ished, what it is nourished by, and what nourishes. What nourishes is this first soul, what is nourished is the ensouled body, and what it is nourished by is the nourishment. What the soul nourishes by is of two types—just as what we steer by is both the hand and the rudder: The first both initiates motion and undergoes it, and the second simply undergoes it. Since all nourishment must be digestible and the hot element produces digestion, every ensouled thing contains heat.

This, then, is an outline of what nutrition is; we should describe it more clearly later in the discussions proper to it.

Perception

Perception as Motion

5

Now that we have determined this, let us discuss perception in general. Perception occurs in being moved and affected, as we have said, since it seems to be a type of alteration. Some also say that like is affected by like; we have said in our general discussion of acting and being affected how this is or is not possible.

A puzzle arises about why we do not perceive the senses themselves, and about why they do not produce perception without external objects, despite the presence of fire, earth, and the other elements, whose intrinsic or coincidental properties are the things that are perceived. Clearly, then, the perceptive part is [what it is] by merely potential, not actual, [perceiving], and so it does not perceive [without an external object]—just as what is combustible is not burnt all by itself without something to burn it, since otherwise it would burn itself with no need of actual fire.

We speak of perceiving in two ways; for we say that something sees or hears both in the case of something that has the potentiality for seeing or hearing, even though it is asleep at the time, and in the case of something that is actually seeing or hearing at the time. It follows that perception is also spoken of in two ways, as potential and as actual, and in the same way both what is potentially perceived and what is actually perceived are called objects of perception.

First, then, let us speak as though the actuality were the same as being affected and moved—for motion is in fact a sort of actuality, though an incomplete one, as we have said elsewhere. Now, everything is affected and moved by an agent that has the relevant property in actuality, so that in a way like is affected by like, and in a way unlike by unlike— for what is being affected is unlike the agent, but when it has been affected it is like the agent.

Different Types of Potentiality

We must also distinguish types of potentiality and actuality, since just now we were speaking of them without qualification. One way in which someone might know is the way we have in mind in saying that a man knows because man is a kind of thing that knows and has knowledge; another way is the way we have in mind in saying that someone who has grammatical knowledge knows. These knowers have different sorts of potentiality—the first has a potentiality because he has the right sort of genus and matter, whereas the second has a potentiality because he has the potentiality to attend to something when he wishes, if nothing external prevents it. A third sort [of knower] is someone who is attending to something at the time, actualizing his knowledge and fully knowing (for instance) this A. In the first and second case we pass from potentially to actually knowing; but in the first case we do so by being altered through learning, and by frequent changes from the contrary state, while in the second case—where we pass from having arithmetical or grammatical knowledge without actualizing it, to actualizing it—we do so in another way.

Further, there is not just one way of being affected. On the contrary, one way of being affected is a destruction of contrary by contrary, while the other way is more properly preservation, not destruction, of a potential F by an actual F, when the potential F is [not contrary, but] like the actual F, in the way that a potentiality is like its actuality. For the second case—where the possessor of knowledge comes to attend to what he knows—either is not a case of alteration at all (since the addition leads to [the knowledge] itself and to the actuality) or is a different kind of alteration. That is why we should not say that the intelligent subject is altered in exercising his intelligence, just as we should not say that the builder is altered in [actually] building.

First, then, when an understanding and intelligent subject is led from potentiality to actuality, we should not call this teaching but give it some other name. Again, if a subject with potential knowledge learns and acquires knowledge from a teacher with actual knowledge, then we should say either, as we said, that this is not a case of being affected, or that there are two ways of being altered, one of which is a change into a condition of deprivation, and the other of which is a change into possession of a state and into [the fulfillment of the subject's] nature.

Perception as Potentiality and Actuality

In the perceiver, the first change is produced by its parent; and at birth it possesses perception corresponding to [the second type of] knowledge. We speak of actual perceiving in a way that corresponds to attending, except that the visible, audible, and other perceptible objects that produce the actuality are external. This is because actual perception is of particulars, while knowledge is of universals, which are, in a way, in the soul itself; hence it is up to us to think whenever we want to, but it is not up to us to perceive whenever we want to, since perception requires the presence of its object. The same is true for the types of knowledge that are about perceptible things, and for the same reason—namely that perceptible things are particulars and external.

There may be an opportunity to explain these points more perspicuously another time, but for the moment let us be content with the distinctions we have made. There are different types of potentiality: One is what is meant in saying that a child is potentially a general. A second is what is meant in attributing the potentiality to someone of the right age, and [this second type] applies to the perceptive part. Since the difference between these cases has no name, though our distinctions have shown that they are different, and in what ways, we have to use 'being affected' and 'being altered' as though they were the strictly correct names.

The perceiver is potentially what the perceptible object actually is already, as we have said. When it is being affected, then, it is unlike the object; but when it has been affected it has been made like the object and has acquired its quality.

Proper, Common, and Coincidental Objects of Perception

6

We should first discuss the objects of perception, taking each sense in turn. An object of perception is spoken of in three ways: Two types are perceived intrinsically, and one coincidentally. One type of intrinsic object is proper to each sense, and the other type of intrinsic object is common to all the senses.

By 'proper object' I mean the one that cannot be perceived by another sense and about which we cannot be deceived. Sight, for instance, is of color; hearing of sound; taste of flavor; and touch has a number of different objects. At any rate, each sense discriminates among its proper objects, and a sense is not deceived about whether, for instance, something is a color or a sound, but can be deceived about whether or where the colored or sounding thing is. These objects, then, are said to be proper to each sense.

Motion, rest, number, shape, and size are the common objects, since they are not proper to any one sense, but are common to them all—a certain sort of motion, for instance, is perceptible by both touch and sight.

Something is said to be coincidentally perceptible if, for instance, the pale [thing] is the son of Diares. For we perceive the son of Diares coincidentally, since he coincides with the pale thing we perceive, and hence we are not affected at all by the perceptible object in so far as it is [the son of Diares].

Among the intrinsic objects of perception, the proper objects are most properly perceptible, and the essence of each sense is by nature relative to these.

Perception Requires Suitable Organs

11

. . . The objects of touch are the differentiae of body in so far as it is body, i.e. those that distinguish the elements—hot, cold, dry, and wet; we have discussed these earlier in what we said about the elements. Their tactile sense-organ, the primary seat of the sense called touch, is the part that has these qualities potentially. For perceiving is a way of being affected; hence the agent causes the thing that is affected, which potentially has the quality that the agent has, to have that quality actually.

Hence we do not perceive anything that is as dry or wet, or hard or soft, [as the organ,] but only the excesses in either direction, because the sense is a sort of intermediate condition between the contraries in objects of perception. And that is why a sense discriminates among its objects; for what is intermediate discriminates, since in relation to each extreme it becomes the other extreme. And just as what is going to perceive both pale and dark must be actually neither pale nor dark but potentially both, and similarly in the other cases, so also in the case of touch, [what is going to perceive the contraries] must be neither hot nor cold.

Further, just as we found that sight in a way perceives both the visible and the invisible, and similarly the other senses perceive the opposites, so also touch perceives the tangible and the intangible. What is intangible is either something that either has altogether very few of the differentiating properties of tangibles—air, for instance—or has an excess of tangible qualities— for instance, things that destroy *the sense*.

We have spoken in outline, then, of the senses, one by one.

Perception Is Reception of Form without Matter

12

A general point to be grasped is that each sense receives the perceptible forms without the matter. Wax, for instance, receives the design on a signet-ring without the iron or gold; it acquires the design in the gold or bronze, but not insofar as the design is gold or bronze. Similarly, each sense is affected by the thing that has color or flavor or sound, but not insofar as it is said to be that thing [for instance, a horse], but insofar as it has a given quality [for instance, color] and in accordance with the form [of the sense]. The primary sense-organ is the seat of this sort of potentiality. Hence the organ and the capacity are one, but their being is different. For though [the sense-organ] that perceives is of some magnitude, being perceptive is not, and [so] the sense is not something with magnitude but is a [specific sort of] form and potentiality of the organ.

It is also evident from this why excesses in objects of perception destroy the sense-organs. For if the motion is too strong for the sense-organ, then the form, i.e. the sense, is destroyed, just as the harmony and tension are destroyed if the strings of an instrument are struck heavily.

This also makes it evident why plants do not perceive, even though they have one part of soul, and are affected in some ways by objects of touch, since they are chilled and heated. The reason is that they *424b* lack a [suitable] intermediate condition and a principle suitable for receiving the form of perceptible things; instead, they are affected [by the form] with the matter.

A puzzle arises about whether something that cannot smell can be at all affected by odor, or something that cannot see can be affected by color, and so on for the other cases. If the object of smell is odor, then anything produced by odor must be [the act of] smelling; hence nothing that is incapable of smelling anything can be affected by odor (the same applies to the other cases), and any such thing must be affected in so far as it is a perceiver. A further argument makes the same conclusion clear. For a body is affected neither by light and darkness nor by sound nor by odor, but only by their subject, as, for instance, the air that comes with the thunder splits the log.

On the other hand, tangible [qualities] and flavors affect bodies; otherwise, what would affect and alter soulless things? Then will the other objects of perception also affect bodies? Perhaps not every body is liable to be affected by odor and sound, and those that are affected are indefinite and impermanent—air, for instance, since it acquires an odor as though affected in some way.

Then what is there to smelling, besides being affected? Perhaps smelling is [not only being affected, but] also perceiving, while air that is affected [by odor], by contrast, soon becomes an object of perception [not a perceiver].

BOOK III

Appearance

How We Perceive That We Perceive

2

Since we perceive that we are seeing and hearing, it *425b12* must be either sight or a different sense by which we perceive that we are seeing. [In the second case] the

same sense will perceive both sight and the color that is the [external] subject, so that either there will be two senses perceiving the same thing, or else the sense will perceive itself. Again, if the sense that perceives sight is different [from sight itself], then either it will go on without limit or there will be some sense that perceives itself, so that one ought to make this claim about the first sense.

Still, a puzzle arises. If perceiving by sight is seeing and if what we see is color or something colored, then if we are seeing, the first case of seeing will be colored.

It is evident, then, that perceiving by sight is not just one thing; for indeed, whenever we are not seeing, we discriminate light and darkness, but not in the same way. Moreover what sees is in fact colored in a way; for a sense-organ receives the object of perception without its matter. That is why, even when the objects of perception have gone away, perceptions and appearances are still present in the sense-organs.

The Actuality of Perception Is the Same As the Actuality of Its Object

The actuality of the object of perception and of the sense are one and the same, but their being is not the same. I mean, for instance, that the actual sound and the actual hearing [are one and the same]; for it is possible to have [the sense of] hearing without [actually] hearing, and what has sound is not always making a sound. But whenever what has the potentiality to hear is actually hearing, and what has the potentiality to sound is sounding, then actual hearing and actual sounding occur at the same time, so that we would say that one thing is a case of hearing and the other a case of sounding.

If, then, the motion and the action are in the thing affected, both the sounding and the actual hearing must be in the [sense] that has the potentiality. For the actuality of what acts on something and initiates motion in it comes to be in the thing affected—that is why what initiates motion need not be set in motion itself. Now, the actuality of what has the potentiality to sound is sound or sounding, while the actuality of what has a potentiality for hearing is hearing or listening for hearing is of two sorts, and so is sound.

The same account applies to the other senses and their objects. For just as both acting on something and being affected are in the thing affected, not in the thing acting on it, so also both the actuality of the object of perception and the actuality of the perceiver are in the perceiver. In some cases, however, the two actualities have different names, as sounding and hearing have, while in other cases one of them has no name; for the actuality of sight is called seeing, whereas the actuality of color has no name, and the actuality of what has the potentiality to taste is called tasting, whereas the actuality of flavor has no name.

And since the actuality of the object of perception and of what has the potentiality of perceiving are one, but their being is different, it follows that hearing and sounding (spoken of in this way), flavor and tasting, and so on, must all perish or remain in being at the same time. But this is not necessary for the things said to have the relevant potentiality.

In fact the earlier naturalists were wrong on this point, in supposing that nothing was pale or dark without sight, and that there was no flavor without taste. For in a way they were correct, but in a way incorrect. For perception and its object are spoken of in two ways, as potential and as actual; in the case [of the actuality] what they say is correct, but in the case [of the potentiality] it is not. They, however, spoke without qualification about things that are not spoken of without qualification. . . .

Appearance Contrasted with Perception

3

. . . If appearance is that in virtue of which some object appears to us, in contrast to what is so called metaphorically, then is it one of those potentialities or states in virtue of which we discriminate and attain truth or falsity? These are perception, belief, knowledge, and understanding.

It is clear as follows that appearance is not the same as perception. For perception is either a potentiality, such as sight, or an actuality, such as seeing; but we have appearances when we have neither of these—in dreams, for instance. Moreover, perception is present in every [animal], but appearance is not. If they were the same in actuality, then it would be possible for all beasts to have appearance, whereas in fact it does not seem possible [for all]; ants or bees, for instance, and grubs [do not have it]. Further, perceptions are always true, whereas most appearances are

false. Again, whenever we are actually perceiving accurately, we do not say that this appears to us [to be] a man; we are more inclined to say [that something appears to be so] in cases where we do not see clearly whether something is true or false. Further, as we were saying before, sights appear to us even when we have our eyes closed.

Appearance Contrasted with Belief

The remaining question is whether appearance is belief; for belief may also be either true or false. Belief, however, implies conviction—since one cannot believe things if one does not find them convincing—whereas no beasts have conviction, though many have appearance. Further, belief implies conviction, conviction implies being persuaded, and persuasion implies reason, whereas no beasts have reason, though some have appearance.

It is evident, then, that appearance is neither belief that involves perception, nor belief that is produced through perception, nor a combination of belief and perception. This is so both for the reasons given and also because [on this view] belief will not be about anything other than the thing, if there is one, that is the object of perception.

I mean, for instance, that the combination of a belief about the pale and a perception of the pale will turn out to be appearance; for surely it will not be the combination of a belief about the good and
428b a perception of the pale—for appearance will be having a belief non-coincidentally about the very thing one perceives. In fact, however, we sometimes have false appearances about the same things at the same time as we have a true supposition about them, as when, for instance, the sun appears a foot across, even though we are convinced that it is bigger than the inhabited world.

It turns out, then, [on the view being considered] that either we have lost the true belief we had, even though the thing still exists and we have neither forgotten our belief nor been persuaded to change it, or else, if we still have the true belief, the same belief must at the same time be both true and false. But in fact it could have become false only if the thing changed without our noticing it. It follows, then, that appearance cannot be any of these things, nor a product of them.

The Relation of Appearance to Perception

It is possible, however, when one thing has been set in motion, for a second thing to be set in motion by the first. Moreover, appearance seems to be a sort of motion, to involve perception, to be present in things that have perception, and to be about the objects of perception. Now, it is also possible for motion to result from actual perception, and this motion must be similar to the perception.

Hence this motion cannot occur without perception or in things that do not have perception. Things that have appearance act and are affected in many ways in accordance with it, and it can be either true or false. . . .

Thought

Thought Compared with Perception

4

Now we must consider the part by which the soul *429a10* has knowledge and intelligence, and ask whether it is separable, or it is not separable in magnitude but only in account; and what its differentia is, and how understanding comes about.

Now, if understanding is like perceiving, it consists either in being affected by the object of intellect or in something else of the same sort. Hence the intellect must be unaffected, but receptive of the form; it must have the quality [of the object] potentially, not actually; and it must be related to its object as the perceiving part is related to the objects of perception.

Hence the intellect, since it understands all things, must be unmixed, in order, as Anaxagoras says, to 'master' them (i.e. to know them); for the intrusion of any foreign thing would hinder and obstruct it. And so it has no nature except this—that it is potential. Hence the part of the soul called intellect (by which I mean that by which the soul thinks and supposes) is not actually, before it understands, any of the things there are. It is also unreasonable, then, for intellect to be mixed with the body, since it would then acquire some quality (for instance, hot or cold) or even, like the perceiving part, have some organ, whereas in fact it has none.

And so those who say that the soul is a place of forms are right, except that it is the intellectual soul,

not the whole soul, which is—potentially, not actually—the forms.

The condition of the sense-organ and of the faculty of perception makes it evident that the perceiving part and the intellectual part are unaffected in different ways. For after a sense perceives something very perceptible, it cannot perceive; after hearing very loud sounds, for instance, it cannot hear sound, and after seeing vivid colors or smelling strong odors, it cannot see or smell. But whenever intellect understands something that is very intelligible, it understands more, not less, about inferior objects; for intellect is separable, whereas the perceiving part requires a body.

When the intellect becomes each thing [that it understands], as it does when someone is said to have actual knowledge (this comes about whenever someone is able to actualize his knowledge through himself), even then it is still potential in a way, though not in the same way as before it learnt or discovered; and then it is capable of understanding itself.

The Objects of Thought

Magnitude is different from being magnitude and water from being water; and the same applies in many other cases too, though not in all, since in some cases the thing is the same as its being. It follows that to discriminate being flesh we use something different, or something in a different state, from what we use in discriminating flesh; for flesh requires matter, and, like the snub, it is this [form] in this [matter]. Hence to discriminate the hot and the cold and the things of which flesh is some sort of form, we use the perceptive part; but to discriminate being flesh, we use something else that is either separable [from body] or related to it as a formerly bent line is related to the straight line it has become.

Further, if we turn to things whose being depends on abstraction, the straight is similar to the snub, since it requires something continuous. But if being straight is different from the straight, then so is the essence of straight (duality, let us say) different from the straight, and therefore to discriminate it we use something different, or something in a different state. In general, then, the [separability] of intellect corresponds to the way in which objects are separable from matter.

Puzzles about Intellect and Thought

A puzzle arises. If intellect is simple and unaffected, having, as Anaxagoras says, nothing in common with anything, then how can it understand, if understanding consists in being affected? For it seems that two things must have something in common if one is to affect the other. Again, is intellect itself an object of intellect? For if nothing other [than itself] makes it an object of intellect, and if all objects of intellect are one in species, then the other objects of intellect will also be intellect; alternatively, it will need something mixed into it, to make it an object of intellect in the same way as the other objects of intellect are.

On the other hand, our previous discussion of ways of being affected because of something in common has shown that the intellect is in a way potentially the objects of intellect, but before it understands them, it is none of them actually. Its potentiality is that of a writing tablet with nothing actually written on it—which is also true of intellect.

Further, intellect itself is an object of intellect in the same way as its objects are. For in the case of things without matter, the understanding part and its object are one, since actual knowledge and its object are the same. (We should investigate why it is not [engaged in the activity of] understanding all the time.) In things that have matter, each object of intellect is potentially present; hence intellect will not be in them (since it is a potentiality for being such things without their matter), but it will be an object of intellect.

Passive Intellect and Productive Intellect

5

In the whole of nature each kind of thing has something as its matter, which is potentially all the things in the kind, and something else as the cause and producer, which produces them all—for instance, the craft in relation to its matter. These differences, then, must also be found in the soul. One sort of intellect corresponds to matter, since it becomes all things. Another sort corresponds to the producer by producing all things in the way that a state, such as light, produces things—for in a way light makes potential colors into actual colors. This second sort of intellect

is separable, unaffected, and unmixed, since its essence is actuality.

For in every case the producer is more valuable than the thing affected, and the principle is more valuable than the matter. Actual knowledge is the same as its object; potential knowledge is temporally prior in an individual [knower], but in general it is not even temporally prior. But [productive intellect] does not understand at one time and not at another.

Only when it has been separated is it precisely what it is, all by itself. And this alone is immortal and everlasting. But [when it is separated] we do not remember, because this [productive intellect] is unaffected, whereas the intellect that is affected is perishable. And without this [productive intellect] nothing understands. . . .

Desire and Action

The Role of Thought and Desire in Producing Action

10

433a9 There are apparently two parts that move us—both intellect and desire, if we take appearance to be a kind of understanding. For many people follow their appearances against their knowledge, and the other animals have appearance but lack understanding and reasoning. Both intellect and desire, then, move us from place to place. This is the intellect that reasons for some goal and is concerned with action; its [concern with an] end distinguishes it from theoretical intellect. All desire also aims at some goal; for the object of desire is the starting point of intellect concerned with action, and the last stage [of our reasoning] is the starting point of action.

Hence it is reasonable to regard these two things—desire, and thought concerned with action—as the movers. For the object of desire moves us, and thought moves us because its starting point is the object of desire. Moreover, whenever appearance moves us, it requires desire.

And so there is one mover, the desiring part. For if there were two—intellect and desire—they would move us insofar as they had a common form. In fact, however, intellect evidently does not move anything without desire, since wish is desire, and any motion in accordance with reasoning is in accordance with wish; desire, on the other hand, also moves us against reasoning, since appetite is a kind of desire. Now, intellect is always correct, but desire and appearance may be either correct or incorrect. Hence in every case the mover is the object of desire, but the object of desire is either the good or the apparent good—not every sort of good, but the good that is achievable in action. What is achievable in action admits of being otherwise.

Evidently, then, the potentiality of the soul that moves us is the one called desire. People who divide 433b the soul into parts, if they divide it into separate parts corresponding to the different potentialities, will find very many of them—the nutritive, perceptive, intellectual, and deliberative parts, and, moreover, the desiring part; for the difference between these parts is wider than the one between the appetitive and emotional parts.

Conflicting Desires

Desires that are contrary to each other arise, however, when reason and appetite are contrary, which happens in subjects that perceive time. For intellect urges us to draw back because of what is to come, while appetite [urges us on] because of what is present; for the pleasant thing that is present appears both unqualifiedly pleasant and unqualifiedly good, because we do not see what is to come.

Hence the mover is one in species—the desiring part, in so far as it is desiring. Indeed, the first mover of all is the object of desire, since it moves us without being moved, by being present to understanding or appearance. But the movers are numerically more than one.

How Desire Results in Action

We must distinguish three things—the mover, its instrument, and the subject moved. There are two types of movers: the unmoved mover and the moved mover. The unmoved mover is the good achievable in action, and the moved mover is the desiring part; for the thing that is moved is moved insofar as it desires, and desire, insofar as it is actual, is a sort of motion. The thing moved is the animal. When we reach the instrument by which desire moves, we reach something bodily, and so we should study it when we study the functions common to soul and body.