

Session 3

Readings for Tuesday Discussion Led by Michael Augros and Lee Perlman

Aristotle, Physics 1.7.191a2-12, trans. Michael Augros

It has been said, then, how many principles of natural coming to be there are, and in what way they are so many. And it is clear that something must underlie the contraries and the contraries must be two. But in another way, this is not necessary. For one of the contraries is sufficient to make a change by its absence and presence.

Now the underlying nature is understandable by an analogy. For as bronze is to statue, or as wood is to bed, or as matter and the formless before it takes on form is to whatever else has form, so is this [underlying nature] to a substance and a 'this something' and a being.

Aristotle, Physics 1.9.192a25-31

[Matter] in a way is destroyed and comes to be, but in a way not. For indeed as 'that in which' [there is some privation], it is destroyed as such (since the privation destroyed is in it), but as being in potency, it is not destroyed as such, but it is necessary that it be indestructible and ungenerable. For if it came to be, there must be some first underlying thing, present in it, from which [it came to be]; but that is its own nature, and so it will be before it comes to be. For I call 'matter' the first thing underlying each thing, present in it, from which something comes to be, not accidentally.

Aristotle, Physics 2.1

Of things which are, some are by nature and some through other causes. The animals and their parts and the plants and the simple bodies (such as earth, fire, air, and water) are by nature. For we say that these and such things are by nature. But all these things appear to differ from things not constituted by nature. For each of these has in itself a principle of motion and of staying still (whether with respect to place, or with respect to increase and decrease, or by alteration). But a bed and a coat, and anything else of this kind, insofar as they are subject to each of these predicates and to the extent that they are by art, do not have any inborn impulse to change. But insofar as they happen to be made of stone or of earth or a combination of these, they do have one, and just to that extent, as though nature is some principle or cause of moving (and resting) in that to which it belongs first, as such, and not incidentally.

I say 'not incidentally' because someone who is a doctor might become the cause of health for himself. Even so, it is not insofar as he gets healthy that he has the art of a doctor, but it just happens that the doctor and the one getting healthy are the same. And so these are also sometimes separate from each other. So too for each of the things that are made. For none of them has the principle of the making in itself: for some, that principle is in others and is external (such as a house and other handmade things), but for whatever others might become a cause of themselves in an incidental way, it is in themselves, yet not as such.

Nature, therefore, is what was said.

Whatever things have this sort of principle 'have a nature.' And all these are substances. For nature is always something underlying and always in something underlying.

'By nature' are both these things and whatever belongs to them as such, as being carried up [belongs] to fire. For this is neither nature nor has a nature, but is by nature and according to nature.

It has been said, then, what nature is, and what things are 'by nature' and 'according to nature'.

But to try to show that natures exists is ridiculous. For it is obvious that there are many such things among beings. To show the manifest through the unmanifest is to be incapable of discerning what is known through itself from what is not known through itself. That it is possible to be in this condition is not unclear. For someone blind from birth might syllogize about colors. And so it is necessary that for such people the argument is about names and is without understanding.

To some it seems that the nature and substance of beings which are by nature is the first thing, in itself shapeless, present in each, as the nature of a bed is the wood, of the statue, the bronze. Antiphon says a sign of this is that if someone buried a bed in the earth and the rot acquired the power to send up a shoot, then not a bed, but wood would come to be, insofar as the one thing (the disposition by rule and art) belongs incidentally, while the substance is rather that which remains, continually undergoing these things. And if each of these things [such as bronze and wood] underwent the same thing in relation to something else, say bronze and gold in relation to water, bones and wood in relation to earth, and likewise for any other things whatsoever—then that other thing is the nature and substance of them. And so some say fire is the nature of beings, some say earth, some air, some water, some some of these, some all of them. For whichever among these someone assumed to be such, whether one or more [of them], this and so many he said was the entirety of substance, while all other things he said were undergoings and conditions and dispositions of these. And he said any one of these was therefore eternal, for there is in these no change from [being] themselves, but other things come to be and are destroyed times beyond count.

So in one sense 'nature' is said in this way, as the first underlying matter of each thing having in itself a principle of motion and of change.

But in another sense, nature is the form [*morphe*] and species [*eidōs*] corresponding to the definition. For just as 'art' applies to what is by art and to the artistic, so too 'nature' applies to what is by nature and to the natural. We would not yet say, in the former case, that it has anything 'by art' if it is only a bed potentially and had not yet the specification [*eidōs*] of a bed, nor that it is 'art'. And neither [would we do so] in the case of things constituted by nature. For what is potentially flesh or bone does not yet have its own nature, before it takes on the species corresponding to the definition (by which, when defining, we say what flesh or bone is); nor is it something 'by nature' [yet]. And so, in another sense, 'nature' would be the form and species (not separable except in definition) of things which have in themselves a principle of motion. (What is from these is not nature, but 'by nature,' such as a man.) And this is more nature than the matter. For each thing is named when it is in actuality, rather than when it is in potency.

Furthermore, man comes to be from man, but not bed from bed. And therefore they say that the nature is not the arrangement but the wood, because if the bed sprouted, not a bed but wood would come to be. Therefore if [by this reasoning] the arrangement is art, the form is also nature. For man comes to be from man.

Furthermore, 'nature' meant in the sense of a coming-to-be is the path to nature. For it is not like doctoring (which is the path to health, and not to the art of doctoring). For doctoring must be *from* the art of doctoring, not *to* the art of doctoring. But 'nature' is not related to nature in this way, but rather what grows, insofar as it grows, goes from something into something. Then into what does it grow? Not that from which [it grows], but that into which [it grows]. Therefore the form is nature.

Now 'form' and 'nature' are said in two ways. For the privation, too, is a species in a way. But whether or not there is a privation and something contrary in simple coming-to-be must be looked into later.

Aristotle, De Anima 2.1

We have now said what has been handed down about the soul by our predecessors. Let us begin again as if from the beginning, trying to determine what the soul is and what would be the most common formulation of it.

Now we call one particular genus of the things which are 'substance'; of this, one is as matter, which by itself is not a 'this something,' while another is the form and the species, by which something is now called a 'this something,' and a third is what is from both of these. But the matter is potency, the form actuality; and this latter is twofold, the one like [habitual] knowledge, the other like [actual] considering.

Bodies seem to be substances most of all, and of these, the natural ones, for these latter are the principles of the others. Of natural bodies, some have life, while some do not. (We call 'life' self-nutrition and growth and wasting away.)

And so every natural body participating in life will be a substance, but 'substance' in the sense of the composite. But since it is a body of a certain sort (for it has life), the soul cannot be the body. For the body is not among things which are in a subject, but rather it is as a subject and matter. Therefore, the soul must be substance as the form [*eidōs*] of a natural body having life potentially. But substance is actuality. Therefore, soul is the actuality of this sort of body.

But actuality is said in two ways, the one like [habitual] knowledge, the other like [actually] considering. It is clear, then, that the soul is like [habitual] knowledge. For both sleeping and waking are when the soul exists in [the body], but waking is analogous to [actually] considering, while sleep is analogous to having knowledge and not using it, and in the same person, [the habit of] knowledge is prior in generation. And so the soul is the first actuality of a natural body having life potentially. But this sort of body has tools. (Even the parts of plants are tools, although they are very simple, e.g. the leaf is the covering of the pod, while the pod is [the covering] of the fruit. And the roots are analogous to the mouth. For both take in food.)

So if something must be said in common about all souls, it would be the first actuality of a natural body with tools.

And so there is no need to ask whether the soul and the body are one, just as one need not ask this about wax and its shape, nor, generally, about the matter of each thing and that of which it is the matter. For although 'one' and 'being' are said in many ways, that which is principally ['one' or a 'being'] is an actuality.

So now it has been said what the soul is universally. For it is 'substance' in the sense corresponding to [a thing's] definition. And this is the 'what-it-is' of this sort of body—just like if some tool, like an ax, were a natural body. For the being of an ax would be its substance, and the same would be its soul. But once this was separated it would no longer be an ax, except equivocally; although right now it is an ax. Only the soul is not the 'what-it-is' and the formulation of this sort of body, but of such a natural body as has in itself a principle of moving and of staying still.

Next consider the parts in light of what has been said. For if the eye were an animal, its soul would be its sight. For this is the 'substance' (in the sense that corresponds to definition) of the eye. For the eye is the matter of sight, which, when left behind, leaves no longer an eye, except equivocally, like the eye of a statue or of a painting.

Now it is necessary to take what [is true] about the part about the whole living body. For there is a proportion: as the part is to the part, so the whole sense is to the whole sensitive body, as such.

It is not what has lost the soul that is a being in potency to living, but what has a soul. But a seed and a fruit is a body of this sort potentially. So in the way that cutting and seeing [are actualities], in the same way too is waking an actuality, but the soul is one in the way that the power of sight and of a tool [are actualities]. Now the body is what is in potency: just as the eye is the pupil plus vision, so the animal is the soul plus the body.

That, therefore, the soul is not separable from the body, or that some parts of it [are not] (if it is naturally divisible), is not unclear. For the actualities of some parts [of the soul] are just those of these [body parts]. But, on the other hand, nothing prevents some parts being separated, because they are the actualities of no body. Moreover, it is unclear whether the soul is the actuality of the body in the way that the sailor is of the ship.

In outline, then, let these things be decided and sketched out about the soul.

Rene Descartes, Principles of Philosophy I (1644), "The Principles of Human Knowledge," trans. John Veitch

8. This enables us to recognise the distinction between soul and body, or between thinking thing and corporeal thing.

This is also the best approach for understanding the nature of mind, and its distinction from body. Let us introspect about who we are — we who are supposing that everything distinct from ourselves is illusory. It will be transparently obvious that our nature contains no extension, no shape, no motion, nor any such thing which could be ascribed to body. All we shall find is thought. Consequently, we know thought before, and more certainly than, we know any corporeal thing, since we have already perceived it, while still doubting about everything else.

53. That each substance has one distinctive attribute—that of mind is thought, and that of body is extension.

Although the presence of substance can be recognised through any attribute, each substance has just one distinctive property, which constitutes its nature and essence, and which is the foundation of all its other properties. So, extension in length, breadth, and depth, constitutes the nature of bodily substance; and thought constitutes the nature of thinking substance. And everything else which can be attributed to body presupposes extension, and is only a mode of that which is extended; similarly, all the contents of our minds are merely different modes of thinking. Thus, for example, we can only make sense of shape in that which is extended, or of motion in extended space; and we can only make sense of imagination, or sensation, or willing in a thinking thing. Whereas we can make sense of extension without shape or motion, and of thought without imagination or sensation, and so on. This should be obvious to anyone who considers it carefully.

54. How we can have clear and distinct notions of thinking and bodily substance, and of God.

So we can certainly have two clear and distinct notions or ideas: one of created thinking substance, and one of bodily substance. The way to achieve this is by carefully separating all the attributes of thought from the attributes of extension. In the same way, we can also have a clear and distinct idea of uncreated and independent thinking substance, namely of God. However we must not suppose that it adequately reveals to us everything that there is in God; nor should we pretend that it contains anything which we are not aware of as actually being included in it, and which we do not vividly perceive as belonging to the nature of a totally perfect being. Nobody can deny that we have such an idea of God within ourselves, unless they judge that there is no notion whatever of God in human minds.

63. How thought and extension can be distinctly known as constituting the nature of mind and body.

Thought and extension can be considered as constituting the natures of intelligent and bodily substance respectively. Given this, they should not be conceived as anything other than thinking substance and extended substance themselves, that is, as mind and body. Not only is this the clearest and most distinct way of conceiving them, but it is also easier to form a conception of extended substance or of thinking substance than of substance alone, leaving out the fact that it thinks or that it is extended. For there is no little difficulty in abstracting the notion of substance from the notions of thought or extension, since they differ from it only through a distinction of reason. A concept does not become more distinct by virtue of our including less in it, but only in so far as we carefully distinguish whatever we include in it from everything else.

Rene Descartes, Principles of Philosophy II, "On the Principles of Material Things."

I. The grounds on which the existence of material things may be known with certainty.

... there exists a certain object extended in length, breadth, and thickness, and possessing all those properties which we clearly apprehend to belong to what is extended. And this extended substance is what we call body or matter.

4. That the nature of body consists not in weight hardness, colour and the like, but in extension alone.

In this way we will discern that the nature of matter or body, considered in general, does not consist in its being hard, or ponderous, or coloured, or that which affects our senses in any other way, but simply in its being a substance extended in length, breadth, and depth. For with respect to hardness, we know nothing of it by sense farther than that the parts of hard bodies resist the motion of our hands on coming into contact with them; but if every time our hands moved towards any part, all the bodies in that place receded as quickly as our hands approached, we should never feel hardness; and yet we have no reason to believe that bodies which might thus recede would on this account lose that which makes them bodies. The nature of body does not, therefore, consist in hardness. In the same way, it may be shown that weight, colour, and all the other qualities of this sort, which are perceived in corporeal matter, may be taken from it, itself meanwhile remaining entire: it thus follows that the nature of body depends on none of these.

23. That all the variety of matter, or the diversity of its forms, depends on motion.

There is therefore but one kind of matter in the whole universe, and this we know only by its being extended. All the properties we distinctly perceive to belong to it are reducible to its capacity of being divided and moved according to its parts; and accordingly it is capable of all those affections which we perceive can arise from the motion of its parts. For the partition of matter in thought makes no change in it; but all variation of it, or diversity of form, depends on motion. The philosophers even seem universally to have observed this, for they said that nature was the principle of motion and rest, and by nature they understood that by which all corporeal things become such as they are found in experience.