

*Preamble, chiefly concerned with matters methodological
and terminological*

Technical terms are worse to be shunned than dog or snake.
(Leibniz, Gerhardt IV, 140.)

I. AIMS AND PURPOSES

The chief aim of this book is to elaborate a theory of the individuation of continuants, including living substances and other substances. Such a theory ought to comprise at least three things: an elucidation first of the primitive concept of identity or sameness; second, some account of what it is for something to be a substance or continuant that persists through change; third, an account of what it amounts to, practically and cognitively, for a thinker, to single a thing out at a time. Here, with this last task, there is the supplementary question of what it amounts to for the same thinker, having once singled something out, later to single out that same thing *as* the same thing.

From a philosopher's attitude towards the logical and methodological ordering of these tasks one can tell something about his or her attitude towards the idea that the meaning of a word is a function of its use. In this work, it is everywhere accepted that the meanings of such words as 'same', 'substance', 'change', 'persist' and 'recognize' depend upon their use. The life and semantic identity of such terms is only sustained by the activity of singling out or individuating. But the thesis of meaning as use is consistent with two converse or complementary theses (A)(B), which have an equal relevance to what is to be attempted and an equal claim upon rational acceptance.

(A) The relation between the meaning and the use of such words as 'same', 'substance', 'change', 'persist' is in fact reciprocal or two-way. Everything that concerns meaning registers upon use; but, unless we

redefine use, that does not imply that meaning can be reduced to use.¹ Among the concerns I began by enumerating, there is no question of collapsing the first two into the third, for instance.

(B) An interpretation of a set of linguistic uses or conceptual practices must speak of the *subject matter* to which they relate. For that reason, it must refer to the various things themselves towards which the uses or practices themselves are directed, together with the properties and relations of these things. The child who is learning to find for himself the persisting substances in the world, to think the thoughts that involve them and recognize the same ones again, grasps a skill and a subject matter at one and the same time. A philosopher who seeks properly to understand those thoughts must proceed accordingly. Let the philosopher elucidate *same*, *identical*, *substance*, *change*, *persist*, etc., directly and from within the same practices as those that an ordinary untheoretical human being is initiated into. At the same time, let the philosopher show by example what good elucidations can be made of such ideas as these. To this end, let him shadow the practical commerce between things singled out and thinkers who find their way around the world by singling out places and objects – and singling out one another. If the meaning of the terms ‘same’, ‘substance’, ‘change’, ‘persist’, etc., is a function of use and use is a function of the said commerce, then one by-product of this mode of elucidation will be that the task I began by calling the third task is undertaken in concert with the first and the second. The first and second tasks acknowledge the importance of the third; but, by their constant appropriate acknowledgment of this importance, they will in fact absorb the third.

When the reciprocities and mutual interdependencies of concept, practice and thing-singled-out are acknowledged and likened to those of some seamless web, when the primitiveness of all the relevant notions is acknowledged too, how much genuine clarification is it reasonable to expect a philosophical theory of individuation to be able to achieve? Well, we have rudimentary pretheoretical ideas of identity, persistence through change, and the singling out of changeable things. By means of these, we may arrive at a provisional or first explication of what ‘same’ means and of the actual application of this relation-word. So soon as that is achieved, there is a basis from which to scrutinize afresh and then

¹ Or even to correct and truthful use, which would be a less striking achievement. (I hear someone scoffing at the distinction between use and correct use. Let them note that the correct use of a word or device might only be determinable from within a whole practice, yes, but without its following from this that the correct use was determinable from within practice *in respect of this word or device*. Cognate questions are pursued further in my (1997b).

consolidate our logical and participative understanding of the individuating practices that a thinker's grasp of the concepts of substance, sameness and persistence through change makes possible for him. At the end of this second phase, nothing will be recognizable as the philosophical *analysis* of '='. But no special mystery need remain about how a notion of the exigency that we ascribe to the identity relation can find application in the changeable world of our experience. Provided we do not despise the ordinary ideas by which we conduct the untheoretical business of the individuation and reidentification of particulars, we can remind ourselves well enough of what regulates the principled employment of '='. We can remind ourselves of what it is for anyone who is bent on singling out objects to carve off from the world, or isolate from among the objects of his experience, various continuants or things that persist through change.

This emphasis on the practical does not mean something that it might seem to mean if, in the cause of the crudest version of 'meaning as use', a separate priority were accorded to the third of the three tasks enumerated in the second sentence of the first paragraph. It does not mean that, for the benefit of his deluded subjects, the theorist is to find a way to see a world that might as well be one of pure flux in which nothing really persists through change *as if* that world offered us objects that persist through change. For persistence through change is not make-believe. No sensible inquiry could abandon a datum so fundamental or so deeply entrenched.² It means that, arriving at the point programmatically described, the theorist is to understand as well as he can – discursively, practically, in the same sort of terms as those who individuate them or in modest extrapolation from these – what it is for an object to be a genuine continuant; it means that, when that is done, the theorist is to describe how the charge that something did not persist is to be considered, namely on its merits, such merits being set out in terms accessible in principle to those who take themselves to believe in genuine continuants. It is in this way that we shall try to identify the point properly at issue in some of the most bitterly contested questions of identity.

There are two complaints about the method of elucidations that will not go happily together: (1) that the method is vacuous, a mere replay of that which needs to be 'explained'; (2) that the demands which the method derives from the congruence and other properties of identity and translates into requirements upon the positive finding of identity are

² Nor could flux *as such*, or as coherently conceived, stand in the way of singling out changeable continuants. See my (1982).

draconian, too exigent, too severe. You cannot make both complaints. But it is better (I hope to show) not to make either.

2. FORMAL PROPERTIES OF IDENTITY

Where there is reciprocity or mutual presupposition between concepts, analytical philosophy is always tempted into violence or arbitrariness. We find it hard to endure the thought that, in the substantive questions of philosophy, there is no master thread we can pull upon to unravel everything else. Even as I deprecate this *idée fixe*, however, it may appear that the chapters which follow are victim of the same illusion. For in this book the formal properties of identity, namely the reflexivity of identity and Leibniz's Law (registered in the claim that, if x is the same as y , then whatever is true of x is true of y and whatever is true of y is true of x), will be treated as enjoying a special status. In this way, am I not attempting to insulate from legitimate criticism my opinion that these formal properties determine what can count as someone's singling out or tracing an entity? In the presence of doubt concerning formal properties, is it not simple dogmatism for me to persist in saying (in effect) that the properties of identity regulate, by reference to a claim they make upon reason, the interpretation of thought and action *as* thought and action?

In partial answer to this charge, I can only plead that something is done in the course of Chapter One, §2, to justify the view I take of the formal properties of '='. I do not really think they are given simply *ab extra*. It is true that I liken the status of reflexivity and congruence (along with the symmetry and transitivity that they entail) to that of the Law of Non-Contradiction. But, bracketing Chapter One, §2, my conciliatory view would be that the issue between the opposition and me is holistic and dialectical. If that is right, however, then the question at issue cannot really be resolved until some opposing account of individuation is developed to the same point as the account presented here. These questions will not be resolved until rival descriptions of individuation (and of reference) are compared with one another against the background of all the practices that they purport to describe. (For one small step in that direction, see Harold Noonan's and my exchange in Lovibond and Williams (1996).) The thing I have to hope is that, in the end, the reader will convince himself that the internal difficulties of the ontology and ideology of a position that abandons the Leibnizian conception of identity are overwhelmingly greater than any of the difficulties attaching to

the position I recommend. I trust that at that point, if not before, the reader will come to share my conviction that the Leibnizian principle is immanent in any linguistic or reflective practices we can recognize as reference and individuation.

3. NOTIONS

Corresponding to the three tasks mentioned in the first paragraph, we have the notions *identical* (*same*), *continuant* and *individuate*.

(i) The notion of sameness or identity that we are to elucidate is not that of qualitative similarity but that of coincidence (as an object, thing or substance), a notion as primitive as predication and correlative with it in the following way: if and only if Socrates is a man, then Socrates is identical with some man, and thus (we shall argue) shares all his properties with him. (This equivalence is offered as a manifest truth, rather than as an analytical definition of ‘is a man’ or of anything else. It is not offered as a part of a canonical or mandatory definitional sequence. See below, §10.) No reduction of the identity relation has ever succeeded. (See especially Chapter Six, §9.) Nor yet is it called for, once we realize how much can be achieved in philosophy by means of elucidations that put a concept to use without attempting to reduce it but, in using the concept, exhibit its connexions with other concepts that are established, genuinely coeval or collateral, and independently intelligible. (Compare here Wittgenstein, *Tractatus Logico-Philosophicus*, 3.263, 4.026, 4.112.) Not only is identity irreducible. Only in a vacuous sense of ‘supervene’, or a weak and irrelevant one, does it supervene on the totality of properties and relations other than itself. (See Chapter Six, §9.)

(ii) We have to explicate what it is to be a continuant or a substance. This explication will not amount to a definition. Nor will it be achieved without the ineliminably practical demonstration of the ordinary perceptible individuals of common experience. The explication must go some way beyond mere demonstration. But to set out, as so many philosophers have done in emulation of Book VII of Aristotle’s *Metaphysics*, with the high-minded aspiration to achieve an altogether purer kind of definition of substance, and then to abandon the concept of substance just because the result does not satisfy, is to end up doing philosophy that is at once ill-tempered and needlessly bad. It represents the inability to learn from Aristotle’s experiment.³

³ For my own attempts to learn from it, see my (1995).

Kant writes at §46 of *Prolegomenon to Any Future Metaphysic*: ‘People have long since observed that in all substances the proper subject, that which remains after all the accidents (as predicates) are abstracted, remains unknown.’ I protest that the substances or subjects we begin with are not unknown but known, that the only abstraction in which we need to be interested is utterly distinct from that which is supposed to result from the notional (mythical) removal of properties from a substance. The interesting and benign form of abstraction is that which results from the ascent from particular kinds of substance to the determinable *substance of some further specifiable kind*. (Ascent to what Wittgenstein in *Tractatus Logico-Philosophicus* called a formal concept.) This form of abstraction cannot part us from our conviction that substances are things which are known to us.

(iii) The *Oxford English Dictionary* defines ‘individuate’ in terms of ‘single out’ or ‘pick out’, and this definition is well suited to the purposes of this book. That which individuates – in the one sense in which the word will be used in this book⁴ – is in the first instance a thinker. (Derivatively, but only derivatively, one may find oneself saying that a substantive or predicate individuates.) To single x out is to isolate x in experience; to determine or fix upon x in particular by drawing its spatio-temporal boundaries and distinguishing it in its environment from other things of like and unlike kinds (at this, that and the other times during its life history); hence to articulate or segment reality in such a way as to discover x there. To single x out though, or even to prolong the singling out of x into the effort to keep track of x , is not yet (unless ‘in thought’) to refer to x or to designate x . And one may well refer to x , of course, without in our primary sense singling x out at all. This is not to say that, if there were no singling out, there could be reference. Singling out is the sheet-anchor for *information about particulars*.

The verbs ‘individuate’ and ‘single out’ are not intensional. If a thinker singles out x or individuates x , and $x = y$, then, whether or not he knows it, he singles out or individuates y . Such verbs do, however, permit of a complementation that is intensional. A Greek could have simply singled out Socrates; he could have singled out Socrates as Socrates; he could have singled out Socrates as a certain man or philosopher; or he could have singled out Socrates as the Athenian married to Xanthippe who was represented by Plato to have stressed (*Phaedrus* 265^c) the equal importance, in classification and in carving, of ‘dividing where the joints are’. What then is the relation of singling out and singling out *as*? In due

⁴ Contrast books about logic or metaphysics where the verb is used to stand for the relation between a predicate and some unique thing that satisfies the predicate.

course, we shall discover reason to think that there could be no singling out *tout court* unless there could also be singling out *as*. (This is not a priority claim.) It will be declared that not just any attempt at singling out counts as singling *something* out; that that which is required in a given case derives from what the thing itself is. It will be a consequence of the account of these matters to be given here that, for a thinker to single out or individuate a substance, there needs to be something about what he does, something about his *rappport* with x or his relational state towards x and his practical sensibility in relation to x , which (regardless of whether he articulately knows this or not – for all he needs is clear indistinct knowledge, cf. Chapter Three, note 6 and associated text – and regardless of whether it is a singling out *as*) sufficiently approximates to this: the thinker's singling x out as x and as a thing of a kind f such that membership in f entails some correct answer to the question 'what is x ?' For the philosophical cargo carried by this Aristotelian question, see Chapter One and the chapter mottoes prefixed to it from Aristotle's *Categories*. One further and equally Aristotelian part of that cargo makes reference to the way in which x behaves, how it acts and reacts. It will be everywhere insisted, moreover, that the singling out at time t of the substance x must look backwards and forwards to times before and after t . And it will be categorically denied in Chapters Five and Six, that, where it is indeterminate what was singled out, we have the singling out of something indeterminate. (Even at this distance the thing denied has the distinctive smell of fallacy.) But at this point in summarizing what is to come, I venture well beyond explanation of terminology and deep into the philosophy of the matter. Chapters Five and Six aim to complete the account of what singling out is. If they succeed, it will become finally clear how and why the singling something out at t cannot help but look, as I say, both backwards and forwards to times before and after t .

In sum, let the English language fix what will be meant by 'single out' and 'pick out'. Let these verb phrases sustain the practical and epistemological significance of 'individuate', 'individuation' and 'individuate'. Let philosophy then seek to say what individuating acts and thoughts amount to. At this point, a reader who has had enough of preliminaries may want to advance to Chapter One.

4. PHILOSOPHICAL TERMINOLOGY: A MANIFESTO

The explications just given are intended to leave room for me to make the following declaration. Ideally, all technical terms should (i) be defined and

(ii) belong in that part of the metalanguage which does not overlap with the object language. Where there is no alternative but to allow technical terms to penetrate into the object language (e.g. because the object language is poor in schematic devices or devices of generalization), one might hope that technical terms would serve the sole purpose of abbreviation, of summarizing, and of systematizing, in terms not essentially different from the expressions indigenous to the object language, the matters of which the object language already speaks. No doubt the philosophy of any particular science or art will need to use the technical terms of that science or art. But such terms will have needed to pass muster in that art or science itself.⁵

The semi-technical uses in this book of ‘concept’, ‘continuant’, ‘substance’, ‘coincidence’, ‘coincidence under a concept’ will stand condemned unless they can conform to these requirements. Maybe they will not always live up to the ideal stated, and will to that extent stand condemned. But my aspiration for them is that they should be devices for the generalization of that which has a straightforward meaning in the object language of English – more specifically, that they will be *determinables* of which ordinary English provides countless *determinations*.⁶ This is everywhere important, but it is a particularly important stipulation in connexion with the term ‘substance’. If we misunderstand determinable notions such as this, then it is almost inevitable that we shall unintentionally restore the unwanted associations of ‘substance’ with doctrines of bare particulars and qualitless substrate.

5. SORTAL PREDICATES AND SORTAL CONCEPTS: AND CONCEPTS VERSUS CONCEPTIONS

A technical term that is associated with ‘substance’ and the *what is it?* question but belongs in the metalanguage is ‘sortal predicate’. I use this

⁵ In stating that these are the ideals to which I regard myself as answerable, I am not venturing to condemn all philosophy that disregards them or follows some other manifesto. It is enough for me to say that the badness of much philosophy that is bad by almost any standard can be partly explained as the effect, *inter alia*, of disregard for such maxims – or of utter nescience of them.

⁶ The *determinable/determinate* distinction was revived by W. E. Johnson (*Logic* 1913; Cambridge, 1921) out of dissatisfaction with the traditional genus and differentia account of species when it was applied outside its traditional scope. ‘To be ultramarine is not to be blue and something else besides, but it is a particular way of being blue’, A. N. Prior, *The Doctrine of Propositions and Terms* (London, 1976). *Pace* the traditional doctrine of *genus* and *differentia*, I should say the same of being a cat. It is not a matter of being an animal and something else that is independent of animality. See below on real definitions, §6. Manifestly ‘substance’ stands for a *fundamentum divisionis* in the traditional scheme. Or, in the language of the *Tractatus*, one may prefer to say it stands for a formal concept. For further discussion, see A. N. Prior, *op. cit.*, pp. 63–4 and ‘Determinables, Determinates and Determinants’, *Mind*, 58 (1949), pp. 1–20, 178–94.

Lockean term in roughly the manner of the second part of P. F. Strawson's *Individuals* (London: Methuen, 1959). See especially his pp. 168–9. (For a discrepancy not of philosophical purpose but of detail, see Chapter One, section 8 below.) Locke's usage, Strawson's usage and my own are all focused or organized by Aristotle's distinction of predications in the category of substance from predications in the category of quality and the other categories. See the first five chapters of Aristotle's treatise *Categories*, especially the two passages I have prefixed to Chapter One. For Locke's usage, see *Essay* III, iii, 15:

it being evident that things are ranked under names into sorts or species only as they agree to certain abstract ideas, to which we have annexed those names, the essence of each *genus* or sort comes to be nothing but that abstract idea which the general, or *sortal* (if I may have leave so to call it so from *sort*, as I do *general* from *genus*), name stands for.⁷

Here, as in other cases, the intuitive semantics we reach for in replacement of the Lockean system of ideas are Frege's or some adaptation of these. (For, however unfinished Frege's original scheme may be and whatever reservations one may have about the further elaborations that he offers of it in *Grundgesetze*, the underlying ideas are as general as they are durable.) Like other predicables, a sortal predicate expresses a sense and, by virtue of expressing this sense, it stands for a concept. Under this concept individual things may fall. See the diagram in Frege's letter to Husserl.⁸ To understand a predicate and know what concept it stands for is to grasp a rule that associates things that answer to it with the True and things that don't answer to it with the False. (The extension of the concept is therefore the inverse image of the True under the function

⁷ At §19 ('Divided reference'), Quine (1960) notes the following variants for 'sortal predicate': (1) individuating predicate; (2) articulating predicate; (3) substance-name; (4) shared, or multiply denotative, name; (5) predicate which divides its reference (extension). Another variant that has had some currency, on which see Woods (1959), is (6) boundary drawing predicate. (Cf. Frege (1950), §54.) All six terms serve to illuminate the difference, partially but only imperfectly reflected in the grammatical division of noun and adjective or verb, between Aristotle's ontologically basic question *What is x?* and less basic questions such as *What is x like?* *Where is x?* *What is x doing?* Note that looking at these terms in this Aristotelian way will enforce a *diachronic* interpretation of 'individuate', 'articulate', etc. We shall not be in the business of describing first what it takes for synchronic momentary presentations (things presented) *a* and *b* to be the same dog and *then* describing what it takes for a presentation now and a presentation tomorrow to be 'concanine'. Identity over time is just identity. The same holds of identity at a time. Such truisms should condition any account of the terms of a given identity judgment. Any secure practical grasp of what counts now as a dog regulates present judgments in the light of future and past findings about the same thing. And *vice versa*. See my 'Reply to Noonan' in Lovibond and Williams (1996).

⁸ The letter is dated 1894. See Dummett (1973), Chapter Five. The diagram is reproduced in my (1984) and my (1993).

determined by this rule.) To grasp the rule is to grasp how or what a thing must be (or what a thing must do) in order to satisfy the predicate. To grasp this last is *itself* to grasp the Fregean concept. Thus 'horse' stands for that which Victor is and Arkle is, for instance – just as, outside the sortal category, the verb-phrase 'runs swiftly' stands for that which Arkle does. When I declare that to grasp this rule is to come to understand what *horse* is or *run swiftly* is, someone may insist that, in that case, the concept so spoken of, *horse* or *run swiftly* or whatever it may be, is a property. I shall not demur, but simply insist in my turn that the notion of a rule of correlation to which I appeal is pretheoretical. It is not indissolubly wedded to an extensional criterion of concept identity. The extensional criterion is the by-product, not here needed, of the mathematicians' regimentation of an entirely intuitive notion.⁹

The concept *horse* is not then an abstraction such as horse-hood or horse-ness (whatever these are). It is something general or, better, universal; and to that extent it will be philosophically contentious. But *horse* or *mammal* or *carnivore* surely *are* things that we need to speak of or quantify over, in metaphysics and in science.¹⁰ Objects fall under them and so on – and, under this aspect, objects can be seen as belonging to divers assemblages, variously denominated species, sorts, kinds.¹¹

Seen in this way, as something with instances, the concept belongs on the level of reference (reference in general being something of which naming is one special case). But there is another use of the word 'concept' which is equally common, if not more common, and this belongs on the level of sense. It is this rival use of the word 'concept' that we find in discussions that are influenced directly or indirectly by Kant. In those discussions, talk of things falling under a concept, or of concepts having extensions, may be less felicitous. Or rather, it will not come to the same thing. Perhaps everything will fall into place, however, and the connexion will be visible between the two uses of the word, if we try to reserve the word 'concept' for the Fregean use and we prefer the word 'conception' to cover the Kantian use (seeing a Fregean sense as a very special case of a conception). The connexion that there is between the two may then be understood as follows:

⁹ See B. A. W. Russell, *Introduction to the Mathematical Philosophy* (London, 1917), p. 187, and the further references to Ramsey, Quine and Church given in Aaron Sloman's neglected but valuable article 'Functions and Rogators' (1965). See especially pp. 158, 159, 161.

¹⁰ For more on these, see my (1984), especially the references to Elliot Sober, 'Evolutionary Theory and the Ontological Status of Properties', *Philosophical Studies*, 40 (1981), and my (1993). The quantification in question is over both sortal and non-sortal properties.

¹¹ In ordinary English and even in ordinary philosophical English, some of these terms lead a double life perhaps, as denoting assemblages *or* as denoting properties.