## Introduction

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What do we do when we do metaphysics? The aim of this introduction is to give a provisional answer to this question, and then to explain the subtitle of the volume. It is easy to observe that when we do metaphysics we engage in a linguistic activity, mainly consisting of uttering declarative sentences that are not very clear to most people. That is true, but, of course, it is not very informative. What do we speak of when we do metaphysics? A traditional answer could be: we speak of what things really are, so suggesting that things can appear in a way that is different from the way they really are. So understood, metaphysics is about the sense, or the senses, of "real being". A question that immediately arises is whether the sense of being is unique or is different for different types of things. Another question is whether it is possible that something could appear to be, but really not be.

Modern analytic metaphysicians usually answer that the sense of being is unique, while acknowledging that there are different kinds of things, and that to say that something could appear to be but really not be is a plain contradiction, unless what is understood is that it could appear to us that there is something having such and such features, but really there is no such a thing. Everything exists in a unique general sense of existence.

From this point of view most analytic metaphysicians are committed to theses which are not shared by ancient and other modern metaphysicians. That is true of most, but not of all of them. In fact, for example, Ryle does not agree with the thesis that the sense of being is unique. This suggests that it is possible, and also preferable, to attach a different meaning to the adjective "analytic". It could be vaguely characterised as alluding to the adoption of a style of doing philosophy mainly based on close conceptual analysis, attention to the ways in which we ordinarily speak or to the ways in which thought may be best expressed, in each case by working out rigorous explicit arguments.

From this different point of view it would be misleading to present analytic metaphysics as the kind of metaphysics that most contemporary analytic philosophers do, first because only a few of them engage in metaphysics at all, and, second, because also some important past metaphysicians adopted an analytic style. Aristotle, St. Thomas and Leibniz are surely among them, even if their work was widely neglected or criticised by the main founders of the analytic tradition, *i.e.* Frege, Russell, Wittgenstein. Why did this happen? More interestingly, could Aristotle, St. Thomas and Leibniz have been more fully taken into account and appreciated by Frege, Russell and Wittgenstein? A negative answer is quite plausible and does not depend only on the possible dispute about the general question of the sense of being.

Even if it cannot be said that Frege, Russell and Wittgenstein shared a common way of approaching the philosophical problems, they converged to create the conditions for what was later called "the linguistic turn", which was not generally favourable to metaphysics as a discipline. The linguistic turn has been identified with a methodological change of view, based on the idea that what is objective can be expressed through language and the very nature of language is informative about reality: whatever is objective can be shown or is presupposed by language. Typically Wittgenstein grounded the comprehension of reality on the notion of fact ("the world is totality of facts, not of things"), *i.e.* on the very notion that is essential to the understanding of the sense of a proposition and that could be seen as the projection onto reality of the logical-linguistic notion of elementary proposition.

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In a relativistic and conventionalist mood, Carnap thought that every relevant and comprehensible question of ontology was reducible to. or identifiable with, a question of choice of a language, or reducible to "internal" questions, where questions are "internal" when they are raised within a linguistic framework, i.e. an interpreted formal language. Internal questions are legitimate because they allow true or false answers according to the rules constituting the linguistic framework specified. Such rules specify methods of observation in the case of empirical sciences such as physics and biology, methods of proof in the case of the formal sciences such as logic and mathematics. From a Carnapian point of view, the traditional general ontological or metaphysical question concerning what kinds of things exist reduces to the choice of a vocabulary and both the questions of the nature the kinds of things and of the general principles ruling them are solvable by adopting the appropriate logical constraints, i.e. the appropriate definitions or axioms. Even if very differently motivated, Wittgenstein's resort to the notion of linguistic games ended by producing a similar reduction of the traditional metaphysical questions.

It has been observed that Aristotle took the statement of ontological concepts and their careful distinction as a way of clarifying the meaning of words belonging to the natural language. As Chisholm noted "Aristotle says that in discussing the categories, he is concerned in part with our ordinary language. And he says this often enough to provide encouragement to those contemporary philosophers who believe that the statements of metaphysicians, to the extent that they are not completely empty, tells us something about our language" It can even be affirmed that in his ontological research Aristotle was guided by some intuitions concerning the meaning of words in ordinary natural language. Many of his ontological notions are defined or clarified with reference to what can be said or not said in such a language. However Aristotle took language into account only as a starting point and a point of reference. He never presented the metaphysical questions as questions concerning the general form a theory of meaning should take, as for instance Dummett might say. Metaphysics is not taken into account by Aristotle as far as it is required by the understanding of language: it is not admitted only inside and for the needs of an analysis of meaning. Metaphysics, book V is a good example of this Aristotelian method. In this book there is an analysis of many philosophical terms such as "principle", "cause", "nature", "one", "being", "substance", and so on. For example, the semantic analysis of the term "being" starts from taking into account its use in common natural language, but aims at establishing the base for an independent science of being.

Aristotle's approach to metaphysics diverges also from some modern views such as, for example, Quine's naturalised epistemology, where metaphysics is placed in a larger context than a theory of meaning and philosophical accounts are put on a par, and in continuity, with scientific explanations. Such non-Aristotelian views share the idea that ontology should not be pursued independently of the analysis of language or the scientific view of the world or our conceptual framework of thought.

However, more recently, some analytic philosophers such as Strawson, Wiggins, Kripke, Putnam and others acknowledged, in very different ways and degrees, that there are intuitions about what things are that ground both our comprehension of words and our identification of things. Most of them do not go beyond an appeal to ontological intuitions. Only some of them engage in autonomously developing or theorising more or less intuitive ontological concepts. They argue for full-blown ontological theses, sometimes resorting to logical and formal tools. Of course such philosophers cannot be said to belong to the linguistic turn. Indeed the influence of their work has made some people speak of "ontological turn" and it is also interesting to notice that their work was not considered outside the field of analytic philosophy. They can still be taken as analytic philosophers because of the attention to the language, and the application of rigorous, sometimes formal, methodology. We are thinking of, for example, A. Prior, P.T. Geach, or D.K. Lewis.

Modern analytic metaphysics is different from the traditional approach as concerns the general view of being or existence and the more accurate styles and methods of arguing. Moreover, some absolutely original methodological questions and ontological theses have been put forward. One is the analysis of what part of a language has ontological import. This problem was raised by Quine and answered in a famous way: to find out what kinds of entities a given theory takes as existing

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one has to look at what kinds of entities are quantified over through expressions like "there is" and "everything". It is the criterion of ontological commitment, also expressed as "to be is to be a value of a bound variable" (Quine [1953], pp.14-5) The criterion is only a test for detecting what entities one is committed to. Quine's criterion has been widely accepted, but has generated also discussion concerning the relation between existence as expressed by "there is" and other possible senses of existence. As we have already said, not everyone has accepted that the sense of existence is unique and is expressed by the existential quantifier.

The other principal innovations brought to the fore by modern analytic research in ontology concern identity. In analytic metaphysics it is taken into account from three new points of view. First, identity is seen as an ontological relation presupposed by our basic practice of identifying entities. This kind of topic was initiated by Strawson and its ontological implications more fully pursued by Wiggins. The most original aspect of this topic is given by the connection of identity with our way of conceptualising entities. Second, in this context, Wiggins took identity as a relation that primitively applies also to entities picked out at different times. So identity, sortally qualified, grounds both identifying and reidentifying practices. Third, a methodological question concerning identity was raised by Quine: the clarity with which identity can be explicated, in short the definiteness of identity criteria, confers ontological legitimacy on the entities for which the identity criteria are stated. As we have already said, not all these theses have been fully accepted, but each has constituted a new and original topic for metaphysics.

These are some themes of "analytic metaphysics". But they are not the only ones. Other themes can be mentioned which are as fully debated even if not completely new. One of these is, for example, the distinction between intrinsic and extrinsic properties.

However, rather than mention the specific topics dealt with by analytic philosophers, it could be useful to give a glimpse of the way in which metaphysics is taken and pursued by them. Let us try to formulate some ingredients of a provisional picture.

## THE QUESTION OF REALISM

#### Kit Fine

My aim in this paper is to help lay the conceptual and methodological foundations for the study of realism. I come to two main conclusions: first, that there is a primitive metaphysical concept of reality, one that cannot be understood in fundamentally different terms; and second, that questions of what is real are to be settled upon the basis of considerations of *ground*. The two conclusions are somewhat in tension with one another, for the lack of a definition of the concept of reality would appear to stand in the way of developing a sound methodology for determining its application; and one of my main concerns has been to show how the tension between the two might be resolved.

The paper is in two main parts. In the first, I point to the difficulties in making out a metaphysical conception of reality. I begin by distinguishing this conception from the ordinary conception of reality (§1) and then show how the two leading contenders for the metaphysical conception – the factual and the irreducible – both appear to resist formulation in other terms. This leads to the quietist challenge, that questions of realism are either meaningless or pointless (§4); and the second part of the paper (§§5-10) is largely devoted to showing how this challenge might be met. I begin by introducing the notion of ground (§5) and then show how it can be used as a basis for resolving questions both of factuality (§§6-7) and of irreducibility (§§8-9). I

conclude with some remarks on the essential unity of these two questions and of the means by which they are to be answered (§10).

#### 1. REALITY

Among the most important issues in philosophy are those concerning the reality of this or that feature of the world. Are there numbers or other abstract objects? Is everything mental or everything physical? Are there moral facts? It is through attempting to resolve such questions that philosophy holds out the promise of presenting us with a world-view, a picture of how the world is and of our place within it.

However, as is so often true in philosophy, the difficulties begin with the formulation of the question rather than with the attempt at an answer. The antirealist about numbers maintains:

There are no numbers.

But most of us, in our non-philosophical moments, are inclined to think.

There are prime numbers between 2 and 6.

And yet the second of these claims implies that there are numbers, which is incompatible with the first of the claims. Similarly, the antirealist about morality maintains:

There are no moral facts.

But he also thinks:

Killing babies for fun is wrong.

And yet the second claim implies that it is a fact that killing babies for fun is wrong and, since this is a moral fact, its existence is incompatible with the first claim.

How, in the light of such possible conflicts, should the realist and antirealist claims be construed? Should we take the conflict between antirealism and received non-philosophical opinion to be a genuine conflict or not? And if not, then how is the apparent conflict between them to be dispelled?

If we take the conflict to be genuine, we obtain what has been called an "eliminative" or "skeptical" conception of antirealism. The antirealist will be taken to dispute what we ordinarily accept, the realist to endorse it. Thus the antirealist about numbers will be taken to deny, or to doubt, that there are prime numbers between 2 and 6; and likewise, the moral antirealist will be taken to deny, or to doubt, that killing babies for fun is wrong.

Of course, the mere rejection of what we ordinarily accept is perverse and so presumably the interest of antirealism, on this conception, must derive from the assumption that philosophy is able to provide us with some special reasons for doubting what we ordinarily accept. Thus the antirealist may attempt to convince us that we have no good reason to believe in a realm of abstract objects with which we can have no causal contact or that, in moral matters, we can have no justification for going beyond the mere expression of approval or disapproval. Our world-view will therefore be the product of dealing with these doubts, either by laying them to rest or by retreating into skepticism.

Anti-realism, as so understood, has a long and illustrious history; and certainly its interest is not to be denied. However, in this age of post-Moorean modesty, many of us are inclined to doubt that philosophy is in possession of arguments that might genuinely serve to undermine what we ordinarily believe. It may perhaps be conceded that the arguments of the skeptic appear to be utterly compelling; but the Mooreans among us will hold that the very plausibility of our ordinary beliefs is reason enough for supposing that there *must* be something wrong in the skeptic's arguments, even if we are unable to say what it is. In so far, then, as the pretensions of philosophy to provide a world-view rest upon its claim to be in possession of the epistemological high ground, those pretensions had better be given up.

Is there room for another form of antirealism – and another account of philosophy's pretensions – that does not put them in conflict with received opinion? If there is, then it requires that we be able consistently to affirm that something is the case and yet deny that it is really the case. It requires, in other words, a *metaphysical* conception of reality, one that enables us to distinguish, within the sphere of what

is the case, between what is really the case and what is only apparently the case.

But what might this metaphysical conception of reality be? Two main answers to this question have been proposed. According to the first, metaphysical reality is to be identified with what is "objective" or "factual". The antirealist, on this conception, denies that there are any facts "out there" in virtue of which the propositions of a given domain might be true. The propositions of the domain are not in the "business" of stating such facts; they serve merely to indicate our engagement with the world without stating, in objective fashion, how the world is. As familiar examples of such a position, we have expressivism in ethics, according to which ethical judgements are mere expressions of attitude; formalism in mathematics, according to which mathematical statements are mere moves within a system of formal rules; and instrumentalism in science, according to which scientific theories are mere devices for the prediction and control of our environment. According to the second conception, metaphysical reality is to be identified with what is "irreducible" or "fundamental". On this view, reality is constituted by certain irreducible or fundamental facts; and in denying reality to a given domain, the antirealist is claiming that its facts are all reducible to facts of some other sort. Thus the ethical naturalist will claim that every ethical fact is reducible to naturalistic facts, the logicist that every mathematical fact is reducible to facts of logic, and the phenomenalist that every fact about the external world is reducible to facts about our sense-data.

We might see the antifactualist and reductionist as indicating two different ways in which a proposition may fail to "correspond" to the facts. For it may fail even to point in the direction of the facts, as it were; or it may fail to indicate, at the most fundamental level, how the facts are. In the one case, the propositions of a given domain will not even *represent* the facts, while in the other, the propositions will not *perspicuously* represent the facts – there will be some divergence between how the facts are "in themselves" and how they are represented as being. If either of these metaphysical conceptions of reality is viable, then it would appear to provide a way of upholding a non-skeptical form of antirealism. For it will be perfectly compatible with affirming any given proposition to deny that it is genuinely factual or

genuinely fundamental. The expressivist, for example, may affirm that killing babies for fun is wrong and yet deny that, in so affirming, he is making a factual claim; and the logicist may affirm that 5+7=12 and yet deny that he is thereby stating something fundamental. Truth is one thing, metaphysical status another.

But the problem now is not to defend the antirealist position but to see how it could even be intelligible. Consider the antifactualist in ethics. Since he is assumed to be non-skeptical, he will presumably be willing to affirm that killing babies for fun is wrong. But then should he not be prepared to admit that he is thereby making a claim about how things are? And is not this a claim about how things are in the world – the only world that we know, that includes all that is the case and excludes whatever is not the case? So is he not then committed to the proposition's being factual?

Of course, the antirealist will insist that he has been misunderstood. He will maintain that the proposition that killing babies for fun is wrong does not make a claim about the real world as he conceives it and that, even though it may be correct to affirm that killing babies for fun is wrong, there still is no fact "out there" in the real world to which it is answerable. But the difficulty then is in understanding the intended contrast between his world – the real world "out there" – and the world of common mundane fact. For what room is there, in our ordinary conception of reality, for any further distinction between what is genuinely a fact and merely the semblance of a fact?

Similarly, the reductionist in ethics will claim that ethical facts are reducible to facts of another sort and, on this ground, deny that they are real. Now it may be conceded that there is a sense in which certain facts are more fundamental than others; they may serve to explain the other facts or perhaps, in some other way, be constitutive of them. But how does this provide a ground for denying reality to the other facts? Indeed, that they had an explanation or constitution in terms of the real facts would appear to indicate that they themselves were real.

What then is this conception of reduction for which the reducible will not be real?<sup>2</sup> Just as there was a difficulty in understanding a metaphysical conception of the facts, one that might serve to sustain a metaphysical form of antirealism, so there is a difficulty in understanding a metaphysical conception of reduction. In either case, we

# BEING AND ESSENCE IN CONTEMPORARY INTERPRETATIONS OF ARISTOTLE\*

#### Enrico Berti

#### 1. BEING AND EXISTENCE IN CONTEMPORARY "ANALYTICAL ONTOLOGY"

In the proceedings of the Conference on "Analytical Ontology", held at University of Innsbruck in September 1997, Peter van Inwagen<sup>1</sup> published an interesting paper, where, from a point of view which he defines "broadly Quinean", he argued in favour of the following four theses: (1) Being is not an activity: (2) Being is the same as existence; (3) Being is univocal; (4) The single sense of being or existence is adequately captured by the existential quantifier of formal logic. The first thesis is clearly an anticipation of the third. It is supported by affirming that the differences of being, alleged by philosophers who conceive it as an activity (e.g. Sartre and the existential phenomenological tradition), are only differences in nature, which do not concern being, once admitted the distinction between a thing's being and its nature. The second thesis is defended by referring to Quine, and states that there is no difference between what is expressed by 'there is' and 'exists'. The third thesis is defended by means of the observation that existence is closely tied to number, because "to say that unicorns do not exist is to say something very much like saying that the number of unicorns is 0", while "to say that horses exist is to say that the number of horses is 1 or more". On the basis of this observation van Inwagen [1998] can conclude that "the univocacy of number and the intimate

connection between number and existence should convince us that there is at least very good reason to think that existence is univocal". The fourth thesis is the most developed, by means of arguments drawn from formal logic, about which I am not able to judge. But they – this is at least my impression – only explain and justify in a more sophisticated way the main argument brought in defence of the third thesis.

What impressed me on reading this paper, as an old frequenter of Aristotle's philosophy, was the third thesis, which van Inwagen formulates in opposition to a modern philosopher who never concealed his Aristotelian inspiration, namely, Gilbert Ryle. This philosopher, in a famous page of *The Concept of Mind*, affirmed:

It is perfectly proper to say, in one logical tone of voice, that there exist minds and to say, in another logical tone of voice, that there exist bodies. But these expressions do not indicate two different species of existence [...] They indicate two different senses of 'exist', somewhat as 'rising' has different senses in 'the tide is rising', 'hopes are rising' and 'the average age of death is rising'. A man would be thought to make a poor joke who said that three things are now rising, namely the tide, hopes and the average age of death. It would be just as good or bad a joke to say that there exist prime numbers and Wednesdays and public opinion and navies; or that there exist both minds and bodies. (Ryle [1949], p.23)

According to van Inwagen, "Ryle has made no case for the thesis that existence is equivocal". And he adds – but it is not clear whether referring to Ryle or in general – "I know no argument for this thesis that is even faintly plausible". This enables him to say: "We must therefore conclude that existence is univocal".

In fact, Ryle was not the only philosopher who admitted different senses of being. Before him John L. Austin, the first who introduced Aristotle in the analytical Oxford philosophy, in his famous article entitled "The Meaning of a Word" (1940) claimed that "'exist' is used paronymously", *i.e.* with a "primary nuclear sense" and other senses dependent on it, just as 'healthy' in Aristotle (Austin [1970], p.71). In Sense and Sensibilia he wrote:

'real' (the translation of the Greek, 'on', i.e. 'being') is not a normal word at all, but is highly exceptional; exceptional in this respect that, unlike

'yellow' or 'horse' or 'walk', it does not have one single specifiable, always-the-same *meaning*. (Even Aristotle saw through this idea). *Nor* does it have a large number of different meanings – it is not *ambiguous*, even 'systematically'. (Austin [1962], p.64, italics in the text)

As everybody knows, the doctrine that being, and perhaps also existence, is at least not univocal, if not equivocal, is distinctive of Aristotle. He refers to it several times.<sup>2</sup> Admittedly, Aristotle never brings any argument in defence of this doctrine. By so doing, he gives the impression of considering this doctrine perfectly evident, though he was clearly persuaded that he was the first philosopher who discovered this truth. He blames in fact not only Parmenides, Zeno and Melissus, *i.e.* the Eleatics, for having conceived being as univocal, but also Democritus, and even Plato.<sup>3</sup> In the whole *Corpus Aristotelicum* there is – as far as I know – only one passage where Aristotle makes an attempt to prove that being is not univocal, at *Metaphysics* B 3, 998<sup>b</sup>22-27. This is an astonishing situation, but just for this reason the passage is worthy of some attention, greater than that which is usually reserved to it even by Aristotle's interpreters.

Even van Inwagen's commentator Gary Rosenkrantz fails to mention this passage. On the one hand, he admits that, because of the intimate connection between the 'is' of existence and the 'is' of predication, or the 'is' of existence and the 'is' of identity, "until van Inwagen provides some reason to think that predication and identity are univocal, his argument against the equivocacy of 'exist' is not clearly valid' (Rosenkrantz [1998]). On the other hand, he argues, this time against Ryle, that there are species (not *genera* or different modes) of existence, because the system of the ontological categories "has entity (or entityhood) as its *summum genus*". But this is exactly what Aristotle denies in the quoted passage. Before analysing this passage, however, let us say something about the relation between being and existence in Aristotle.

#### 2. BEING AND EXISTENCE IN ARISTOTLE

In his article "On Aristotle's Notion of Existence", Jaakko Hintikka claimed not only that Aristotle did not admit "the Frege-Russell thesis

about the ambiguity of verbs for being like the Greek *einai*", according to which these verbs express either identity, or predication, or existence, or finally subsumption, but also that Aristotle consciously considered this thesis, and rejected it (Hintikka [1999], p.782). This would be documented in *Metaph*. Γ 2, 1003<sup>b</sup>22-30, where Aristotle says that "to be and to be one are the same [...] since 'one man' and 'man' as well as 'existent man' and 'man' are the same thing, in that the reduplication in the statement 'he is a man and an existent man' yields no fresh meaning". Aristotle was operating with an unitarian concept of being, says Hintikka, because "in the fullest sense, *einai* had to comprise all of the first three Frege-Russell senses of being, that is predication, existence, and identity".

This does not mean, Hintikka argues, that Aristotle did not introduce distinctions between different uses, and even different senses, of being other than the Frege-Russell ones. "The most prominent of them are the distinction between being in different categories as well as the contrast between potential being and actual being". In this way Hintikka shows that it is impossible to isolate, in Aristotle, the existential from the predicative sense of being, and that, since the latter sense is multiple, inasmuch as there are many kinds of predicates, *i.e.* the "categories", the existential sense is also multiple.

The same result had been reached five years before by Lesley Brown. By focusing on the use of the verb 'to be' in Greek philosophy, she had concluded that, while distinguishing 'to be something', *i.e.* the predicative use of being, from 'to be *haplos*', *i.e.* its existential use, Aristotle thinks that they are closely connected. So, when he claims that 'is' is said in many ways, it is impossible to decide whether he is analysing existential or predicative uses. Lesley Brown says

Aristotle insists on the inter-relations of the question 'Is X?' and 'What is X?'. [...] The distinctions he does consider philosophically important – chiefly that between essential and accidental being, and the different ways in which, as he puts it, 'being is said' which correspond to the different categories – cut across the syntactic distinction between complete and incomplete, and do not correspond to the semantic distinction between 'exists' and the copula. (Brown [1994], pp.233-236).

The connection between the existential and the predicative sense of being, which is not a confusion, is at the basis also of a famous paper by G.E.L. Owen, published for the first time in 1965. According to Owen, when Aristotle says that "being is said in many ways" (pollachos legetai to on), for 'being' he means 'existence' or, to mark the role of 'on' as a grammatical predicate, 'existent' (Owen [1965]). "At various places - Owen observes - Aristotle says things which show how the verb 'to be' in its existential role or roles can have many senses". He says in De anima II, 415<sup>b</sup>13, that "for living things, to be is to be alive", so that, when we say that a man 'is', we mean that he 'is living', because, if he is dead, we cannot say that he 'is'. Aristotle generalizes the point when he speaks of the 'being' of a thing (its ousia or einai) as what is explained by its definition, that is, by the account of the sort of thing it is. This means that the word 'is' is used in a variety of ways corresponding to the conditions of the being of a thing, as its material, its position, its time, etc. For instance, as Aristotle himself observes in Metaph. H 2, 1042<sup>b</sup>15-1043<sup>a</sup>7), a threshold is, in that it is situated thus and so: for it 'to be' means its being so situated; and 'the ice is' means that it is solidified in such and such way.

On the basis of Aristotle's theory of categories, Owen continues, to be is always to be either a substance of a certain sort, or a quality of a certain sort, or a quantity of a certain sort. The categories are the most general headings under which other classifications are grouped. No category is a species of another, and no category is a species of being and what there is, for there is no such genus as being (cf. the passage in Metaph. B). So the verb 'to be' in its existential role enjoys a number of irreducibly different senses.

But Owen admits that in Aristotle there is also another sense of existence. In the *Analytica Posteriora* he distinguishes the question ei estin ("whether A exists") from the question ti estin ("what A is") (89<sup>b</sup>34-90<sup>a</sup>1). In this case Aristotle does not say that 'exists' has a different sense for different kinds of subjects. Instead he says that we can only be said to know of A's existence to the extent that we know what it is to be A (93<sup>a</sup>21-33). According to Owen, this is the use of the verb 'to be' most commonly called 'existential' at present. It is the use which is rendered by the French 'il y a' or by the German 'es gibt', and it is represented in predicate logic by the existential quantifier.

## ON THE NOTION OF IDENTITY IN ARISTOTLE

### Mario Mignucci

1.

As is well known, a chapter in the first book of the *Topics* is dedicated to exploring the various senses or uses of the word 'same' (tauton), and its style is to a certain extent reminiscent of the famous lexicon of the philosophical terms in *Metaphysics* Δ. The reason for its insertion after the definition of predicables probably lies in the fact that a reference to identity is made not only in relation to definition, where it is said that checking a definition in most cases consists in testing identity and difference, but also in relation to *genus*, where the question whether two things fall under the same *genus* is relevant in many ways. If we stick to the received view that the *Topics* is one of Aristotle's earliest works, the analysis of identity we find in I 7 is probably his first attempt to make a map of the senses of sameness. He starts by introducing a tripartite division of the use of 'tauton'. Let us read the passage:

(A) We may regard the same as being divided, in outline, in three parts, for we are accustomed to describe what is the same as in number or in species or in *genus*. Those are the same in number which have several names but the thing is one, for example cloak and coat. Those are the same in species which, though many, are indistinguishable with respect to species, for instance a man and another man and a horse and another horse

(for those things are said to be the same in species which fall under the same species). Similarly, those are the same in *genus* which fall under the same *genus*, as horse and man. (*Top.* I 7, 103<sup>a</sup>7-14, translation by Robin Smith slightly modified, see Smith (ed.) [1997])

This is not the only place where an examination of the word 'tauton' is offered,<sup>5</sup> or where this tripartition of the uses of 'sameness' is mentioned.<sup>6</sup>

Numerical identity is probably the only kind of identity that one would expect to find under the heading of sameness, so much so that, below, when referring to numerical identity, we shall simply call it 'identity' without any further qualification, unless this is required by the obvious necessity of following Aristotle's terminology.

Aristotle claims that  $\mu$  and  $\xi$  are (numerically) the same if they have different names denoting one thing. To formalise his characterisation of identity and the ways in which, according to him, 'tauton' is used, we must make use of a language slightly richer than the usual one adopted in a standard first order calculus with identity. We have to introduce not only 'a', 'b', 'c', ..., as arbitrary names for individuals and 'x', 'y', 'z', ..., as variables ranging over a domain of individuals, but also ' $\mu$ ', 'v', ' $\xi$ ', ..., as arbitrary names for general or individual entities, and ' $\rho$ ', ' $\sigma$ ', ' $\tau$ ', ..., as variables ranging over a domain of general or individual entities. Then, if we take Aristotle's words as a sort of definition of identity, we can say that  $\mu$  and  $\xi$  are the same, *i.e.* 

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(1) μ = ξ if
(i) 'μ' is a name for μ
(ii) 'ξ' is a name for ξ
(iii) 'μ' ≠ 'ξ'
(iv)* 'μ' and 'ξ' denote one thing
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We can express condition (iv)\* more elegantly by stating

(iv) '
$$\mu$$
' and ' $\xi$ ' are co-referential

This characterisation of identity deserves some comment. First of all, one should be aware that in Aristotle's view identity is a relation between things and not between names, despite the linguistic approach chosen here. It is not that the names 'cloak' and 'coat' are the same. In

fact, they are not the same: 'cloak' is a different name from 'coat'. It is what is denoted by 'cloak' that is the same as what is denoted by 'coat'. Therefore, identity holds between things, *pragmata*, and not linguistic entities. As we shall see, this observation is crucial for the development of our analysis.<sup>7</sup>

There are, however, at least two disturbing aspects of this way of putting things. The first depends on the example of numerical identity offered by Aristotle in the text. We would expect him to quote the case of an individual with two names, as for instance 'Tullius' and 'Cicero' for Cicero. But he mentions 'cloak' and 'coat', which are general terms. For those of us raised in the protective shadow of Frege it may be shocking to accept an identity relation between the denotata of nonindividual terms. The impression that Aristotle is not interested in distinguishing the case of sameness among individuals and sameness among general or abstract entities is confirmed by the fact that elsewhere he states a proposition expressing sameness of a particular with itself as an example of (numerical) identity.8 I will not discuss here this apparent anomaly of Aristotle's approach to identity. Let me only observe that his view does not seem to be conditioned by the context in which the analysis of identity is carried out in the Topics. In the Metaphysics, where he seems very concerned to avoid assigning an ontological import to the denotata of general terms, we find the same free attitude towards the bearers of the identity relation: they can be not only individuals but also what is referred to by universal terms.9

Let us concentrate on the second awkward feature of Aristotle's way of characterising identity in text (A). The linguistic aspect of it should not by any means go unnoticed. Identity is said to occur when the names of the entities involved by the relation refer to one and the same object. As Paolo Crivelli in his comments has acutely observed, this approach to identity implies that things to which identity applies must have a name, and this assumption is not at all obvious. Worse than that, identity seems to apply only to things which have at least two possible names, as condition (iii) in (1) suggests. Apart from the fact that it is not at all clear that we can give a name to a grain of sand in the sea, although we can claim that it is self-identical, Aristotle is well aware that names cannot match things, since the former are finite and the latter infinite in number. <sup>10</sup> Even if we include definite descrip-

tions in the notion of an Aristotelian name we do not solve the problem. All possible combinations of a finite number of names are themselves finite and they cannot equate the number of infinite things to which sameness applies. Of course, identity has a linguistic aspect. We cannot express identity without referring to a language and a way of picking out things since, as we have seen, identity holds between things. But this obvious remark does not entail that we are compelled to assign a name (or a definite description) to any object of which we say, for instance, that it is identical to itself. In a natural language we have quantifiers and expressions such as 'thing', 'object', 'entity' to help cope with the limited number of names at our disposal, and some refined versions of these devices are used in formal languages.

Needless to say, (1) cannot be counted as a definition of sameness. Condition (iv) (or (iv)\*) contains a clear reference to identity and the same probably holds for condition (iii). Therefore, conditions (i)-(iv) cannot be taken as a proper definiens of sameness, since they include what must be defined. As one should expect, (1) can be considered only as an elucidation of the notion of identity, and this elucidation naturally depends on the context in which sameness is supposed to operate. The context of Aristotle's analysis is dialectic, i.e. the technique of discussion between two opponents. It is from this point of view that definitions are examined and, as we have seen, discussion about definitions and genera is one of the main reasons for appealing to identity. For instance, a definition can be disproved if one is able to show that its alleged definiens is not the same as the definiendum. Similarly, we can reject the claim that  $\mu$  is the genus of  $\nu$  and  $\xi$  if it can be maintained that  $\pi$  is the genus of  $\xi$ ,  $\mu$  is the genus of  $\nu$ , and  $\mu$  is different from π.

If this is the context of Aristotle's use of identity it should not surprise us too much that he has recourse to a linguistic approach in his elucidation of this notion. In some sense *definientia* and *definienda* can be taken as names of entities, and *genera* can be considered in the same way.<sup>11</sup> This view is confirmed by the fact that when Aristotle treats identity in the context of his ontology, his approach changes. Consider for instance the following passage:

(B) The same has several meanings: we sometimes mean the same numerically; again we call a thing the same if it is one both in definition and in number, e.g. you are one with yourself both in form and in matter; and again if the definition of its primary substance is one, e.g. equal straight lines are the same, and so are equal and equal-angled quadrilaterals – there are many such, but in these equality constitutes unity. (Metaph. I 3, 1054<sup>a</sup>32-<sup>b</sup>3, Oxford revised translation modified, see Barnes (ed.) [1985])

For our purposes, it is sufficient to underline the different perspective according to which identity is characterised. It is no longer explained in terms of sameness of names' denotata, but in terms of sameness of the ontological constituents of the bearers of the relation, matter and form. The details of the passage are far from clear. It is not obvious in what sense numerical identity differs from unity of definition and number. Maybe, as the pseudo-Alexander thinks, <sup>12</sup> Aristotle is here hinting at the distinction between accidental and essential identity. <sup>13</sup> Nor need we find perspicuous the example of the equal straight lines as a special case of sameness in definition, *i.e.* specific identity. However, what really matters for us is the ontological shift in the characterisation of sameness with respect to the approach in the *Topics*. We find the same ontological commitment in characterising identity in other passages of the *Metaphysics* in which no mention of the coreferentiality of names is made. <sup>14</sup>

There is however an aspect in which the ontological characterisation of identity and the linguistic coincide, and this is the attempt that Aristotle makes to reduce sameness to oneness. In the *Topics* it is said that  $\mu$  and  $\xi$  are the same if their names denote one thing and in text (B) it is oneness in number that establishes sameness. More explicitly, in another passage of the *Metaphysics* Aristotle clearly says that identity is a kind of oneness. It is difficult to evaluate the meaning of this reduction. One might be tempted to take it seriously and spell it out in terms of indistinguishability:  $\mu$  and  $\xi$  are the same if they are one, *i.e.* if they cannot be distinguished, and, of course,  $\mu$  and  $\xi$  cannot be distinguished if they share all properties and attributes. We could express this by positing

(1\*) 
$$\mu = \xi$$
 if  $\forall F(F(\mu) \leftrightarrow F(\xi))$ 

## LEIBNIZ, COMPOSITE SUBSTANCES AND THE PERSISTENCE OF LIVING THINGS

### Anthony Savile

One of the several points at which Leibniz's metaphysics appears to lose contact with common sense and verge on fantasy is where he says that living things such as men or fishes or plants never truly die but are in their way no less eternal than those simple substances that are the fundamental monads of his system (e.g., Monadology §76). Here I shall argue that, appearances to the contrary, it is plain enough why he thinks this and also that, strange as it may seem, comparatively little emendation to his way of thinking is needed before we find an interesting convergence between his way of understanding the natural world and our own.

What are living things? They are unities consisting of a dominant monad and an organic body that is particularly tied to it, a body by means of which the dominant monad perceives the world around it and through the voluntary control of which it is able to bring about the satisfaction of its desires (*Monadology* §63). Every monad has to be dominant over some such body because only if it is will it be possible for it to enjoy perception and appetition, and monads have to enjoy those things since they are the sole qualities that simple substances can possess. Lacking perception and appetition a monad would have no qualities, and just as qualities cannot exist in the absence of some sub-

stance of which they are qualities, so in the absence of any qualities a substance could not exist at all (Monadology §8).

The body that a given monad dominates consists of other monads, although which monads these are will be constantly change from moment to moment. Leibniz observes that there is Heracleitean flux here and that no portion of matter (viz. collection of subdominant monads) is assigned to a given dominant monad throughout the latter's existence (Monadology §71). The body that a cabbage or an ant or a man possesses retains its individual stability on the Leibnizian conception of things despite the fact that its elements are in flux. To us there is nothing strange about this since we see ourselves as bodily continuants of a kind whose existence is unthreatened by the metabolic process.

The point at which we are liable to encounter some difficulty with Leibniz's introduction of living things is in adequately distinguishing them from what he calls "phenomena bene fundata". These latter are material things which do not qualify as genuine substances in that they have no true unity as is made manifest by their tendency to dissolve or come apart. A block of ice, a flock of sheep, a wormy cheese are examples that Leibniz offers of such things: they are composed of simple substances all right (there is nothing else that they could be composed of), and they are real enough in that they borrow their reality from the reality of their constituting simples, but their unity is a purely conventional or as Leibniz sometimes says, a "mental" matter. That a large group of monads makes up a single block of ice depends on nothing more than our determination to count that mass as a single thing, and a genuine substance, be it simple or complex, has to have a unity that is natural, and not conventional in the way that these things are.

The difficulty that Leibniz appears to encounter – perhaps it appeared to him that he encountered it – is to figure out how living things consisting of some dominant monad together with an organic body could be genuine substances, how they could enjoy any unity that warrants us in thinking of them as anything more than *phenomena bene fundata*. To take an example that Leibniz discusses in his correspondence with Arnauld, it would seem as though the body that is more or less under my voluntary control during my lifetime ceases to be so when I die and persists a while as a corpse<sup>1</sup>. But in that case it does indeed looks as if the dominant monad and its organic body have come

apart, and hence together lack precisely that unbreakable unity which alone would entitle a good Leibnizian to account the original composite living thing a true substantial unity. Setting aside the soul or the dominant monad, the body itself is surely no more than a conventional or phenomenal unity, just like the block of ice or the flock of sheep or the wormy cheese. If this is so, it is bound to strike us that Leibniz's determination to pick out certainly men and, he is inclined to think, many other naturally occurring things as truly substantial composites that are metaphysically quite distinct from aggregative phenomena like the cheese is under threat. To put it starkly, how could there possibly be such real things whose high grade, substantial, reality depends on their possessing a body whose reality itself is no more than low grade and phenomenal?

When Leibniz considers the example of the cadaver he is quite explicit that there we do have to do with a phenomenon and not a complex substance. And given that, it may strike us as astute enough on his part, but ultimately, surely, quite hopeless, to say that living things are indeed composite substances and that they never truly die. For even if that might serve to mark out a possible relation between dominant monads and bodies that is distinct from the relation between the self and the body that becomes a corpse, it is all too likely that we shall say on the basis of straightforward observation that such a relation is never realised, and hence that neither cabbages, nor ants nor even men are instances of it. The introduction of the everlasting body constantly conjoined with the indissoluble simple soul like substance is likely to seem nothing more than a kind of metaphysical wishful thinking. Intellectually speaking, it looks quite inapplicable to the actual world.

Such an accusation is mistaken, I think, and it does scant justice to the subtlety of Leibniz's thought. To set things right we need only reflect a little on the idea of a monad's organic body. In our perceptual engagement with the world we are sensitive to far off events through the way in which mechanically they impress themselves or leave traces on other bodies, which in turn transmit that information to yet other bodies (Monadology §61). A chain of such transmitted impressions terminates at the point at which a simple soullike monad is immediately sensitive to information that is mechanically inscribed on a particular body of matter (Monadology §63). The body of which the mo-

nad is thus immediately aware in perceiving the world around it is its own body. Similarly, in realizing my desires I bring about changes in the world around me, often changes that take place at some distance from me. So in order to satisfy my thirst, say, I have to bring it about that water flows from a tap in some room in the house some distance away from me. To do this I have to engineer changes in the world between myself and the tap, perhaps by getting you to go to the kitchen and turn the tap on. And this I do through some change in a body over which I have direct control, exercised on this occasion perhaps by moving my lips, tongue and mouth as I ask you to fetch me a glass of water. So, as in the case of perception, desire also can only be satisfied through the monadic self possessing a body over which it has unmediated control. Such is the Leibnizian picture.

Now, it is not so very far from here to saving that my organic body will be whatever body of matter it is that in perception and appetition I have immediate awareness and control of. This it seems is just what Leibniz does want to say, since that, and as far as I can see that alone, is what entitles him to reject the idea of metempsychosis, and with it Locke's fantasy of the prince and the cobbler exchanging bodies (Cf. Nouveaux Essais, II.xxvii.14-15). If the dominant monad that is me at one time dominates a body that we think of as that of a cobbler and then later on comes to dominate a mass of monads that act in a more princely way, the right thing to say will not be that the dominant monad has come to control a different body, but that the body that the single self controls is unchanged in being numerically the same one, but has adapted itself to qualitative changes in the sorts of desire and perception that are now enjoyed by the one persisting self. Metamorphosis of this kind there may be (and that Leibniz approves of) but metempsychosis, no (Monadology §72).

To get to the point of affirming that the body is everlasting and to understand Leibniz's motivation for speaking of the cadaver as he does we have to remind ourselves of the everlasting nature of the simple substances that make up the world. Their simplicity ensures that they do not perish or come into being in natural ways. For they have no parts, and when things (aggregates) perish or come to be in the way of nature they perish and come to be by dissolution and by combination of parts. The everlasting character of these simples, however, is not an

absolute metaphysical necessity, for no contradiction is involved in supposing that within the temporal order of things God might annihilate some and create others. That they enjoy temporally unending existence is however a hypothetical necessity, underwritten by the principle of sufficient reason, since the world that actually exists is the best world that it was open to God to have created, and any alteration to its original constitution that might be wrought by further creation or novel annihilation would imply that the original set he decided to create was less good than it might have been. So Leibniz will say that it is a consequence of the principle of sufficient reason that monadic simples are imperishable.

Now, we have seen that a simple substance must possess an organic body throughout its existence, and also that whatever functioning body it possesses and immediately controls at a given time will be the very same body as it possesses and immediately control at any other time. Once that is in place we can infer that all simple substances, persisting everlastingly as they do, must possess bodies that themselves persist eternally. To suppose this is not just metaphysical wishful thinking; it is the direct consequence of the underlying principles governing the way in which the natural world is conceived of. Given that, we can see that Leibniz has no option but to treat the matter of the corpse, which after all precisely no longer serves the perceptual and appetitive needs of a dominant monad, as a phenomenal unity. That is, it is no more than a quantity of matter sloughed off in Heracleitean fashion by a dominant monad whose new needs enable it to dispense with its services and for the sake of which needs it must now have taken on some other quantity of matter in the fulfillment of the internal principle that governs its development. Seen from this point of view, the mistake we are prone to make in the ordinary way in which we think of the dead body is to suppose that it is the very same body as was previously alive, but we can see now that from Leibniz's point of view this must be a mistake. The dominant monad that was once served by that mass of matter is still around and is still necessarily endowed with its own organic body, which may have shrunk or otherwise changed its demeanor in surprising ways, yet the shrunken body that it now controls has to be (a stage of) the very same organic body as was previously made up of the mass of matter that now lies inert upon the