



OXFORD JOURNALS
OXFORD UNIVERSITY PRESS

Mind Association

Aristotle's Principle of Individuation

Author(s): A. C. Lloyd

Source: *Mind*, New Series, Vol. 79, No. 316 (Oct., 1970), pp. 519-529

Published by: [Oxford University Press](#) on behalf of the [Mind Association](#)

Stable URL: <http://www.jstor.org/stable/2252437>

Accessed: 15-02-2016 19:41 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Mind Association and Oxford University Press are collaborating with JSTOR to digitize, preserve and extend access to *Mind*.

<http://www.jstor.org>

IV.—ARISTOTLE'S PRINCIPLE OF INDIVIDUATION

BY A. C. LLOYD

AN individual is what can be referred to by a singular pronoun and identified by a demonstrative adjective. In Aristotle's ordinary philosophical usage and the one which is relevant here a 'principle' (*arche*) of *x* is something the concept of which is necessary to the correct description or analysis of *x* as such. The notion of an individual raises two distinct philosophical questions. Taking this man as an example of an individual we can ask what makes one man rather than (or perhaps as well as) two arms, two legs, or several bones and a quantity of flesh. For convenience this question can be said to be asking for a principle of unity. We can also (though it may look odd in this form) ask what makes him this man rather than another man. To ask this is to ask for a principle of individuation. A general answer to the general question, what makes one so and so different from another so and so, where 'so and so' means some one kind of thing, would give us the principle of individuation. There are other philosophical questions about individuals: but these are the two that it is most important to distinguish when we enquire what Aristotle considered to be the principle of individuation. For confusing this with the principle of unity may lead people, it has not already led one or two distinguished scholars, to mistake the relevance of some of the things Aristotle said about form and matter and so make wrong inferences from them. But it must also be remembered that unity (in this sense) is prior to and implied by individuation: the flesh and bones have to have made one man, the metal one penny, before either can be or not be the same man or penny as some other man or penny.

Aristotle believed the principle of individuation was matter. To shew that, it is necessary to collect the evidence and arrange it so that facts can be seen to require that conclusion and not be contradicted by other facts. The Aristotelian evidence falls into different groups each of which has to be understood in relation to its own philosophical context or concern. It is then possible also to consider the philosophical merits of the conclusion. These are the two tasks of this article.

In the places, or the chief instances of them, in which we have Aristotle saying that the principle of individuation is matter

we find that individuation is equated with numerical difference or plurality: for example *Met.* Δ 1016 b 31-32:

things may be one in number, in species, in genus, by analogy: in number when their matter is one, in species when their definition is one.

This is of course the reverse side of the medal from the Aristotelian doctrine that unity and being are convertible. Its importance lies in the further equation of plurality with countability, the possession of a cardinal number; for things can be counted only if there is some kind or class of things which they belong to, since it is that class concept which provides the criterion for assigning the number. In *Met.* N Aristotle states this fashionable dogma of Frege's very clearly:

it is evident that what 'one' signifies is *measure* . . . [Things to be measured] must always have as the measure some identical property: *e.g.* if horse is the measure, they are horses, if man, men . . . (1087 b 33-1088 a 14).

It follows that the individuation of two individuals, that is, their numerical or material difference, must be accompanied by their formal identity. This point will be seen to have a bearing on the question *what* matter is the principle of individuation.

Some scholars have agreed that Aristotle said the principle of individuation was matter and that he was ready to argue from that premiss on an important issue; for the well known demonstration that there is only one prime mover depends expressly on an unmoved mover being essence and on essence containing no matter (*Met.* Δ 1074 a 33-37; *De coelo* 278 a 6 ff.). But they have said that he did not consistently or always say so; and they appeal to the group of texts which point out that substance in the primary sense is peculiar to each individual. But they have mistaken Aristotle's point in these texts.

One of them (*Met.* B 999 b 20-22) is an argument against the Academy's theory that the species is a substance, a second (*Met.* Z 12, 1038 b 10-15) against the genus (representing the universal) as substance: no universal can be substance, for "substance in the primary sense is the substance which is peculiar to each thing". In a third passage (*Met.* Δ 1071 a 27-29) Aristotle talks of an individual's formal cause as peculiar to it. Causes, he says, can be spoken of universally or not. But universal causes do not exist, for the primary principles of anything are a this which is primary in actuality and something else which is potential; there is no one who is a man universally (the product of man as a universal principle), only Peleus the

principle of Achilles, this B of this BA. Except by analogy, causes and elements differ both from kind to kind, for example those of colours and sounds, and from individual to individual—for

causes of things in the same species are different, not in form, or specifically, but inasmuch as each individual has its own cause—your matter or form or efficient cause is not mine, although spoken of universally they are the same.

All three passages then seem to say that each individual has its own distinct form or substance or essence. (All three notions can be referred to interchangeably here.) But if so, it follows that individuals as such, or individuals of a species, do not differ *solo numero*, and it is not the case that matter is the principle of individuation. For although it would not be implied that matter was not a necessary condition of individuation it would not be a sufficient one, and therefore while it might be a principle it would not be the principle. The conclusion however does not follow. The simplest way of saying why not does not, as we shall see, quite make sense: but it is probably the clearest. Aristotle is saying that each individual of a species has a different form—but *different only numerically*. This difference of form so far from explaining numerical difference presupposes it. Someone who took the first two passages in isolation might be tempted to infer that Socrates and Coriscus had different substances or forms in the way in which Socrates and Cerberus had different substances or forms. The third, about causes, makes it abundantly clear that that is just what is not the case. Socrates and Cerberus have different forms. This difference is describable. One is the form of a rational animal, the other of a barking animal. The descriptions are of Socrates and Cerberus “spoken of universally” because they apply to any man and any dog. Form is thus the form of differentiation between Socrates and Cerberus. Form therefore cannot be the principle of the differentiation between Socrates and Coriscus. Anyone who has missed the full implication of “although spoken of universally they are the same” should look at the place in Bk. Θ where we are told that

matter is potential because it *would* proceed to the form; and once it is actual then it is included in the form (1050 a 15-16).

There Aristotle is talking of natural generation in which the efficient cause will also be the formal cause; for example, man begets man; but the form of man which is the efficient cause by being the nature (Aristotle's word) of the father is distinct

from the form which is the nature of the product by being "in another thing", namely the father, not the son; but this nature which occurs in both is specifically identical (*homoeides*).

But now we must ask whether it quite makes sense to talk of a numerical difference between forms. The answer is clearly that it does so only in the case which is not the one we are concerned with, and which Aristotle rightly describes as the case where there is a difference if "spoken of universally". We can say, for instance, that there are two forms in the case of Socrates and Cerberus; the criterion for counting—the measure of singleness, as Aristotle called it—is distinctness of *logos*. Abstracting the form, as we have already been doing, we treat it as an individual—something countable and referred to by a singular pronoun. It then seems reasonable to count each instance of one form as numerically distinct from another; for each is in a different matter, Socrates, Coriscus and so on. This can be seen in several ways to be incorrect. It is exactly the Platonism which Aristotle is protesting against and which is impaled on the sail cloth dilemma. To attribute it to Aristotle is to fail to recognise his distinction between a form and a universal. When we talk of a form existing in some subject we are talking of the form. The universal is not *in re*, but *post rem*—*hystero genes* as it was called by the commentators, who were sounder about the distinction between a form and a universal than the modern convention. Secondly we ought not to have spoken of instances of man, each in a different matter. There is no different matter for them to be in; for either the matter is the proximate matter "speaking universally" (or "in terms of the universal"), *i.e.* potentially, here flesh and bones, in which case it is the same in Coriscus as it is in Socrates, or it is the matter "speaking in particular", *i.e.* actually, in which case it is identical with the form, *not* as a universal but "in terms of the particular", here the man Socrates and the man Coriscus respectively. In short, if their matter is to be matter it will not be different; and if their matter is to be different it will not be matter. Thirdly, to avoid the return to Platonism involved in distinguishing forms from their instances in particulars instead of universals from forms, Aristotle insists in his logic that although white is in Socrates or Coriscus, man is not *in* them at all; man is what each is.

On the other hand Aristotle himself uses the language we are finding objectionable. When he explained individuation as numerical difference he spoke implicitly (*Met.* Δ 1016 b 31-32) or explicitly (*Met.* Z 1034 a 5-8) of different matter within the same species; and the passage about formal causes spoke ex-

explicitly of your form as other than mine. It is a useful as well as plausible way of speaking. It forestalls a return to Platonism from the other direction. It was objectionable so far as it implied turning the Aristotelian universal into an *in re* form, as though allowing us to be called men by distributing something called the species man over each of us. But it is useful so far as it prevents us from reaching the same position by turning the *in re* form into an *in re* universal; and it prevents this much more explicitly. To summarise, when Aristotle distinguishes forms of individuals, he means only that they are as it were numerically different; and this must be understood negatively, to mean that they are not identical, where 'not' is a contrary not a contradictory; in other words it is nonsensical to suppose, *pace* the Academy, that the man I am is the man you are.

In any case those three passages give no grounds for claiming that form explains individuation, for they presuppose that notion. We should have to have known what it was for your form to be numerically different from mine in order to have used the fact, if it had been one, to explain what it is for you to be numerically different from me.

In Book Z of the *Metaphysics* Aristotle says

by 'form' I mean the essence of anything, or the substance in its primary sense (1032 b 1-2; *cf.* 1035 b 32).

And this too troubles people when they have been told that matter individuates. But what lies behind it is that a substance, such as Socrates, is form and matter, but form principally, because once an individual is generated the matter has become the form—a man, a statue of Hermes. This is what makes form the principle of unity, which has been but must not be mistaken for the principle of individuation. Similarly the last state of the matter is often, and explicitly, identified with the form (*e.g.* *Met.* Z 1034 a 5-7, 1035 b 27-31); for Aristotle thinks in terms of production and generation, and when what is produced is a substance this is the essence or substantial form. After repeating this at the very end of the lectures on substance (*Met.* H 1045 b 17-19) he concludes that the cause of "being one", the property of being one thing, is identical with the cause of "that which is one", the thing itself; both are the efficient cause of the substance. But this does not exclude the cause of being one, in the sense of principle of unity, from being the form.

In this light we can understand the whole group of passages which seemed to suggest that form was the principle of individuation because it was the substance of a thing.

Substance is what we call one of the things that *are*; and this from three points of view, as matter, which *per se* is not a this, as form, in virtue of which it is called a this, and thirdly the product of these two.

This is from the *De anima* (412 a 6-9), but it will be recognised as a summary, almost a formula, repeated from other lectures (e.g. *Met.* Δ 8 fin, *Z* 3 in.). 'A this is something described by an individuating term, that is, by the name of a substance in the secondary sense, or species. To have a specific form is not only a necessary but a sufficient condition of being an individual; for ontologically, in other words not as a thought or what we mean, every specific form is this or that particular. As soon as the flesh of an embryo is such that it is no longer so much flesh and so many bones but (or perhaps also) a, *i.e.* one, man or dog then that is what the stuff is, a man or a dog. The indefinite article does not show that it is not a form but that it is not a universal. Thus Aristotle's summary is not evidence for the principle of individuation but for the principle of unity.

It follows, if it was not already agreed, that form and matter are both abstractions from the concrete individual. I find that a number of things fall into place if one follows the principle that 'the form of x' and 'the matter of x' are normally to be understood as 'x in respect of, or from the point of view of, its form' and 'x in respect of, or from the point of view of, its matter', so that both expressions are *about* the composite. (Cf. *Z* 10, 1035 a 6-7.) This enables us to answer the question which has been left, as it often remains, in abeyance: why should matter be the principle of individuation? To have shewn that it is not form is hardly enough; for someone might then question the adequacy of the whole scheme, the three principles, form, matter and privation. But if we think of the matter of x as x *qua* matter we shall remember that x *qua* matter is x *qua* substrate or subject. And this, rather than the stuff x is made of, is the way to understand how matter is the principle of individuation. "They are both men (or pennies)". "What are?" What is indicated by the pronouns *qua* subjects. "The water has become cold." "What is it which was hot and is cold?" Whatever is indicated by the subject of the sentence. The answers are parallel, and when generalised, the second is by definition Aristotle's 'matter'; that is how he introduced it in the *Physics*. The first, which when generalised, is the principle of individuation, must also be matter. Individuation coincides with plurality; what are many and countable are the members of a class, not the class. Certainly these are the individuals themselves, but from the single point of

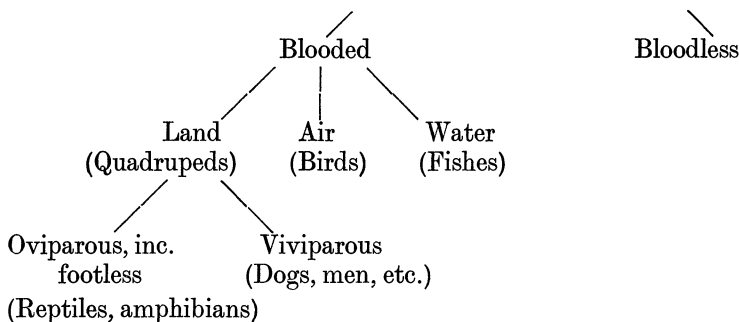
view of their plurality they are the individuals seen from the point of view of their being able to have the class concept predicated of them; and this is what Aristotle calls, means by, 'their matter'.

One other question which was also left in abeyance has caused quite unnecessary fuss. *Which* matter is principle of individuation? Prime matter, or the proximate matter in the sense of specific matter, or the proximate matter in the sense of specific matter plus the accidents? The third can be ruled out immediately: it is not matter but the composite. As for the other two we need only recognise a second, sound Aristotelian principle: whatever *x* is, it can be spoken of in general (universally) or it can be spoken of in particular. If we are asked what is the principle of individuation in general, we must answer matter in general, which is prime matter. If we are asked what is the principle of individuation of some given individuals we must answer *their* matter, which is proximate or specific matter.

There is one passage in the *Parts of animals* which has sometimes been thought to mean that the case of humans must be distinguished from that of brutes by having the principle of individuation in form not matter—Socrates and Coriscus each has a species to himself where Cerberus and Fido do not. Being an introduction to the biological lectures Book I of the *Parts of animals* is an essay in methodology and philosophy of science. Early in it (639 a 13 ff.) Aristotle mentions the problem whether the zoologist should describe generic characteristics first or specific; although, as he mentions later, theoretically one might say species, for these are the reality, in practice this would lead to repetition since they have so many generic properties in common. In chapter 4 (644 a 24 ff.) the question is taken up again in order to be answered: the proper method, Aristotle then concludes, is to distinguish kinds which form a genus with species, and whose species are not too far apart from one another, from other kinds. The first, which is exemplified by birds and fishes, should have its generic characteristics described; the second, which is exemplified by men, should be described according to its lowest species.

The case against supposing Aristotle means Socrates and Coriscus to be examples of lowest species seems to me to be overwhelming. It is a matter of context. The zoological characteristics he is talking about and by which the animal kingdom is divided into genera and species are parts of animals—wings, feet and so on. Some people are bald, and some have hair, and this difference might conceivably reflect a difference

of personality. But I do not believe that Aristotle thought there were *necessarily* differences of physical parts, even merely quantitative, between you and me, Socrates and Coriscus, corresponding to those between ostriches and cranes. Secondly, I do not think that the scholars against whom I am arguing have recognised the classificatory background of the *De partibus animalium* that explains the special case of men. It is not their difference from one another but their difference from their co-ordinate species which was striking to Aristotle the zoologist. He is less concerned than readers may have expected, to arrive at or to present a single classification. But generally speaking the division of animals that he has in mind is something like this:



To take one feature alone, the species co-ordinate with man are all four-footed (the term 'quadruped' seems more than once to serve for land animal): reptiles and amphibians which have too many or no legs conveniently lay eggs and so form another genus.

On the other hand a conventional interpretation of man as a lowest species does involve two difficulties in the Greek text. This says,

(644 a 24) Since real things are the lowest species, but these are undifferentiated in species—Socrates, Coriscus, for example—either one must first mention the universal properties or one must frequently repeat oneself . . . So far as the real thing is that which is indivisible in species the best course, if it should be possible, would be to deal with each particular kind, that is, the indivisible in species separately; (a 30) just as with man we should deal with bird—for this is a kind that contains species—but with whatever bird it may be among the indivisible species, like ostrich or crane and so on.

We have to understand the thought expressed by the first two lines as something like "these are *not* differentiated into further

species like Socrates and Coriscus". This will not be much of an obstacle to those accustomed to Aristotle's style. At line 31 editors have supposed that a negative has dropped out from the original text, which read, "we should deal not with bird...". But I should prefer to achieve the same result by supposing that the parenthesis (which may originally have been in the margin) has got displaced and that the text read "we should deal with bird, but with whatever bird it may be among the indivisible species—for this is a kind that contains species—like ostrich or crane and so on".

The question of human beings will remind readers how Aristotle more than once suggests that a man may be identified with his soul; and the soul is of course his form. Here he has in mind an application of the rule supposed to be demonstrated in *Metaphysics* Z 6 that things said *per se* are identical with their essences.

Sometimes one fails to notice the question whether some name signifies the compound substance or the actuality in the sense of form: for example, whether 'house' is a sign of the universal, *viz.* shelter made from bricks and stones disposed in such and such a way, ... or whether 'animal' means a soul or soul in a body (for a soul is substance or actuality of some body). In fact 'animal' might be applied to either kind of substance, not as an unequivocal expression but by the two meanings being related to the same thing. But while it matters in another connection this problem is irrelevant to the inquiry into sensible substance; for essence belongs to the form or actuality. Soul and being a soul are identical; but man and being a man are not identical, except if soul is called 'man' as well, when they will be identical in one case and not in another (*Met.* H 1043 a 29-b4).

Neither the rule nor its application are without difficulty. But both this passage and a similar one in Z 11 (1037 a 5-10) mention defining a man as his soul only as a possibility, for the point each is making is independent of rejecting or accepting the definition. In fact the same chapter, Z 11, had already claimed that man was the kind of term that could not be defined without reference to its material parts:

The comparison (in the case of living creature) which the younger Socrates used to make will not do; it departs from fact and suggests that it is possible for a man to exist without his parts like the circle without the bronze. But the case is not the same, for a living creature is something perceptible, and it is impossible to define it without reference to movement and consequently without reference to parts in a certain condition (1036 b 24-30).

Secondly and more important, the question is not as relevant to us as it may look. For suppose that (being) a shelter = this house, and every house is a shelter, it does not follow that no: 12 Main Street is a different *kind* of shelter from no: 14 Main Street. No more does it follow that if Socrates is his soul and Coriscus is his soul then Socrates has a different kind of soul from Coriscus's, so that Socrates and Coriscus belong to different species. If we thought it did we should be back in the misunderstanding of the passages about form that we have already examined and which were relevant only to the principle of unity. Nor on the other hand does this mean that there cannot be kinds of human soul—brave and cowardly ones, generous and mean. These forms and their accidental combinations account for what we call character or personality. They cannot of course be classes that logically are confined to one member each: but is character so confined?

At this point the question of individuation by form invites some philosophical comment. The two paramount points seem to me to be these. First there is no reason, with one important qualification, why individuals should not be allowed to have different, that is specifically different forms. In the second place allowing it would not serve the purpose for which it was demanded.

For Aristotle species is a notion that belongs not only to his logic but to his physics: it plays an essential part in the causal chains of nature. If we replace man by Socrates as the lowest species then the physical principle "man begets man" has to be replaced by a principle "Socrates begets a Socrates"; and it is a matter of observation and was a commonplace of Greek moralising that this is not the case. Aristotle does however admit also a purely logical use of "species", applicable to anything which can be considered a class. With this qualification each man could be the sole individual of a species, like, presumably, the prime movers or so called intelligences in *Metaphysics A*. As a procedure of logic this has been adopted by logicians, notably Quine, for technical purposes (in particular, as one among other ways of dealing with "Pegasus does not exist"). These logicians have been rather more careful than the interpreters of Aristotle to distinguish a class with a unique member from the unique member of the class.

Those who want to attribute it to Aristotle have a very different purpose in mind. They confine it to human individuals because they think that these are not only individuals but persons; their specific forms would therefore provide what might be called a principle of individuality as well as of individuation, of 'person-

ality' which did *not* mean 'character'. But they would fail to perform that function, or rather would perform it quite empty—trivially as a logician might say—and this for two reasons. First, such species or essences would be unknowable; the *logos* of Socrates's essence would be being a Socrates, that of Coriscus being a Coriscus; for we do not know the differentiae. Secondly their possession by individuals would or should logically make no difference to our moral attitudes to the individuals. If I learn that some object is the unique member of a species I may or may not decide to destroy it; that depends on my belief that the species is or is not better in existence; but if the species can have and have had only this one member I cannot decide this in any other way than I should decide whether or not the individual in question was or was not better in existence. (Contrast an ornithologist concerned to preserve the last nightjar.) In general we are quite accustomed to finding significant differences that are accidental—some *per se* accidents, some not—among individuals of all kinds, and do not need a something we know not what behind them: this pebble was brought by my great-uncle from the Holy Land; Kitty has such pretty markings on her paws; this airman gave his life for his crew.

University of Liverpool