

ARISTOTLE'S HYLOMORPHISM

In these comments on Bernard Williams's probing and provocative paper, I shall first try to develop a line of response to the pair of problems Williams poses concerning Aristotle's account of soul. I shall then offer some reactions, of a more general sort, to his discussion of hylomorphism (henceforth "HMism"). In particular, I want to suggest that, though HMism is in part a form of inoffensive materialism, it is more than just that. And I want to urge also that HMism need not be tempted towards the quasi-dualist position that Williams describes.

The first difficulty Williams finds in Aristotle's account of soul derives from a general difference between the brazen-sphere case and the case of an animal or human being. It seems clear that the form of a brazen sphere can exist in different matter and that its matter can take on a different form. But it is less clear that these possibilities are open in the case of the matter and form of a living human being or other animal. The second, more specific, difficulty results from Aristotle's accounts of soul in *de An.* B1, together with a well-known application he makes of his notion of homonymy. If soul is "substance *qua* form of a natural body which has life potentially" (412a20-21; Hamlyn transl. throughout) or "the first actuality" of just such a body (412a28-29), the correlate matter will presumably have to be a body that has life potentially but not actually. But at 412b6, the relevant body is said to have organs, and at 412b18, an eye that lacks sight is said to be no more than a homonym of a genuine eye; in other places, the same point is made in terms of other organs (hands and faces in *Meteor.* Δ12, 390a1 and a10, and fingers in *Met.* Z10, 1035b25; in Z11, 1036b32, a dead hand is not even a part of a human being). Moreover, in *Met.* Z10, Aristotle tells us that a finger, properly so called, must "be a part of a living animal" (1035b24-25; Tredennick transl. throughout). So, if the matter of a human being is a body with organs that are actually alive, and if any such body must therefore itself be actually alive, the matter of a

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human being will be not merely potentially but also actually alive. But then it will be unclear how one could distinguish, even conceptually, between the matter of a living human being and the living human being itself; if the matter is a body that is actually alive, there is nothing left for the form to contribute.

At the close of *Met. H*, Aristotle tells us that

the proximate matter (ἐσχάτη ὕλη) and the shape (μορφή) are one and the same (ταύτο καὶ ἓν); the one existing δυνάμει, and the other ἐνεργείᾳ (1045b18-19).

And he goes on to say that

each individual thing is one (ἐν γάρ τι ἕκαστον), and the potential and the actual are in a sense one (καὶ τὸ δυνάμει καὶ τὸ ἐνεργείᾳ ἐν πῶς ἔστιν) (1045b21-22).

This is an example of the familiar distinction Aristotle draws between the question of whether A is the same thing as B, and the question of whether what it is to be A is the same as what it is to be B, whether, that is, A and B are the same in being. Here, though the matter and the form of an object are said to be identical, what it is to be the matter of an object is distinct from what it is to be its form or actuality.

Such considerations may help us deal with the second of Williams's two problems. For, even if living organs always occur in a live body, that does not imply that the being of a live body is the same as the being of a suitable collection of living organs. Let us suppose that Aristotle did hold that what it is to be a suitable collection of live organs does differ from what it is for a body to be alive, though the live body and the collection may be one and the same. Then we can regard the collection of live organs as the body, conceived of as being only a potentially living body, and we will think of the animal as the body, conceived of as actually alive. The soul will then have something to contribute to the body, conceived of as a suitable collection of live organs, for the soul will contribute the life of the body, taken as a whole. The body will be one and the same thing as the animal itself, though the two will be different in being. The body will also be the matter of the live animal, for as a body, it will be merely potentially alive; conceived of as having soul, however, it will be actually alive.

There are, however, many places where Aristotle speaks

of the matter of a live animal as being its flesh or its flesh and bones, e.g., *PA* B9, which speaks of "[n]ature's ... fashioning animals out of flesh" (654b32; tr. Peck). But this squares nicely with a later passage in *PA* Γ5, where Aristotle seems in fact to identify the body with flesh, speaking there of the blood as that which is, in turn, potentially body or flesh (668a26-27).

It might be thought that, if we identify the body with flesh and bone, Williams's problem will simply reassert itself. For, as Ackrill has pointed out, in discussing this sort of difficulty for Aristotle ("Aristotle's Definitions of *Psuche*," *PAS* 1972-73: 129-130), nonfunctioning flesh is a homonym of living flesh no less than nonfunctioning organs are of live organs, see *GA* B1, 734b26-27, *de Gen. et Corr.* A5, 321b31-32, and *Meteor.* Δ12, 390a10-15. But these passages are about flesh and bone conceived of as parts of the whole animal, and not as the body of the animal as a whole, that is, the whole body. So we remain free to urge that the life of the whole body is what the soul, as form, contributes to the animal, and that this life is distinct in being from the life of the parts, whether organs or flesh and bone.

But this still leaves us with the first of Williams's two problems, about whether, given Aristotle's conceptions of form and matter, we should wait to say that the form of a living animal can occur in some other sort of matter, and the matter in a different form. For Williams seems surely right that only the proper kind of flesh and bone can be informed in such a way as to make up a human being, and perhaps such flesh and bone cannot, indeed, occur in any other form. It is essentially this difficulty which leads Williams to propose that the matter of a living organism must be a "Body" with a capital letter—which I shall call a C-Body—namely, "that which can have life or lack it" (192-193).

Aristotle in fact tells us that only the right sort of matter can go into a human being or other animal; see *GA* B6, 743aa 21-26 and *PA* A1, 642a10-14. But, as the latter passage makes clear, the necessity for the right sort of matter holds no less in the case of artifacts, such as axes; the point is made in terms of saws at *Phys.* B9, 200a13-14 and 200b5-7, and *Met.* H4, 1044a29-30. So a saw made from the wrong kind of matter is only homonymously a saw (*Meteor.* Δ12, 390a13-14). As Williams notes (191), this necessity for the right sort of matter results from the extension of εἶδος beyond mere shape to include something like a capacity to function in a particular way. And, though an axe or saw can be made of a variety of materials—*PA* A1 lists bronze or iron for an axe (642a11)—it is reasonable to suppose that the more demanding the relevant εἶδος is, the narrower the range of suitable ὕλη will have to be. In the

case of an organism, perhaps only the kind of matter that nature actually uses will do.

But, even if we need not require that the form of an animal can occur in other sorts of matter, a stronger case may seem to be available for insisting that the matter of an animal be able to be informed in some other way. For *Met.* Z15 tells us that what has matter is capable of both being a particular way and not being that way (1039b29; transl. suggested by Ackrill, 125). And, in Θ 8, we are told that "matter exists potentially" and that "[e]very potentiality is at the same time a potentiality for the opposite"—the word is ἀντίφασσις (1050a15 and b9). And it may seem that this requires that whatever is the matter of a human being must also be potentially a corpse. Not all potentialities, however, are potentialities for opposites, but only those which Aristotle calls rational potentialities, which involve the rational part of the soul (Θ 2, 1046a36-b7; cf. Θ 8, 1050b28-35, Θ 7, 1049a5-7 [on potentialities involving thought—διανοία], and *de Int.* 13, 22b37-23a4). Nonrational potentialities, which exist in both animate and inanimate objects (Θ 2, 1046a7-b2 and Θ 5, 1048a2-5) can "only produce opposite results by their presence or absence" (Θ 8, 1050b34-35). Thus, Aristotle tells us, in Θ 7, that

in all cases in which the generative principle is contained in the thing itself, one thing is potentially another when, if nothing external hinders, it will of itself become the other (1049a13-15).

And he immediately goes on to give, as an example of this, the semen's being potentially a human being. Indeed, it would seem that the only cases in which we shall have potentialities for opposites in the way the brass can be spherical or cubical is in those cases which involve rational action, for then the generative principle will fail to be "contained in the thing itself." It is therefore far from obvious that whatever is the matter of a human being or other animal has a potentiality for failing to live, nor for being opposite in any other way that would cause difficulty for Aristotle's HMIc account of soul.

Though Aristotle repeatedly tells us that nonfunctioning organs are organs only homonymously, he does not, so far as I can discover, tell us that a corpse is only homonymously a body. The closest he seems to come, if *Meteor.* Δ is genuine, is his assertion in chapter 12 that a corpse is homonymously a human being (389b31). But he does say that "[i]t is not that which has lost its soul which is potentially such as to live" (*de An.* B1, 412b26-27), apparently ruling out the idea that corpses might be among the bodies referred to in his accounts of soul. And, if an animal's body

is one and the same thing as the animal, though the body is alive only potentially whereas the animal is alive actually, Aristotle would surely have rejected any appeal to the notion of a C-Body. Nor, if the foregoing account is correct, is any appeal to that notion necessary to make coherent sense of Aristotle's views.

I turn now to some remarks about Williams's more general discussion of HMism. I agree with Williams that HMism, cast in terms of the notion of a C-Body, is a version of polite materialism (195, 197), that is, it is a nonreductive materialism (189, 194, 195), which does not claim that psychological states can be understood in physico-chemical terms, or at least not solely in such terms. Indeed, the materialist character of HMism emerges, I believe, from the very statement of the view, not because the account of soul mentions the body, but because the account mentions nothing that must be taken to be nonphysical. And this is so whichever conception of body is employed. I want, however, to resist Williams's suggestion that, at least when HMism is not veering towards dualism, it is "*simply* non-reductive materialism" (195, emphasis original). And I want to take issue, also, with the idea that it is an important distinguishing characteristic of HMism that it denies that a person's body is identical with the person.

As Williams notes, HMism seems to be committed to the idea that "[mental] functions are intimately connected with what it is for a certain kind of animal to be alive" (194), though Aristotle's treatment of $\nu\omicron\bar{\nu}\varsigma$ is the conspicuous exception. For, if psychological states belong to the soul and the soul is the form of the living body (or working C-Body) in something like Aristotle's broadened sense of $\epsilon\iota\delta\omicron\varsigma$, then psychological states will also be a function of what it is for bodies of various sorts to be living bodies. This is of a piece with the nonreductive aspect of HMism. But it is not, or at least not obviously, a kind of nonreductive position that is common today. For it does not simply deny that one can account for psychological states solely in physico-chemical terms; it also asserts that an understanding of the psychological either requires or, at least, will be enhanced by seeing the biological as an intermediate level of study between the physico-chemical and the psychological. Thus, perhaps, Aristotle's occasional insistence that the soul must be understood in terms of the functioning of the whole living body (e.g., *de An.* B1, 412b24; cf. *de Somno* 2, where Aristotle says that there is really only one sense [$\alpha\acute{\iota}\sigma\theta\eta\sigma\iota\varsigma$] whose "mode of sensitivity varies with each class of sensible objects" [455a21-22; tr. Hett]; cf. also *de Sensu* 7, 449a5-20).

If HMism need not make use of the notion of a C-Body, then some of the disadvantages Williams sees in that view will disappear. In particular, there will be no need to postulate "two non-identical (though related) items which are the subjects of respectively physical and psychological investigation" (195). The body, conceived of as essentially alive, will be the subject of both physiology and psychology. Physics and chemistry, on the other hand, unless motivated by distinctively biological concerns, would have little reason to study bodies, conceived in either way, though certainly dead or nonworking C-Bodies will be of great use in studying anatomy. Even Aristotle must have learned much from studying the mere homonyms of animals. And an insistence on the importance of a level of biological study in between the physico-chemical and the psychological, far from being a hindrance to our understanding "the relations of the sciences of man" (195), as Williams suggests, might instead be an actual benefit. For such an insistence might help to dissolve, in a salutary way, the great gulf that, since Descartes, we have come to feel divides the mental from the physical. If more philosophical attention were focused on the apparent mystery of how life can emerge in physical things, perhaps the mystery of how the mental can emerge in some life forms would come to seem less intractable. Aristotle would hardly have put the point this way, for he held that what is living must come from what is already alive (*GA B1*, 734b21-22 and 735a21-22). But it is reasonable to suppose that a desire to stress the continuity between psychological and strictly biological functions is in part responsible for the length and care of his treatment of αἰσθησις, compared with the striking brevity of his treatment of νοῦς.

This continuity is especially striking in Aristotle's application of his HMic scheme to giving an account of psychological states themselves. Thus, in *de An.* A1, psychic affections are "principles involving matter—λόγοι ἔνυλοι," and being angry is defined in terms of the desire for retaliation, which is its form, and "the boiling of the blood ... around the heart," which is its matter (403a25 and a31-b2). Even νοῦς has some connection with bodily function, since it involves αἰσθησις in the form of φαντασία (*de An.* A1, 403a7-10 and Γ8, 432a9 and a14, and *de Memoria* 1, 449b32). For "the objects of thought are included among the ... objects of perception" (*de An.* Γ8, 432a5). And, though Aristotle's accounts of psychic affections typically mention other psychic affections—anger is a desire for retaliation (403a31)—the interdefinition of psychological states does not by itself imply the presence of some nonphysical component of such affections.

The insistence on a biological level of analysis in between the chemico-physical and the psychological is, I believe, a truer distinguishing mark of HMism than the claim that a person's body is distinct from the person because it can outlast the person. But just as the "more mechanical ... conception of 'life'" (193) that we have today has made the idea of the biological as an independent level of analysis less popular among philosophers, so Cartesian views seem also to have been responsible for the idea that the peculiar virtue of HMism is its denial that persons are identical with their bodies. For, given Aristotle's conception of body, persons and their bodies will be identical, though we can distinguish the two conceptually. But we are accustomed, since Descartes, to stress the idea that one's body is distinct from one's self. So, if one wanted to retain that insight without the cost of the Cartesian commitment to two distinct substances, one might invoke a modern version of HMism to do so, just as it seems plausible to see Aristotle as having deployed his version of HMism to retain some of Plato's insights without the accompanying dualism. Given a roughly Cartesian notion of body—and we can understand the term 'C-Body' as expressing a Cartesian notion—the HMic idea that a person is a working C-Body seems to do the trick. But it is not a HMism that a pre-Cartesian would have propounded. For, without the clock-like conception of body pioneered by Descartes, HMism does not yield the right distinction.

Williams sees "temptations for hylomorphism which lead in [the] direction" of the dualism at the end of the *Phaedo* (196). So far as his *de An.* and *Met.* passages go, however, I am not convinced that these show such a tension in Aristotle's thinking. (See Williams's references on p. 196.) *De An.* 429a10, which describes a part of the soul as knowing and understanding (γινώσκει ... καὶ φρονεῖ), is the opening line of Γ4, where the discussion of νοῦς begins. And whatever one thinks of Aristotle's views about νοῦς, they are an exception to the sort of HMism that he otherwise espouses. Moreover, the passage Williams cites is more than offset by Aristotle's earlier injunction in A4, that "it is surely better not to say that the soul pities, learns, or thinks (διανοεῖσθαι), but that the man does these with his soul" (408b14-15). As for Williams's passages from Z10 and 11 and H3 (1036a17, 1037a5-7, and 1043b2-4), which say that the soul is in a way the human being, the issues being discussed in these chapters are the difficult issues about form as substance. It is therefore unlikely that they reveal any dualist tendency in Aristotle's views about soul. And if, following the passage quoted earlier from the end of *Met.* H6, we take form and matter to be one and

the same thing though different in being (1045b18-19), it will be entirely reasonable to refer to an actual composite as its actuality. Indeed, it is perfectly in place to refer, e.g., to a brazen sphere as a sphere; perhaps the practice sounds so odd in the case of the soul only because we tend to understand talk about the soul in Cartesian terms.

Williams also sees a temptation for HMism "to move in the direction of saying that [Kallias] is *this* soul in this flesh and these bones" (196), instead of saying simply, as Aristotle does at 1034a7, that Kallias is "soul in this flesh and these bones" (10). But it is not clear that this temptation need take one any distance at all towards dualism. If Kallias's soul is, as Williams suggests, simply Kallias's life in the sense of ζωή (196), then to say "that [Kallias] is *this* soul in this flesh and these bones" will be to say just that Kallias's identity depends on the continuity of his life. In this way, the soul can be the principle of personal identity for the HMic view, just as it was for Descartes. Again, only our bringing to bear a Cartesian view of what the soul is would make this look like a move towards dualism. The "thought-experiments about diachronic identity" that Williams envisages would indeed create havoc with the notion of personal identity construed as resting upon the continuity of a particular life, but it is not clear what view can deal in a reasonable way with such thought experiments. If, e.g., HMism invokes the continuity of lives, it will have no marked tendency to fall prey to allowing that there could be many Kalliases, each a token of a person type. Cartesian dualism does go one better by completely ruling out the possibility. But to do so, the Cartesian invokes a notion of soul whose identity in turn is not only independent of the states of any associated C-Body, but is independent even of its own modes. It may seem surprising that a conception of mind not unlike that of Aristotle's active νοῦς could be thought to be of help with problems about personal identity.

I shall close with a brief remark about Williams's Suggestion that a strength of the HMic outlook lies in its effect on ethical thought (198-199). I agree with most of what Williams says here, but my reservation will very likely be congenial to some of those who seek to base ethical obligation on some nonsortal notion, such as that of a person or rational being. My concern is that beings outside our species could be discovered whose mental and moral qualities would lead us think that we should treat them, in moral terms, as we treat other human beings. At least this seems to be a possibility if we take into account the countervailing effects of cultural barriers and barriers of easy communication, which are all too familiar in human affairs. So

perhaps a truly humane ethics must appeal both to sortal and to nonsortal notions, in some such way as this, that we should regard other beings as having moral claims on us if they are members of a natural kind that is in turn relevantly similar to our own.

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