

## 6 On Aristotle's Conception of the Soul

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The study of Aristotle's conception of the soul, at least indirectly, has considerable bearing on modern philosophical concerns. It helps us to identify more clearly some of our preconceptions concerning both the mental and the physical. It also helps us to see the at times rather dubious historical or philosophical origins of these preconceptions.

Philosophers nowadays rarely talk about the soul. But they do talk about the mind. In fact, we are so used to talking about the mind, even ordinarily, that it is no longer readily apparent to us that to talk about the mind is to talk about the soul conceived of in a certain way. This becomes clear when we turn to the historical origins of our talk about the mind. One such origin is Descartes. If we look at Descartes we see that Descartes uses both the term 'mind' and the term 'soul' to talk about the same thing. If there is a preference for the term 'mind', it is because Descartes is rejecting a certain conception of the soul, that of the scholastic Aristotelians, which he wants to replace by another conception. And so he finds it convenient and appropriate to use the term 'mind', rather than the term 'soul', when he wants to talk about the soul as he himself conceives of it. In doing so he deviates from the established scholastic use of the term 'mind', and the fact that we follow Descartes in this deviation is one of the signs that he is an important source of our notion of the mind.

Now the notion of the soul which Descartes rejects, though not Aristotle's notion, is a historical descendant of it; and it shares with Aristotle's notion precisely the feature which Descartes rejects. Both Aristotle and the scholastic Aristotelians believe that the soul is that in virtue of which a living body is alive. Descartes, on the other hand, assumes that bodies, whether alive or not, form part of the physical world and can be explained in its terms without recourse to such entities as souls. To be more precise, Descartes has a certain conception of the physical world, or of the physical, according to which it, and hence also a body, whether it is animate or inanimate, can be explained in terms of matter and its properties. Accordingly he rejects an Aristotelian notion of the soul. All that is needed to explain a living organism and its vital functions is matter and its properties. But the relation between Aristotle's and Descartes's notion is a lot closer. It is not just that Descartes rejects an Aristotelian notion of the soul. Something like the converse is true, too. For the conception of the soul which Descartes adopts in place of an Aristotelian notion itself historically is a descendant of a conception Aristotle rejects; and Descartes' notion shares with the conception Aristotle rejects precisely the feature Aristotle is objecting to. The conception Aristotle rejects is a Platonist conception. According to the Platonists the soul not only is that in virtue of which a body is alive, it also is the proper subject of what we might call the mental functions, things like believing or desiring. On this Platonist conception it is, properly speaking, the soul which is thinking or feeling

anger, and the living organism only derivatively can be said to do these things, namely in so far as its soul is doing them. Now later Platonists, under the influence of Stoicism, give up the assumption that our soul makes us alive. They, too, come to think that bodies, whether alive or not, are part of nature and can be explained in terms of it. But they retain the notion of the soul as the thinking self, distinct from the body, and the proper subject of the mental functions. It is in this way that the notion of the soul attacked by Aristotle is the historical ancestor of Descartes's notion of the mind: a Platonist notion of the soul freed of the role to have to animate a body. From Aristotle's point of view, then, Descartes's conception of the mind is fundamentally mistaken: (i) it does not even try to explain the life of an organism, since it rests on the assumption that the ordinary life-functions can be, and have to be, explained in terms of matter and its properties, and that, hence, a soul is not needed to account for them; and (ii) it presupposes that a natural body, however complex it may be, being a body, could not possibly be able to think, feel, or desire, and that, hence, an entity distinct from the natural body, namely the soul, has to be introduced to account for these mental functions. Thus, to the extent that our notion of the mind is a descendant of Descartes's notion, and in so far as an Aristotelian notion of the soul is diametrically opposed to the kind of notion Descartes has, Aristotle's view, indirectly, has considerable bearing on our notion of the mind.

What I have to say is very simple. We tend to underrate the physical to the extent that we tend to think of it as being determined by certain ultimate material constituents and a few basic properties of these material constituents. Such an impoverished view of the physical then creates a considerable pressure to introduce something non-physical to account for mental phenomena, as we can see in Descartes. Aristotle, in resisting such a narrow conception of the physical, is correspondingly also in a much better position when he tries to reject Platonist dualism. The remarks which follow will be little more than an attempt to elaborate and to elucidate this point.

Put systematically and in a nutshell, Aristotle's position, I take it, is the following. It ultimately turns on a certain conception of the physical or the natural, which is rather different from Descartes's and also rather different from the conception most of us are inclined to. Aristotle thinks that it is true of natural objects and their behaviour in general that they cannot be fully understood in terms of their material constituents and their properties, but have to be explained in terms of their essence or nature. But it would be a mistake to think of this difference in terms of the contrast between an antiquated, hopelessly inadequate Aristotelian science and modern science since Descartes. The crucial difference does not lie in the details of a theory of the material constituents of objects and their properties. The crucial difference rather lies in the answer to the question whether such a theory will provide us with a complete understanding of natural objects and their behaviour or not. And this, if we think, for example, of contemporary biology, remains as much a question nowadays as it was in Aristotle's time. Aristotle's introduction of essences or natures in the first place reflects the fact that he takes the anti-reductionist view that objects and their

behaviour for the most part cannot be fully understood in terms of their material constituents and the properties of these. But to introduce essences or natures, at least in Aristotle, though perhaps not in scholastic Aristotelianism, is not to introduce new entities with a curious kind of agency and causal efficacy of their own. If this were Aristotle's view, then Aristotelian natural science in its scientific details would indeed be incompatible with modern natural science in principle. But this is not the way Aristotle thinks of essences or natures. When Aristotle is insisting on essences or natures, he is insisting that objects, natural objects, human beings, are not just configurations of more basic material constituents and hence should not just be conceived of in this way. They should not be conceived of just in this way, because essences or natures enter in a non-causal, but nevertheless crucial, way into their explanation and the explanation of their behaviour.

Since this is a point on which my account of Aristotle's conception of the soul crucially depends, let me at least try to explain it in some more detail. Essences, in Aristotle, enter explanations in various ways, for example as efficient causes. But this tends to be misunderstood. Efficient causes in Aristotle are not the nearest equivalent to what we might think of as a cause, something which in virtue of its agency enters into a causal explanation. This becomes particularly apparent when Aristotle explains that, strictly speaking, it is not the sculptor who is the efficient cause of the sculpture, the builder who is the efficient cause of the house, but the art of building and the art of sculpting. Essences, then, enter into an explanation somewhat in the way in which the art of building enters into an explanation of how a house is built or is being built. Nobody assumes that the art of building is an agent or has any causal efficacy, and nevertheless we readily see that it is quite crucial to an understanding of the details of a house how much art has gone into it. It is important, though, not to misconstrue the analogy. To refer to the art here is not to refer to the thoughts, beliefs, and intentions of the builder. We, of course, do assume that the builder had certain beliefs, thoughts, intentions when he built a house according to the art. But my point is that there are two different kinds of explanation here, one in terms of the art, the other in terms of the thoughts of the builder. To identify the two is to give in to the temptation to turn an explanation in terms of the art into another, familiar kind of causal explanation. The fact is, so at least I assume, that an explanation in terms of the art is a perfectly good explanation, though it is not a causal one. It does not involve any reference to episodes or dispositions in the builder's mind. And it seems that the latter kind of explanation in terms of what goes on in the builder's mind presupposes the former kind. For it seems that our assumptions about what goes on in the builder's mind already largely depend on our antecedent understanding of the art. And it also seems that we resort to an explanation in terms of the builder and what goes on in his mind precisely if there is something contrary to the art in the way he goes about building a house, if what he does cannot be explained any longer in terms of the art. So it is in this way, I submit, that Aristotle is thinking of an explanation in terms of the art of building. And the suggestion is that an essence or

nature enters the explanation of natural objects and their behaviour somewhat in the way the art enters into the explanation of a house. I will return to this point later.

Forms, essences, or natures, then, are crucial explanatory factors of some kind without themselves being causal agents. And it is the insistence on this kind of explanation, rather than a peculiar, outdated, view of what happens causally, which distinguishes Aristotle's view of the physical, or the natural, from that of his Presocratic predecessors as much as from that of Descartes.

Now, for Aristotle, souls are just a particular kind of essences or natures, namely the essences or natures of animate bodies. A soul is what essentially distinguishes a living body from an inanimate body. To say that the soul is the essence of a certain, sufficiently complex, kind of natural body, again, then, is to say that the organism and its behaviour has to be understood in a certain way, if it is to be fully understood.

But once we grant ourselves such an essence or nature, Aristotle's view seems to be, we not only can understand the behaviour of natural objects in general as what it is, we also can understand the ordinary living functions of organisms. And not just that. Aristotle thinks that there is no reason to treat the so-called mental functions, things like desiring, thinking, and believing, any differently than the ordinary living functions. To put the matter differently: because Aristotle takes the position that the organism, in virtue of its form, is able to do all the things which a living thing of its kind can do, he also refuses to divide the things animate objects can do into two classes, namely into those things which the body is made to do by the soul and those things which the soul does itself. To explain: if we make a list of the things human beings (for example) might do, this list will include such items as these:

- (i) they breathe in a certain way;
- (ii) they eat;
- (iii) they catch cold;
- (iv) they take walks;
- (v) they write letters;
- (vi) they get upset;
- (vii) they think something over;
- (viii) they try to decide what to do.

Aristotle refuses to divide this list into two parts, a list of, as we might say, physical doings and a list of mental doings. He refuses to assume that the soul is the proper subject of the latter, that it has, as it were, a life of its own constituted by these mental doings, whereas the animate object is merely the subject of the physical doings. He rather thinks that there is just one subject, the animate object, which, in virtue of the particular kind of form or soul it has, is capable of all of these things, though it only is a natural body. Not any natural body can do these things, and only bodies which have complicated enough a nature can do all of them. Still, it is just a natural body which, in virtue of its nature of soul, is perfectly capable of doing all these things, a natural body which does not stand in need of a further thing, namely a soul, to do

some of these things for it, because it itself, being just a body, would not be capable of doing this sort of thing.

Now a caveat is necessary here. When I say that Aristotle refuses to distinguish between mental doings, which are supposed to be doings of the soul or the mind, and physical doings, which are doings of the animate object, I do not mean to commit Aristotle to the view that there is no way in which a useful distinction might be drawn which extensionally comes reasonably close to the distinction between mental doings and physical doings. Aristotle might, for example, distinguish two senses of 'life': the sense in which any kind of organism has life, and that in which only some organisms, perhaps only human beings, have a life. And among the doings which constitute life in the second sense, the life which might be described in a biography, some clearly are more basic than others in such a way that we explain the latter in terms of the former. And it might turn out that these basic ones pretty much correspond to the mental predicates. But, what matters here is not whether such a distinction can be drawn at all. What rather matters is that Aristotle refuses to distinguish them as natural doings. On his view they all have to be explained alike as the kind of thing an organism which is complicated enough naturally will do in the appropriate circumstances.

A further caveat is needed. Actually it turns out that, on Aristotle's considered view, thinking, a very particular kind of thinking, namely intellectual intuition, the intellectual grasp of certain kinds of features, is unlike the other so-called mental functions. It is not related to the body in quite the same way as they are. Thus it needs a more complicated account. But even this more complicated account will make thinking something which a living body does in virtue of the soul, rather than something which the soul or the mind does for it. I shall return to this point.

This, very roughly, is the view which I want to attribute to Aristotle. One readily sees how it is diametrically opposed to the Cartesian view. And one also sees how this opposition turns on a very different conception of the natural or the physical. It is not first of all a disagreement about the status and explanation of mental items. It is, first of all, a disagreement about natural objects and their behaviour. Aristotle for natural objects in general insists on essences, in addition to matter and its properties. But, given these essences, Aristotle also thinks that no further kind of item, like a Cartesian mind, is needed to account for the so-called mental items. But this is a secondary disagreement.

Having provided a rough sketch of the position I would like to attribute to Aristotle, I now want to turn to some of the details. Here I necessarily have to be rather selective. The topic itself and the way I deal with it raise a great number of complicated questions. But I shall try to focus on a few selected problems the discussion of which might give a clearer intuitive content to the view I am trying to sketch.

One central point which we need to be as clear about as possible is why Aristotle insists on the assumption that there are essences or natures. One way to think about the matter is this: we might think of the form or nature of an object as its disposition

or organization. There are certain material constituents, but they are disposed or organized in such a way that, thus disposed or organized, they can do things which—not thus disposed or organized—they could never do. But there are different ways in which we might think of this disposition or organization. Only a disposition or organization of a certain kind, and this only conceived of in a certain way, will count as an essence.

An example from Aristotle's own treatise on the soul may make the point clearer. Whereas most of Aristotle's predecessors had made the soul an entity distinct from the body it animates, there had been some who—like Aristotle—assumed that the soul was just a disposition of a body. There were, for example, those who claimed that the soul is the attunement of the body (cf. *DA* 407<sup>b</sup>30 ff.). Now there are two ways in which one could construe the view referred to, and though Aristotle has only one of them in mind here, it is important to see why Aristotle would reject both of them. The view might be that the soul is a certain disposition of the body such that the body thus disposed can do things it otherwise could not do. Thus one might think of a living organism on the analogy of a stringed instrument. The instrument properly strung and tuned can do marvellous things which we would never have expected from a thing which just consists of some pieces of wood and some strings. According to Aristotle, though, this analogy is inappropriate. The crucial difference is that, whereas in the case of the stringed instrument there is an object there, namely the instrument, quite independently of whether it is appropriately disposed or not to be able to do what it is supposed to do, in the case of the organism there is no object there independently of its being disposed in such a way as to be alive. To be a living thing, and hence to be alive, is to be a kind of thing, and whatever makes it that kind of thing, its essential features or characteristics, is constitutive of its being an object in the first place; that is to say, there is no object there that is not alive, in the way in which one might have an instrument which is not tuned. There is no single object which sometimes is alive and sometimes is not, depending on how it is disposed. The view Aristotle actually has in mind in the *De Anima*, though, when he talks about the soul as the attunement of the body is a different one. Moreover, it is different precisely in such a way that Aristotle's response to it relies on his particular conception of an essence or nature. On the view in question the soul is the harmony of the body in so far as the organism consists of certain material constituents which are blended harmoniously, such that a blend of this kind can do things the ingredients by themselves, or blended in some other way, could not do. What Aristotle has to say about this view will fit any view according to which an organism is just a certain appropriate configuration of the appropriate material constituents. Though such a view comes rather close to Aristotle's own, the crucial difference is the following: on the view criticized, we understand the configuration or organization in terms of the material constituents as a configuration these constituents, given their features, might enter into, such that, having entered into it, they constitute an organism. On such a view there is even a sense in which the

configuration or organization is essential to the organism. For it would not be the kind of organism it is without this kind of organization. And yet the organization conceived of in this way does not yet count as an essence in Aristotle's sense. The reason is that thus conceived its relation to the materials thus organized is purely external, accidental, contingent. It is just one of the many ways these material constituents might be organized. It is not that we cannot understand how they might get organized this way. Given these constituents and their properties we can understand perfectly well that one way they might get organized is this. But Aristotle thinks that, though this is a way of looking at the matter, there is a more important way of looking at it, which is exactly the other way round: we do not try to understand the configuration in terms of the material constituents and their properties, but rather the other way round; we try to understand the material constituents and their properties in terms of the form or organization. It is materials of this kind with such properties we need if we want an organism which works in this way. Only if we give the organization this kind of priority over its constituents will it count as an essence.

But why should Aristotle insist on looking at the organization in this second way? Ultimately, I think, the answer is that Aristotle wants to hold on to the metaphysical primacy of objects, natural objects, living objects, human beings. He does not want these to be mere configurations of more basic entities, such that the real things turn out to be these more basic entities. But to look at an object just as the configuration the material constituents transiently happen to enter into is to look at the material constituents as the more basic entities. So since Aristotle, against the view of practically all his predecessors, wants to hold on to the ontological primacy of objects, he introduces essences which guarantee this status. This might be tied to, as we should put it, an epistemological point. What we try to understand when we do science are the ordinary objects around us. There might be something radically misguided about any view which interprets the scientific theories which we develop in order to understand these ordinary objects and their behaviour in such a way that these objects are no longer of any significance in our scientific view of things. This may be the ultimate answer as to why Aristotle insists on essences. But a more concrete and less speculative answer is the one we already have alluded to: Aristotle thinks we need something like an essence for explanatory purposes. And this is what we need to get clearer about. Forms or essences, according to Aristotle, enter explanations in many ways, for example, as efficient or as final causes. What I want to pursue here is just one particular way in which nature seems to me to play an explanatory role, a way moreover which is particularly relevant to our subject. Aristotle characterizes a nature as a principle of change and rest in the thing itself which is undergoing a change, as opposed to a principle of change external to the thing which is undergoing a change. It is easy to see the primitive intuition of which this is supposed to be a refinement. When an object hits me in such a way that I fall over, this has very little to do with my nature. But if I see an object coming my way and jump aside, to avoid being hit and falling over, this obviously has a lot to do

with the kind of thing I am. Being this kind of thing I jump aside under the appropriate circumstances. An example Aristotle uses for an external principle of change is the art of building when a house gets built. I want to look at this example in some detail to see how what Aristotle has to say in this case might apply, *mutatis mutandis*, in the case of an internal principle of change like the soul.

The art of building is external to the building which is being built: it resides in the builder who is building a house. In what sense is this art a principle of the change which takes place when a house is being built? When a house is being built there are certain building materials, let us say bricks. These bricks can be put together in such a way as to form a house. In so far as it is true of them that, if they are put together in this way, they, thus put together, are a house, they are a potential house, to use Aristotle's phrase. And in so far as they are a potential house, they constitute the matter of a house in the strict Aristotelian sense of the term 'matter'. They are the matter of a house, a potential house, relative to a process, in this case an artificial process, namely an exercise of the art of building. Where there is no way to turn some stuff by some definite process into an actual something or other there also is no potentiality or matter, given Aristotle's notion of matter. I say 'Aristotle's notion of matter', because Aristotle's notion significantly differs from ours; for Aristotle to think of something as matter is already to think of it as the matter of some kind of thing or other which by some definite process could be turned into that sort of thing, if it has not already been so turned. Thus for Aristotle matter as such, by definition, presupposes a form or nature in terms of which it has to be understood.

But, of course, even on Aristotle's view something which, looked at in one way, is matter in this strict sense can also be looked at in another way. In fact, it seems that Aristotle is committed to the view that when something can be regarded as the matter of something, there also is another prior, more basic way of looking at it. Suppose we have bricks which are a potential house because nothing but an exercise of the art of building is required to turn them into a house. Looked at in this way they are matter, the matter of a house. But note that this presupposes something on the part of the bricks which might exist even if there were no such thing as the art of building, if there were no such things as houses. The bricks can be moved around in all sorts of ways. One of the many ways in which they can be moved around is such that they are put on top of each other and alongside each other in such a way as to form an object which is exactly like a house. If they could not be moved in this way, no art of building could turn them into a house. Just looking at the bricks, without thinking about houses or the art of building, just trying to think how these bricks could be moved, we could figure out that one way for them to be moved would be this. And we could describe this motion they are capable of in all detail without any reference, explicit or implicit, to houses or to the art of house-building. Would such a description be a description of house-building? Yes and no. But first of all no. There would be no way to tell from just this description that this was a case of house-building. And, in fact, it might not be a case of house-building. The bricks may have been moved this way by accident, however unlikely this is. Somebody may just have



been trying to build a house, more or less successfully, or have practised building a house. What makes a case of house-building a case of house-building is that it is an exercise of the art of building. But this does not mean that there is something further to the building of the house than we mentioned in our first description. It just means that in the case of an actual house-building the process as a whole and its details have a certain explanation. We do not understand a case of house-building and the house except as respectively an exercise and the product of the art of building. On the other hand, the original description given is a precise description of what happens to the bricks when a house is being built. With some hesitation I will call it a material description of the building of the house. It is a description which makes no reference, explicit or implicit, to houses or the art of building. It is a description such that the process described this way is perfectly intelligible and explainable in terms of the mechanical properties of bricks and the mechanical properties of things which might move them this way. Nothing in Aristotle prevents us from saying that this process can be understood and explained in terms of physics or mechanics. But to understand the process this way is not yet to understand it as a case of house-building, if that is what it actually is. It is not that there are any details which have escaped description and explanation. It is rather that once we look at the process as a case of house-building we see that the details require, not a different, but a further explanation. After all, a house is a product of art, and one can see in its details the art which has gone into its building. But, to repeat what I already emphasized earlier: to say that the building of the house has to be explained in terms of the art is of course not to say that the art moves the bricks around. It rather is to say that the builder in virtue of his art moves the bricks around in a certain way which one also has to understand in terms of the art, the way the different moves contribute to the production of a house made according to the art, a house which serves its purpose in a certain way, etc. The art of building is not a mysterious force without whose agency we could not understand the house, or the building of it, at all. But we would not understand it as a house and as a case of building.

Let us, then, turn to the soul. One of the things a living thing might do is to digest food, which at least from a certain point onwards becomes part of the body. To say that the soul is the principle or even the efficient cause of this change is obviously not to say that the soul is doing anything to the food. It is rather to say that the living thing, in virtue of having the kind of soul or nature it has, is doing something to the food, or that the food is having something done to it in virtue of this nature. It is also to say that the food could not undergo this change unless it were the kind of stuff in the first place which could undergo this process described in material terms, in other words without any reference to processing of food by this kind of organism and to the state of the organism it is in as a result of this process. It is also to say that there will be a perfectly good explanation of this process, thus described. There, again, is nothing in Aristotle to prevent us from saying that this process can be understood and explained in terms of the appropriate kind of chemistry. And yet to understand the process this way is not to understand it as the natural process it is. Presumably

the same process, as described in material terms, could be reproduced artificially. But if it were, it would not be a case of digestion. And this not because it lacked some details or some mysterious quality the natural process has, but because it, as a whole and its details, would have to be explained differently. What makes the digestion of food the process it is, and hence is essential to our understanding of it, is that it is the exercise of the capacity or ability of this kind of organism to digest food. And similarly for the other life-functions. In each case there is a material description in terms of material parts of the organism and of what happens to them in terms of their properties. But in each case the process is only the natural or physical process it is, rather than a materially equivalent, but formally different process, because it is the exercise of an ability the organism has in virtue of its form or soul. In fact Aristotle often talks as if the soul itself were a set of abilities the organism has to do the kinds of things which are characteristic of its kind. Thus to say that the soul is a principle of change is to say that these abilities are principles of change. It is their exercise which makes a physical or natural process the process it is, rather than a different, though materially equivalent one. Thus to say that an object has a certain nature is not to postulate a mysterious force or a mysterious kind of causation; it is to say something about how the object and its behaviour have to be understood and to be explained. The nature is supposed to make a real difference precisely in the way in which the art of building makes a real difference. It adds a further level of understanding to what happens. It is not that without it we would not understand at all what happens. But we would not understand it as what it really and most specifically is, namely a specific case of metabolism, tailored to the needs of a particular kind of organism. It is in this way, then, that Aristotle can say that the soul, *qua* form, essence, or nature of the organism, is that in virtue of which it is alive. It is alive in so far as it does the kinds of things an organism of this kind characteristically does. But what it is doing would not count as these things unless it were exercising an ability which it had in virtue of its soul.

Now Aristotle's conception of the soul, as we said at the outset, is not only determined by his particular version of the assumption that the soul is that in virtue of which an animate thing is alive; it is also characterized by his rejection of the assumption that the soul is an entity distinct from the body it animates and the proper subject of a subclass of the predicates we ascribe to living things, namely the mental predicates. A lot more can be said about why Aristotle rejects the notion of the soul as a distinct entity which is the proper subject of the mental predicates, as that this notion raises the standard questions concerning the unity of body and soul and their interaction, or that it threatens the substantiality of living objects. But I want to focus on Aristotle's rejection of the notion that the soul is the proper subject of some of the doings we ascribe to living things.

At *DA* 408<sup>b</sup>11 ff. Aristotle says: 'To say, then, that the soul is angry is as if one were to say that the soul is weaving or building a house. For it would seem to be better not to say that the soul pities or learns or thinks, but that the human being is doing this in

virtue of the soul.' What is so absurd about saying that the soul is weaving? Weaving clearly is something which the living body is doing; for it clearly involves the use of the parts of the body. But if to say that the soul is angry or is thinking is like saying that the soul is weaving, and the latter is patently absurd because weaving involves the body in a certain way, then Aristotle must also think that being angry and thinking and learning are like weaving in that they involve the body in a similar way, and that hence their proper subject, too, is the organism, rather than the soul. When Aristotle makes these remarks in ch. 4 he is relying on a discussion of the so-called 'affections of the soul' – the attributes which correspond to mental predicates – in ch. 1. There he argues that these affections all involve the body and hence cannot be affections peculiar to the soul, that is, having the soul, rather than the organism, for their proper subject (403<sup>a</sup>16 ff.). He concludes the argument by saying that it thus would seem that the affections are 'enmattered formulae' (403<sup>e</sup>24-5). He proceeds to explain this. All these so-called affections of the soul have two sides, a material and a formal. And a full physical account or definition of them would have to specify both (403<sup>b</sup>8-12). Thus to be angry or to be angered, Aristotle says, is formally something like to desire revenge, whereas materially it might be the boiling of the blood around the heart. There are considerable difficulties of interpretation here. But the distinction between a formal aspect and a material aspect of anger thus drawn does remind one of the distinction we drew earlier between house-building regarded in purely material terms and house-building regarded as an artificial process, an exercise of the art of building, between the digestion of food regarded in purely material terms and the digestion viewed as a natural process, an exercise of a natural capacity. Similarly if one is angered, what happens in material terms is that something is making one's blood boil. A material part of the organism undergoes a change described in terms of the features of this material constituent, a change which thus described might happen elsewhere and for a different cause (cf. 403<sup>d</sup>26-7). But to look at it just in this way, as described materially, is not yet to understand it as anger. It is to understand it as one thing which can happen to stuff like blood and which does happen to it if something does certain things to it. What makes it a case of being angered is something else. And this something else is not, as it were, something psychical or mental, a mental counterpart of the material process. For, on Aristotle's view, there is no independently existing material process; processes as materially described actually only exist as natural, artificial, or spontaneous processes. There is a natural process, which can be described in material terms, and this material description does not miss anything that is happening when somebody is angered. Nor do we lack an adequate explanation of anything which is happening. The appropriate kind of chemistry or physiology will supply us with a perfectly adequate explanation of what is happening as thus described. But what such a description does leave out is the fact that the process in fact is an exercise of the natural ability of the organism to have desires and more specifically to desire revenge.

If this is correct, then Aristotle seems to think that the so-called affections of the soul are just like all the other doings of living organisms. They are physical or natural the way he understands 'physical': they have a material side to be described in terms of the material constituents of the organism and their features, and a formal side to be specified in terms of the natural capacities of the organism. It is this formal side which makes them the natural processes which they are. So, given what we have said so far, we can see how Aristotle might think that, granted his notion of a nature, such a nature might account for all life-functions and hence for all anybody wants the soul to account for.

Two qualifications are needed here, on which I will be brief, though they deserve and need more detailed treatment. To say that a natural process is the natural process it is in so far as it is the exercise of an ability, is *not* to say that anger (for example) is functionally defined and that any functionally equivalent process would count as anger. For there to be anger there has to be a process as materially described.

Something, on Aristotle's view, clearly would not count as a case of seeing, unless it satisfied a material description in terms of the material parts of the organism and their properties, specifically the eyes and their properties. Secondly, this claim that a natural process is the exercise of an ability of a certain kind needs to be understood in a certain way to avoid the objection that according to Aristotle an exercise of this sort of ability, such as the ability to see, is not a process in the first place. It does not take time, does not have a beginning, a middle, and an end, as a process does. But note that there are two ways of looking at one and the same activity, such as the activity of building a house. Looked at in one way it is a process, something that needs time to get done. Looked at in another way, namely as the exercise of the art of building, it does not take any time. The builder, in building a house, at each point already has fully exercised his art.

Thus we might end our brief account of Aristotle's conception of the affections of the soul, if there were not a formidable array of remarks in Aristotle's writings and in *De Anima* itself which threw all of this into doubt. All of these remarks ultimately concern the intellect (*nous*) and the characteristic activity Aristotle ascribes to it, a certain kind of intellectual intuition. They raise the question whether Aristotle himself in the end does not feel forced, after all, to reintroduce a separate subject in the form of the intellect to account for thought, or at least this kind of thought. They raise the question whether Aristotle is not all along wavering about his account of the soul as the nature of a certain kind of body. And, in any case, they are very confusing, so confusing that they have been the subject of debate since antiquity and have given rise to rather different interpretations and philosophical views.

I am in no position to solve these problems. But the following remarks may suffice to show that Aristotle, for all his remarks about intellectual intuition and the intellect, was at least strongly inclined to accept the view of the soul sketched above. To begin with, there is no doubt that Aristotle thinks that all human thought, properly speaking, presupposes the activity of an immaterial intellect which is not dependent on a body in any way. This is the notorious active intellect of *DA* 3. 5. Its activity

clearly is not the exercise of a natural ability of a body, and thus its thought clearly cannot be explained in the way, I suggested earlier, Aristotle wants to explain the mental functions of human beings. But we can acknowledge this, without having to draw the conclusion that Aristotle's doctrine of the active intellect is incompatible with the view that the soul is just the form of a natural body. For it is open to us to assume, following in this a long tradition of interpreters, that this active intellect is not a human intellect, that it is not an integral part of the human soul. Thus there also is no need why Aristotle, given his view of the human soul as the form of a body, should be able to explain the activity of the active intellect along the lines he tries to explain the mental functions of human beings. I think that it is with reference to this kind of intellect that Aristotle sometimes says that not every kind of soul falls within the province of the study of the natural scientist. This kind of intellect or soul is not itself a natural object or the nature of such a natural object. Hence it does not fall within the province of natural science. But even if we can thus set aside the active intellect, there still is the activity of the human, passive intellect to worry about. Aristotle right from the beginning of the *De Anima* repeatedly raises the question whether intellectual intuition (*noein*) is like the other so-called affections of the mind. In these passages he clearly seems to be talking about our human intellectual intuitions, rather than about the intuitions of some superhuman mind. And since he is wavering on this question, one thinks, he must be wavering on the question whether the human soul may not be the proper subject of some affections, after all. To make matters worse, it becomes apparent that Aristotle's considered view is that our intellectual intuition does not involve the body the way the other mental functions do. So one easily comes to think that not even the passive intellect does fit the view of the soul outlined above. But this would be a mistake. Aristotle's view turns out to be this: the exercise of the intellect, Aristotle wants to say (cf. *DA An.* 429<sup>a</sup>18 ff., esp. <sup>a</sup>24-5), unlike the exercise of the other so-called mental faculties, does not involve the use of a bodily organ. For otherwise our cognitive abilities would be hampered by the restrictions the organ puts on them, the way the sense-organs limit what we can perceive. But this does not mean that the exercise of the intellect does not presuppose a body. It is Aristotle's view that we could not think the way we do unless, for example, we were capable of perception and could remember, and somehow process, what we perceive. Thus our ability to think presupposes a body. In fact, it presumably is Aristotle's view that the very exercise of this ability presuppose a body, if he does believe that thinking involves images of some kind (cf. 403<sup>a</sup>8-9). How could this be? Aristotle's position might be the following. He might think that certain abilities developed to a certain degree, like the abilities to perceive, and to store, and to process what one has perceived, give rise to certain further abilities, such as the ability to think. But whereas the exercise of the former abilities directly involves the use of a bodily organ, the exercise of the latter abilities does not involve the use of a separate bodily organ, but rather the exercise of some of the former abilities and thus indirectly the use of their bodily organs. If this is the

position Aristotle envisages, one easily understands some of the unclarity of his remarks. For the notion of an ability which is based on, or arises from, certain other abilities is a rather confused notion which Aristotle has not had occasion to develop and to clarify. If something like this is correct, the position which he comes to take on the human intellect and its activity does not pose a problem, either, for his view of the soul as the form of the body, let alone for our interpretation of this view. On Aristotle's considered view human intellectual intuitions importantly differ from the other so-called affections of the soul, but they do not differ from them in such a way as to justify our postulation of an intellect or a soul as the proper subject of these intuitions or thoughts.

Now, the reason why Aristotle, right from the beginning of the *De Anima* (cf. 402<sup>a</sup>9), is so concerned with the question whether there are affections of the soul peculiar to it, as the Platonists maintain, is easy to see. If there were such affections peculiar to it, and if they really were affections—things which happen to the soul—the soul would be a distinct subject with a life and a history of its own. And given that this life of the soul clearly would explain a good deal of our external life, it would be tempting to think that it would explain our external life altogether; that it gives the body whatever life it has. So in order to be able to say that the soul is just the form or the nature of the living body, Aristotle has to show that there are no affections peculiar to the soul. And he tries to do this in the way we have seen, by assimilating, if this is the right word, these affections to the physical or natural affections of the organism as a whole, arguing that in the relevant details they are just like them. Moreover, in the course of book 1 of *De Anima* Aristotle is eager to show that the soul is absolutely changeless. Being a form or nature it is a principle of change, something one appeals to to explain change, which hence cannot itself be the kind of thing which is subject to change. Thus it cannot be the kind of thing which has a life of its own.

Aristotle's view, therefore, seems to be this. In order to do justice to physical or natural phenomena we need the notion of a form or nature anyway. But once we allow ourselves this notion, Aristotle thinks, this notion is strong enough to account for all that we would want a soul to account for, the life, the things living objects do, and even the so-called affections of the soul. Hence there is no need to introduce, in addition to the form or nature, a distinct soul, either to account for the life of an organism as a whole or for a mental part of it.

end p.107