

## BOOK II

### CHAPTER I

**412a1** Let this much be said about what has been handed down concerning the soul by our predecessors. Let us start anew, as if from the beginning, endeavouring to determine what the soul is and  
5 what its most common account would be.

We say that among the things that exist one kind is substance, and that one sort is substance as matter, which is not in its own right some this; another is shape and form, in accordance with which it is already called some this; and the third is what comes from these. Matter is potentiality, while form is actuality; and  
10 actuality is spoken of in two ways, first as knowledge is, and second as contemplating is.

Bodies seem most of all to be substances, and among these, natural bodies, since these are the principles of the others. Among natural bodies, some have life and some do not have it. By 'life' we mean that which has through itself nourishment, growth, and decay.

15 It would follow that every natural body having life is a substance, and a substance as a compound. But since it is also a body of this sort—for it has life—the soul could not be a body; for the body is not among those things said of a subject, but rather is spoken of as a subject and as matter. It is necessary, then, that the  
20 soul is a substance as the form of a natural body which has life in potentiality. But substance is actuality; hence, the soul will be an actuality of a body of such as sort.

Actuality is spoken of in two ways, first as knowledge is, and second as contemplating is. Evidently, then, the soul is actuality as knowledge is. For both sleeping and waking depend upon the  
25 soul's being present; and as waking is analogous to contemplating, sleeping is analogous to having knowledge without exercising it. And in the same individual knowledge is prior in generation. Hence, the soul is the first actuality of a natural body which has life in potentiality.

This sort of body would be one which is organic. And even the parts of plants are organs, although altogether simple ones. For example, the leaf is a shelter of the outer covering, and the outer covering of the fruit; and the roots are analogous to the mouth, since both draw in nourishment. Hence, if it is necessary to say something which is common to every soul, it would be that the soul is the first actuality of an organic natural body. 5

For this reason it is also unnecessary to inquire whether the soul and body are one, just as it is unnecessary to ask this concerning the wax and the shape, nor generally concerning the matter of each thing and that of which it is the matter. For while one and being are spoken of in several ways, what is properly so spoken of is the actuality.

It has now been said in general what the soul is: the soul is a substance corresponding to the account; and this is the essence of this sort of body. It is as if some tool were a natural body, e.g. an axe; in that case what it is to be an axe would be its substance, and this would also be its soul. If this were separated, it would no longer be an axe, aside from homonymously. But as things are, it is an axe. For the soul is not the essence and organization (*logos*) of this sort of body, but rather of a certain sort of natural body, one having a source of motion and rest in itself. 15

What has been said must also be considered when applied to parts. For if an eye were an animal, its soul would be sight, since this would be the substance of the eye corresponding to the account. The eye is the matter of sight; if sight is lost, it is no longer an eye, except homonymously, in the way that a stone eye or painted eye is. 20

What has been said in the case of parts must of course be understood as applying to the entire living body. For there is an analogy: as one part is to one part, so the whole perceptual faculty is to the whole of the body which is capable of perception, insofar as it is capable of perception. The body which has cast off its soul is not a being which is potentially such as to be alive; this is rather the one which has a soul. The seed, however, and the fruit, is such a body in potentiality. 25

Hence, as cutting and seeing are actualities, in this way too is waking an actuality; and as sight and the potentiality of a tool are, in this way too is the soul. The body is a being in potentiality. 413a

But just as an eye is a pupil and sight, so in this case too an animal is the soul and the body.

Therefore, that the soul is not separable from the body, or some 5 parts of it if it naturally has parts, is not unclear. For the actuality of some parts belongs to the parts themselves. Even so, nothing hinders some parts from being separable, because of their not being the actualities of a body.

It is still unclear, however, whether the soul is the actuality of the body in the way that a sailor is of a ship.<sup>14</sup>

Let the soul, then, be defined in outline in this way and 10 sketched out.

## CHAPTER 2

**413a11** Because what is sure and better known as conforming to reason comes to be from what is unsure but more apparent, one must try to proceed anew in this way concerning the soul. For it is not only necessary that a defining account make clear *the that*, 15 which is what most definitions state, but it must also contain and make manifest the cause. As things are, statements of definitions are like conclusions. For example: 'what is squaring? It is an equilateral rectangle being equal to an oblong figure.' But this sort of definition is an account of the conclusion: the one who states that squaring is the discovery of a mean states 20 the cause of the matter.

We say, then, taking up the beginning of the inquiry, that what is ensouled is distinguished from what is not ensouled by living. But living is spoken of in several ways. And should even one of these belong to something, we say that it is alive: reason, perception, motion and rest with respect to place, and further the motion 25 in relation to nourishment, decay, and growth.

For this reason, even plants, all of them, seem to be alive, since they seem to have in themselves a potentiality and a principle of such a sort through which they grow and decay in opposite directions. For it is not the case that they grow upwards but not downwards; rather they grow in both directions and in all ways— 30 those, that is, which are always nourished and continue to live as long as they are able to receive nourishment.

This can be separated from the others, but among mortal beings the others cannot be separated from this. This is evident in the case of plants. For no other capacity of soul belongs to them.

Being alive, then, belongs to living things because of this principle, but something is an animal primarily because of perception. For even those things which do not move or change place, but which have perception, we call animals and not merely alive. The primary form of perception which belongs to all animals is touch. But just as the nutritive capacity can be separated from touch and from the whole of perception, so touch can be separated from the other senses. By nutritive we mean the sort of part of the soul of which even plants have a share. But all animals evidently have the sense of touch. The reason why both of these turn out to be the case we shall state later.

For now let just this much be said: the soul is the principle of the things mentioned and is delimited by them, namely, nourishment, perception, thought, and motion. In some cases, it is not difficult to see whether each of these is a soul or a part of a soul, and if a part, whether in such a way as to be separable in account alone or also in place; but in other cases there is a difficulty. For just as in the case of plants, some, when divided, evidently go on living even when separated from one another, there being one soul in actuality in each plant, but many in potentiality, so we see this occurring in other characteristics of the soul in the case of insects cut into two. For each of the parts has perception and motion with respect to place, and if perception, then also imagination and desire; for wherever there is perception, there is also both pain and pleasure; and wherever these are, of necessity there is appetite as well. But concerning reason and the capacity for contemplation nothing is yet evident but it seems to be a different genus of soul, and this alone admits of being separated, in the way the everlasting is from the perishable.

It is evident from these things, though, that the remaining parts of the soul are not separable, as some assert. That they differ in account, however, is evident; for what it is to be the perceptual faculty is different from what it is to be the faculty of belief, if indeed perceiving differs from believing, and so on for each of the other faculties mentioned.

Further, all of these belong to some animals, and some of them to others, and only one to still others. And this will provide a differentiation among animals. It is necessary to investigate the reason why later. Almost the same thing holds for the senses: for some animals have them all, others have some of them, and others have one, the most necessary, touch.

That by which we live and perceive is spoken of in two ways, just as is that by which we know. We speak in one case of knowledge and in the other of the soul, because we maintain that we know by means of each of these. Likewise, we are healthy in one way by health and in another way by some part of, or the whole of, the body.<sup>15</sup> On one of these ways of speaking, knowledge and health is each a shape, a sort of form, an organization (*logos*), and so as to be an actuality of what is capable of receiving them—in the one case of what is capable of knowledge and in the other of what is capable of health. For the actuality of productive things seems to reside in what is affected and is disposed to receive it.

Consequently, the soul is in the primary way that by which we live and perceive and think, so that it will be a sort of organization (*logos*) and a form, but not matter and a substrate. For substance is spoken of in three ways, just as we said, of which one is form, another matter, and another what is from both; and of these the matter is potentiality and the form actuality. Since what is from both is an ensouled thing, the body is not the actuality of the soul, but the soul is the actuality of some body.

For this reason, those to whom it seems that the soul is neither without body nor some kind of body understand things rightly. For it is not a body, but is something belonging to a body; and because of this it is present in a body, and in a body of this sort—not as our predecessors supposed when they fitted the soul into the body without additionally specifying in which body or in which sort, even though it appears that whatever happens to show up does not receive whatever it happens upon. It happens rather in this way, in conformity with reason: the actuality of each thing comes about naturally in what has it in potentiality, that is, in its appropriate matter.

That, then, the soul is a kind of actuality and an organization (*logos*) of what has a potentiality to be of this sort, is evident from these things.

## CHAPTER 3

Among the capacities of the soul, all belong to some, to others **414a29**  
 some of them belong, and to still others only one belongs. The 30  
 capacities we mentioned were: the nutritive faculty, the percep-  
 tual faculty, the desiderative faculty, the faculty of motion with  
 respect to place, and the faculty of understanding. The nutritive  
 faculty alone belongs to plants; both this and the perceptual  
 faculty belongs to others. But if the perceptual faculty, then also **414b**  
 the desiderative faculty: desire is appetite, spirit, and wish. And  
 all animals have at least one kind of perception, touch. And that  
 to which perception belongs, to this belongs also both pleasure  
 and pain, as well as both the pleasurable and the painful; and to  
 those things to which these belong also belongs appetite, since 5  
 appetite is a desire for what is pleasurable. And further they have  
 perception of nourishment; for touch is perception of nourish-  
 ment, since all living things are nourished by dry, wet, hot, and  
 cold things, and touch is perception of these. Touch is perception  
 of other sensibles co-incidentally. For neither sound nor colour 10  
 nor smell contributes anything to nourishment, whereas flavour is  
 among the objects of touch.

Hunger and thirst are appetites—the first sort, hunger, for the  
 dry and the hot, and the second sort, thirst, for the wet and the  
 cold. Flavour is a sort of seasoning of these.

It will be necessary to clarify these matters later. For now let  
 this much be said: to those living things which have touch, desire 15  
 belongs as well. But regarding imagination things are not clear.  
 One must inquire into that later.

In addition to these things, a capacity to move with respect to  
 place belongs to some things; and to others both the faculty of  
 understanding and reason, for example to humans and to any-  
 thing else there may be of this or of a more elevated sort.

It is clear, then, that in the same way there could be one 20  
 account for both soul and figure. For in the one case a figure is  
 nothing beyond a triangle and the others following in a series, and  
 in the other a soul is nothing beyond the things mentioned. There  
 could, however, in the case of figures be a common account which  
 fits them all, though it will be peculiar to none; and the same holds  
 in the case of the souls mentioned. For this reason, it is ludicrous 25

to seek a common account in these cases, or in other cases, an account which is not peculiar to anything which exists, and which does not correspond to any proper and indivisible species, while neglecting what is of this sort. Consequently, one must ask individually what the soul of each is, for example, what the soul of a plant is, and what the soul of a man or a beast is.<sup>16</sup>

What holds in the case of the soul is very close to what holds concerning figures: for in the case of both figures and ensouled things, what is prior is always present potentially in what follows in a series—for example, the triangle in the square, and the nutritive faculty in the perceptual faculty. One must investigate the reason why they are thus in a series. For the perceptual faculty is not without the nutritive, though the nutritive faculty is separated from the perceptual in plants. Again, without touch, none of the other senses are present, though touch is present without the others; for many animals have neither sight nor hearing nor a sense of smell. Also, among things capable of perceiving, some have motion in respect of place, while others do not. Lastly, and most rarely, some have reasoning and understanding. For among perishable things, to those to which reasoning belongs all the remaining capacities also belong, though it is not the case that reasoning belongs to each of those with each of the others. Rather, imagination does not belong to some, while others live by this alone. A different account will deal with theoretical reason.

It is clear, therefore, that the account of each of these will also be the most appropriate account concerning the soul.

#### CHAPTER 4

**415a14** It is necessary for anyone who is going to conduct an inquiry into these things to grasp what each of them is, and then to investigate in the same way things closest to them as well as other features. And if one ought to say what each of these is, for example, what the intellective or perceptual or nutritive faculty is, then one should first say what reasoning is and what perceiving is, since actualities and actions are prior in account to potentialities. But if this is so, and their corresponding objects are prior to them,<sup>17</sup> it would for the same reason be necessary to make some

determinations about, for instance, nourishment and the objects of perception and reasoning.

The result is that one must speak first of nourishment and generation; for the nutritive soul also belongs to the others as well. This is both the first and most common capacity of the soul, 25 in virtue of which living belongs to all living things, a capacity whose functions are generating and making use of nutrition. For the most natural among the functions belonging to living things, at least those which are complete and neither deformed nor spontaneously generated, is this: to make another such as itself, an animal an animal and a plant a plant, so that it may, insofar as it is able, partake of the everlasting and the divine. For that is 415b what everything desires, and for the sake of that everything does whatever it does in accordance with nature. ('That for the sake of which' is spoken of in two ways: that on account of which and that for which.) Since, then, these things are incapable of sharing in the everlasting and the divine by existing continuously (because among perishable things nothing can remain the same and one in number), each has a share insofar as it is able to partake in this, 5 some more and some less, and remains not itself but such as it is, not one in number but one in form.

The soul is the cause and principle of the living body. As these things are spoken of in many ways, so the soul is spoken of as a cause in the three of the ways delineated: for the soul is a cause as 10 the source of motion, as that for the sake of which, and as the substance of ensouled bodies.

That it is a cause as substance is clear: for substance is the cause of being for all things, and living is being for living things, while the cause and principle of living is the soul. Further, actuality is the organization (*logos*) of that which is potentially.

It is evident that the soul is a cause as that for the sake of which: 15 just as reason acts for the sake of something, in the same way nature does so as well; and this is its end. And in living beings the soul is naturally such a thing.<sup>18</sup> For all ensouled bodies are organs of the soul—just as it is for the bodies of animals, so is it for the bodies of plants—since they are for the sake of the soul.<sup>19</sup> 'That 20 for the sake of which' is spoken of in two ways: that on account of which and that for which.

Moreover, the soul is also that from which motion in respect of place first arises, though this capacity does not belong to all living



things. There are also alteration and growth in virtue of the soul; for perception seems to be a sort of alteration, and nothing  
 25 perceives which does not partake of the soul. The same holds for both growth and decay; for nothing which is not nourished decays or grows naturally, and nothing is nourished which does not have a share of life.

Empedocles was not right when he added that growth occurs  
 416a for plants downwards, when they take root, because earth is naturally borne in this direction, and upward growth occurs because fire moves in a like manner. Nor even does he understand up and down rightly. For up and down are not the same for all things as for the universe; rather, as the head is in animals, so the roots are in plants, if it is because of their functions that one ought  
 5 to say that organs are the same or different. Moreover, what is it that holds fire and earth together, even though they are borne in opposite directions? For they will be torn apart if there is nothing which hinders them. If there is something, however, this will be the soul—the cause of growing and being nourished.

The nature of fire seems to some to be without qualification the  
 10 cause of nourishment and growth, since among bodies fire alone is evidently something which is nourished and grows. On this basis, one might suppose fire to be what accomplishes this in plants and animals. It is, however, a sort of co-cause, and most surely not a cause without qualification; the cause is, rather, the  
 15 soul. For fire's growth is without limit, so long as there is something combustible. By contrast, for all things naturally constituted, there is a limit and an organization (*logos*) of both size and growth. These things belong to the soul, and not to fire, and to the organization (*logos*) rather than to the matter.

Since the same capacity of soul is both nutritive and generative,  
 20 it is necessary to determine what concerns nutrition first; for it is in virtue of this function that it is marked off from the other capacities. Nutrition seems to be from a contrary to its contrary, though not from every contrary to every contrary, but only those contraries which have not only generation from one another but also growth. For many things are generated from one another, but not all of them are quantities, as, for example, the healthy  
 25 from the sick. Nor even among growing contraries does it appear that nourishment is reciprocally one from the other: whereas water is nourishment for fire, fire does not nourish water. Now

then, in the case of simple bodies it seems most true that the one is nourishment and the other nourished.

Yet there is a difficulty. Some say that like is nourished by like just as like grows by like. By contrast, as we said earlier, it seems 30 to others that contrary is nourished by contrary, since like is unaffected by like, and that nourishment changes, and is digested, while every change is into its opposite or an intermediary. Further, nourishment is in some way affected by what is nourished, but what is nourished is not affected by nourishment, just as a 35 carpenter is not affected by the matter, but it is affected by him. 416b The carpenter changes only from idleness into activity.

It makes a difference whether nourishment is what is added last or first. If it is both, in one instance undigested and in the other digested, it would be possible to call either nourishment. For 5 insofar as it is undigested, contrary is nourished by contrary; and insofar as it is digested, like is nourished by like. As a consequence, evidently each side will be in one way correct and in another way incorrect.

Since nothing which does not partake of life is nourished, what is nourished would be the ensouled body, insofar as it is ensouled, with the result that nourishment is relative—and not 10 co-incidentally—to what is ensouled.

There is a difference, however, between being nourishment and being able to produce growth in something. For insofar as an ensouled thing is a particular quantity, something is capable of producing growth in it, while insofar as it is some this and a substance, something is nourishment for it. For what is ensouled preserves its substance and exists as long as it is nourished; and it is capable of generating not the very thing which is nourished, but 15 rather something like what is nourished, since its substance already exists and nothing generates itself, but rather preserves itself.

Consequently, this principle of the soul is a capacity of the sort which preserves the thing which has it, as the sort of thing it is, while nutrition equips it to be active. Hence, whatever has been deprived of nutrition cannot exist.

Since it is right to name each thing after its end, and here the end is to generate another such as itself, it would be right to call this primary soul *generative* of another such as itself.<sup>20</sup>

Since these are three things—what is nourished, that by which 20 it is nourished, and what nourishes—that which nourishes is the

- primary soul; that which is nourished is the body which has the  
 25 primary soul; and the nourishment is that by which it is nourished. And that by which something nourishes is twofold, just as that by which one steers is both the hand and the rudder, the one both producing movement and itself moving, and the other merely moving. It is necessary that all nourishment be able to be digested; and what is hot effects digestion. For this reason, everything ensouled has heat.
- 30 So, it has been said in outline what nourishment is. It is to be made completely clear later, in the appropriate discussion.

## CHAPTER 5

- 416b32** With these things determined, let us discuss what is common to the whole of perception. Perception arises in both being moved and being affected, just as was said; for it seems to be a kind of  
 417a alteration. Some also say that like is affected by like; and we have said how this is possible or impossible in our general discussions on acting and being affected.

- There is a puzzle as to why there is no perception of the senses themselves, and why they do not produce perception without external objects, even though present in them are fire, earth, and  
 5 the other elements of which there is perception either in themselves or in respect of their co-incidental properties. It is clear, then, that the perceptual faculty is not actual, but only in potentiality; for this reason it does not perceive, just as what is combustible does not burn by itself without something capable of burning it. For otherwise it would burn itself, and would have no need of any actually existing fire.
- 10 Since we speak of perceiving in two ways—for we speak of that which potentially hears or sees as hearing and seeing, even if it should happen to be sleeping, and also of that which is already actively seeing or hearing—perception will also be spoken of in two ways, in one case as potential and in the other as actual; and the same for the object of perception, in one case as potential and in the other as actual.

- First, then, let us speak as if being affected and being moved  
 15 and being actual were the same; for motion is a kind of actuality, however incomplete, as was said in other writings. Everything is

affected and moved by what is capable of producing such a result and is in actuality. There is, accordingly, a sense in which like is affected by like and there is a sense in which unlike is affected by unlike, just as we have said; for something unlike is affected, but once affected it is like. 20

One must also draw a distinction concerning potentiality and actuality. For we have just now been speaking of them without qualification. In the first case, something is a knower in the way in which we might say that a human knows because humans belong to the class of knowers and to those things which have knowledge; but in the second case, we say directly that the one who has grammatical knowledge knows. These are not in the same way potential knowers; instead, the first one because his genus and matter are of a certain sort, and the other because he has the potential to contemplate whensoever he wishes, so long as nothing external hinders him. Yet another sort of knower is the one already contemplating, who is in actuality and strictly knowing this *A*. In the first two cases, then, those knowing in potentiality come to be knowers in actuality, but the first one by being altered through learning, with frequent changes from a contrary state; and the other, from having arithmetical or grammatical knowledge and not actualizing it to actualizing in another way. 25 417b

Nor is being affected unqualified. Rather, in one way it is a kind of destruction by a contrary, and in another way it is rather a preservation of what is in potentiality by what is in actuality, and of what is like something in the way potentiality is in relation to actuality. For whenever the one who has knowledge comes to contemplate, he is either not altered, since this is a progression into the same state and into actuality, or his is a different kind of alteration. For this reason, it is inappropriate to say that one who understands is altered whenever he understands, in just the way it is inappropriate to say that the builder is altered whenever he builds. Hence, leading one who thinks or understands into actuality from potentiality is not teaching, but properly has some other name; whereas the one who, from being in potentiality, learns and receives knowledge from one who is in actuality, and able to teach, either should not be said to be affected or there are two types of alteration, one a change towards conditions of privation and the other towards positive states and a thing's nature. 10 15

In what is capable of perceiving, the first change is brought about by the parent; what is born also already has perception, just as we have knowledge. Actually perceiving is spoken of in a way similar to contemplation. But there is a difference: what is capable  
 20 of producing this actuality, the object of sight and hearing and so on for the remaining objects of perception, is external. The reason is that actual perception is of particulars, whereas knowledge is of universals, which are in a sense in the soul itself. Consequently, reasoning is up to oneself, whenever one wishes; but perceiving is  
 25 not up to oneself, since it is necessary for the object of perception to be present. This holds in the same way for the types of knowledge which concern objects of perception, and for the same reason, namely that the objects of perception are particulars and are external.

There may come an appropriate time later to clarify these  
 30 things. For now, let this much be distinguished: that what is spoken of as being in potentiality is not without qualification, but rather in the first case as when we say that the child is potentially a general, and in the second, as when we say this of someone who is at the right age; and it is in this way that we speak  
 418a of what is capable of perceiving. Since the difference between these has no name, though the boundary between them has been drawn—that they are different and how they are different—it is necessary to use ‘being affected’ and ‘being altered’ as though they were the appropriate names.

What is capable of perceiving is in potentiality such as the object of perception is already in actuality, as was just said.  
 5 Hence, it is affected while being unlike what affects it, but when it has been affected, it has been made like it and is such as what affected it is.

## CHAPTER 6

418a7 In the case of each sense, it is necessary to speak first about perceptible objects. Perceptible objects are spoken of in three ways: in two cases we say perceptible objects are perceived in their own right, and in one co-incidentally. Of the first two, one  
 10 is exclusive to an individual sense and the other common to them all.