribed to us by reason of the sensation and by reason of the very thing which has sensation, for sometimes we say that we see by reason of vision and sometimes by reason of the eye. Likewise, in regard to knowledge sometimes we say that we know by knowledge and sometimes by the soul, which is the power possessing knowledge. It is likewise for all the powers belonging to what is alive. For instance, we sometimes say that we are healthy by health and sometimes by a healthy body or by a healthy member [of the body]. After he had asserted this proposition as self-evident and by induction, he began to assert another proposition. He said: **Of these knowledge**, etc. That is, it is apparent that one of those two, which is like knowledge with respect to the soul and health with respect to the body, is form and the other is matter. For form is among these and it is an intention which is found in the two things receiving them, namely, in the one knowing knowledge and in the one receiving health. Hence, it is necessary that every action [be] ascribed to some being owing to some two things existing in it, so that one of them be matter and the other form. But he leaves out this conclusion because it appeared well [enough] on the basis of the things which he asserted. Next he said: **For it is thought that the action of the agents**, etc. That is, we said that one of the two is form and it is that which is like knowledge and health because health, knowledge, and the like are actions of an agent, namely, of something giving and bestowing health, and the action of the agent is that which exists in the recipient, and it is form. Hence it is necessary that knowledge be something existing as form and soul as matter.⁵⁶ He had explained that for every action ascribed to some being {165} owing to two things it is necessary that one of them be matter and the other form and [that] it is clear that the action is ascribed to the being in a primary way on account of form and that the actions of the soul⁵⁷ seem to be ascribed to the body and soul but first to the soul and second to the body. Now it is concluded in a clear way from this that the soul is form and the body is

56. Arabic fragments correspond to Book 2, 24.42, 46–48: وقال : «فانه يظن ان فعل الفاعل... الخ» يعني ان فعل الفاعل الذي هو الصورة للشيء فانما يوجد في القابل (فيجب ان يكون العلم انما يوجد في النفس) من قبل شيء يجري المادة وشيء يجري الصورة (Long Commentary Fragments [1985], 38). "He said: 'It seems that the act of the agent... etc.' He means that the act of the agent which is the form belonging to the thing exists in the recipient. <So it is necessary that knowledge exist in the soul only> by way of a thing which is analogous to matter and a thing which is analogous to form."

57. I read *anime* with Latin manuscripts B, D, and G and the Arabic fragment's النفس in lieu of Crawford's *animati*. For the Arabic, see the following note.

matter.⁵⁸ He said: **And the soul is that by which we [. . .] live**, etc. But he made manifest only some of those propositions and left out some because they were clear. The syllogism is composed in this way: the actions of something alive are ascribed to the body and to the soul together; every action which is ascribed to some being owing to two things must be such that one of them is matter and the other form; therefore, one of those two, namely, body and soul, is form and the other is matter. And after we have joined to this that an action is ascribed to a being primarily owing to form and that this is convertible and we have joined [this] to its converse that the action is ascribed to what is alive through soul primarily, then it is concluded from this that the soul is form and the body matter.⁵⁹

25. **Since substance is said in three ways, as we said, namely, matter, form, and the composite of these, and of these matter is potency and form actuality and what comes to be from these is alive, then body is not the actuality of soul, but rather soul is the actuality of some body.** (414a14–19)

This is an explanation different from the one mentioned earlier, that soul is substance as form, not as matter. But because this explanation gives the cause and the being,⁶⁰ but the first {166} gives only the being, he brought this forth as the cause of the account mentioned earlier. He said: we already said earlier that substance is said in three ways, matter, form, and the composite of these, and the being of matter is potentially while the being of form is in actuality and in act, and what is composed of soul and body is alive, so that by one of these there is something alive potentially and by another [something alive] in act. Hence, it is clear that soul is the actuality of body, not body of soul. For it is alive in act by soul and what is in act ought to be the actuality of what is in potency, and not the contrary. [It is] as if he meant, when he said: what is from these is alive, that is, because what is among these is alive in act by soul and

58. Arabic fragments correspond to Book 2, 24.48–55: كما تبين ان كل فعل ينسب الى موجود واحد من قبل شيئين فأحدهما مادة والآخر صورة <...> كان ظاهر ان الذي ينسب الفعل الى الموجود نسبة أولى هي الصورة وان أفعال النفس يظهر من أمرها انها منسوبة الى النفس نسبة أولى وإلى البدن نسبة ثانية أي من قبل النفس لنتج عن ذلك ان النفس هي الصورة والبدن هو المادة (Long Commentary Fragments [1985], 38).

59. Arabic fragments correspond to Book 2, 24.58–68: ويتألف القياس هكذا: ان أفعال المتنفس تنسب الى النفس والبدن معا ، وكل فعل ينسب فانما ينسب الى موجود واحد من قبل شيئين ، فأحدهما مادة والآخر صورة فينتج ان الجسم والنفس أحدهما صورة والآخر مادة. فاذا أضيف الى هذه ان النفس صورة ونسب الفعل الى الموجود نسبة أولى ، وان هذه منعكسة وأضيف الى عكسها ان الفعل ينسب الى المتنفس من قبل النفس (Long Commentary Fragments [1985], 38).

60. That is, the fact.

in potency by body, body must not be the actuality of soul, but soul [the actuality] of body.

26. **On account of this those who say that the soul is neither outside the body nor a body thought soundly. It is not body, but through body, and on account of this it is in the body and in a body of a certain sort, not as the ancients held asserting [the soul] to be in body without determination of that body, [i.e.,] what body it is and of what sort, and this [they asserted] although it is not the case that any given [body] receives any given [soul].**⁶¹ (414a19–25)

Owing to the fact that it appeared concerning the soul that it is the actuality of a natural body, those holding the opinion {167} that the soul does not exist outside the body and is not body spoke rightly. For actuality is so, namely, it is in a body and it is not body. For body is not made actual by body, since body is not constituted by nature to be in a subject. He meant this when he said **It is not body, but in body**, etc. That it is body, insofar as it is actuality, is not possible, but it does exist in body. Next he said: **On account of this it is in the body**, etc. That is, on the basis of this way [of understanding], which we provided in regard to the substance of soul,⁶² it is possible to give the reason why the soul exists in body and the body receiving it is of such a sort. This is not in the way which the ancients provided in regard to the substance of the soul, since they said that it is body and that it enters another body. They did not determine what nature is the nature of that body and why it had the characteristic of being alive while other bodies are not and [they did not determine] in what way there was similarity between these two bodies, namely, that one receives the other, since it is not the case that anything can receive anything. For it is necessary for those people to give the reason why this body receives that body which is soul. It is necessary for them to say why this body which is soul exists properly in this body and not in others. He meant this when he said: **without determination of that body, what body it is**, namely, what is

61. Averroes' Text omits 414a26–28, "It comes about as reason requires: the actuality of any given thing can only be realized in what is already potentially that thing, i.e. in a matter of its own appropriate to it. From all this it is plain that the soul is an actuality or account of something that possesses a potentiality of being such." Aristotle, *De Anima* (1984). This is preserved in the alternate translation: لأن انطلاشيا كل واحد من الأشياء لا يكون إلا لما فيه من قوة لقبول تلك الانطلاشيا ، بأن كان في هيولى ذلك الشيء <تهيؤ> لقبولها. – فقد استبان من هذه الأقاويل أن الشيء ذا القوة الموصوف بصفة كذا و كذا (ibid. [1954]). Averroes evidences no awareness of this omission here in his *Long Commentary* or in his *Middle Commentary* (2002), at 51–52. Note that what is a general principle in the Greek is in the Latin applied to the case of body and soul.

62. That is, the explanation of form as perfection and actuality.

received,⁶³ **and of what sort**, namely, the recipient. He said this because demonstrative definitions are naturally constituted to give the causes of all the things which are seen in what is defined, and if the definition will not be so, it will not be a definition.

27. **Those powers of the soul which we mentioned are all found in certain animals, [168] as we said, and in certain others [only] certain [are found], and in [certain] distinctive kinds [only] one is found. We name the powers nutritive, sensitive, desiderative, locomotive, and discerning.**⁶⁴ **Of those the nutritive alone is in plants, while in others there is that and the sensitive and desiderative, for the desiderative is appetite, anger, and will.**⁶⁵ **All animals have at least one sense, namely, touch. Everything having sensation has pleasure and sorrow. And everything having those has appetite, for appetite is a desire for the pleasurable.** (2.3, 414a29–b6)

Since he wanted to begin to speak concerning every one of the powers of the soul, he began first to enumerate which they are and [to indicate] that certain animals properly have certain of them, as the craftsman asserts the existence of the subject of his craft. For the craftsman must assert the existence of the subject of which he speaks and he divides its genera as if they were clearly existing. For the craftsman cannot demonstrate the subject of his craft nor the species of that subject. What he said in this chapter is clear. When he said **in [some] distinctive kinds**, he meant: in a few. That is, in a few animals [only] one power of the senses exists, namely, touch. Next he said: **We name the powers**, etc. That is, when we mention **powers**, the nutritive and sensitive powers should be understood. He means by **nutritive** all the principles which are active in nutrition, which are three, namely, the nutritive, that of growth, and that of diminution. He means by **desiderative** the appetite for food. For this reason he distinguished [169] it from locomotion and asserted it to be a

63. *Receptum*. One expects “what receives” here. Perhaps the translator mistook an active participle for a passive one in this context.

64. *Distinguentem* here corresponds to the Greek διανοητικόν in Aristotle’s text and to المفكر والمميز, “cogitation and discernment,” at *Middle Commentary* (2002), 52.12. The alternate Arabic translation renders this with المفكرة (Aristotle, *De Anima* [1954]); “the cogitative power.”

65. *Desiderium enim est appetitus et ira et voluntas*. The corresponding Greek is ὁρεξίς μὲν γὰρ ἐπιθυμία καὶ θυμὸς καὶ βούλησις (414b2), “for appetite is the genus of which desire, passion, and wish are the species.” Aristotle, *De Anima* (1984). The *Middle Commentary* (2002), at 52.14, has إرادة ومنه غضب ومنه شهوة والشوق, “desire, which . . . includes passion, anger and will.” The alternate Arabic translation renders ذلك أن الحاسة هي الشهوة والغضب والإرادة (Aristotle, *De Anima* [1954]); “The appetitive power is in it, for sensation is appetite, anger and will.”

genus per se, since that power is found in animals which do not move themselves. He understands by **discerning** understanding. Next he said: **Of those [. . .] in plants**, etc. That is, in plants the nutritive alone is found, while in animals sensation, which is touch, and desire, which is desire for nutrition, and this is common⁶⁶ to all [animals]. Next he said: **for the desiderative is appetite, anger, and will**. That is, we mean by desire appetite, for desire is said of appetite and of anger, and will and universally of several [of these]. He wanted to explain that appetite exists in every animal having sensation because this was not clear to sense. He said: **Everything having sensation has pleasure**. His account in this chapter is clear.

28. **Moreover, it has sensation of food since the [activity of] discerning food belongs to sensation. For every living thing is nourished only by what is dry [or] moist, warm [or] cold, and touch senses those things. But sensing other sensible things is accidental in the case of nourishment, since no contribution is made to nourishment by sound, color, or smell, while flavor is one of the tangibles. Hunger and thirst are each appetite, hunger for the warm and dry, thirst for the cold and moist. But flavor is, as it were, the cause of those.** (414b6–14) [170]

After he had asserted that every animal has the sense of touch and desire for nourishment, and [since] in explaining this induction is not sufficient, he began to explain this by argument. He said: **Moreover, it has sensation of nourishment**. That is, moreover, every animal must have a sense by which it apprehends what is fit and unfit among nourishments, so that it may spit out what is injurious and take in what is beneficial.⁶⁷ This was because what is nourishment for it does not exist potentially in many things as is the case for plants (and for this reason plants do not need sensation to discern food). That passage requires a great deal of contemplation. After he explained that every animal must have a sense for discerning food, he began to explain which sense is necessary for discerning food. He said: **For every living thing is nourished**, etc. That is, because every living thing is nourished only by dry [or] moist, warm [or] cold, since what nourishes takes the place of what is dissolved from the elements of which it is composed, the sense directed toward what is nutritious must be the sense which is naturally constituted to discern these qualities and that is the sense of touch. [It is] as if he says: because everything living is nourished only by dry [or] moist, warm [or] cold, and the sense of touch is what senses those, then touch must be the sentient power

66. Cf. Themistius, *De Anima Paraphrase*: κοινοτάτης (1899), 47.18; أعمّها (1973), 62.11; “most widely shared” (1996), 66.

67. Cf. Themistius, *De Anima Paraphrase* (1899), 47.26; (1973), 62.18–63.2; (1996), 66.

which discerns what is food. Therefore, an animal necessarily has touch. Next he said: **But** what senses **other sensible things**, etc. That is, but the senses which apprehend other sensible things sense food in an accidental way, that is, they are not necessary for discerning what is food insofar as it is food, since they perceive food accidentally. For things which can be sensed by these⁶⁸ {171} are not in food insofar as it is food. He meant this when he said: **since** there should **not** be **in** food, etc., that is, insofar as it is food. Next he said: **while flavor is one of the tangibles**. That is, while flavor, if it exists in food insofar as it is food, is one of the kinds of things which are tangible and the sense of taste is a certain kind of touch.⁶⁹ Because of what he said one should hold the opinion that this sense also exists in every animal, just as the sense of touch, since it is, as it were, one of its species. Later it will be explained how it is in reality. After he had recounted that cold, warm, moist, and dry exist in food insofar as it is food and that flavor exists in it insofar as it is food, he began to explain the way in which any of those exists in food. He said: **Hunger and thirst are**, etc. That is, but if flavor exists in food inasmuch as it is food, nevertheless the primary qualities exist in it first and in an essential way. The indication of this is that when an animal desires food, it desires only warm [or] cold, moist [or] dry. For hunger is an appetite for the warm and dry and thirst [is an appetite] for cold and moist. It does not desire sweet or sour. Flavor, however, is joined with those qualities. This is what he meant when he said: **But flavor is [. . .] the cause of those**, that is, the cause for the animal knowing which of those is fit and unfit. He did not mean here by **cause** the cause in being, for the primary qualities are the cause of flavor. Perhaps he understands that flavor is the cause on the basis of which an animal uses food owing to the delight joined with it.⁷⁰ {172}

29. **This should be explained later. Here, however, we are content with this determination, which is that every living thing having [the sense of] touch has desire. The case of the imagination is obscure and should be the object of inquiry later. Let us place with this having locomotion as well. And [let us also say this] in regard to other things [which possess] the ability to discern and [which possess] intellect, as in the cases of human beings and other things if the latter are of such a sort and better.** (414b14–19)

68. *Sensibilia enim eorum*—that is, the sensibles belonging to or appropriate to these other senses.

69. Cf. *Middle Commentary* (2002), 53.4.

70. The *Middle Commentary* (2002), at 53.7–8, states *وأما إدراك الطعم فكأنه توطئة للغذاء* and *وسبب لتناوله*; “The apprehension of flavor, however, is like an appetizer to the food, and a reason for taking it.”

Because he wants to assert here the number of those powers insofar as the craftsman asserts the subjects of his craft, he wants to assert only what is self-evident and he leaves aside other things which are not evident, until there will be investigation concerning them. For this reason he said: **This should be explained later. Here, however, we are content with this determination**, that is, what is clear in itself or nearly so, namely, that every animal lacking touch lacks desire.⁷¹ For this is clear in itself. Next he recounted that this is obscure in the case of imagination. He said: **The case of the imagination is obscure**, that is, whether or not imagination exists in everything which has the sense of touch. Next he said: **Let us place with this having locomotion**. That is, let us assert as clear that everything which has locomotion is something which has imagination. It can be understood [in this way]: and let us assert the power of locomotion [to be] among the number of those powers which are seen to be evident and differ in definition and being. He means the concupiscible power. Next he said: **And [let us also say this] in regard to other things [which possess] the ability to discern and [which possess] intellect**. That is, let us also assert [it] as clear that the cogitative power⁷² and the intellect exist in other kinds of animals which {173} are not human beings and that they are properly in some genus, as in [that of] human beings, or in a different genus, if a demonstration arises that there exist different things of this sort. This will be the case if there are things equal to or better than human beings.

30. **Let us therefore say that it is clear that by way of this example the definition of soul and the definition of figure will be the same. For according to that there is no actuality aside from the powers mentioned,⁷³ but it is also possible in the case of figures that there be a universal definition fitting for all figures and [that] it not be proper to any one of them. And similarly so in the cases of all the things mentioned above. For this reason it would be right that he be laughed at who seeks in their case and in the cases of others a universal account which is proper to none of them all and is not in**

71. *Carens tactu caret desiderio* is surprising here since the corresponding Text has *habens tactum habet desiderium*. An account corresponding with the latter, not the former, is what is found in the *Middle Commentary* (2002), at 53.9–10.

72. *Virtus cogitativa*. The corresponding term in the *Middle Commentary* (2002), at 53.12, is *المميزّة*, which Ivry translates “the faculty of discernment.”

73. The Text seems to omit the following: *οὔτε γὰρ ἐκεῖ σχῆμα παρὰ τὸ τρίγωνον ἔστι καὶ τὰ ἐφεξῆς*. “For, as in that case there is no figure apart from triangle and those that follow in order.” Aristotle, *De Anima* (1984). Averroes’ alternate translation follows the full Greek text: *لأنه ليس هناك اشكيم غير اشكيم المثلثة وما بعدها* (ibid. [1954]). The problem in the Text here, however, seems not to affect adversely Averroes’ understanding as expressed in the Comment.

this properly characteristic way something which is not divided, and [who] then dismisses such an account.⁷⁴ (414b20–28)

Since the genera taken in definitions are either univocal, as animal in the definition of a human being, or said in many ways, as being, potency, and act, he began to explain of what sort is the genus taken in the definition of the soul, and he said that it is neither equivocal nor univocal. He said: **Let us therefore say that it is clear**, etc. That is, let us say that it is clear from the example that what the universal definition of the soul provides from the intention common to all the parts of the soul is similar to what the universal definition of figure provides for all figures. For it is self-evident that, just as there is no actuality fitting for some part of the soul in addition to the universal actuality which {174} we include in the definition of all the powers, even if those powers are different in the intention proper to each of them, so too here there is no figure in addition to the definition of universal figure, although figures differ from one another in proper terms (for one is round, another straight, and another composed of both). This example is very similar to the definition of soul. For it is not from among the definitions of equivocal names (since, if it were so, then Geometry would be Sophistics), nor also from the genera [of things] which are said in a univocal way. This is because if it were so, then one of two things would necessarily be the case: either there would be a power one in definition and in name, in which all the powers which we enumerated share, just as the kinds of animals share in the definition of simple animality; or all the powers of the soul would be the same in definition and being. After he had explained by example that the definition of soul is similar to the definition of figure, he began to give the nature of the similarity. He said: **but it is also possible in the case of figures**, etc. That is, that definition is not univocal but [still] it is possible for all figures, although they differ, that they have a broad universal definition fitting for them all, although they differ a great deal in definition and in being. Likewise, it is possible for those different powers to have one universal definition fitting for them all, just as the definition of figure fits all figures and is specifically proper to none. Next he said: **For this reason it would**

74. The Text again suffers corruption. The Greek has διὸ γελοῖον ζητεῖν τὸν κοινὸν λόγον καὶ ἐπὶ τούτων καὶ ἐφ' ἐτέρων, ὃς οὐδενὸς ἔσται τῶν ὄντων ἴδιος λόγος, οὐδὲ κατὰ τὸ οἰκεῖον καὶ ἄτομον εἶδος, ἀφέντας τὸν τοιοῦτον. "Hence it is absurd in this and similar cases to look for a common definition which will not express the peculiar nature of anything that is and will not apply to the appropriate indivisible species, while at the same time omitting to look for an account which will." Aristotle, *De Anima* (1984). من أجل ذلك إن نحن قلنا هذا القول الشائع في هذه وفي غيرها وهو قول ليس يختص (1984). بـشء من الأشياء – لا على ما يليق به من معناه الأعلى ، ولا على صورة انفراده ، فميتي أضرينا عن هذا قلنا بذلك الشائع – كنا أهلاً ليهزأ بنا (ibid. [1954]).

be right that he be laughed at who seeks, etc. That is, because of what we said, it would be right that he be laughed at who seeks in the case of the soul {175} and in those of other similar things one universal definition which is not specifically proper to any of them all and which is not such as the definition which we provided for soul, but rather is like the universality of the definition of simple animality fitting for the species of animal and is not also one, that is, a definition which is of one nature and which is not divisible in species. He who has dismissed such a definition as we provided [should rightly be laughed at], since those two kinds of definition are not found in such natures and only that kind of definition which we use is found in their case. For one who works at giving the first kind of definition in the case of the soul is seeking the impossible in what he works at, just as he who dismisses this definition in dismissing what is possible. For to dismiss what is possible is similar in expression to seeking what is impossible.

31. **The disposition in the case of the soul is similar to the disposition in the case of figures. For what is prior is always found potentially in what follows in the case of figures and living things, for instance, the triangle in the quadrilateral and the nutritive in what is sensitive. It is necessary, therefore, to seek in any given thing what it is according to its definition. For instance, what is the soul of a plant and what is the soul of a beast.**⁷⁵ One should indeed seek out why they are of such a disposition with respect to those which follow, since what has the capacity for sensation does not exist without the nutritive, but what has the capacity for sensation is separate in reference to plants. Also, none of the other senses exists without touch but touch does exist without the other senses. For many living things do not have sight or hearing or smell or another sense. (414b28–415a6) {176}

After he had explained that the definition of the soul is similar to the definition of figure, he began to explain the kind of similarity and to show what kind of definition it involves. He said: **The disposition in the case of the soul is similar**, etc. That is, the disposition in things which are contained in the definition of the soul is like the disposition in things which are contained in the definition of figure. For just as prior and posterior are found in figures, and the prior exists potentially in the posterior, so too is it the case for the powers of the soul. For instance, in figures, the triangle is prior to the quadrilateral and the triangle exists potentially in the quadrilateral. For this reason,

75. The Greek has οἶον τίς φυτοῦ καὶ τίς ἀνθρώπου ἢ θηρίου, "of a plant, man, beast" (Aristotle, *De Anima* [1984]), with which the alternate translation is in accord: ما نفس النبات وما نفس الإنسان ، وما نفس البهيمة (ibid. [1954]). Averroes' Comment is also in accord with these. See below.

if a quadrilateral exists, a triangle exists, and not the converse. And likewise in the case of the powers of the soul, for the nutritive is prior to the power of sensation and exists in it potentially. And if the power of sensation exists, the nutritive exists, and not the converse. After he had explained the nature of that definition and how much knowledge it gives, he said: **It is necessary, therefore, to seek in any given thing what, etc.** That is, it had been explained that this definition of the soul is of the genus of the definition of figure and, just as knowledge of figure alone is not sufficient with respect to knowledge of a figure possessing straight lines and of a circular figure, so too is it the case for the definition of universal soul. Now one should therefore seek after knowledge of that universal definition, the definition proper to each power of the soul, namely, what is the soul of plants and what is the soul of a human being which is proper to [a human being] and what [is the soul proper] to a beast. Next he said: It is necessary to seek out **why they are of such a disposition**. That is,⁷⁶ it is necessary that one investigate also why the prior and consequent are found in the powers of the soul. For it is impossible for the power of sensation to exist without the nutritive, but the nutritive can exist without the power of sensation and this is [the case] in {177} plants. It also appears that it is impossible that any of the four senses exist without touch, but touch can exist without the other senses. For several animals lack vision, hearing, smell, or taste (he meant this when he said: **or another sense**.)

That passage requires consideration. For it is thought that taste is one of the kinds of touch, as he said above. But if some animal is nourished by things lacking flavor, then the [sense of] taste of that animal will be only with respect to warm [or] cold, moist [or] dry. Or he means, when he said: **or another sense**, that is, that another sense is not distinguished ultimately, that is, in the end, from the sense of touch as it is found in perfect animals. Universally the opinion should be held that if something has the sense of touch and is nourished by its roots, as plants are nourished, as is said regarding the sea sponge, that animal has the sense of touch without taste. Perhaps he indicates kinds of animals such as those, for every animal having a mouth has some [capability for] taste.

32. **Among those that have sensation it is the case that some have locomotion and some do not. However, the completion and end is that which has cogitation and discernment.**⁷⁷ **For every one of the corruptible things having**

76. Crawford has *Idest* italicized, but this appears to be a printing error.

77. Crawford declined to follow manuscript G, which is more fully in accord with the Comment of Averroes. I follow the correct reading in G, which is *cogitationem*, not *cognitionem*, throughout this entire passage of the *De Anima*. This is confirmed by examination of the Greek text and the edition of the Hebrew by Bos (Aristotle, *De Anima* [1994]): 415a8: λογισμὸν מחשבה; a9: λογισμός מחשבה; a10: λογισμός מחשבה. The

cogitation has all the others.⁷⁸ However, what has one of them does not necessarily have cogitation, and some do not have imagination and some live only through those⁷⁹ alone. [As for] the theoretical and cogitative intellect,⁸⁰ the account with respect to it is different. Therefore it was explained that the account with respect to each of those powers is the account more fitting with respect to the soul. (415a6–13) {178}

It is apprehended by sense that some animals have locomotion (this is the perfect kind) and some do not. The completion and end of animals which was intended in generation, which nature has achieved when it has been able to succeed, is the kind of animals having the theoretical and cogitative power, that is, the intelligible [power]. Next he said: **For every one of the corruptible things**, etc. That is, it appears that everything among generable and corruptible things having the cogitative power necessarily has the other powers of the soul. He said this because he did not want to include the celestial bodies. For it was explained that those have only the impulse of desire and intellect from among the powers of the soul. Next he said: **what has one of those**, etc. That is, what has one of the powers which are prior by nature to the intellect does not necessarily have cogitation or intellect, but some do not have imagination, much less do they have cogitation, and some live through those which are below imagination, powers which are prior to [imagination]. He meant this when he said: **Some live through those alone**. Next he said: **the account** concerning the theoretical intellect, etc. That is, the account concerning it is such that it is outside that nature, for it is thought that it is neither soul nor a part of the soul. He indicated its nobility and its difference from the other parts, for one must hold that it is from a nature superior to that of the soul. Next he said: **For it was explained**, etc. That is, for it was explained from what was said earlier that the first thing which was intended concerning the knowledge of the

alternate Arabic text has الفكر, فکر, and الفكر (ibid. [1954]). On the contaminated version of the Arabic text of the *De Anima* used by Averroes, see the discussion of cogitation (*cogitatio*/فكر/מחשבה) in the introduction, pp. lxxvii–lxxix, and in Taylor (1999a).

78. That is, all the other powers.

79. *Per ista*. In the Greek, τὰ δὲ ταύτη μόνῃ ζῶσιν, the referent is to the singular φαντασία, while here it is to the neuter plural *omnia alia*. In the alternate translation the referent is spelled out as imagination: وبعضها إنما معني حياته بالتوهم وحده (Aristotle, *De Anima* [1954]). Latin manuscript B retains the reading *istam*, but Averroes' Comment indicates that the problem already existed in the Arabic text.

80. The alternate translation renders the Greek περὶ δὲ τοῦ θεωρητικοῦ νοῦ as في العقل البحثة النظر (Aristotle, *De Anima* [1954]); "concerning the intellect as investigative and theoretical." *Cogitativus*, "cogitative," is added here.

soul, which is more appropriate to an account in regard to the soul, is to speak of the [sort of] soul fitting for every one of those powers. {179}

33. **One who wishes to investigate those will necessarily need to know what each one of those is; then later there will be investigation of the things consequent upon those. And if it is necessary to say what each one of those is, for instance, what the intellect is, what the sensitive part is, and what the nutritive part is, then it is necessary to say first what understanding is.⁸¹ For actions and operations precede the powers in the intellect.⁸² If it is so, and consideration of other things opposed to those⁸³ ought to precede consideration of those, [then] for that reason we must first direct our efforts toward defining those, for instance, food, what is sensed, and what is understood.** (2.4, 415a14–22)

After he had explained that the universal definition of the soul mentioned earlier is not sufficient for knowledge of its substance, he began to say what must be known concerning the soul after that definition. He said: **One who wishes to investigate those will necessarily need**, etc. That is, he who wants to acquire perfect knowledge of the soul must necessarily investigate each of the powers of the soul per se to the extent that he knows by demonstration what each of them is and what nature it has. For instance, what the intellect is and what sense is must be investigated. Next after this there must be investigation of each with respect to things which universally and properly follow upon each of those powers, for instance, whether or not the intelligible power can be separated. After he had explained what we must investigate concerning the soul, he began to show {180} the way to this knowledge and that it is among the things which are more known from our perspective and posterior in being to things which are more known by nature and prior in being. He said: **And if it is necessary to say what each one** of those, etc. That is, if it is necessary, as we explained, to know what each of those powers is, it is necessary to know first what are the actions proper to each of those powers, for instance, what it is to understand through understanding and to sense through sensing and to take nourishment through taking nourishment. For knowledge

81. The Greek has τί τὸ νοητικὸν ἢ τὸ αἰσθητικὸν, "thinking or perceiving." Aristotle, *De Anima* (1984). Averroes' alternate translation renders the Greek more precisely: وما الذي يفهم ، وما الذي يحس (ibid. [1954]).

82. Or: in understanding. *In intellectu* corresponds to the Greek κατὰ τὸν λόγον, "in definition." Aristotle, *De Anima* (1984). The alternate translation captures the sense of the Greek: في الحد (ibid. [1954]); "in definition."

83. *Oppositis istis*. The Greek τὰ ἀντικείμενα is "their correlative objects." Aristotle, *De Anima* (1984). Averroes' explicit remark on this in the Comment makes it clear that he understands this more in accord with the sense of the Greek.

of the actions of those powers is prior from our perspective in our first knowledge to knowledge of those powers. After he had recounted that knowledge of the actions ought to precede knowledge of the powers, he also recounted that the knowledge of the things undergoing those actions ought to precede the knowledge of those actions, for the same reason that knowledge of the actions ought to precede knowledge of the powers. He said: **If it is so**, etc. That is, if it is so, namely, that we ought always to go from these things which are more known from our perspective to those things which are more known by nature and that consideration of things opposite to those powers (i.e., things which are passive in relation to them) ought to precede consideration of the actions and the powers, then it is necessary to know first what food is, which is the passive object of the nutritive power, what the thing sensed is, and what the thing understood is, before one may know what being nourished and sensing are. He called these opposites, for the passive and the active seem to be in some way opposites. {181}

34. **Therefore it is necessary first to speak of nourishment and generation. For the nutritive soul is prior in all living things and is more universal with respect to the powers of soul by which [powers] what is living lives. Its actions are to generate and to take nourishment. For the action which is more fitting for the nature of every living thing from among those which are perfect, do not have defect, and are not generated per se by chance is to produce another of the same kind. Therefore an animal produces an animal and a plant a plant so that it may have a share of the eternal and divine insofar as it is able. For all things desire this and [each] does what it does by nature for the sake of this.** (415a22–b2)

He had explained which of all the definitions of the soul is more universal and how much knowledge it yields and that it is not sufficient for knowing the definition of the substance of the soul in a perfect way and that one must know first any [given one] of the powers of the soul by its own definition and in how many ways those powers are different and how they are united. [Now] he began to recount that one must first begin with the knowledge of those powers, starting with the one which is clearly prior, namely, the nutritive [power], and that first one must consider the affections and actions of those powers. He said: **Therefore it is necessary first to speak of nourishment and generation**, etc. That is, since it was explained that it is first necessary to consider the actions and affections before the powers themselves, of all those actions we must first speak about food and generation, which are affection and action belonging to that soul. We must {182} first speak of the nutritive soul because it is naturally prior to the other things by virtue of which something is called living; for this reason it is the more universal among the other pow-

ers of the soul. He indicated that it must be placed first in consideration owing to its priority and universality, for the universal is more known to us than what is proper, as was said elsewhere.⁸⁴ After he had explained this, he began to list the actions ascribed to [the nutritive] since we ought to know that it is before [we know] what it is. He said: **Its actions are**, etc. That is, the actions of that power are to take nourishment, to generate, and to make use of food. We say that to generate is an action of that power since the action which most belongs to the nature of what is called living by virtue of this power is to generate something like itself in species. This comes about with three conditions: one is that it reaches the time in which it has this power, since it is not in act in every [moment of] time; a second is that with this it does not have a defect, for that impedes this action, although it may reach the time in which that action arises from [that being]; [and] the third is that this living thing is not from these things which come to be per se. Therefore, when these three are brought together in a living thing, then it will generate [something like itself in species]. He meant this when he said: Since **the action which is more fitting**, etc. Next he provided the final cause for the sake of which that power exists in animals and plants. He said: **so that it may have a share of the eternal**. That is, that power exists in something living so that what is generable and corruptible may have something in common with the eternal according to its ability. For since divine solicitude could not make it last forever individually, it showed pity in giving it the power {183} by which it can last forever in species. In this there is no doubt, namely, that it is better in its being that it has that power than that it not have [it]. Next he said: **For all things desire this**, etc. That is, this was so because all things desire everlasting permanence and are moved toward it insofar as their nature is naturally constituted to receive [it]. For the sake of this end all beings do what they do naturally.

35. **For the sake of which is said in two ways, one is [that] in regard to which it is and the other [that] of which it is.**⁸⁵ **Therefore, because it was impossible for it to share in eternity with the everlasting divine, because it is impossible for something corruptible to remain forever the same in number, for this reason it shares something with it insofar as it can, in some cases more, in others less. Thus it is not that same thing which remains forever but its like and not [something] one in number but one in form.** (415b2-7)

84. See {14} and {149}.

85. *Unus est in quo est, et alius cuius est*. The Greek has τὸ μὲν οὗ, τὸ δὲ ᾧ, "the end to achieve which, or the being in whose interest, the act is done." Aristotle, *De Anima* (1984). The Arabic in Averroes' alternate translation is *والأخرى فيه*، *إحدهما له* (ibid. [1954]); "one of the two is for it and the other is in it."

After he had provided the final cause for the sake of which the generative power exists universally in what is living (and it is the assimilation of the corruptible with the eternal, insofar as it has the nature of what must be assimilated), and that all beings carry out actions toward that end, he explained according to how many ways that end is said. He said: **For the sake of which is said in two ways, one is** that which is the end itself **and the other** that in which the end is. For instance, on this account, all beings act for the sake of {184} everlasting permanence and for this reason in some we find everlasting permanence or some disposition for everlasting permanence. After he had explained this, he began to explain how generable and corruptible things can have something in common with eternal things and the reason why they are removed from everlasting permanence. He said: **Therefore, because it is impossible**, etc. He means by everlasting divine the heavenly body, for those heavenly bodies last forever as individuals. And when he said: **in some cases more, in others less**, he meant the generative and the non-generative. For both last forever according to species, but the generative has this always and the non-generative most of the time and in several subjects.⁸⁶

36. **The soul, therefore, is the cause and principle of the living body in three determinate ways.**⁸⁷ **For it is that from which motion comes to be and that for the sake of which the body existed, and the soul is also the cause insofar as it is substance, which is the cause of being for all things.**⁸⁸ (415b8-13)

After it had appeared from the universal definition of the soul that the soul is the cause of the body according to form and it had appeared here that the generative power is the cause making [it] alive, he began to explain that the soul is cause not only according to form, but also a cause according to the three ways in which it is called cause, and this is in three ways. This is necessary, namely, to know this before speaking about {185} each of the parts of the soul,

86. *Sed generativum habet hoc semper, et non generativum in maiori parte temporis et in pluribus subiectis*. Averroes may here be referring to animals continuous in species by generation and to animals resulting from spontaneous generation, though this is by no means evident.

87. Averroes' Text here omits a line of the Greek: αἰτία καὶ ἀρχή. ταῦτα δὲ πολλαχῶς λέγεται, ὁμοίως δ' ἡ ψυχὴ. "The soul is the cause or source of the living body. The terms cause and source have many senses. But the soul is the cause of its body alike in all three senses which we explicitly recognize." Aristotle, *De Anima* (1984); emphasis of the relevant text added. Averroes' alternate text renders the whole Greek text with the exception of ἀρχή. See ibid. (1954).

88. δῆλον may have been dropped from the Greek of the Arabic translator's manuscript in this passage. It is in the alternate translation as *من الظاهر* (Aristotle, *De Anima* [1954]).

although it was already explained universally that every natural form is of such a sort.⁸⁹ He said: **The soul, therefore, is the cause and principle of the living body.** Because these two things are said in many ways, the soul is likewise a cause according to three determinate ways, namely, as moving, final, and formal causes, which have been determined in the general physical accounts.⁹⁰ Next he said: **For it is that from which motion comes to be,** namely, the cause bringing about motion. By this we can understand motion in place and generation, and motion in growth and diminution, for the soul is the cause bringing about those three motions in what is alive. Next he said: **And that for the sake of which the body existed,** namely, the final cause. For the body was only for the sake of the soul, since it was explained that the soul is with respect to the body as form to matter. It was explained in the general accounts⁹¹ that matter is for the sake of form alone and that it is not something consequent upon matter or something which is from the necessity of matter, as the ancients used to think, not granting there to be a formal or final cause.⁹² **And the soul is also the cause,** etc. That is, and the soul is also a cause of the body according to substance and form,⁹³ which is the cause of the being of all things.

37. **To be for a living thing is to live, and the soul is the cause and principle of that. And the actuality [of a thing] is also the intention⁹⁴ of what is a being potentially.** It is evident that the soul is a cause according to that for the sake of which, since, just as the intellect does nothing except for the sake of something, so too [is it the case for] nature, and this is its end. It is similarly so for the soul in animals and all things, {186} for all natural things are tools for the soul, as in animals so too in plants, such that it is also cause of what is alive.⁹⁵ That for the sake of which is said in two ways, one is that on

89. See Book 2, Comment 8 {40}ff.

90. *Physics* 1.3, 194b23–195a26.

91. See Book 1, note 165.

92. *Physics* 2.1, 193b7–8.

93. *Secundum substantiam et formam*. The corresponding passage of the *Middle Commentary* has the same phrase, على طريق الجوهر والصورة, which Ivry indicates (*Middle Commentary* [2002], 56.15–16; 174, n. 6) may be related to the replacement of Aristotle's οὐσία by ὡς εἶδος in the paraphrase of Themistius. Themistius, *De Anima Paraphrase* (1899), 50.29; وكالصورة (1973), 70.1; “as form” (1996), 69.

94. *Intentio*: λόγος, “its account” (Aristotle, *De Anima* [1984]); معنى (ibid. [1954]). “Further, the actuality of whatever is potential is identical with its account” (Aristotle, *De Anima* [1984]). أيضا الانطلاشيا هي بمعنى الشيء ذى القوة (ibid. [1954]); “The actuality is also through the intention of the thing existing in potency.”

95. Averroes’ Text here varies considerably from the Greek of Aristotle, which has, “To that something corresponds in the case of animals the soul and in this it follows

account of which and the other is that to which this belongs. The soul is also that from which motion in place first comes to be, but that power is not found in all living things. Both alteration and growth also come to be through the soul, for sensation is thought to be some sort of alteration and nothing has sensation unless it has soul. So too is it in the cases of growth and diminution, for nothing suffers growth or diminution in a natural way unless it is nourished, and nothing is nourished unless it shares in life. (415b13–28)

After he had asserted that the soul is a cause of the body in the three ways in which this word “cause” is said, he began to explain that those ways are in it and in the first place that it is the cause of the body by way of form. He said: **To be for a living thing,** etc. That is, the indication of the fact that the soul is the form of the body is that this living being does not have being insofar as it is living, except by virtue of that by which it lives, that is, what is the cause of that action, namely, of life. It is evident that the cause of that action is the soul; therefore this being belonging to what is living, insofar as it is living, is by virtue of the soul. And that through which the being is a determinate particular is its form; therefore the soul is the form of what is alive, since it is a determinate particular and a being only by virtue of soul. He provided a second argument for this. He said: **And the actuality [of a thing] is also the intention of what {187} is a being potentially.** That is, the soul is also actuality, as it was already explained; but actuality is form and the intention of that which is a being potentially; therefore soul is form.

After he had explained that it is a cause according to form, he also explained that it is a cause according to the end. He said: **It is evident that the soul is also a cause,** etc. That is, it is self-evident that the soul is a cause of the body which is alive insofar as it is that on account of which the body was alive. For just as many artifacts are brought about only for the sake of something else, so too is it with respect to nature, namely, that it does not act except for the sake of something. This is the end of nature, namely, that it acts only for the sake of something, as art acts only for the sake of something. Next he explained that that for the sake of which nature carries out natural [activities] seems to be the soul in animals, and not only in animals but in all natural things. He said: **It is similarly so for the soul in animals and all things.** That

the order of nature; all natural bodies are organs of the soul. This is true of those that enter into the constitution of plants as well as of those which enter into that of animals. This shows that that for the sake of which they are is soul.” Aristotle, *De Anima* (1984). Averroes’ alternate translation is closer to the Greek if *يعقل* is changed to *يفعل* twice in this passage. See ibid. (1954).

is, just as form is the end of art in artifacts, so soul is the end of nature in animals and in all natural things. Next he explained the way in virtue of which it appears that the soul is the end of all natural things. He said: **For all natural things are instruments of the soul**, etc. That is, and we said that the soul is the end of all natural things because all natural things seem indifferently to be instruments of the soul in all things which are alive. And as it seems in animals, so does it seem in plants. Next he said: **such that it is also a cause of what is alive**, etc. That is, what we said concerning it is not obscure but rather is self-evident to the extent that it appears from the fact that the soul is also the cause of what is alive. For that for the sake of which is said in two ways: one is that for the sake of which something is found,⁹⁶ {188} and that is the relationship of the soul to the body; the other is that to which there belongs this for the sake of which something is found, and that is the relationship of the soul to what is alive. For we say that the soul and the body both are only for the sake of what is alive.

After he had explained it to be a cause according to form and according to end, he also explained that it is a moving cause according to all the kinds of motions existing in what is alive, whether they are true motions or [just] thought to be [so]. He said: **The soul is also that from which motion in place first comes to be, but that power is not in all living things**, that is, in all animals. Next he said: **Both alteration and growth also**, etc. That is, alteration ascribed to the senses, as some hold, if we will have conceded it to be motion, will be by virtue of the soul, and similarly [so for] growth and diminution. For nothing is said to have this motion, namely, sensation, unless it has soul. Next he said: **It is similarly in the case of growth and in the case of diminution**. That is, as it appears that only something having soul senses, so too it appears that only what shares in some part of soul with living things either grows or suffers diminution. For nothing is diminished naturally or made to grow naturally unless it has the power of taking nourishment, and nothing takes nourishment unless it shares in the life ascribed to living things. For this reason the word "dead" is said of an animal only when it has lost what it shares with plants.

38. Empedocles, however, did not speak rightly and truly in regard to this when he said that the growth which occurs in {189} plants, with respect to what branches out downward through roots, comes about naturally through the motion of earth itself toward that part (and he provided this as the

96. *Invenitur*. Here and just below the corresponding Arabic was probably يجد, "to be found" or "to exist." Hence, Averroes' Arabic here probably said that the soul is that for the sake of which the soul exists. That is, the soul exists for its own sake, while the body exists not for its own sake but for the sake of the soul.

cause⁹⁷), and with respect to what branches upward, comes about because fire is likewise moved upward (and he provided this as the cause). For what he also made use of in his account concerning up and down was not rightly said. For up and down are not the same for each and every thing, but rather as the head is for animals so are the roots for plants, since it is in virtue of actions⁹⁸ that we ought to say that their organs are similar or different. (415b28–416a5)

After he had explained that the motion of growth is not from a principle which is an element, he began to explain that Empedocles erred when he held the opinion that this principle is from the elements and that growth downward in plants is due to a heavy part and upward [is] due to a light part, namely, air and fire. He said: **Empedocles, however**, etc. That is, Empedocles, however, was not thinking properly when he held the opinion that this principle is not the soul and that the growth which occurs in plants is in virtue of the nature of the elements; [and that,] therefore, what grows downward is in virtue of the nature of earth, and he asserted this as its cause. That is, he asserted the cause of its motion downward to be a heavy nature and the cause in the growth of branches upward to be a light nature, namely, fire. Next he began to give an account of how this account is erroneous. He said: **What he also made use of in his account concerning up**, {190} etc. That is, that account which he brings forth in giving the cause of that contrary motion which is found in what can be made to grow is not true. For what was thought, that up in the case of plants is up in the case of the world and down down, is not true, since they are similar neither in part nor in nature and potency; in part because, although we concede this in the case of plants, nevertheless that is something we cannot concede in the case of most animals, for up in [the case of animals] does not correspond to the upper part of the world. Truth does not allow this to be conceded, for the nature of down in plants is different from the nature of down in the world, but there does occur a coincidence of these in such a part by chance, and the nature of up in animals is the very same. An indication of that is that the head in animals is like the roots in plants, since their function is the same, and we ought to note similarity and diversity in parts which can grow in virtue of actions. He said: **For up**, etc. That is, the first error of Empedocles is that the upward and the downward are not the same part in each [particular thing] and in the whole, namely, the world. For, al-

97. There is no parenthetical remark in Aristotle's Greek to correspond to this or the other parenthetical remark immediately below.

98. *Actiones*: τῶν ἐργῶν, "their functions" (Aristotle, *De Anima* [1984]); والآلة وإن اختلفت فالعمل يجمعها (ibid. [1954]); "If the instruments differ, the activity unites them."

though we may concede this in the case of plants, what can we say for most animals? For up in animals does not correspond to the upper part of the world. Next he said: **but rather as the head**, etc. That is, but rather we do not concede that down in plants is down in the world according to nature and potency, nor [that] up in them [is] up in the world, although they may be in the same part. For the nature of the head in animals is the nature of the roots in plants, since they have the same actions, and it is according to the actions that we should say that the parts of animals and plants and their organs are similar or different in nature. Since the nature of a root in {191} plants is the nature of the head in animals, then up in plants is in reality down in the world. And if we had conceded that it is down, then what occurs in the case of plants, namely, that down in them is down in the world, occurs only by chance, not because they have the same nature such that a heavy part is moved downward in plants and a light upward. For if it were so, then an animal would have neither up nor down, nor would the nature of up and down in plants and animals be the same. He said that the potency of the head in animals is the potency of the root in plants because this is the principle through which an animal is an animal, namely, sensation. But this is the principle of that through which plants are plants, namely, food. For this reason if the head from an animal and the root from plants are cut off, they die.

39. **And, besides, what is it that restrains fire and earth when they are moved toward contrary parts? For they are quick to separate unless something prevents it. And if there is something there preventing this, what prevents this ought to be the soul and the cause of growth and nutrition.** (416a6–9)

If we concede that the nature of up and down in plants is the nature of up and down in the world and that the fiery part moves upward in plants and the earthen part downward, and we see that the same part moves upward and downward at once (for we see that any given {192} part asserted as sensible and any given member moves toward each part at once); and if, then, we asserted that this part is unitary, namely, what moves toward each part, then the principle by which they move with those two motions is at once a unitary principle. Therefore, that principle has the potency to move toward each part at once, which is not something in the elements, since one of their parts has only a single motion, whether it is simple or composite (since, if it is composed from them, it will move according to the dominant element). And if the parts, which move upward in that same part in the sense or in nature, are different from the parts which move downward in that part, then those parts are necessarily distinct from one another, either because they are simple or because what is dominant in the things which move downward with respect to simple

bodies is different from what is dominant in the things which move upward. If that is so, what is it which restrains fire and earth, or the fiery or earthen part, since we cannot say that these two are mixed together (since if they were mixed together, they would move toward the same part, namely, of what is dominant), and if it were so, would they not immediately separate from one another, unless something prevents it? But it happens that they must say there is something preventing it there, since they seem not to be separate but to remain [together] at once so long as the plant lives. This is necessary for them. Since they have conceded there to be something preventing it there, whose potency is not the potency of the elements, we will say to them that what prevents it is the soul. In accord with this, then, we should understand his account, although it is very brief. {193}

40. **Some⁹⁹ think that the nature of fire taken absolutely is the cause of nutrition and growth. For of the bodies and the elements, it is fire that is nourished and made to grow, and for this reason it is thought that it does this in plants as well as in animals.** (416a9–13)

After he had refuted the account of those imagining that growth is through an elemental principle, namely, the heavy or the light, he began also to refute the account of those imagining that the principle of nutrition and growth in what is able to take nourishment is fire or a part of fire or something fiery. He said: **Some**, etc. That is, some think that the nature of fire insofar as it is fire, not insofar as it is some given fire (he meant this when he said **taken absolutely**), is the cause of nutrition and growth. They held this opinion because they saw fire change all things into its own substance insofar as it grew in virtue of that. And because according to them what is able to take nourishment is nourished by changing all things into its own substance, for this reason they thought, in virtue of two affirmative propositions in the second figure, that fire without qualification does this.¹⁰⁰

41. **Let us say, therefore, that fire is not a collaborative cause except in a certain way and is not the cause absolutely, but rather the soul deserves more to be this [cause]. For the growth of fire is infinite so long as there is something able to burn. But things which are constituted by nature all have an end and limit in quantity and growth. Those are due to the soul, not fire, and they deserve the intention more than matter.** (416a13–18) {194}

99. Heraclitus.

100. What changes all things into its substance is fire. What changes all things into its substance is the cause of nutrition and growth. Therefore fire is the cause of nutrition and growth. A syllogism in the Second Figure with two affirmative propositions does not yield a necessary conclusion.

After he had explained this opinion, he began first to recount the true part and the false part in it. He said: **Let us say, therefore, that fire**, etc. That is, let us say, therefore, that fire is not without qualification the cause of nutrition and growth in animals, but rather it is ascribed to a cause as if it were one of its tools. Rather, the soul is that to which this action is ascribed without qualification. He conceded that fire is a collaborative cause insofar as something is ascribed to something whose action is completed only through that, because what is able to take nourishment seems to change¹⁰¹ food only by virtue of the fiery part existing in it. For among the elements this one either is what changes the others or the ability to cause change predominates in it more than in the other elements. For this reason it was necessary that it be dominant in bodies which are able to take nourishment. After he explained that if that action were ascribed to it, it is ascribed only insofar as it is a collaborative cause, not insofar as it is itself the cause, he then explained how it is not necessary to ascribe that action to fire without qualification and that it is more deserving to ascribe it to the soul absolutely. He said: **For the growth of fire is infinite**, etc. That is, the indication that the first mover in nutrition and growth is the soul, not the fiery part, is that if that motion, namely, to change something into the substance of what is causing the change, and its growth through what causes the change were in fire alone without another power joined to it (namely, so that the first mover is a potency of fire insofar as it is fire, not a different power joined to fire), it will be found to be infinite and will not cease at some limit so long as it finds something able to burn. However, the motion of changing and growing which is found in this nature which is able to grow is always found to be finite and determinate in quantity. Hence, it is evident, in the second figure, that this motion is not of fire [195] absolutely. And since it is not of fire, it necessarily belongs to another principle, and that we call the nutritive soul. He means by limit and measure the ultimate natural things which are found in the quantities of bodies which are able to grow.

Next he said: **and they are more deserving of the intention than matter**. That is, and that action which is found in this motion, namely, [the motion] which began from a determinate beginning and continued through to the determinate end, is more deservedly ascribed to what is in that action as form, namely, the soul, and not to what is [in it] as matter and instrument, namely, fire. He said this because it appears that the action of growth was composed of the action of fire and of some intention in fire. For the change which is in it

101. *Alterare*: This and related terms are used here to indicate both the accidental alteration of a substance by its consumption of food and the substantial change of the food into the substance of what is altered by nutrition. Consequently, I render it by "to change" and related forms, understanding this to be a generic term for substantial and accidental change.

ought to be ascribed to fire. And because it is determinate, it ought to be ascribed to another power joined with fire, just as softening iron by fire for making some tool, insofar as it is softening, is ascribed to fire and insofar as that softening has a limit known in the case of each tool, it is ascribed to the power of the craft.

42. **Therefore, because the nutritive power and the generative [power] are the same, one must necessarily first determine what nourishment is and distinguish [it] from the other powers.** (416a19–21)

He had recounted earlier that he wants first to speak about the nutritive power, since it is more universal and the first of these which are apparent in it, or [since] the first of the things contemplated on the basis of this power is that it is in the soul and that its actions are growth, nutrition, and generation. He began now to determine what must first be contemplated [196] in regard to this power after it has been known to exist in the soul. He said: **because** the potency for nourishment and generation, etc. That is, because the subject of the nutritive, growth-causing, and generative potency is the same, namely, nourishment, and we already said first that the way to the knowledge of the substances of those powers is only through knowledge first of what they act upon, hence it is necessary first to begin with the determination of what food is and what taking nourishment is. After he had explained this, he began to show what food is.

43. **Let us say, therefore, that it is thought that nourishment is contrary by contrary, and not every contrary by every contrary, but rather contraries which not only come from one another, but also cause growth. For many things come from one another, but not all cause growth,¹⁰² for instance, what is healthy from what is ill. And we also find that they are not nourishment for one another in the same way. Rather, water is nourishment for fire, but fire is not nourishment for water. In simple bodies, however, these two are properly thought to be such that one is the nourishment and the other what is able to take nourishment.** (416a21–29)

Let us say that it was thought that nourishment is that which is contrary to what is able to take nourishment, as certain people have thought. But that opinion is not in regard to every contrary but in regard to these contraries which not only come from one another, but also cause growth. For many contraries which are generated from one another do not cause growth in one

102. The corresponding Greek has οὐ πάντα ποσα, "where neither is even a quantum" (Aristotle, *De Anima* [1984]); وليس جميع الأشياء هكذا (ibid. [1954]); "and all things are not so."

another, for what is healthy {197} comes from what is ill, but it is not nourished by it. He meant this when he said: **and not every contrary by every contrary**, etc. His account is understandable by itself. He indicated by this the contraries which are in the substance, for those are thought to cause one another to grow and to be nourished by one another. After he had explained that this opinion is found only in the case of contraries which are in the substance, those which are such that it is possible that they be figured to be nourished by one another, he [then] also explained that this is not found equally in each contrary. For contraries themselves do not seem to nourish one another equally. He said: **And we also see that they are not nourishment . . . in the same way**, etc. That is, that opinion is not equally found in regard to both of the contraries in the substance, namely, so that each of them nourishes equally what corresponds to it [in the other]. For water and generally damp bodies seem to be nourishment for fire, but fire does not seem to be nourishment for something [else]. After he had explained that this opinion is weak, if it is taken without qualification, he explained that this opinion is found only in the case of the elements. He said: **In simple bodies, however**, etc. That is, to think, however, that what takes nourishment is contrary to what is able to take nourishment is [a view] found properly only in regard to these two simple bodies, one of which is fire and the other dampness, as water and air.

44. **But there is room for doubt in regard to this. For some say that like is nourished and likewise also made to grow by like. Some take the contrary position, namely, that contrary is nourished by its contrary, for like is not affected by its like, {198} and nourishment is changed and digested, and change in anything is toward an opposite disposition or to an intermediate one.** (416a29–34)

But [with respect to] that opinion, although it is found in the case of the elements through sense and induction, nevertheless in the very question there is room for doubt on the basis of well-known propositions. For there is one account which asserts that the nourishment is like and another which asserts that the nourishment is contrary. Next he gave the reasoning for each account. He said: **For some say**, etc. That is, for some of the ancients held the opinion that the nourishment ought to be like, because like nourishes its like and causes it to grow. For contrary changes its contrary but neither nourishes it nor causes it to grow. After he had given this reason, he also gave the reason that the nourishment is a contrary. He said: **Some take the contrary position**. That is, they said this, namely, that the contrary is nourished by its contrary, not by its like, because they held the opinion that nourishment is affected by what is able to take nourishment, and like is not affected by its like; therefore, nourishment is not something like. After they had also seen that nourishment is changed

into what is able to take nourishment and is affected, and every change is from contrary to contrary, or to that which is intermediate between contraries, they concluded from this that nourishment is among the contraries.

45. **Furthermore, nourishment is affected in some way by what is able to take nourishment, but not the converse, as the carpenter [is] not [affected] by the material, but rather the material by him. The carpenter is changed only to action from inaction. Therefore, there is a difference between nourishment as what {199} is united at the end [of the process] and as what is united at the beginning. If, therefore, each is nourishment, but one is what is to be digested and the other what has been digested, then it is possible to say that each is nourishment. However, insofar as it is not digested, contrary is fed by its contrary, but insofar as [it has been] digested, like [is fed] by like. It is evident, however, that [what] each of those groups [holds] is said in a way to be true and in a way to be untrue.** (416a34–b9)

Furthermore, nourishment is affected in some way, etc. It can be understood that this account is, as it were, a figuring aiding one who says that nourishment is contrary and dispelling objections which contradict this account. For someone can say that if nourishment is contrary to what is able to take nourishment, it would be necessary that each be changed by what corresponds to it [in the other] and be affected by it. He speaks as if responding to the position that nourishment concerns what is affected by what is able to take nourishment, not what is able to take nourishment by what is nourishment. For it is not necessary that an agent be affected by every patient in the same way in which the patient is affected by [the agent]. For wood is affected by the carpenter, but the carpenter is not affected by the wood, unless someone calls that change which is from inactivity to operation an affection. Perhaps that account was placed before what he wishes [to say] in dissolution of that difficulty to show what truth was contained in each of those two opposite accounts. Since after this is known concerning nourishment and what is able to take nourishment—namely, that nourishment is what is changed {200} into the form of what is able to take nourishment, not what is able to take nourishment into the form of what is nourishment, and not each equally by what corresponds to it [in the other], and that the case of nourishment in relation to what is able to take nourishment is just as [is] the case of the carpenter in relation to wood, not as contraries which share in the same matter—it will be immediately explained that nourishment is said in two ways. For it is said of what is still not digested and not changed into the nature of what is able to take nourishment, and it is also said of what has been digested and is changed into the nature of what is able to take nourishment, because that food is like is [something which is] truly said of what has been digested and the contrary of what

has not been digested. For this reason he said later: **Therefore, there is a difference between nourishment**, etc. That is, since what takes nourishment is what transforms the nourishment into its substance, it is evident that there is a great difference between the nourishment which was conjoined with what is able to take nourishment at the completion of digestion and what is naturally constituted to be united with what is able to take nourishment, but [has] not yet [been so united].¹⁰³

Next he said: **If, therefore, each is nourishment**, etc. That is, if, therefore, this name nourishment is said of each, but one of them is nourishment in potency (since it is its nature to be digested but it is still not yet digested) and the other is actually nourishment (and that is what is already digested), [then] we can truly say each of food, namely, that it is like and unlike, without any contradiction. For these two accounts were not contraries, unless this name nourishment were said in the same way. For undigested nourishment, which is nourishment in potency, can be said truly to be a contrary. For what takes nourishment acts on it only insofar as it is contrary. Digested nourishment, [201] however, can be said to be like, for it is part of what is able to take nourishment only insofar as it is like. Next he said: **It is evident, however, that [what] each of the two groups**, etc. That is, it is therefore evident from this account that in the account of each of those two groups there is a part which is true and a part false.

46. **And because nothing takes nourishment unless it takes part in life, for this reason a body which is alive is something which is able to take nourishment insofar as it is alive. Nourishment, therefore, is ascribed to what is alive in a way which is not accidental.** (416b9–11)

Because nothing seems to take nourishment unless it shares some one of the intentions of which this name life is said, as was explained, for this reason a body takes nourishment only insofar as it has soul, not insofar as it is body. That action, therefore, is ascribed to the soul in an essential way, not in an accidental way, and the substance of the part of the soul to which that action is ascribed is nothing but the power which is naturally constituted to have that action. When, therefore, we come to know that action in a proper way, we will then come to know the substance of that power in a proper way.

47. **Being nourishment is different from being something which can cause growth.**¹⁰⁴ **It is nourishment, however, insofar as it is a determinate particu-**

103. That is, there is a great difference between potential nourishment assimilated as actual nourishment and potential nourishment unassimilated.

104. Averroes' Text here omits a line of the Greek: "Food has a power which is other than the power to increase the bulk of what is fed by it; so far forth as what has soul in

lar and a substance, and because it preserves the substance of what is able to take nourishment, since [202] it always takes nourishment.¹⁰⁵ **And it causes generation, not because it is self-generating, but because it causes the generation of what is like what is able to take nourishment, for that has being. And nothing generates itself, but [a thing] does preserve itself.** (416b11–17)

He wants to distinguish three actions of nourishment, namely, to take nourishment, to cause growth, and to generate.¹⁰⁶ He said: **Being nourishment**, etc. That is, for something to be nourishment or nutritive is different from its being a cause of growth. For it is called nourishment insofar as it preserves the substance of the thing which is able to take nourishment so that it does not suffer corruption, for it provides it with something in place of what is dissipated. For this reason it endures in being so long as it is nourished and when nourishment ceases, it suffers corruption. It is a cause of growth insofar as it perfects the natural quantity of that which is diminished at the start by necessity. But he said nothing about this, since the difference between growth and nourishment is evident (if perhaps there is no omission on the part of the scribe). After he distinguished these two actions, he began to speak of the third action, which is to generate. He said: It is something which causes **generation**, etc. That is, nourishment has an action other than preservation and growth, namely, to generate. Next he expounded on generation. He said: not the generation of what is able to take nourishment, **but the generation of what is like**

it is a quantum, food may increase its quantity [ἡ μὲν γὰρ ποσὸν τι τὸ ἐμψυχόν, αὐξητικόν], but it is only so far as what has soul in it is a 'this-somewhat' or substance that food acts *as* food; in that case it maintains the being of what is fed, and that continues to be what it is so long as the process of nutrition continues." Aristotle, *De Anima* (1984); emphasis in original; Greek and underlining added. Averroes is aware that there are problems with the Text here. See below in his Comment, where he mentions that the Text may be faulty because of scribal error. The omission also affects the understanding of the line that follows, where the Greek ἡ δὲ τὸδε τι καὶ οὐσία, τροφή is found rendered *Est autem nutrimentum secundum hoc et substantiam*. For this Text Averroes' alternate translation is in different ways also imperfect (e.g., rendering ἡ δὲ τὸδε τι καὶ οὐσία as only جوهر, "a substance") and suffers omissions (e.g., ἥδη γὰρ ἔστιν αὐτοῦ ἡ οὐσία, "the substance of the individual fed is already in existence" [ibid.], which is rendered in the Latin as *illud enim habet esse*) but reflects the Greek somewhat better than what we find in the Latin. See *ibid.* (1954).

105. Although Averroes' Text is much less clear than the Greek, "in that case it maintains the being of what is fed, and that continues to be what it is so long as the process of nutrition continues," (Aristotle, *De Anima* [1984]), his comment shows he understands the Text in accord with the Greek.

106. Cf. Themistius, *De Anima Paraphrase*, (1899), 53.9–10, (1973), 75.8; (1996), 72.

what is able to take nourishment, that is, [like] in species. Next he said: **for that has being.** This can be understood [in this way]: for that is in every way its own being,¹⁰⁷ and it preserves what is able to generate so that it may endure as one in species, as we said earlier.¹⁰⁸ Next he said: **And nothing generates itself, but [a thing] does preserve itself.** That is, there is a difference between these two actions because to take nourishment {203} is to preserve itself and this generating is to generate another, not itself. For it is impossible for something to generate itself.

48. **This principle, therefore, is a power of the soul which is able to preserve what belongs to it as a disposition. And nourishment is that by virtue of which it is prepared for acting. For this reason, when nourishment is lacking, it is impossible for it to exist.** (416b17–20)

It was explained that those actions are different in accord with the diversity of their ends, although the subject is the same, namely, nourishment. It is also necessary that those actions be ascribed to some power belonging to the soul and, since it is so, it is necessary that this principle of soul, namely, the nutritive power, be a power which can preserve a being in its form according to a [certain] disposition, that is, according to some disposition of preservation. He said this because there are some powers which preserve being according to every disposition and all its parts in the same mode, namely, the powers of the heavenly bodies.

Next he said: **And nourishment is that by virtue of which it is prepared,** etc. That is, nourishment is an instrument through which it carries out this action [of self-preservation]. For this reason, when that power lacks nourishment, then it does not have this action [of self-preservation], just as the carpenter, when he lacks a saw, is not able to saw.

49. **They are, therefore, three: what is able to take nourishment, that by which it is nourished, and the agent which brings about nourishment. The agent which brings about nourishment, then, is the first soul; what is able to take nourishment is the body; and that {204} by which it is nourished is nourishment. And because all things must be named from their ends, and the end is to generate [its] like, for this reason the first soul is what generates [its] like.** (416b20–25)

107. That is, that nourishment is a being and material substance in its own right. This is how Averroes understands the Text. In the Greek text, however, Aristotle seems rather to be referring to that which takes nourishment and to be saying that it is a substance in its own right already prior to taking nourishment and that it does not generate itself though it does preserve itself through nourishment.

108. See Book 2, Text 35 {183}.

After he had described this principle of the soul and described nourishment, he returned to distinguish the intentions of those names which are denominated by nourishment. He said: **They are, therefore, three,** etc. That is, it is self-evident that the three are different according to the diversity of related things: one is what is able to take nourishment, the second that by which it is nourished, and the third is what nourishes. And it was already explained that what is the agent for nourishment is the soul to which this action is ascribed. Hence it is evident that the agent for nourishment is the soul, which is first among the rest of the powers which are ascribed to nourishment; and he means by first here what is prior by nature. What is able to take nourishment is the body and that by which it is nourished is food. Next he said: **And because all things must,** etc. That is, because all things must be named from their ends, since this final cause is more befitting the being of the thing than all the [other] causes, it is necessary that the nutritive soul be described through the action which is its end, and it is to generate its like, [and] not through the action of taking nourishment, which is to preserve [itself], as we said earlier. It should, therefore, be said that the nutritive soul is a power which is naturally constituted to generate from food something like in species to the individual in which it exists, since all its actions are only for the sake of this power. This is evident in plants and in animals.

50. **That by which it is nourished is twofold (just as that by which a ship is steered: both the hand and the rudder), one is mover and moved and the other is only mover. {205} It is necessary that all nourishment be capable of being digested; and what causes digestion to take place is heat; hence every living thing has heat. We, then, already said in outline what food is. Later we will give an [extensive] account of it.** (416b25–31)

After he had shown the ways of the nutritive soul's action and both described [that action] and described nourishment, he began now to explain the first instrument by which that soul acts upon food. For he had already said in a general way that the definition of the soul is the actuality of a body having organs. He said: **That by which it is nourished,** etc. That is, that by which the action of nourishment is brought to completion is twofold, namely, a first mover which is not moved while it moves, and a mover which moves and is moved. That is what is related to the first mover as subject, and the first mover [is] related to this as form.¹⁰⁹ Concerning what he said, some things he explained here and some in the general accounts. What was said here, then, is that the nutritive soul is the first mover in regard to the food and that it acts

109. That is, the moved mover is related to the first mover as its subject, and the first mover is related to the moved mover as its form.

upon the food by means of heat by which [the food] becomes digested. But whether it is necessary that it move and not be moved, insofar as it is a first mover, and that heat move in such a way that it is moved by a first mover, was explained in the general accounts. For there it was explained that if every first mover were bodily, it would be composed of a mover which is not moved and a mover which is moved, insofar as things are composed from matter and form.¹¹⁰

But there is a difficulty in regard to what he said. For the motion of the nutritive power is in the category of alteration, and what is self-moved, which is composed of an unmoved mover and a moved mover, is found only in local motion. {206} In the motion of alteration, however, self-motion is not found, for it is not necessary that a first bodily cause of alteration suffer alteration and then alter [something else], as is necessary in the case of the first bodily mover, namely, that it move in place only if it is moved. How, then, did he say here that one of them is mover and moved and the other only mover, while he gave an example from things moving in place? If this were said of the local motion of animals, then the example would be sound. Let us say then: that the proximate mover of food ought to be a body is evident; but that the body causing alteration is not sufficient to be the first mover causing that motion was explained earlier, when he said that heat is not sufficient to bring about the completed action of alteration, unless some power which is not a body but in a body be there. The body, therefore, which is the first cause of alteration, is composed of what causes alteration but does not suffer alteration, namely, the soul, and what causes alteration and is altered, namely, natural heat. It was explained, therefore, that that by which nourishment comes about is twofold, namely, what causes alteration but does not suffer alteration (for everything which suffers alteration is a body), and this is the soul, and what causes alteration and suffers alteration, namely, natural heat. This name motion, therefore, is taken in a broad and general way in this passage. According to this exposition, what was explained in that account is not needed, namely, that the first mover in place be composed of an unmoved mover and a moved mover. We can say that natural heat alters food only if it is first moved in place. For it was explained that local motion precedes the other motions and in particular that motion which is complete, namely, which alters the thing at one time and not at another. And also it not only alters, but it takes into itself and expels food, and this is local motion. {207} According to this exposition the disposition will be evident, but the first exposition seems more fitting. Also, the example was taken in a broad sense, for the hand is not the first unmoved mover of the ship, but rather the pilot himself. After it had been explained that the

110. See *Physics* 8.4, 255a28, and 8.5, 257a32ff.

nutritive soul is a form in the body, since the proximate cause of alteration in the body, which is food, ought necessarily to be a body, and that the form is an unaltered cause of alteration, since it is not a body, and that the body is an altered cause of alteration, he then began to explain what this body is. He said: **All nourishment** must necessarily, etc. That is, all nourishment which is already nourishment in actuality must necessarily be digested by means of a body which is a cause of alteration [and] which is an instrument of the nutritive soul. Since this body ought to be a cause of alteration and digestion, and such is a warm body (hence the ancients said that fire nourishes), everything having a nutritive soul must necessarily possess heat, not without qualification but rather natural heat. For it was explained in the fourth book of the *Meteorology*¹¹¹ that what causes digestion is heat belonging to that being, not extraneous [heat]. Next he said: **We, then, already said in outline**, that is, in a general and broad way. . . , etc. That is, the completion of the account in regard to each of their parts from which nourishment is constituted should be expounded later in an appropriate place. He said this because the account concerning nourishment and growth is realized only in several books. For in the book *On Generation and Corruption*, motion of growth and diminution was established,¹¹² while in the *Meteorology* the kinds of heat and [their] kinds of actions were established, such as to be boiled and {208} to be roasted.¹¹³ In this book the first mover in those motions was also explained, while also in the book *On Animals* it was established how many instruments of that power there are in each animal, how action is brought to completion by [that power] in the case of each of them, and how many members there are and how those members serve [each animal], and what is the nature of the relationship of those to one another in that action, and so forth.¹¹⁴ For this reason he said that the explanation of nourishment given here only concerned the first mover and the first instrument alone.

51. Since we have already established those things, let us now speak in regard to all sensation in a general way. Let us say, then, that sensing occurs with motion and affection, as we said, for it is thought to be some sort of alteration. Some say that like is affected by its like and unlike by unlike.¹¹⁵

111. *Meteorology* 4.3, 381b4–9.

112. *On Generation and Corruption* 1.5, 320b26–322a34.

113. *Meteorology* 4. Cf. 4.3, 380b13ff.

114. *Parts of Animals* 2–4.

115. These last four words are additions to the text of Aristotle, which has *φασὶ δέ τινες καὶ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου πάσχειν*; "Now some thinkers assert that like is affected only by like." Aristotle, *De Anima* (1984). Averroes' Comment below indicates that he read what we find in the Text. Averroes' corresponding remark in his *Middle*

We already spoke of acting and being affected and how they can come to be or not come to be in the general accounts,¹¹⁶ and in this passage we have also spoken of it.¹¹⁷ (2.5, 416b32–417a2)

After he had spoken of the nutritive power, he began to speak of the sensitive [power] and first of what is common to all the senses. He said: **Let us say, therefore, that sensing**, etc. That is, let us therefore say that sensing comes about through an affection and motion in the senses from sensible things, not through an action of the senses upon the sensible things. For this is what was first considered concerning sensation, namely, whether it is counted among the active or passive powers. After he had placed it in the genus of passive powers, he gave the reason for that view. {209} He said: **for it is thought**, etc. That is, we said that sensation comes about as an affection because it is thought that the senses are altered in some form of alteration by sensible things. He said **some sort of** in order to signify what is specific to it, because later it will be explained that this change is called an alteration only equivocally. Next he said: **Some say that like**, etc. That is, since we asserted that affection is the genus of sensation, consideration should be given to the things in which the affection exists, for some say that like is affected by its like and some the contrary, namely, that contrary is affected by its contrary. He meant here by **general accounts** the book *On Generation and Corruption*. What was established in that book is not sufficient for him because here the account seems to be more specific, for the subject of which he speaks here is more specific than the subject of which he spoke there. He first began to raise questions in his assertion that sensation is one of the passive powers, not one of the active ones.

52. **But it is irrational [to ask]¹¹⁸ why the senses do not sense themselves and why also no sense acts in absence of something external, while fire, earth, and the other elements are in them and are what are apprehended by the sense per se, and [likewise for] the accidents consequent upon them. Let us say, therefore, that the sense is not in act but only in potency and for this**

Commentary (2002), at 60.17–18, is similar: *و بعضهم قال إن غير الشبيه يفعل عن غير شبيهه*; “others say that it is affected by that which is unlike it.” Averroes’ alternate translation, however, does not contain this addition. See Aristotle, *De Anima* (1954).

116. *On Generation and Corruption* 1.7, 323b1ff.

117. The Greek version is slightly different: “in what sense this is possible and in what sense impossible, we have explained in our general discussion of acting and being acted upon.” Aristotle, *De Anima* (1984).

118. *Sed est irrationabile*. The Greek has *ἔχει δ' ἀπορίαν*; “Here arises a problem” (Aristotle, *De Anima* [1984]), which is reflected in Averroes’ alternate translation: *ولنا في الحواس مسألة* (ibid. [1954]); “Concerning the senses we have a question.”

reason we do not have sensation, just as what is combustible does not burn by itself in the absence of something causing it to burn. If this were not so, it would cause itself to burn and not need fire to be in act. (417a2–9) {210}

After he had asserted sensation to be among the passive powers, he began to raise questions about pressing the position that it is among the passive and not the active powers, and this is the case if he does not mean by “it is thought” “it is confirmed,” for he often uses “thought” for “certainty.” He said: **But it is irrational [to ask] why the senses do not sense themselves**. That is, as it seems to me, but it is irrational, since we will have asserted that the sensitive powers are active, to say why the senses do not sense in their own right in the absence of something external. For it is necessary, if the sensitive powers were active, to say that the senses sense in their own right and that they do not need something external for their sensing. Next he said: Among them are **fire, earth, and the other elements**. That is, the composition of some of the senses is ascribed to each of the elements and those are sensible things; therefore, they must sense themselves. He meant this when he said: **the accidents consequent upon them**, that is, things consequent upon those sensible things from which the instruments of those senses are composed. After he had explained that it is irrational to say why the senses do not sense in the absence of something external, if we have asserted that the senses are among the active powers, he began to explain the way in which there will be a response to this question. He said: **Let us say, therefore, that the sense is not in act but . . . in potency**, etc. That is, let us therefore say in response that sensation is not among the active powers which act in their own right without need of an external mover in the action which comes from them, but rather they are among the passive powers, which need an external mover. For this reason they do not sense in their own right, just as what is combustible does not burn in its own right without an external mover, namely, fire. And just as {211} in the case of what is combustible, if it were combustible in its own right, it would be possible for it to burn without fire existing in act, so too if the senses would sense in their own right, insofar as they are active powers, then it would be possible for them to sense in the absence of anything extrinsic. You ought to know that this is the first difference by which the powers of the soul differ from one another and it is a starting point for the consideration of the intellect and the other powers.¹¹⁹ However, that the nutritive power is among the active powers is evident from what was said earlier.

53. **Because there are two ways to say that something senses (for what hears and sees in potency we say hears and sees even though it may be**

119. Cf. Themistius, *De Anima Paraphrase*, (1899), 54.28–55.2; (1973), 78.14–79.7; (1996), 74.

sleeping and we [also] say this in regard to what achieves act), hence [it is that] sensation is spoken of both in potency and in act. And similarly sensing also exists in potency and exists in act. (417a9–14)

He had explained that sensation is one of the passive powers, not one of the active powers, and [that] those [passive powers] have a twofold being, namely, being in potency before their powers are perfected by an external mover and being in act, when they are completed and found in actuality by an external mover in act. [Now] he began to explain that these two occur in the case of the powers of the soul. He said: **Because there are two ways to say that something senses**, etc. That is, because it is self-evident that there are two ways to say that something senses, one of which is when we say in regard to someone hearing and seeing in potency that he hears and sees, as we say of one who is sleeping. He meant this when he said: **for what hears and sees**, etc. That is, for what one who hears and one who sees in proximate potency is customarily said to be is one who hears and one who sees, even though one who is sleeping is one who is more removed {212} in all the modes of potency. For what is in darkness is a seer in potency, but that potency is more near to act than a potency which belongs to the vision of one who is sleeping. Next he said: **this is said in regard to what achieves act**. That is, what attains sight and hearing and in general sensing of sensible things is also said to hear, to see, and in general to sense. After he had explained that this word *sense* is said of each intention,¹²⁰ he said: It is necessary that sense also be said in two ways, of potentiality and actuality, and similarly sensing, etc. That is, similarly sensing, which is an action of sense, must be said also in two ways, as of a disposition and a form from which sensing arises.

54. **In the first place, then, our account is not¹²¹ insofar as being affected and being moved is the same as acting and moving. For motion is an action, but an imperfect one, as was said in other places. And everything which is affected and moved is affected and moved only by some agent in act. For this reason being affected is sometimes by like and sometimes by unlike. According to what we said, what is affected is unlike and, after it is affected, it becomes like.** (417a14–21)

120. Arabic fragments correspond to Book 2, 53.27–28: *ولما عرف ان العادة جرت ان يطلق اسم «الحس» على هذين المعنيين* (Long Commentary Fragments [1985], 38).

121. The Greek text has οὐν, “then,” rather than οὐ, “not,” where Averroes’ Text has *non*, “not.” “To begin with let us speak as if there were no difference between being moved or affected, and being active, for movement is a kind of activity.” Aristotle, *De Anima* (1984). The alternate Arabic translation reflects the Greek suitably enough with the particle *ف* rendering οὐν. Ibid. (1954).

After he had explained that sensation is one of the passive powers and that it exists in two ways, he said: **[In the first place,] then our account**, etc. That is, there is a great difference between the account of sensation presenting the opinion that it is a passive power and the account of it presenting the opinion that it is an active power. For the account of something insofar as we hold in regard to it the opinion that its being is to be affected and to be moved is different from the account in regard to it insofar as we hold the opinion that its being is to act and to move. After he had explained this, {213} he provided the difference between each of these two beings. He said: **For motion is an action, but an imperfect one**, etc. That is, these two kinds of being are different. For the being of one kind is of the genus of the being of motion, and it was already explained that motion is an imperfect action (for it is the actuality of something in potency insofar as it is in potency). But the being of the other kind is a perfect action. Next he provided another difference between these two beings. He said: **And everything which is affected and moved**, etc. That is, they differ also since everything counted in the genus of affection¹²² has being only from another, namely, the agent, and for this reason, if the agent does not exist, this will not exist. But everything counted in the genus of action has being in itself, not from another. Next he said: **For this reason being affected is sometimes by like**, etc. That is, because the being of passive powers is a mixture of potency and act, for before it is affected, the passive is contrary to the agent, and when the affection is completed, it is like, and, while it is being affected, it is a mixture of like and contrary. For so long as it is moved part of the contrary does not cease to be corrupted in it and part of the like [does not cease] to come to be. It is evident that one who does not understand that there are passive powers in such a being [as this] will not be able to solve the question mentioned earlier,¹²³ nor also can one who has not conceded that the powers of sensation are among the passive powers even say whether the sensible thing is like or contrary. This is the foundation and it must be preserved as we said in regard to the other powers of the soul, and chiefly in regard to the rational power, as will appear later.¹²⁴

55. **We must also determine potency and actuality, since in this passage we spoke of these without qualification. Let us, therefore, say what we mean when [214] we say of something, for instance a man, that he is a knower, because a human being is among those having knowledge. Sometimes we say this as we say of one who already has acquired the science of**

122. That is, what is acted upon by something else.

123. See Book 2, Text 52 {209}.

124. See Book 3, Text and Comment 3 {381–383}.

grammar that he is a knower. But the potency in each of them is not of the same sort. Rather, the potency of the first is because its genus is of such a sort,¹²⁵ while [the potency] of the second is because, when he wishes, he is able to exercise knowledge, so long as something external does not impede him. (417a21–28)

After he had explained that sense is said in two ways, namely, in potency and in act, and also that each of those is said in two ways, he began to make determinations regarding this. He said: It is necessary also to determine, etc. That is, since we know that sense is found in two ways, namely, in potency and in act, we must determine the intentions in which potency, actuality, and act are said without qualification, since in this passage we speak of them only without qualification. After he had given the reason why it is necessary to speak in this passage about potency and act without qualification, namely, that they exist in sensation without qualification, he said: **Let us, therefore, say what we mean**, etc. That is, let us therefore say that it is evident that when we say that something is such in potency, that this is meant in two ways: either as we say that a human being is a knower in potency, that is, naturally constituted to have knowledge, or as we say in regard to one who knows grammar in act that he is a knower in potency when he does not use his knowledge. After he had explained those two modes of potency, he provided the difference between them. He said: **But the potency in each . . . is not of the same sort**, etc. That is, but the intention of potency in each of them is not the same. Rather, since we say that someone ignorant is a knower in potency, we mean that his genus {215} and matter is receptive to knowledge; and when we say in regard to one who knows grammar that he is a knower in potency, it is said because he has the potency for contemplating grammar when he wishes.¹²⁶

125. The Text here drops the Greek καὶ ἡ ὕλη, “or matter” (Aristotle, *De Anima* [1984]), which is found in Averroes’ alternate translation as كهيولى (ibid. [1954]) and which reappears in Averroes’ Comment.

126. That we are able to exercise our ability to think when we wish is important for Averroes’ assertion that the material and agent intellects are in us. See, for example, {390}, {406}, {437}, and {438}. At the corresponding text in Themistius, *De Anima Paraphrase* (1899), 56.20–24; (1973), 82.17–83.1, we find sensation distinguished from knowledge by the fact that “knowledge has the objects of knowledge from within, in that thoughts are universal objects of knowledge that it amasses and stores for itself. And it is in its power to make them available for itself whenever it wishes, while for sense-perception there are particular (i.e. individual) objects, but these are external and the activity of nature, not of the soul. That is why it is in our power to think whenever we wish, but not in our power to perceive.” Ibid. (1996), 76. Also see ibid. (1899), 99.13; (1973), 179.11; (1996), 123; (1990), 90–91.

56. But one who is contemplating is in a state of actuality and is one who really knows this.¹²⁷ Those first two, therefore, are knowers in potency, but one of them will be altered by learning and will be changed many times over by habitual activity to a contrary disposition, while the other, when he is changed from having sensation or knowledge of grammar (but he is not acting)[will be altered and changed] up to the point that he acts.¹²⁸ Therefore its mode is different. (417a28–b2)

One who knows grammar in contemplating it is a knower according to complete actuality, and such a person we say is really a knower of what he contemplates, not insofar as he knows that but does not contemplate it in act. Next he said: **Those first two, therefore, are knowers in potency**, namely, one who does not know and one who knows but does not make use of his knowledge.

Next he said: **but one of them**, etc. That is, but one of them will be changed from potency into actuality when he is altered by learning and changed many times over from one state to the contrary disposition and from the contrary disposition to a state, until this state is firm and fixed. He means by state the form of knowledge and by **contrary disposition** ignorance. Next he said: **while the other, when he is changed from having sensation or knowledge of grammar (but he is not understanding)**¹²⁹ **up to the point that he acts**. That is, the one goes out from potency {216} into act and into complete actuality when he is changed from having sensation in act or knowledge of grammar in act at a time at which he is not understanding by it, to acting by it. The mode, therefore, of that power is another mode.

57. Affection is also not without qualification, but rather one is a corruption from a contrary and another seems more to be an eduction¹³⁰ of what is in potency by what is in act and is [its] like. That, then, is the disposition of what is in potency in relation to actuality, for only one having knowledge

127. The Greek has τὸδε τὸ Α, “e.g. this A” (Aristotle, *De Anima* [1984]), which Averroes’ alternate translation reflects with «ألف» هذا الحرف المشار إليه (ibid. [1954]).

128. The sense of the Text is not rendered well in the Latin translation. Aristotle here is saying that the second kind of knower in potency is one who has possession of sensation or knowledge of grammar but is not actively using it and then comes to put it to active use.

129. The difference between the Text and the Comment is likely due to an error based on the similarity of يفعل, “he acts,” and يعقل, “he understands.”

130. *Evasio*. The Greek has, “the maintenance [τὸ δὲ σωτηρία] of what is potential by the agency of what is actual” (Aristotle, *De Anima* [1984]); my addition of Greek and underlining and is followed by Averroes’ alternate translation: سلامة (ibid. [1954]).

contemplates. And this either is not an alteration, since there will be an addition to the actuality in him, or it is another kind of alteration. (417b2-7)

This word **affection** does not signify the same simple intention but rather one is the affection which is a corruption of a patient by a contrary by which it is affected, as the affection of the hot by the cold and the moist by the dry. Next he said: **and another seems more**, etc. That is, there is also the affection which is an eduction of what is affected in potency by what is in actuality and act, insofar as what is in act is like, not contrary, namely, drawing it out from potency to act, contrary to the disposition in the first [kind of] alteration. Next he said: **That, then, is the disposition**, etc. That is, that final mode of affection is the disposition of a part of the soul which is in potency in relation to the actuality which moves what is in potency and which draws [the potency] out into act, [though] not according to the first mode of affection. {217} Next he said: **for only one having knowledge contemplates**, etc. That is, that mode of affection is from a mode which is an eduction of the patient by what is moving it in act, not its corruption. For only one who knows contemplates something after he was not contemplating. This is not an alteration according to the first intention, which is the corruption of what is affected. Next he said: **since there is an addition to actuality in it**, etc. That is, because that change is not from non-being but is an addition in what is able to be transformed and a going toward actuality without there being a corruption or change there from non-being, it is asserted as a change from ignorance to knowledge.¹³¹ [It is] as if he means that this is more remote from true alteration in two ways. For alteration which is an eduction of the patient is twofold, namely, change from non-being to actuality and change from first actuality to final [actuality], and this [latter] is the addition which he indicates. Next he said: **or it is another kind of alteration**. That is, that mode which is an eduction of the patient either is not called alteration or it will be another kind of alteration.

58. Likewise, it is not right to say regarding what understands that it is altered when it understands, just as it is not said that the builder is altered when he builds. In the category of understanding¹³² that [something] is reduced to actuality from what exists in potency is not rightly called learning, but rather must be given another name. One who learns after he was in potency and acquires knowledge from one who is a teacher in actuality, must either not be said at all to have been affected or [it must] be said that

131. That is, there is a change from not actively knowing to actively knowing.

132. *In capitulo intelligendi*: [κατα] τὸ νοοῦν καὶ φρονεῖν, "in the case of thinking or understanding" (Aristotle, *De Anima* [1984]); العلم والفهم (ibid. [1954]).

alteration is twofold, namely, change to dispositions of non-being and change to a state and nature. (417b8-16) {218}

Likewise, it is not right to say of what comes from ignorance to knowledge, whose disposition is called learning, that it is altered. Similarly, it is not said of what is changed by this that it does not act by a state existing in it in act to what acts by it, as the carpenter who is changed from not being engaged in carpentry to being engaged in carpentry, the example which we find in the other translation.¹³³ Next he said: **[In the category of understanding] what is reduced to actuality**, etc. That is, he who acquires the actuality of knowledge after potency by a reduction to that which he had already acquired in the first place, then next lost it, ought not to be called by that name by which we call one who is in the first potency always and has never acquired that which is called learning. Rather, that mode ought to have another name.¹³⁴ That mode which he indicated is called recollection. He said this because Plato holds the opinion that learning and recollection are the same. Next he said: **One who learns after he was in potency**, etc. That is, change from ignorance into knowledge by a teacher who is a knower in actuality and in act necessarily either is not called alteration or is such that it is said that alteration takes place in two ways, one is the change which comes about through an agent in dispositions which were not yet existing in a patient and the other is the change which comes about from the agent in the disposition of a state and form existing¹³⁵ in the patient. The latter is an affection which is the corruption of the patient, not an eduction. This is what he said before: **or it is another genus of alteration**.¹³⁶

133. كما أنه لا يحسن أن يقول في البناء إذا بنى (Aristotle, *De Anima* [1954]); "just as it is not right that it be said when he builds."

134. Arabic fragments correspond to Book 2, 58.25: بل يجب ان يلعب بلقب آخر (Long Commentary Fragments [1985], 38).

135. Arabic fragments correspond to Book 2, 58.29-35: يعني ان كانت الاستحالة أيضا: على حال خروج المتعلم من الجهل الى العلم - وهو حصول العلم بالاستكمال والفعل - فينبغي اما الا يسمى ذلك انفعالا واستحالة، واما ان يسمى على أنه معنى آخر حتى يقال ان الاستحالة ضربان: أحدهما تغير المستحيل وحصول حال ما فيه بدون انفعال عن الفاعل > (Long Commentary Fragments [1985], 38). "He means that the change also be to a disposition of the emergence of the learner from ignorance to knowledge—which is the coming about of knowledge in completeness and act—so it is necessary either that this not be called affection or change, or that it be so called insofar as it has another meaning. In this way change has two senses, one of the two is the forming and coming about of a certain disposition in it <without affection on the part of the agent> and the other <the change by way of state> and form coming about."

136. 417b6-7, Book 2, Text 57.

59. **The first alteration of what senses is from what generates [it], such that when it was generated, immediately the ability to sense exists just as knowledge exists. And what is also in act is like contemplating. Nevertheless, they do differ because in this the agents are external, as what is seen and heard, and likewise the other sensible things.**¹³⁷ (417b16–21) {219}

The first change on the part of what senses, which is like the change of a human being from ignorance to knowledge through a teacher, is the change which comes about through the agent generating the animal, not from sensible things. He indicates this difference between the first actuality which has come to be in the sense and the last. For it is held that the first actuality of sense comes from the agent intelligence,¹³⁸ as is explained in the book *On Animals*,¹³⁹ but the second actuality comes from sensible things. Next he said: **such that**

137. Averroes' Text here is far less clear than the Greek: "In the case of what is to possess sense, the first transition is due to the action of the male parent and takes place before birth so that at birth the living thing is, in respect of sensation, at the stage which corresponds to the possession of knowledge. Actual sensation corresponds to the stage of the exercise of knowledge. But between the two cases compared there is a difference; the objects that excite the sensory powers to activity, the seen and the heard, etc., are outside." Aristotle, *De Anima* (1984).

138. *Ab intelligentia agenti*. This is the first occurrence of the term *intelligentia agens* in this work. Could the distinction of *intelligentia agens* from *intellectus agens* be one made by the translator, perhaps under the influence of the thought of Avicenna? The Arabic العقل الفعال can be rendered either way. For Averroes in the present work, the referent is the same for the terms "agent intelligence" and "agent intellect." See the introduction, pp. xix–xx, n. 10, and p. xxiv, n. 20. Also see Book 3, n. 732 {390} regarding the use of the phrase "intellect which is in act," *intellectus qui est in actu*, to denote the agent intellect.

139. See *Generation of Animals* 2.3, 736b21–28. Here Aristotle is concerned with intellect and says nothing about sense. "It remains, then, for the reason alone so to enter and alone to be divine, for no bodily activity has any connection with the activity of reason." 736b27–28. Aristotle, *Generation of Animals* (1984). The corresponding passage of the *Middle Commentary* (2002), 63.8–14, does not trace sensation to the agent intellect. Since the agent intellect is not generally held to be the cause of sensation for all animals, it may be that Averroes has in mind the apprehension and processing of bodily sensation by the internal sense powers of imagination, cogitation, and memory. These taken together as the cogitative power do constitute a "kind of reason" {449} by the preparation of denuded intentions for the separate intellects. Moreover, at {450} in explaining Aristotle, he writes, "Perhaps he indicated the material intellect in its first conjoining with us, namely, [in] the conjoining which is through nature." It may be, then, that the human ability for pre-intellectual formation of pure—albeit still individual—intentions in preparation for abstraction by intellect is an ability which he understands ultimately to come from the agent intellect via our natural affiliation and connection with the material intellect.

when it was made [to be], etc. That is, such that when the first power comes to be, immediately it will have sensation unless there is some impediment or sensible things are not present. This is like the knowledge which is in the knower who does not put the knowledge to use. Next he said: and to sense is just as to know. That is, the complete actuality of sense, which is to apprehend sensible things in act and to contemplate them, is like making use of knowledge and contemplation. Next he said: **And what is . . . in act is** similar to contemplation. That is, to have sensation in act is similar to contemplating and knowing. Next he said: **But they do differ**, etc. That is, but the first actuality of sense differs from the knowledge of the knower which is in act when he is not contemplating, in that what is the cause moving the first actuality of sense and what draws it out into the second [actuality] are external sensible things, such as visible things, and what moves the knower from the first actuality into the second is something united with the soul by a uniting in being.¹⁴⁰

60. **The reason for this is that sense in act apprehends particulars, while science [apprehends] universals existing, as it were, in the soul itself. For this reason a human being can exercise understanding when he wishes, but not sense, because he requires a sensible object. That disposition is also in the knowledge of sensible things, for that cause is a cause {220} of them,**¹⁴¹ **namely, that sensibles are from particular external things. But we will speak of these and expound on them later, and it will have [its] time.** (417b22–29)

The reason for the difference between sense and intellect in the acquisition of complete actuality lies in the fact that the mover is external in the case of sense and it is internal in the case of intellect. For sense in act is moved only by a motion which is called apprehending and [is dependent] upon sensible particular things which are outside the soul. Intellect, however, is moved to complete actuality by universal things and those are in the soul. He said: those are, **as it were, in the soul**, because he will explain later that these—which are from the first actuality in the intellect as sensibles from the first

140. *Copulatione in esse*. For Averroes the Aristotelian notion that knowing is a way of being entails that there is some joining in being with the separate material and agent intellects as well as with intentions in the inner senses derived from sensation when the second actuality of knowing takes place. Cf. {228}.

141. The Latin *ista enim causa est causa* is based on a corrupt Arabic text, apparently due to a confusion between علم, "knowledge," and علة, "cause." In the Greek this is καὶ διὰ τὴν αὐτὴν αἰτίαν, "on the same ground" (Aristotle, *De Anima* [1984]); لعلمنا من أجل هذه العلة بعينها (ibid. [1954]); "Our knowledge is by way of this cause itself." From Averroes' Comment it is perhaps likely that he read the sort of thing we find in the Latin in his Arabic Text.

actuality of sense, namely, insofar as both cause motion—are intentions which can be imagined and those are universal in potency, although not in act. For this reason he said: those are, **as it were, in the soul**, and he did not say “they are,” because a universal intention is different from an imagined intention. Next he said: **For this reason a human being can exercise understanding**, etc. That is, because the things which move the rational power are inside the soul and possessed by us always in act, for this reason a human being can contemplate them when he wishes and this is called “to conceptualize,”¹⁴² and he cannot sense when he wishes because he necessarily needs sensibles which are outside the soul. Next he said: **That disposition is also**, etc. That is, that disposition is also in us in the case of the knowledge of sensibles and we learn from them because they exist in the senses. The cause for the existence of that disposition in us for the knowledge of sensibles is the same as the cause for their existence in the senses themselves. Similarly we should understand {221} that the disposition existing in us for the knowledge of universals is in us because it is in the rational power and the reason that we are in this mode through that [disposition] is the reason why [that power] is in that mode.¹⁴³ But because the account in regard to the intellect is not evident here, he referred us to another time. He said: **But** the account concerning **those things**, that is, concerning the intellect. One can say that sensibles do not move the senses in accord with the way they exist outside the soul, for they move the senses insofar as they are intentions, since in matter they are not intentions in act, but in potency. And one cannot say that this difference occurs by virtue of the difference of subject such that the intentions come to be on account of a spiritual matter which is the sense, not on account of an external mover. For it is better to think that the reason for the difference of matter is the difference of forms, rather than that the difference of matter is the reason for the difference of forms. Since it is so, we must assert that the external mover in the case of the senses is different from the sensibles, as was necessary in the case of the intellect. It was seen, therefore, that if we concede that the difference of forms is the reason for the difference of matter, it will be necessary that the mover be external. But Aristotle was silent about this because it is hidden in the case of sensation and is apparent in the case of intellect. You ought to give this consideration, since it requires investigation.

142. *Formare*. See Book 1, {6}, n. 14.

143. Human beings are linked to the agent and material intellects insofar as humans provide the images which are the basis for the knowledge which comes about in the material intellect. That knowledge in the material intellect and the activities of the agent and material intellects are together responsible for the knowledge and rationality which particular human beings have in this world. See Book 3 {388}, {406}, {416}.

61. Now to this extent it may be determined that what is said to be in potency is not [so] without qualification, but of one sort it is said as it is said that a boy can lead an army and of another sort it is said as it is said of an experienced man, and the same goes for sense. (417b29–32) {222}

The whole of what was explained from this account and in this passage is this. He means by **without qualification** one intention and he said that what is in potency is not one intention, but several. He said: **but one is said**, etc. That is, a sense is said to be in potency just as it is said that a boy is able to lead an army. This is a first remote potency from which, when a change comes about to proximate potency, it comes about through the generating agent and not through sensible things and it is similar to the potency for knowledge in one who is ignorant. Next he said: **and of another sort it is said as it is said of an experienced man, and it is similarly so with regard to sense**. He means the potency which is the first actuality of the sense, namely, that from which there comes to be the change to the complete actuality through sensible things themselves. It is like the one who knows when he is not using his knowledge. He means by all those things to explain that the power of a sense which receives sensible things is not a pure disposition,¹⁴⁴ as [is] the disposition which is in the boy for receiving knowledge, and that the power of sense is a certain act, as having a positive disposition when he does not make use of his positive disposition.¹⁴⁵

62. But because their differences are not named, and we already determined in regard to them that they are different and how, we must use [the terms] affection and alteration as [if they were] the real things. That which senses is in potency just as what is sensed in actuality, according to what we said. For while it is unlike it is affected and after it is affected, it is like. (417b32–418a6) {223}

But the differences of potency and change belonging to things existing in the sensitive soul and in things which are alive do not have names of their own. We already explained that these are different and we explained the way in which they are different. It, consequently, seemed to us that it is necessary, insofar as that intention which we have explained concerning the soul does not have a name of its own, to give the name of affection and alteration to that which is the subject of real things. For this does no harm, since we already

144. *Pura preparatio*. That is, a receptive disposition and a directed receptivity.

145. Arabic fragments correspond to Book 2, 61.20–24: *كله ان قصده من ذلك كنه* يعني ان يقصد ان قوة الحس التي تقبل المحسوسات ليست استعدادا محضا بمنزلة الصبي الذي فيه استعداد لقبول العلم وانما هو فعل ما بمنزلة «ملكة العالم» في حين لا يستعمل علمه (*Long Commentary Fragments* [1985], 39). Note that for علمه, “his knowledge,” the Latin translator has *suo habitu*, “his disposition.”

determined the intention by which they differ. He said: **we must** because that intention lacks a common name and the adoption of a name already in common use is easier than conjuring up another name. After this had been explained concerning what has sense, he began to describe it in an unqualified way. He said: **That which senses in potency is just as what is sensed in actuality.** That is, it is therefore evident from what we said that what has sense in an unqualified way is what is in potency to the intention. We explained this concerning the potency [actualized] through the intention of a sensible thing in actuality, that is, that which is naturally constituted to be actualized by the intentions of sensible things, not by the sensible things themselves.¹⁴⁶ And if [it were] not [so], then the being of color in the sense of sight and in a body would be the same; and if it were so, then there would be no apprehension of its being in the sense of sight. For that reason he said: that which is **in potency is just as what is sensed in actuality**, and he did not say: that which is sensed in potency. For, if it were so, the being of color would be the same in the sense of sight and in its matter. Next he said: Therefore, **while it is unlike it is affected and after it is affected, it is like**, etc. That is, what occurs for it is what occurs for all things subject to alteration, as was said in the general account,¹⁴⁷ namely, that it is affected by what is sensible while it is not like it and, when the affection is completed, it will then be like.¹⁴⁸ [224]

146. The same notion is expressed in the *Middle Commentary* by way of a distinction between the perfection of the sense (استكمال) and the sensible in actuality (بالفعل). See *Middle Commentary* (2002), 64.5–10, and 178, n. 14.

147. See *On Generation and Corruption* 1.7, 323b18ff.

148. Arabic fragments correspond to Book 2, 62.27–36: لأن اللون في البصر هو بعينه وجوده خارج العين في الجسم ، ولو كان الأمر كذلك لما كان يدرك وجوده في البصر ، ولذلك قال «وهو أن الحاس بالقوة يصير كالمحسوس بالاستكمال » ولم يقل « أن الحاس بالقوة هو المحسوس » فإن كان ذلك كذلك لكان البصر بوجود اللون فيه ملونا باللون الذي في الجسم ، ثم قال : « والحاسة تنفعل عن المحسوس من جهة ما هي متشبهة ... » يعني ويلحقه جميع الأشياء المستحيلة ، وهو أنه ينفعل عن المحسوس ما دام غير شبيه به حتى إذا أنفعل وتم انفعاله (Long Commentary Fragments [1985], 39). Note that the Arabic contains a clause at the beginning of this section corresponding to Latin Book 2, 62.27, and differs from the Latin in other ways. “And if [it were] not [so], then the being of color in the sense of sight and in a body would be the same, because the color in the sense of sight exists in its own right external to the eye in the body [seen]; and if it were so, then there would be no apprehension of its being in the sense of sight. For that reason he said: “it is the case that what senses in potency sees insofar as the sensible is in act” and he did not say: “that what senses in potency is the sensible.” For, if it were so, then the sense of sight with the existence of color in it would be colored by the color which is in the body. Next he said: “the sense is affected by the sensible insofar as it is similar,” etc. That is, what occurs for it is what occurs for all things subject

63. Before we begin to speak of each of the senses, let us speak of sensible things. Let us say, then, that sensible is said in three ways, of which two are said to be sensed per se and the third accidentally. One of the two [first indicated] is proper to any given sense and the other is common to them all. And one calls proper what another sense cannot sense and what is such that it is impossible for there to be any error in regard to it, for instance, sight with reference to color, hearing with reference to sound, and taste with reference to flavor. Sense has several modes in one,¹⁴⁹ but each of them judges those things and it does not err in regard to color as to what color it is nor in regard to sound as to what sound it is,¹⁵⁰ but rather in regard to a colored thing as to what it is and where it is and in regard to something heard as to what it is and where it is. What, then, is of such a sort is proper. (2.6, 418a7–17)

After he had explained what sense in an unqualified way is, he wants now to speak about each of the senses. Because he already said earlier that the way to [do] this is to speak about sensible things themselves, since they are better known than the senses, he said: **Before we begin to speak**, etc. That is, because it is necessary to go from these things which are better known from our point of view to those which are better known by nature,¹⁵¹ we must first speak of sensible things themselves.

Because some sensible things are universal and some are proper, he began to speak of universal ones. He said: **Let us say, then, that** what is sensed, etc. His account in this chapter is clear. And when he said: **sense has several modes**, he means that the sensible objects of each of those [225] senses are several in one mode, but each of the senses judges its proper sensed object and does not err in regard to it for the most part.¹⁵² For the sense of sight does not err in regard to color as to whether it is white or black, nor hearing in regard to sound as to

to alteration, namely, that it is affected by what is sensible while it is not like it until, when it is affected and the affection is complete, it becomes like, as is apparent in the general accounts.” Additional Arabic emphasized in translation.

149. *Sensus autem plures modos uno habet*. *Sensus* here corresponds to the Greek ἡ δ' ἄφῃ, “touch.” Aristotle, *De Anima* (1984). Averroes makes no comment on this, although the alternate translation has اللمس (ibid. [1954]); “touch.” Note that Latin manuscript C has *uno modo* for *uno*.

150. The Greek has καὶ οὐκ ἀπατάται ὅτι χρώμα οὐδ' ὅτι ψόφος, “never errs in reporting that what is before it is colour or sound” (Aristotle, *De Anima* [1984]). Averroes’ alternate translation has اللون وليس يدرك اللمس القرع و (ibid. [1954]); “touch does not perceive sound and color.”

151. Cf. *Physics* 1.1, 184a16–18.

152. Note that in contrast to this remark in the Comment, the Text has “it is impossible for there to be an error in regard to it.”

whether it is low or high. But those senses do err in apprehending the differences of those sensible individuals, for instance, in apprehending that white thing which is snow or the differences of their places, for instance, so that it apprehends that this white thing is above or below. Next he said: **What, then, is of such a sort is called proper.** That is, sensibles which are found to belong to some sense alone which does not err in regard to them for the most part, are called proper. And when he said: **but rather in regard to a colored thing as to what it is and where it is and in regard to something heard as to what it is and where it is,** he did not mean that sense apprehends the essences of things, as some have thought, for this belongs to another power which is called intellect. Rather, he meant that the senses, with their apprehension of their proper sensibles, apprehend individual intentions which are different in genera and species. They, therefore, apprehend the intention of this individual human being and the intention of this individual horse and generally the intention of each of the ten categories of individuals. This seems to be proper to the senses of a human being. Hence, Aristotle says in the book *Sense and Sensibilia* that the senses of the other animals are not as the senses of a human being, or something like this statement.¹⁵³ That individual intention is what the cogitative power discerns from the imagined form and refines from the things which were added with it from those common and proper sensibles, {226} and it deposits it¹⁵⁴ in the memory. This same [individual intention] is what the imaginative [power] apprehends, but the imaginative [power] apprehends it as joined to those sensibles, although its apprehension is more¹⁵⁵ spiritual, as is explained elsewhere.¹⁵⁶

64. **Motion, rest, number, shape, and quantity are common [to all the senses]. For those are not proper to any but all [are] common to them, for motion is sensed by touch and the sense of sight.** (418a17–20)

153. *Sense and Sensibilia* 1, 436b18–437a3. Cf. {219}.

154. I follow manuscripts B and G, with *eam* instead of *ea*.

155. Arabic fragments correspond to Book 2, 63.50–60: ان يكون هذا خاصا بحواس الانسان ولذلك يقول أرسطو في <كتاب الحس والمحسوس> ان حواس سائر الحيوان هي كالقشور بالنسبة لحواس الانسان أو شبيه بهذا الكلام. وهذا المعنى الشخصي هو الذي تميزه القوة المفكرة من الصورة المتخيلة وتجدره <مما كان مقتربا به> من هذه المحسوسات المشتركة والخاصة وتودعه الى الذاكرة. وهذا بعينه تدركه المتخيلة لكن تدركه مقتربا بهذه المحسوسات. وإذا كان <روحانية> ، كما لخصه هناك <Long Commentary Fragments [1985], 39>. In the Arabic we find an analogy not found in the Latin: “that the senses of the rest of the animals are like shells in relation to the senses of human beings, or something like this statement.” The printed text has المحسوسا، which must be an error for المحسوسات.

156. Cf. {416}. This important passage explaining the mediating role of cogitation in process toward intellectual understanding is key to the doctrine of cogitation developed in *Long Commentary* and is not at all touched upon in the corresponding passage of the *Middle Commentary*. See *Middle Commentary* (2002), 64.4–17.

After he had explained the proper mode from among the two essential modes, he began to explain the common mode. He said that they are five: motion, rest, etc. What he said: **For those are not proper**, etc., does not mean that each of those five is common to each of the senses, as Themistius understood,¹⁵⁷ and as it appears. Rather, three of them, namely, motion, rest, number, are common to all, but shape and quantity are common to touch and the sense of sight alone. He intends this by what he said: **but all [are] common to them**, etc, that is, but all are common to the senses, not all to all senses. That these sensibles, namely, the proper and the common, are ascribed to the senses in an essential way is evident, for we cannot ascribe the apprehension belonging to the senses to these in a way different from that by which they are senses. (This [sort of attribution], then, is the intention of what exists in an accidental way, which is opposed to what exists in an essential way.) For those¹⁵⁸ are things which can be apprehended and which belong to the senses insofar as they are senses, not insofar as they are certain [particular] senses.¹⁵⁹ {227}

65. **[To be] in an accidental way is said in regard to a thing because it is sensible just as the white thing is Socrates, for he is sensed only in an accidental way, for it happens to the white thing to be him. For this reason one is not affected by a sensible thing insofar as it is so [as a particular individual]. But what are sensible things per se and proper are sensibles in reality, and they are what the substance of each sense is naturally constituted to sense.** (418a20–25)

After he had explained the two modes of per se sensibles, namely, proper sensibles and common sensibles, he began to explain the third mode, which is the per accidens sensible. He said: **[To be] in an accidental way is said in regard to a thing because it is sensible**, that is, in this mode. Next he gave an example. He said: **for the white thing which Socrates is is sensed only in an accidental way.** That is, for to judge that this white thing is Socrates is to sense in an accidental way. Next he gave the reason. He said: **for it happens** that the white thing which is sensed is that thing. That is, we say that this apprehension is per accidens because we sense by the sense of sight that this thing is

157. Themistius, *De Anima Paraphrase* (1899), 57.16 and 57.36–58.14; (1973), 85.1–2 and 86.9–87.10; (1996), 77–78. In the *Middle Commentary* (2002), at 65.3–4, Averroes, as Ivry puts it, “believes he is following Themistius” and takes a position different from the one found here in the *Long Commentary*. He writes, “That which is common is movement, rest, number, shape and size—all the senses perceiving each of these.” See Ivry’s note at 178, n. 15.

158. That is, the proper and common sensibles.

159. That is, it is essential to them as senses, not as this or that particular sense.

Socrates only insofar as it is colored and the fact that this colored thing is Socrates is per accidens insofar as it is something colored. But one can say that shape, number, motion, and rest similarly occur for it. How, then, have those been counted among these which are essentially sensibles? For if they have been counted because they are common, similarly also the intentions of individuals are common to all the senses. In regard to this we can mention two accounts. One is that this commonness seems to be more necessary in the being of prior sensibles, for instance, of quantity. For color is not stripped from it, and likewise heat {228} and cold, which are associated with touch. Color, however, need not be in Socrates or Plato, neither with a proximate nor a remote necessity. Furthermore, common sensibles, as will be explained, are proper to the common sense (insofar as those are proper to any of the senses) and apprehension of the intention belonging to the individual is not, although it is an action of the common sense. And for this reason oftentimes it is required in the apprehension of the intention belonging to the individual that more than one sense be used, as physicians use more than one sense, in knowing the life of what is thought to have a mass of blood vessels.¹⁶⁰ Nevertheless, it seems that this action is not of the common sense, insofar as it is the common sense, but insofar as it is the sense of some animal, for instance, of an intelligent animal. That, then, is also another of the accidental modes, namely, that it happens to the senses to apprehend the differences of individuals (insofar as they are individual) not insofar as they are simple senses, but insofar as they are human senses. This is chiefly the case for substantial differences, for it seems that the apprehension of the intentions belonging to individual substances, which the intellect contemplates, is proper to the senses of a human being.¹⁶¹ And you ought to know that the apprehension of the intention belonging to the individual belongs to the senses and the apprehension of the intention of the universal belongs to the intellect, whereas universality and individuality are apprehended by intellect, namely, the definition of the universal and of the individual. Next he said: **For this reason one is not affected**, etc. That is, the sense of sight is not affected by a sensible intention per accidens, for if it were affected by some individual insofar {229} as it is that individual,

160. *Et ideo pluries indiget in comprehensione intentionis individui uti pluribus uno sensu, ut utuntur Medici, in sciendo vitam eius quod existimatur habere superpositionem venarum, pluribus uno sensu.* What Averroes intends here is apparently that at times one must look at something again and again using the same sense in order to perceive the object in its full complexity. In his example he may be referring to a ganglion, a cystic lesion resembling a tumor, consisting of a tangle of blood vessels. Cf. *Short Commentary on the De Anima* (1950), 27.13–14; (1985), 42.4–5; (1987), 127.

161. Cf. Book 2 {219–221}.

it ought not to be affected by another individual.¹⁶² Next he said: **But what are sensible things per se**, etc. That is, of the two modes of things sensible per se, the proper are those which ought first to be counted in these which are essentially and are sensibles in reality and essentially, since those are what are sensed first and essentially; the others, however, although they are sensed essentially, nevertheless are not first. Next he said: **and they are what**, etc. That is, they are what are naturally constituted to be sensed first and essentially by any one of the senses and likewise the nature and being of any one of the senses is in sensing them.

66. **That, then, with which the sense of sight is concerned is the visible. And the visible is color and [the sort of thing] which can be spoken of but [in fact] is not spoken of.**¹⁶³ **What we are speaking of will be more apparent later. For the visible is color and this is visible per se. That is to say per se not according to [its] intention, but [because] a cause is found in it for its being visible.** (2.7, 418a26–31)

After he had completed the general account of sensibles, he returned to the account proper for each sensible and first to the sensible belonging to the sense of sight. He said: **That, then, with which the sense of sight is concerned**, etc. That is, it is self-evident that the sensible with which the sense of sight is concerned in a proper way is the visible. The visible is color and what

162. Arabic fragments correspond to Book 2, 65.45–55: *ان ادراك المعنى الشخصي عن طريق جوهره الذي ينظر اليه العقل اما هو شيء يخص حواس الانسان وهي المعاني التي تدل عليها أسماء الأشخاص وينبغي ان نعلم ان ادراك المعنى الشخصي للجواس ادراك المعنى الكلي للعقل والكلي والشخصي هما مدركان بالعقل، اعني حد الكلي والشخصي. ثم قال: «ولذلك ليس يفعل» أي ولكون المعنى الذي به زيد المشار اليه مدركا بالبصر بطريق العرض صار البصر لا يفعل عن ذلك المعنى المحسوس من طريق انه زيد أو عمر وفاته لا انفعال عن شخص ما مشار اليه (Long Commentary Fragments [1985], 39); “that <the apprehension> of the individual intention which the intellect considers is that which is the proper object of the human senses. These are the intentions which individual names indicate. We must know that the apprehension of the individual intention belongs to the senses <and the apprehension of the universal intention belongs to the intellect>, and both the universal and the particular are apprehended by the intellect, namely, the definition of the universal and of the particular. Then he said, ‘For this reason it is not affected,’ that is, owing to the nature of the intention by which Zayd as a determinate particular is apprehended by the sense of sight incidentally, the sense of sight does not come to be affected by that sensed intention insofar as it is Amr or Zayd. For it is not an affection from a certain specific individual.” Additional Arabic emphasized. The names Zayd and Amr are commonly used in examples for any given person.*

163. *Et quod possibile est dici sed non est dictum: καὶ ὁ λόγος μὲν ἔστιν εἰπεῖν, ἀνόνομον δὲ τυγχάνει ὄν*, “a certain kind of object which can be described in words but which has no single name.” Aristotle, *De Anima* (1984).

is like [color] among the things which are seen in the dark, which do not have a collective name¹⁶⁴ in color, nor do they even have in themselves a name which shows for them what is, as it were, a genus, but they can be explained only [230] with a complex account. For instance, we may say that they are those things which are seen in darkness and not seen in light, such as [phosphorescent] shellfish. Next he said: **[What we are speaking of] will be more apparent later.** That is, we will explain later the way in which it is said that color and those [other things] are visible, namely, whether this may be said equivocally or according to the prior and the posterior. Next he said: **For the visible is color,** etc. That is, for the visible in reality is color; but color is that which is per se visible. This is to say per se not according to the first of the intentions by which one speaks of what is essentially (this is the way in which the predicate is in the substance of the subject), but [per se] in the second intention (which is that in which the subject is in the definition of the predicate).¹⁶⁵ For color is the cause that the thing is visible.¹⁶⁶ And when he said, **but [because] a cause is found in it,** he means: insofar as color is the cause or the cause is found in it for something to be visible.

67. And every color is a cause of motion in what is actually transparent; and this is its nature. For this reason it is not visible without light, but any

164. *Nomen congregans*. That is, there is no collective or comprehensive name used of all of them.

165. Visible is not a constitutive part or a cause of what it is to be color. However, color is a constitutive part or cause of what it is to be visible. This is why Averroes goes on to say, "For color is the cause that the thing is visible." Cf. *Posterior Analytics* 1.4, 73a34–39. Ivry finds the account in the *Middle Commentary* different from this one. See *Middle Commentary* (2002), 179, n. 2. But the accounts are quite compatible when read in the context of the discussions of *per se* in the *Posterior Analytics*. To make this clear, in what follows I revise Ivry's translation by indicating the uses of *per se* (بذاته , بالذات , بذاتها): "The truly visible, then, is color, and it is color which exists *per se* outside the soul. The visible is such only in relation to the viewer; and, therefore, our remark concerning its *per se* existence ought not to be understood as it is in the *Posterior Analytics*—namely, that the predicate is in the substance of the subject, or the subject in the substance of the predicate. This [kind of existence] is in contrast to that which is accidental, but that which is in contrast to what is *per se* here is that which is predicated in relation to another. [The essences of] some things are predicated *per se* without relation to anything else, while the essences of other things are predicated in relation to something else. Color belongs to those things which exist *per se*, while the visible belongs to those things which are predicable in relationship [to others]." *Middle Commentary* (2002), 663–11.

166. Cf. Themistius, *De Anima Paraphrase* (1899), 58.27–32; (1973), 88.11–89.5; (1996), 78. While Themistius may be the source, this is by no means a sufficient account of his position.

of the colors¹⁶⁷ necessarily is visible only in light. For this reason we ought to say what light is. And this will occur in the course of saying, as it were, what the transparent is. (418a31–b4)

The substance and being of color, insofar as it is visible, is that which moves what is transparent in act. Next he said: **and this is its nature,** etc. That is, that description shows [231] its nature and substance insofar as it is visible. The indication that color is what moves what is transparent in act, not transparent in potency, is that it will not be visible without light, by which the transparent in potency becomes the transparent in act. Either this shows that he holds the opinion that colors exist in act in darkness and if light is necessary for seeing color, then it is [so] only insofar as it makes the transparent in potency into the transparent in act; or [it shows] that he holds the opinion that light is necessary for seeing insofar as colors exist in potency in darkness, and insofar as the transparent, in order to receive color, needs to be transparent in act. Ibn Bâjjah¹⁶⁸ had doubts about this description of the transparent and said that it is not necessary that the transparent, inasmuch as it is moved by color, be transparent in act. For its transparency in act is its illumination and its illumination is some color, for color is nothing but the mixture of a luminous body with a transparent body, as was said in the book *Sense and Sensibilia*.¹⁶⁹ And everything which receives something receives it only in the way in which it is lacking it. This forces him to explain this account in a way different from what was related by the commentators and he said: this is to say that color moves the transparent in act, that is to say, it moves the transparent from potency to act, not that it moves the transparent insofar as it is transparent.¹⁷⁰ Light, however, is necessary for seeing because colors in darkness are in potency and [light] makes them in act so that they move the transparent insofar as the transparent lacks light or [lacks] that which comes to be from light, namely, color. This explanation is very difficult, as expressed [here].

Alexander, however, gives a reason that the transparent in act [232] is moved by color on the basis of what is apparent. For air seems oftentimes to be colored by the color which we see with the mediation of the air, so that walls and earth are colored with the color of plants after the passage of the clouds above them.

167. *Unusquisque colorum*. The Greek has πᾶν τὸ ἐκάστου χρώμα, "the colour of a thing" (Aristotle, *De Anima* [1984]). كل لون (ibid. [1954]); "every color."

168. *Avempeche*, or *Avempace*: Abu Bakr Muhammad Ibn Bâjjah. The translator consistently uses this name with the exception of Book 3, Comment 5 [397], where he twice gives Abubacher.

169. See *Sense and Sensibilia* 3, 439a13–b18, though the definition of color is not altogether the same.

170. Ibn Bâjjah, *Book on the Soul* (1960), 108; (1961), 85–86.

If, then, air were not colored with the color of those plants, then the walls and earth would not be colored.¹⁷¹ And it is evident that color, although it may come to be from a luminous body, nevertheless differs from it in definition and being, for color, as it is said, is the boundary of the determinate transparent, but light is the actuality of the indeterminate transparent.¹⁷² Hence it is evident that it is not necessary that what is moved by color should be non-luminous but necessary that it should be uncolored. For nothing receives itself or is something's cause in receiving itself.¹⁷³ That proposition is self-evident and Aristotle uses it frequently. It makes no difference whether being moved and receiving is spiritual, as air receives color, or material, as a body which is a mixture of illuminated and dark transparent receives color. Since it is possible for the transparent in act to be moved by color, it is necessary that this belong to it either essentially or accidentally, namely, either insofar as it is transparent in act or insofar as it is transparent only but it happens to it that it is moved by colors only by being transparent in act, for this is insofar as it is transparent. That is the opinion of Ibn Bâjjah.¹⁷⁴

But it is self-evident that light is necessary for colors to be visible. This will be either because it gives the colors the form and positive disposition by which they act on the transparent or because it gives the transparent the form by which it receives motion from colors, or both. It is evident, when we keep [in mind] {233} what Aristotle said in the beginning of that account (and he asserted it as self-evident), that then it will be necessary that light be necessary for there to be colors moving the transparent only insofar as it gives the transparent some form by which it receives motion from color, namely, illumination. For Aristotle asserted the principle that color is visible per se and that saying color is visible and a human being is able to laugh are similar, namely, from the kind of essential proposition in which the subject is the cause of the predicate, not the predicate the cause of the subject, as when it is said: human

171. "The proof that light and illuminated transparent substances are somehow set in motion by colors is the fact that we see light itself as being colored in the same way as the various colors which it makes visible to us by carrying them along with itself. Thus light is tinged with a yellow sheen when it is in contact with gold, it looks purple from contact with violets, and has the shade of grass when the object is green. We often observe, too, that a wall or pediment seems to have the same color as <a mural> standing opposite <the wall or mounted on a pediment>; and any people who happen to be standing <in the courtyard> will appear to us colored in this same way." Alexander, *De Anima* (1887), 42.11–19; (1979), 56–57.

172. See *Sense and Sensibilia* 3, 439b11–12.

173. That is, nothing is a potency for receiving what it already has in actuality. Cf. {231}.

174. Ibn Bâjjah, *Book on the Soul* (1960), 108–109; (1961), 86.

being is rational. He meant this when he said: but insofar as **a cause is found in it for its being visible**, as we have expounded. When this has been conceded, it is evident that it is impossible to say that light is what bestows upon color a positive disposition and form by which it becomes visible. For if it were so, then the relation of sight to color would be accidental and second, not first, namely, through the mediation of that positive disposition. For it is evident that sight is something posterior to the visible and that its relation to color is not like the relation of rational to human being. It is evident, therefore, that its relation is as the relation of being able to laugh to human being. And thus color, insofar as it is color, is visible without the mediation of another form accruing to it. Since it is so, light is not necessary for there to be color which is causing motion in act, except insofar as it gives the subject proper to it the ability to receive motion from [color]. It seems that Aristotle asserted what he asserted only intending to provide a solution to that question. It is in this way that we should understand his account that colors move the sense of sight which is in potency in darkness, for light is that which makes them able to move {234} in act. Hence, he likens light to the agent intelligence and colors to universals.¹⁷⁵ For what is brought forth by example and in a general way is not like what is brought forth by demonstration. In the case of an example, the intention is only to make something evident, not to provide verification. And no one can say that color is found in act only when light is present. For color is the boundary of a determinate transparent; but light is not the boundary of a determinate transparent and for this reason it is not necessary for its being color, but for its being visible, as we determined. Let us return, then, and say that when he had explained that color, insofar as it is visible, moves the transparent in act and that this is its nature owing to the fact that it is visible per se, and that it is impossible for there to be sight without light, he returned to recounting what should be considered first concerning those things. He said: **but** it is necessary that **any** color, etc. That is, but because any color is visible only in light, we should first speak about light, for light is one of the things by which sight is brought to completion. Next he said: **And this** is in the course of saying what **the transparent** is. That is, and this will be brought to completion by us by saying first what the transparent is.

68. **Let us say, therefore, that the transparent is that which is visible but is not visible per se and without qualification, but rather owing to the color of something extraneous. In such a state we find air, water, and several celestial bodies.**¹⁷⁶ For it is not insofar as air is air or insofar as water is water

175. *De Anima* 3, 5, 430a14–17.

176. The Greek has καὶ πολλὰ τῶν στερεῶν, "and many solid bodies" (Aristotle, *De Anima* [1984]); وكثير من الأجساد الكثيفة (ibid. [1954]); "and many solid bodies." The *Middle Commentary* (2002), 66.20, has الأجسام الصلدة, "smooth bodies."

that they are {235} transparent, but on account of the same nature existing in these two and in the highest eternal body. (418b4-9)

After he had recounted that it is necessary first to consider the nature of the transparent, he began to describe it. He said: **the transparent is that which is visible**, etc. That is, the transparent is that which is not visible per se, namely, through a natural color existing in it, but rather [it is] that which is visible per accidens, that is, through an extraneous color. What he said is evident. For this reason it is naturally constituted to receive colors, since it has none of its own in itself. Next he said: **For it is not insofar as air is air**, etc. That is, because transparency is not in water alone or in air alone but [is] also in the celestial body, it was necessary that transparency not be in one of them insofar as it is that which it is, for instance, insofar as water is water or the heavens heavens, but according to a common nature existing in them all, although it may not have a name. What he said is evident.

69. **Light is the act of that, namely, of the transparent, insofar as it is transparent, but in potency it is that in which there is darkness besides. Light is, as it were, the color of the transparent, since the transparent is in actuality by fire and the like, as is the higher body, for in it there also exists that same thing. It was already said, therefore, what the transparent is and what light is, and that it is not at all fire or a body nor is it something emanating from a body. For if it were, then in this way {236} it would be a body. But there is the presence of fire or its like in the transparent. For it is impossible for there to be two bodies in the same place.** (418b9-17)

After he had explained the nature of the transparent, which is related to light as matter to form, he began to define what light is. He said: **Light is the act . . . of the transparent**, etc. That is, the substance of light is the actuality of the transparent insofar as it is transparent or the actuality of that nature common to bodies. This is what he said: **but in potency it is that in which there is this and darkness**, that is: a body transparent in potency is that in which that common nature is found together with darkness.

Next he said: **Light is, as it were, the color of the transparent**, etc. That is, light in the indeterminate transparent is as color in the determinate transparent, since the transparent is transparent in act naturally by a luminous body, such as fire and similar things from the highest luminous bodies. Next he said: **for in this there also**, etc. That is, for the nature of the transparent existing in the heavenly body is always associated with that which makes it a disposition in act. For this reason the heavenly [body] is never found to be transparent in potency, as [are] those which are [here] below, since sometimes light is present and sometimes it is not, while that heavenly nature is always illu-

minated. From this it was explained also that colors do not acquire a positive disposition from light, for light is only a positive disposition of a transparent body. . . .¹⁷⁷

70. **It is thought that light is contrary to darkness, while darkness is the privation of a positive disposition from the transparent. It was explained from this, therefore, that light is the presence of that intention. Neither Empedocles nor anyone else spoke correctly {237} if someone said as he himself said that light travels and goes forth in a time between earth and the circumference, but [in a time] imperceptible for us. For that account exceeds truth and appearance. For it is possible that this is not perceived in a short space, but there is a very great difference [between that and the assertion] that it is not perceived [in its movement] from east to west.** (418b18-26)

After he had explained that light is the actuality of a transparent body insofar as it is transparent, he began to explain the way in which it will be proven that light is not a body but is a positive disposition and a positive state in a transparent body. He said: **It is thought that light is contrary to darkness**, etc. That is, it seems that light is opposite to darkness as privation and positive disposition. Next he said: **It was explained from this, therefore, that light is the presence of that intention**. That is, it was, therefore, explained from this, namely, that darkness is a privation of light in the transparent, that light is not a body but is the presence of an intention in the transparent in the presence of a luminous body, while the privation of this [intention] is called darkness. What he said is evident, since the subject of darkness and light is a body and it is transparent. Light, however, is a form and a positive disposition of that body, and if it were a body, then body would penetrate body. Next he said: **Neither Empedocles**, etc. That is, Empedocles said nothing at all when he said that light is a body and that it first travels and goes out between earth and the circumference [and] next travels [back] to earth, but sense does not perceive it owing to the speed of its motion. Next he said: **For that account exceeds truth**, etc. That is, for that account, namely, of Empedocles, is unreasonable. For it is possible for this not to be sensed over a short space, but [for it not to be sensed] over a great distance, namely, from the east to the west, is to retreat far from reason. {238}

71. **What receives color is what does not have color, and what receives sound is what does not have sound. But what does not have color is the invisible transparent, or that which is seen insofar as it is thought to be so**

177. Averroes' Comment here is incomplete in the Latin manuscripts. Apparently he is asserting here that light is a positive disposition of a body which is transparent in act always, such as the heavenly bodies which are always actually luminous.

from consideration of the dark.¹⁷⁸ And such is the transparent, but not when it is transparent in actuality, but rather in potency, for the same nature will be perhaps darkness and perhaps light. (418b26–419a1)

After he had recounted that color is what moves the transparent insofar as it is transparent in act, he began to give the reason for this. He said: **What receives color is that which does not have color**, etc. That is, color is what moves the transparent because what receives color should lack color. And what lacks color is the transparent which is invisible per se, but if it is said to be visible, it will be as if it is said that the dark is visible, that is, it is something naturally constituted to be seen, since the transparent is dark when light is not present. He meant this when he said: **or that which is seen as it is held to be so from consideration of the dark**. That is, or that which is visible insofar as it is said that the dark is visible. Next he said: **And what is such is the transparent**, etc. That is, and the transparent which is not visible per se is not the transparent which is brought to actuality by light, but the transparent which is luminous in potency.

Next he said: **for the same nature**, etc. That is, and the transparent is found according to these two dispositions because the nature receiving transparency in certain things receives both, for sometimes it is found dark and sometimes transparent. He said **perhaps** because this does not occur equally in that nature, but only in generable and corruptible transparent things. (239) The heavenly nature, however, never receives darkness, except for what is thought concerning the moon during an eclipse and in the diversity of its positions from the sun (if we will have conceded that the moon's nature is among the transparent natures, not among the luminous natures, for perhaps the moon is composed from those two natures).

72. **Not all things are seen in light, but only the proper color of any given thing. For there are some things which are not seen in light but in darkness they cause sensation, for instance, those things which seem to be fiery and to become bright. Those do not have one name, for instance, the seashell, the horn,¹⁷⁹ the heads of certain kinds of fish, and fish scales and eyes. But its own color is not seen in any of these. But why those are seen requires another account.** (419a1–7)

178. The Greek has ἄχρουν δ' ἐστὶ τὸ διαφανὲς καὶ τὸ ἀόρατον ἢ τὸ μάλιστα ὀρώμενον, οἷον δοκεῖ τὸ σκοτεινόν. "What is colorless includes what is transparent and what is invisible or scarcely visible, i.e. what is dark." Aristotle, *De Anima* (1984). The reference here is to the potentially transparent medium which is invisible.

179. V.g. *concha*, et *cornu*: οἷον μύκης, κέρασ, "instances of it are fungi, horns." Aristotle, *De Anima* (1984).

After he had mentioned earlier that among the visible are something which is color and something which is non-color (and it is this which does not have a common name), and that it is proper to color that it may be seen only in light, he began to say that the state of those other visible things is contrary to that of color, namely, that they are seen in the dark and not in light. He said: **Not all things are seen in light**, etc. That is, not every visible thing is seen in light, but rather only this is true, that the proper color of any given visible thing is seen in light, and it makes no difference whether that visible thing is seen in the dark or not. Next he said: **For there are some things which are not seen in light**, etc. That is, we said that it is not necessary that every visible thing be seen in light because there are some which are seen in the dark and not in light, as several [kinds of] animals, seashells, (240) horn, and other things. All those things do not have the same name. Next he said: **But its own color is not seen**, etc. That is, but although those are sensed in the dark, nevertheless the proper color of every one of these is not sensed then, but only in the presence of light. For this reason no one can say that some color is seen in the dark. Next he said: **But why those are seen**, etc. That is, the reason why those are seen in the dark and not in the light should be said in another place. It seems that those are seen at night and not in the day because in them there is [too] little of a bright nature, for it remains hidden when there is incoming light due to its feebleness, just as this occurs in weak lights in [the presence of] strong ones. (For this reason the stars are not apparent during the day.) The nature of color is different from the nature of light and what is luminous, for light is visible per se, but color is visible with the mediation of light.

73. **In this passage, however, this alone is apparent, namely, that all that is seen in light is color and, likewise, it is not seen without light. For this is also what was the essence¹⁸⁰ in the case of color, namely, that it is what moves the transparent in act; and the actuality of the transparent is light. The indication of this is evident, since if you place something having color right on the sense of sight itself, it will not be seen. But color moves the transparent just as the sense is moved by the air since [air] is continuous.** (419a7–15)

After he had explained what the visible is, namely, color, what the transparent is, and what light is, he began to state a summary of what (241) he had explained. He said: **In this passage, however, this alone**, etc. What he said is evident, namely, those two propositions, one that everything which is seen in light is color and the other the converse, namely, that every color is seen in light. For it is evident that those things which appear in the dark are not seen according to their own color.

180. *Quid est*.

Next he said: **For this is also what**, etc. That is, for this also is what led us to say in regard to the knowledge of the substance of color, insofar as it is visible, that it is that which moves the transparent in act. He means by this that this definition explains the being of color only insofar as it has been apparent to us that it is impossible for color to be seen without light and that light enters into sight insofar as it bestows upon the transparent the disposition for being moved by colors, not that it bestows a positive disposition on colors. This was explained earlier.¹⁸¹ Next he said: **and the actuality of the transparent is light**, etc. That is, and light is simply the act of the transparent. The indication of the fact that light does not exist without the transparent is that if something colored were placed on the sense of sight, it would not be apprehended. For then there will be no light between the color and the sense of sight because there is no transparent there. When, therefore, the transparent is removed, light is also removed; and when there is light, there will be the transparent. Next he said: **But color moves the transparent**, etc. That is, but on account of what we said—that when color will have been placed on the sense of sight, it is not seen—it was necessary that the sight of color not be completed unless color moves the transparent which is the medium between it and the one who sees and the medium moves the one who sees by its continuity with the one who sees. [This is] just as air, since when it is united with the one who sees, it is moved by color when it is illuminated, then next it moves the sense of sight. {242}

74. Democritus, therefore, did not speak truly in regard to his having thought that if the medium were a vacuum, then sight would be more accurate, even an ant [could be seen] if it were in the sky. For this is impossible. For sight comes about only when the sense is affected by some affection. But it is impossible for sight to be affected by color. Therefore, it remains that it is affected by the medium; hence, it is necessary that there be something in the medium. If, however, there were a vacuum, not only would sight not be accurate but nothing at all would be seen. We have, therefore, mentioned the reason why it is necessary that color be seen only in light. Fire, however, is seen in both, namely, in dark and in light, and this is necessary, for the transparent is transparent in virtue of this. (419a15–25)

Earlier he had explained that the action of the sense of sight is brought to actuality only through a mediating transparent, by the indication that when color¹⁸² is placed on the sense of sight, it is not seen, and also because sight is brought to actuality only through light, and light is found only in a transpar-

181. See above {232}.

182. Color: The argument requires "a colored object" here.

ent medium. Here he begins to reprimand Democritus, who said that if sight were in a vacuum, then it would be more accurate.¹⁸³ He said: **Democritus, therefore**, etc. That is, when it had been explained that sight comes about only through a medium, [it was evident that] Democritus incorrectly held the opinion that if sight were via a mediating vacuum, then it would be more accurate. Next he said: **For this is impossible**, etc. That is, for what he said, that sight will be more perfect in a vacuum, is impossible. The indication of this is that he had already explained that the sense of sight, insofar as it is a sensible power, is moved and affected by color and color moves {243} it. It is impossible for the sense of sight to be affected and moved by color, if the colored body is external to the sense of sight, unless [it is] such that this colored thing first moves the medium by touch and the medium moves the sense of sight. If there were a vacuum between the sense of sight and the visible object, then it would not be able to move the sense of sight. For every positive disposition existing in a body acts only by touch. If, therefore, the last thing moved is not touched by a mover, it is necessary that there be a medium between them which conveys the affection and that medium will be what is touched and what touches [something else]. The first,¹⁸⁴ however, will be what touches while being untouched, and the last thing moved [will be] touched while not touching [anything else]. Hence it is necessary that the sense of sight be affected by the medium, not by a vacuum as Democritus thought. This is the demonstration that it is impossible for sight to come about through a vacuum, not that it is impossible for sight to come about except through a medium. For someone may say that if the necessity for there to be a medium were due to the fact that what is sensed is distinct from what senses, then it would be necessary that when what is sensed touches the sense of sight, [the sense of sight] senses it, and this is not so. For this reason Aristotle does not mean by this account that sight needs a necessary medium, but [he means] to show that when sensible things are discerned by it, it will be impossible that [sight] be via a vacuum as Democritus thought. He was supported by the fact that the senses need a necessary medium, because when the sensibles are placed on them, they do not sense, and because there will be no sight except through light and light is found only through a medium. Next he said: **We have, therefore, mentioned already the reason**, etc. That is, after he had explained that {244} the sense of sight needs a necessary medium, by this the reason why color is seen only in light was explained and it is because it is seen only via a medium. This shows that he does not hold the opinion that the reason for there being light for sight is that it makes colors in act, as certain people have held. Next he said: **Fire**,

183. Cf. Themistius, *De Anima Paraphrase* (1899), 62.12–13; (1973), 97.2–3; (1996), 82.

184. That is, the visible.

however, is seen in them, etc. That is, fire is seen in darkness and light alike because each is brought together in it, namely, because it makes the medium transparent in act insofar as it is luminous and it moves it insofar as it is color in a body.

75. That account is the same both for sound and for smell. For neither of these, if it has touched its sense, causes sensing. Rather, the medium is moved by smell and by sound, and by that each sense is moved. If, then, you would place either something having sound or having smell on the sense itself, they would not cause sensing at all. And it is likewise for touch and for taste, but this is not apparent. Later on we will explain the reason for this. (419a25–31)

After he had explained that the sense of sight does not come to be except via a medium, he began to say also that by that same explanation three senses need a necessary medium. His account is evident. By his having said, **And it is likewise for touch and for taste**, he means: and our opinion in regard to the sense of touch and taste, concerning the fact that they need a medium, is just as our opinion in regard to the other senses, although those two senses seem to sense when their sensibles are placed {245} on them, and for this reason they seem not so evidently to need a medium as do those other three. Next he said: **Later on we will explain the reason for this**, that is, the cause on account of which the senses of touch and taste sense sensibles placed on them and it is not so with respect to the three other senses.

76. The medium in the case of sound is air. In the case of smell, however, it does not have a name, for it is a certain affection common to air and water and it is with respect to smell as transparency is in regard to color, and for this reason it is found in both. For also animals living in water have the sense of smell, but human beings and all animals which walk and breathe cannot smell without breathing. Later on we will give the reason for those things. (419a32–b3)

He says that the medium in sound is air, not water, because animals which are in water do not sense, as it seems to me, except through sounds occurring in the air outside the water. For it appears that the sound does not come about from the striking of bodies in water, though the contrary is the case for smell. Next he said: **In the case of smell, however, it does not have a name**. That is, the nature receiving the smell, namely, what is in the medium, does not have a name, while the nature which receives color in water and in air does have [one], namely, this name, the transparent. Next he said: **for it is a [certain] affection common**, etc. That is, for it appears from this that the reception of smell is not of air insofar as it is air nor of water insofar as it is water, but it

must be some affection in the nature common to these. That nature is naturally constituted to receive extraneous smells and this will be such that it does not have a smell at all in itself, just as {246} the transparent is a nature which receives colors and assumes extraneous things, insofar as it does not have its own color. This shows that he does not hold the opinion that smell is a body dispersed in the air by what is able to be smelled, but rather it is some quality through which that nature is naturally constituted to be actualized. But the smell is not actualized by that [nature], just as the transparent [is actualized] by color but color [is] not [actualized] by the transparent. As color has a two-fold being, one in the determinate transparent (this is that in which it is natural) and the other in the indeterminate transparent (this is that in which it is extraneous),¹⁸⁵ so too smell has these two similar beings, namely, being in the odoriferous dampness (this is natural being) and being in the non-odoriferous dampness (this is extraneous being). Later on we will explain this, when we will speak of this sense.¹⁸⁶ Next he said: **and owing to this it is found from both**. That is, owing to this common nature smell is found from both these elements, namely, water and air. For aquatic animals have the sense of smell and there is no doubt but that this comes about with the mediation of water. Next he said: **but all animals which walk**, etc. He meant by this to explain that fish have the sense of smell without breathing and that this is not unthinkable, just as many non-breathing animals living in air have the sense of smell without breathing. Next he said: **Later on the reason for this sort of thing will be given**, that is, why certain animals have the sense of smell through breathing and certain do not. {247}

77. In this passage we will make some determinations first about sound and smell. Let us say that sound is twofold, for it is in act and in potency.

185. Arabic fragments correspond to Book 2, 76.21–30: كما ان الشفيف له طبيعة تقبل اللون الغريب لأنه ليس لها لون يخصصها هذا يدل ان الرائحة ليس جسم يتحلل في الهواء من هذه الرائحة وينبسط. بل هي «كيفية» تستكمل تلك الطبيعة بها من غير أن يكون قوام الرائحة بها، كما ان يستكمل المشف باللون من غير ان يكون اللون قائما بالمشف، وكما ان اللون «له وجودان»، وجود «في المشف المحدود»، وهو الذي به اللون بالطبع ووجود «آخر» (Long Commentary Fragments [1985], 39–40); “Since the transparent has a nature which is receptive of foreign color because it does not have a color specific to it, this indicates that smell is not a body which is separate and spread out in air apart from this smell. Rather, it is <a quality> by which this nature is actualized without smell subsisting in it. Just as the transparent is actualized by color without the color subsisting by means of the transparent, so too color <has two beings, a being> in the determinate transparent which is what the color has by nature, and <another> being in the indeterminate transparent which is what <enters> it from outside.”

186. See below, Book 2, Texts and Comments 92ff. {270ff.}.

less so. That is, but water returns the sound less strongly than air. Next [250] he said: **for sound air alone is not sufficient**, etc. That is, air is not sufficient for the sound to come about without something struck, nor is water sufficient in this regard. Rather, there needs to be in the air a striking by solid bodies against one another and in the air itself.¹⁹² Next he said: **This will be when the air is fixed in place**, etc. That is, the sound comes about when the striking is by solid bodies against one another and against the air itself, and the striking of the air is with a quick motion, in such a way that it precedes the motion of the air and what strikes has breadth and quantity, since the air will then resist it. For when what strikes and the striking are of such a sort, it happens that the air is seen to be fixed, as it were, and not dispersed, namely, when what strikes is not dispersed and its motion is not slow. Next he said: **for that reason, when something is struck**, etc. That is, the indication of the fact that the sound comes about only when the motion of what strikes is quicker than the dispersal, is that when something among the things which are not naturally constituted to make sound is struck quickly and forcefully, sound will come about, as happens when one will have struck a column of sand forcefully and quickly. Because of what he said, it happens that these things which are of quick motion make sound in the air, although they do not strike something else, just as the motion of a strip of leather¹⁹³ in the air.

80. Echo comes about from air when it is one¹⁹⁴ on account of the vessel by which it is contained and is prevented from dispersal, when the air rebounds and is forced out from it like a ball. Perhaps an echo always comes about but not in a way that is evident. For it happens in the case of sound just as in the case of light. For light is always reflected (and if it were not so, then [light] would not be [251] everywhere, but there always would be darkness outside of the place on which the sun falls), but [this light] is not reflected as it is reflected by water, by copper and by different smooth bodies such that it also causes a shadow (and it is that by which light comes).¹⁹⁵ (419b25–33)

192. Arabic fragments correspond to Book 2, 79.14–18: الماء للصوت أقل من تأدية الهواء: «ثم قال: والهواء ليس وحده كافيا لحصول الصوت» يعني أن الهواء «لا يكفي» لحدوث الصوت ولا الماء أيضا دون المقروع وإن يكون في الهواء قرع عن الأجسام «الصلبة» بعضها ببعض (Long Commentary Fragments [1985], 40).

193. *Corrigie*: a rein or a shoelace. The reference seems to be to the sound of a whip slicing through the air. Cf. *Middle Commentary* (2002), 70.14–17.

194. That is, made into a unified whole.

195. The Greek has ἀλλ' οὐχ οὕτως ἀνακλᾶται ὥσπερ ἀφ' ὕδατος ἢ χαλκοῦ ἢ καί τινος ἄλλου τῶν λείων, ὥστε σκιὰν ποιεῖν, ἢ τὸ φῶς ὀρίζομεν, "but this reflected light is not always strong enough, as it is when it is reflected from water, bronze, and

After he had explained the things from which sound comes about and how it comes about, he began to explain the being of a certain accident of sound, which is called echo. This is the repetition of sound while preserving its pattern, as happens in empty houses. He said: **Echo**, etc. That is, echo comes about from air which comes to be one, that is, confined and enclosed, on account of what contains it and prevents it from escaping. For, when its motion is actualized by what first strikes, the air is pushed from the sides of that by which it is contained and it strikes it a second time by a strike like the first one which made the sound. And in this way the same sound is repeated, for it is heard as if responding to the first.

He likened that to a pushed sphere since when the sphere is pushed, a motion similar to the first motion comes about in it. And the echo is heard after the first sound as if responding, because it was already explained that between any two motions there is rest. From what he said, **it comes about from air when it is one**, we should not understand that it comes from one [part of] air because it is distinct from the other parts of air by virtue of motion, as [in the case of] a stone when it is thrown and a ball. Rather we must understand that he means by "one air" [something which is] one because it is confined and contained by a vessel. For when some affection and strong motion comes about in air which is so, it will come about [252] then from a striking similar to what comes about from the fall of the stone in water, namely, that this motion is not actualized on account of what confines it. Hence, it is struck a second time by the walls of the confining vessel and in this way another affection similar to the first comes about. For this reason that sound is repeated. Aristotle, therefore, likened air in this motion to a ball which, when thrown, is pushed as moved by that which it encountered,¹⁹⁶ when its motion is not actualized, by an expulsion similar to the first, not insofar as one part of the air is that to which that rebounding and expulsion happen a second time. Next he said: **Perhaps the echo always comes about but not in a way that is evident**. He indicates by this how the motion of the sphere comes about in the air at the striking. For such motion comes about in the air from the striking only by way of rebounding. For what strikes first pushes the air in its path toward the part toward which what strikes is moved. Unless the motion of reaction happens to the parts of the air, that motion will not come about equally or nearly so from all the parts of the thing struck, such that from this there will arise a spherical figure or nearly so, the center of which is the thing struck. He said: **Perhaps the echo always comes about**. That is,

other smooth bodies, to cast a shadow, which is the distinguishing mark by which we recognize light." Aristotle, *De Anima* (1984). The alternate Arabic translation is in accord with the Greek here.

196. That is, it bounces off what it strikes.

perhaps the reason why the echo comes about, namely, the reaction, [is that it] is always in the sound, but in a weak way. For when it is so strong that it will make the affection remaining in the air different in number from the first affection and similar to it in quality, then an echo will come about. Next he said: **just as happens in the case of light. For light is [...] reflected**, etc. That is, what happens in the case of sound is similar to what happens in the case of light. For light has two reflections, a strong one and a weak one. For a strong one makes a second light {253} and is a reaction which comes from polished bodies and is like a reflection which makes a second sound in air. The second [reflection], however, is a weak light on account of which things are seen in shade and is like the reaction by means of which a human being hears his own sound. It is something which does not reach the point that it is like the reaction which comes about from water and copper which makes a second light in the part opposite to the first light, just as a strong reaction makes a second sound in the air in the part opposite to the first sound. The reason why we know this reaction of light, as he said, is because we see in a place upon which the sun does not fall. For light is naturally constituted to go forth from what is bright according to straight lines to the part opposite to the bright part from the luminous body, as [explained by] those who wrote the *De Aspectibus*.¹⁹⁷ If, therefore, the reaction were not there, then there would be darkness in all the parts except for the part to which the rays are opposite. Likewise, if the motion of the air which makes the sound were only in the part in which it is pushed from what strikes alone, then the sound would be heard only by one who is in that part alone. But the sound is heard in all the parts of the thing struck. For this reason we know that what happens for light with respect to the spherical figure is similar to what happens for the motion of the striking in the air. Therefore, we should understand in this way the similarity between these two reflections. When, however, the body is luminous from all parts, there is no doubt but that it makes a bright sphere, and this was explained in the *De Aspectibus*.¹⁹⁸ The difference, therefore, between this sphere and the first is that the light in that is similar and the light in this differs according to strength and weakness. It also seems that the sphere of light made by the luminous body from one of its parts, {254} besides not being similar to itself in light, is also not of perfect roundness, namely, because the longest diameter is that which goes out from the luminous body to the circumference in the part to

197. *De Aspectibus*. This is likely a reference to the *Optics* of Ibn al-Haytham, though similar discussions are found in a work of al-Kindī known under the same Latin title. See Ibn al-Haytham, *Optics* (1983), 75 and 81; (1989), vol. 1, 15 and 20. Cf. al-Kindī, *On the Causes of Differences of Perspective* (1997), 448–449.

198. See Ibn al-Haytham, *Optics* (1983), 81; (1989), 20. Still, perhaps he has in mind what we find at al-Kindī, *On the Causes of Differences of Perspective* (1997), sec. 14, 482–487.

which the rays are opposite and the shortest in the part opposite (and it is the part which is of denser darkness than all the parts and of lesser light).¹⁹⁹

81. **It was, therefore, rightly said that the vacuum plays a valuable role in hearing. For it is thought that air is a vacuum and this is what causes hearing, when it is moved as something continuous and one. But [this is] not because it is pliant. For [sound] does not come about unless what is struck is smooth, and then one echo will come about, since it comes at once from its surface, for the smooth surface is one.**²⁰⁰ (419b33–420a2)

After it had been explained from this that air is the matter of sound, because it is impossible for it to come about except through [air], the one who said that

199. Arabic fragments correspond to Book 2, 80.59–96: فالضوء له انعكاس قوي وانعكاس ضعيف. فالقوى يحدث ضوءا ثانيا وهو الانعكاس الذي يكون عن الأجسام الصلبة وهو شبيه بالانعكاس الذي يحدث في الهواء صوتا ثانيا، وهو الصدى، والضعيف هو الذي به «نرى الأشياء» في الظل، وهو نظير الانعكاس الذي به يسمع المرء صوت نفسه، وهو الذي لا ينتهي إلا أن يكون مثل الانعكاس الذي يكون عن الماء والنحاس، يحدث ضوء ثاني في جهة مقابلة للضوء الأول كما يحدث الانعكاس القوي في الهواء صوتا ثانيا، وهو المسمى صدى «في الجهة المقابلة للصوت الأول». والذي أوقفنا على هذا الانعكاس للضوء هو أننا نحصي في المواضع التي لا يقع عليها الشمس وذلك أن الضوء من شأنه أن يخرج المضيء على سمت مستقيم «...» كما قد تبين أمره في «كتاب المناظر» فإنه لا يخلو الضوء من الانعكاس، ولولا ذلك لما كان الضوء إلا في المواضع التي يقع عليها الشعاع وكانت تكون الظلمة في سائرهما. كما أنه لو كانت حركة الهواء التي تحدث في الجهة التي يدفعها القارع اليها فقط لما سمع الصوت إلا من كان في تلك الجهة فقط، لكن إذا ما سمعنا الصوت من جميع جهات الشيء المقروء علمنا من هذا «ما الشيء الذي» يحدث للضوء من التشاكل بشكل كروي شبيه بما يحدث للحركة من القرع في الهواء، فعلى هذه الجهة ينبغي أن نفهم التشابه بين هذين الانعكاسين. وكذلك الجسم إذا كان مضيقا «من جميع الجهات...» فيحدث كرة مضيقة وقد بين ذلك أصحاب المناظر. والفرق بين هذه الكرة والكرة الأولى أن الضوء في هذه متشابه في تلك مختلف في القوة والضعف. وشبيه أيضا أن تكون كرة الضوء الحادث «عن الجسم» المنير من أحد جوانبه مع أنها متشابهة بالضوء غير تامة الاستدارة حتى يكون أطولها هو القطر الذي يخرج من الجسم المنير إلى محورها في الجهة التي يقبلها الشعاع، واقصرها في الجهة المقابلة (Long Commentary Fragments) لها، وهي الجهة التي هي أصغر الجهات ظلا وأقلهما ضوءا [1985], 41). At 80.74, after the reference to the *De Aspectibus*, the Arabic adds “for light is not without some reflection.” The Arabic also adds “and this is echo,” corresponding to 80.62, and “and it is called echo,” at 80.68. At 80.91, where the Latin has *non consimilis sibi in luce*, “not being similar to itself in light,” the Arabic has no negation. In this passage the translator used both *conversio* and *reflexio* to render the Arabic انعكاس.

200. The Greek here has τότε δὲ εἷς γίνεται ἅμα διὰ τὸ ἐπιτεδόν· ἐν γὰρ τὸ τοῦ λείου ἐπιτεδόν. “But then it becomes a single mass at the same time because of the surface; for the surface of the smooth object is single.” Aristotle, *De Anima* (1984). The alternate translation has وإذا كان المضروب أملس كان الهواء واحدا متصلا – وكذلك حال – وكذلك الحال (ibid. [1954]); “And when the thing struck is smooth, the air is one and continuous. And the disposition of the smooth surface is similarly so.”

sound comes to be through a vacuum did not err in this way when he believed that air is vacuum, even though he did err insofar as he thought that air is vacuum. [Aristotle], therefore, praised them because they spoke rightly in one way, although they erred in the opinion they held. Next he said: **But [this is] not because it is pliant**, etc. That is, air is that which causes hearing, when it is moved as something one and continuous. But that motion is not found to be one and continuous for it insofar as it is pliant alone, but only when what has been struck would be smooth body. After he had given the reason why the motion is one and continuous—[the reason] is that what is struck is a smooth body—[255] he gave the reason for this. He said: **and then one sound will come about**, etc. That is, and we say that it is necessary in the coming to be of sound that what is struck be smooth because one sound comes about only from one motion, when the body struck is smooth. Then, therefore, the motion which comes about in the air comes about from one striking, since the parts of air are at once pushed from its surface, for the surface of a smooth thing is one. For this reason the striking will be one; hence the sound will also be one. An uneven surface, however, is not one, but many surfaces; hence the striking will be many; hence sound will not come about there at all on account of their diversity and lack of uniformity. And because one of them is not sufficient for making sound, neither are they all at once unless there is one striking.

82. **What has sound, therefore, is what moves one [body of] air in a continuous way right up to the point that it reaches the organ of hearing. The organ of hearing, however, is united with the striking because it is in air.**²⁰¹ **And for this reason an animal does not hear in every place [in the body] nor does air enter into every place. For the member which is moved and breathes**²⁰² **does not have this in every place, just as the disposition of what sees with liquid.**²⁰³ (420a3–7)

201. The text here suffers from omission and is a confused version of the Greek. Ross, in Aristotle, *De Anima* (1956), has ἀκοῇ δὲ συμφύῃς ἀήρ· διὰ δὲ τὸ ἐν ἀέρι εἶναι, κινουμένου τοῦ ἔξω ὃ εἴσω κινεῖται ("air is united with the organ of hearing"), while Smith and Barnes, in *ibid.* (1984), opt for a variant and read ἀκοῇ δὲ συμφύῃς ἀέρι, διὰ δὲ τὸ ἐν ἀέρι εἶναι, κινουμένου τοῦ ἔξω ὃ εἴσω κινεῖται, "the organ of hearing is physically united with air, and because it is in air, the air inside is moved concurrently with the air outside." The alternate translation has والهواء مجانس؛ والسمع. (ibid. [1954]); "For this is an activity of the striking. The air is akin to the sense of hearing. The striking is only in the external air."

202. The Latin *anelans* corresponds to the Greek ἔμψυχον, which Ross emends to ἔμψοφον, "makes noise," following the lead of Torstrik (Aristotle, *De Anima* [1862]). Aristotle, *De Anima* (1956). The alternate translation also follows the Greek codices and renders it ذى نفس (ibid. [1954]), "possessing soul."

203. The clause *sicut dispositio videntis apud humorem*, "just as . . . liquid," is an addition to the text of Aristotle. The alternate translation has كالرطوبة للحدقة, "like the

After he had explained the dispositions by which sound comes about, namely, the dispositions of what strikes, of what is struck, and of air, he began to explain how the uniting of sound with the organ of sense comes about from those things. He said: **What has sound**, therefore, etc. That is, it is therefore necessary from what we have explained that what causes sound be what moves one [body of] air moved by one continuous motion {256} all the way until it reaches the organ of hearing. He means by his having said **one** not one on account of a distinction from the other parts of air, but one on account of one continuous motion. Next he said: **And the organ of hearing is united**, etc. That is, and the sense of hearing is united with sound because there exists in it air which is continuous with the external air. If there were not, it would sense nothing. Next he said: **And for this reason [an animal does] not [hear] in every place**, etc. That is, and it is necessary that the air in this sense be continuous with the external air on which the striking takes place. For this reason the animal is not able to hear in every place, but [only] in the places in which there is no division between the air struck and the air in the sense of hearing; nor does hearing come from every member, but from the member in which the air enters, namely, the ear. Next he said: **For the member which is moved and breathes**, etc. That is, so is it that the animal hears only from the proper member just as in the cases of breathing and vision. For the member through which there is breath is not just any member but the proper member, namely, the lung. The disposition of one who sees in relation to the gelatinous liquid [of the eye] is likewise, namely, that vision is not suited for it except through the member in which there is a transparent liquid suited for receiving colors, for instance, the gelatinous liquid [of the eye]. For this reason an animal lacking those instruments lacks those senses.

83. **This, therefore, does not itself have sound, namely, the air, because it disperses quickly. When, therefore, it is prevented from dispersal, then its motion will be sound. Air, however, which is in the ears, was positioned in them as unmoved, so that it may sense perfectly all the kinds of motion. And for this reason we also hear in water, because it does not enter upon the air which is united [with the ear], since it does not enter {257} in the ear also on account of the twist [of the tube of the ear].**²⁰⁴ **When this does happen, we do not hear nor [do we hear] when damage has occurred to the eardrum,**²⁰⁵ **just as the disposition of the membrane which is above the organ**

moisture belonging to the pupil of the eye." See Aristotle, *De Anima* (1954), 49, where Badawi suggests their excision.

204. That is, the Eustachian tube.

205. Here *matri cerebri* corresponds to the Greek ἡ μήνιγξ which is also used of the dura mater or membrane enclosing the brain. Aristotle, *De Anima* (1984), has "the tympanic membrane."

of vision when damage has occurred to it. What happens concerning the destruction of the organ of hearing by the entrance of water upon that air is the same as what happens from the entrance of external air upon [the organ of sight]. You know this.²⁰⁶ (420a7–15)

He had explained that through air it comes about that sound is united with the sense and that it is itself an element proper to that sense, just as there is also an element proper to the sense of vision. Now he began to explain the way in which air receives sound. He said: **This, therefore, does not itself have sound, namely, the air, etc.** That is, air is receptive of the proper sound because it does not have sound in itself, since there is no motion in it which causes sound. The reason for this is that it disperses quickly. This in air is similar to what is the case in the transparent. For just as the transparent would not receive colors if it had color, so too air would not receive sounds if it had sounds from itself. Next he said: **When, therefore, it is prevented, etc.** That is, when it happens in this through a different motion which prevents it from dispersal, this is the motion which comes about from what strikes in what is struck, then that motion will cause sound in it. Next he recounted that this is the reason why nature put air in the ears, not as something subject to change [in its own right], but as altogether still. He said: **Air, however, which is in the ears was [. . .] in them as unmoved, so that it may sense perfectly all the kinds of motion made in the external air.** That air placed in the ears, therefore, {258} surpasses the external air in stillness. Next he said: **And on account of this we [. . .] hear in water, etc.** That is, and because air is necessary for the sense of hearing, we hear in water when water has not entered upon the air which is in the ear and has not corrupted it, on account of the spiral which is in the created nature²⁰⁷ of the ear. When it has entered, we do not hear, and then there happens to us what happens when the destruction of the eardrum has happened, because then we do not hear, just as when the destruction of the membrane which is on the organ of vision has happened, we do not see. He meant to explain that the relation of the air placed in the ear is just as the relation of a member proper to each thing sensed, namely, [that it is that] through which the action of that sentient being is first actualized. For this reason he likened what happens to this air with respect to destruction through the entrance of water upon it to what happens with respect to a striking taking place upon the ear and upon the organ of sight itself. What happens with

206. *What happens . . . You know this.* These two sentences are additions to what is found in the Greek. They are not found in the alternate Arabic translation.

207. *In creatione.* The Latin translator seems likely again to have confused *خُلِقَ*, "make-up" or "nature," with *خَلَقَ*, "creation." Cf. {74}, Book 1, n. 232 and {282}, Book 2, n. 247.

respect to the corruption of the organ of hearing through the entrance of water upon that air placed in the ears happens through the entrance of external air upon [the organ of vision].

84. Furthermore, a sign [of the presence] of hearing in the first place is constantly to hear resonance in the ear, as with a horn.²⁰⁸ For air in the ear constantly moves with some motion of its own, but sound is [from something] external, not its own. For this reason they said that hearing comes about through a vacuum capable of producing resonance, because we hear only through something in which there exists air which is separate.²⁰⁹ (420a15–19) {259}

After he had explained that this air which exists in the organ of hearing is necessary for [hearing], he began to provide evidence that there exists in the ear a [body of] air separate from the external air. He said: **Furthermore, a sign [of the presence] of hearing, etc.** That is, he shows also that this air exists in the ear because the sign of the verification [of the presence] of hearing in a human being, as the physicians say, is that he constantly hears resonance in the ears, even when uninjured. Hence, this happens for a human being when he places a horn on the ears and hears sound in it, on account of the air enclosed in the horn and the hardness of the horn. Next he said: **For air in the ear always moves, etc.** That is, the cause of this resonance which the sense of hearing belonging to one who hears well hears is that the air which is in the ear constantly moves with its own motion, but that motion is its own and the motion of sound is external; hence that motion does not impede the motion of sound. Next he said: **For this reason they said, etc.** That is, on account of that resonance which is heard in the ear due to the enclosed air, the ancients said that hearing comes about through a vacuum possessing a resonance, because they believed air to be a vacuum. They said this because we hear only through a bodily part in which air exists separate from the external air.

85. Is it, however, what strikes or what is struck that makes the sounds? Let us, therefore, say that it is both, but in two different ways. For sound is the motion of what is able to be moved in such a way, namely, as smooth bodies are reflected by some body. But not everything struck and [every-

208. That is, we hear a faint sound or tintinnabulation when we hold a horn or shell over the ear.

209. *In quo existit aer distinctus:* τῷ ἔχοντι ὀρισμένον τὸν ἀέρα, "a chamber which contains a bounded mass of air" (Aristotle, *De Anima* [1984]); حيثما كان الهواء محبوساً (ibid. [1954]); "wherever the air is confined."