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Truth, Predication and the Complete Concept of an Individual Substance

By

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Leibniz is committed to the thesis that possession of a complete concept is a necessary and sufficient condition for something's being an individual substance. On several occasions in his writings he implies that this should be seen as a consequence of his view that the truth of a proposition is determined by the containment of its predicate-term in its subject-term¹. For the most part commentators have agreed with this judgement². In this paper I shall argue that this is inadequate as an explanation of Leibniz's doctrine of the complete concept of an individual substance. I shall then provide what I take to be a more promising interpretation, which draws on a broader view of Leibniz's conception of predication, his theory of definition, and his sympathy for a version of nominalism.

1. At least once Leibniz asserts the following two propositions³:

- (1) If X is an individual substance, the concept of X is complete.
- (2) If the concept of X is complete, X is an individual substance.

1 Leibniz might be read as implying this section 8 of the *Discourse on Metaphysics* (GP IV 432), at VE 1.186 and C. 10.

A b b r e v i a t i o n s: P = LEIBNIZ: *Philosophical Writings*, G. H. R. PARKINSON, ed., London 1974. PL = LEIBNIZ: *Logical Papers*, G. H. R. PARKINSON ed., Oxford, 1966. L = LEIBNIZ. *Philosophical Papers and Letters*. 2 ed., L. E. LOEMKER, ed., Dordrecht, Holland, 1969. SF = Leibniz: *Fragmente zur Logik*, ed. F. Schmidt, Berlin, 1960.

2 See, e.g., L. COUTURAT: *On Leibniz's Metaphysics*, trans in H. FRANKFURT, ed. *Leibniz. A Collection of Critical Essays*, New York, 1972, p. 22. G. H. R. PARKINSON: *Logic and Reality in Leibniz's Metaphysics*, Oxford, 1965, p. 131. C. D. BROAD: *Leibniz's Predicate-in-Notion Principle and Some of its Alleged Consequences*, in FRANKFURT, op. cit., p. 2. R. McRAE: *Leibniz: Perception and Thought*, Toronto, 1976, p. 78. RUSSELL (*A Critical Exposition of the Philosophy of Leibniz*, 2 ed., London, 1937) claims this too (pp. 9, 11), although his analysis is in fact more complex, involving as it does the idea that "substance . . . is that which can only be subject, not predicate, which has many predicates and persists through change." (p. 43).

3 "Si qua notio sit completa, seu talis ut ex ea ratio [reddi] possit omnium praedicatorum ejusdem subjecti cui tribui potest haec notio, erit notio Substantiae individualis, et contra." (C 403) "Si A sit B, et B sit terminus completus erit A s u b s t a n t i a s i n g u l a r i s, seu subjectum certum quam vulgo individuum vocant. Sola enim substantia singularis completum habet conceptum" (LH IV, 7, B, 4, Bl. 13; SF 479). "Et quidem substantiae singularis conceptus est quiddam completum, qui omnia jam virtute continet, quaecunque de ipso possunt intelligi. . . . Conceptus autem completus est nota substantiae singularis" (VE 2.417).

(1) apparently states a necessary condition for something's being an individual substance. (2) a sufficient condition. Proposition (1) might be taken to be supported by the following sort of argument. Consider any individual substance *A* and all the propositions that are true of *A* and have the form "*A* is *F*". According to Leibniz's principle of concept containment, the truth of each of these rests on the inclusion of the concept of its predicate term in the concept of its subject term, i.e. in the concept of *A*⁴. Thus the concept of *A* must be complete in this sense, that it includes concepts of all the predicates of *A* – past, present and future.

The problem with this argument is that it seems to deliver too much. If it is based solely on Leibniz's general account of propositional truth, then there is no reason why it should not be applied to a proposition whose subject term appears to designate a species. Man is rational, sensate, two-legged, etc. Thus we may reason that the concept *m a n* must include the concepts of all and only those predicates which are attributed truly to man, and infer that *m a n* is in this sense complete. But if we accept this conclusion, then (2) must be false; possession of a complete concept will not be a sufficient condition for something's being an individual substance.

In one passage from a letter to Arnauld Leibniz appears to confirm this:

"Can it be denied that everything (whether genus, species or individual) has a complete (a complete concept) notion, according to which it is conceived by God, conceives of everything perfectly, i.e. notion containing or comprehending all that can be said about the thing" (GP II 131).

We are here faced with a dilemma: either Leibniz cannot claim possession of a complete concept as a necessary and sufficient condition for something's being an individual substance or he employs at least two different senses of "complete", one of which is applicable to the concept of any being, the other exclusively to that of an individual substance. The evidence, I think, supports the latter alternative. In addition to the passages which clearly limit possession of a complete concept or notion to individual substances⁵, we may draw on a well-known note which Leibniz appends to another of his letters to Arnauld. In it he distinguishes a complete concept [*n o t i o c o m p l e t a*], which he describes as containing all the predicates of a subject, from a "full" concept [*n o t i o p l e n a*] which "comprehends all the predicates a thing" [*r e s*] (GP 49n). It seems reasonable to identify what Leibniz here calls a "full" concept with what is demanded of the subject term of any true proposition by his analytic conception of truth. This encourages the hope that we may reserve the technical expression "complete concept" for the notion of an individual substance.

How then does Leibniz define the complete concept of a substance? While signs

4 Leibniz offers at least two versions of this principle: that the truth of a proposition is determined by the containment of its predicate term in its subject term (C 68, 518–9); or that it is determined by the containment of the concept or notion of its predicate in the concept or notion of its subject (C 16, 388, 402). The last two passages strongly suggest that the two formulations are equivalent. Regarding the ambiguity inherent in Leibniz's use of the word "term", see n. 9 below.

5 See n. 3 above.

It is difficult to know how precisely we are to understand this statement. By a “subject of predication” Leibniz might just mean the subject term of a proposition. But if that is so, then without some modification (which Leibniz himself could easily have made) (3) comes uncomfortably close to defining the notion of “full concept” considered above¹⁰. Alternatively, by “subject” Leibniz might mean “substance” or “notion of a substance”. Many of his discussions of the complete concept of a human being indeed give the impression that this is all that is at stake (e.g. GP II 43; VE 1.191, 2.380). If this were so, however, (3) would obviously be unhelpful as an elucidation of the idea of individual substance. This is a possibility that cannot be ruled out. Nevertheless, it is hard to deny that some texts show evidence of a use of “subject” that is not readily identifiable either with the sense of “subject term” or with that of “substance”. It is therefore worth considering whether some other meaning can be given to the expression “subject of predication” which might help us in interpreting Leibniz’s definition of a complete concept or notion.

2. Throughout the history of philosophy the concept of predication has straddled the boundary between logic and metaphysics. The reason for this is fairly clear. A predication is in the first place a relation between linguistic expressions or logical terms. At the same time, a logical predication is often seen as the expression of a predication *in re*, the assertion of a fact or state-of-affairs. On allowing this we are immediately drawn into ontological inquiries: we are compelled to ask what sort of things subject and predicate terms designate, and what sort of relation must hold between them, for a genuine predication to exist. A discussion of predication, then,

that a term is “not a name, but a concept, i.e. that which is signified by a name . . .”. One definition has it that a term is a “thinkable” [c o g i t a b l e] which can be the subject of a true proposition (LH IV, 7, C, Bl. 76; cf. LH IV, 7, C, Bl. 105r); in other places however Leibniz speaks of the “concept of” a subject or predicate term (GP II 56). It is probably fair to see Leibniz’s usage of *t e r m i n u s* as retaining some of the ambiguity that is built in to the medieval sense of the word. OCKHAM, citing Boethius, claims that there are three types of term – written, spoken and conceptual, and characterizes the last as “an intention or impression of the soul which signifies or consignifies something naturally and is capable of being part of a mental proposition . . .” (*Summa Logicae*, I.1., trans M. LOUX, Notre Dame, 1974). Thus while by and large it may be right to assimilate what Leibniz says about terms and concepts, we should also recognize the former as possessing properties not generally associated with the latter: in particular, we should not be surprised to find Leibniz claiming both that terms “signify” or “designate” objects, and also that they are “understood of” or “express” objects. The result, discussed below, is that terms acquire certain semantic characteristics, such as denotation and connotation, now reserved for (written) linguistic expressions.

10 Leibniz typically says that a complete concept must contain all the predicates of “its” subject or of the “same” subject. If by “subject” he meant only “subject term”, the definition could be read as requiring only that a complete concept contains all the predicates of a subject of which it can be predicated. Since any term is predicatable of itself, this would only guarantee the notion of full concept discussed above. Under this reading, to make the point he wishes to make Leibniz would have to have said that a complete concept contains all the predicates of *e v e r y* subject (term) of which it is predicatable.

In section 8 of the *Discourse on Metaphysics*, he proposes another interpretation of the *in esse* principle:

“It is agreed that every true predication has some basis in the nature of things. . . . This is what philosophers call *in esse*, when they say that the predicate “is in” the subject. Thus the subject term must always include the predicate term, in such a way that someone who understood the notion of the subject perfectly would also judge that the predicate belongs to it” (GP IV 433).

This well-known passage contains the second half of Leibniz’s response to the question of the metaphysical meaning of predication. In contrast to the doctrine that a thing’s having such-and-such a quality requires the inherence in it of a separate being which is (an instance of) that quality, Leibniz maintains that the reason for a true predication, its “basis in the nature of things”, rests in the relation between the perfect notions of subject and predicate present in the divine understanding. This approach is consistent with, and supportive of, the nominalist ontology suggested in *De Accidentibus*: in relocating the metaphysical ground of predication from things in the actual world to the perfect notions or essences of things resident in the intellect of God, Leibniz has blocked the principal argument for supposing the actual existence of predicative beings¹³.

Now it has rightly been assumed that the central import of the preceding passage from the *Discourse*, and others like, is its stating of the “predicate-in-subject principle” — that in any true proposition the concept of the predicate is contained in the concept of the subject. My point has been that it is possible to overestimate what this principle tells us about Leibniz’s conception of predication. While it indeed articulates the ground a *p a r t e r e i* for the truth of a predicative proposition, it would clearly be wrong to see Leibniz as claiming that this principle also informs us as to the facts which are asserted by true predications: that for example a singular proposition (“Socrates is white”) asserts a real relation between an individual and a universal, and a general proposition (“White is a color”) a relation between two universals. For we know that this runs directly contrary to his preferred ontology. Predication is the saying of things about concrete or substantial things, a con-

13 It might be objected that the very fact that Leibniz recognizes a realm of conceptual entities (the natures or essences of things) implies that he is not a nominalist in the strictest sense of the term. This may be so, but it does not follow that there is not an interesting distinction to be drawn between Leibniz’s position and someone who is prepared to recognize universals and other abstract beings as ontologically on a par with individual existents, and who interprets predication as a real relation between these different types of being. I am prepared to accept at face value Leibniz’s assertion that “neither essences nor the truths about them, which are called eternal truths, are fictions; they exist — if I may put it so [*ut sic dicam*] — in a certain region of ideas, namely, in God himself, the source of all essence. . . .” (GP VII 305; cf. GP VII 311, VE 3.484). Mates takes the somewhat stronger position that when Leibniz “tells us that possible worlds, concepts, and propositions exist only in ‘the region of ideas’ or in ‘the mind of God,’ what he intends is . . . that statements purporting to be about these kinds of entities are only *compendia loquendi* for statements about God’s capacities, intentions, and decrees” (op. cit., 177).

praedicato” (LH IV, 7, C, Bl. 105r), or the notion of something of which something else is understood (C 437; VE 2.239, 356, 380). Equivalently, the mark of such a term is that it is analyzable into the term *subjectum*, *ens* or *res*, and a term expressing a quality which is predicated of it. *Homō*, for example, can be understood as *subjectum humanum*; *rex* as *res regnans*¹⁶. A substantival term, then, signifies a thing-with-qualities, or a thing which is such-and-such.

Adjectival terms like *calidum* (hot) and *magnum* (great) are distinguished from substantival terms by the fact that they do not make complete sense unless supplemented by a term like *ens* or *res* which explicitly introduces a subject (VE 1.187. 1.191, 2.338). Given this, however, it is fair to say that Leibniz offers the same account of the significance of substantival and adjectival *concreta* (see e.g. VE 2.349, 2.356); in a “rational language”, he adds, there would be no need to mark the distinction (C 356, 433; VE 2.356; LH IV, 7, B, 4, Bl. 13). The important division again comes between *concreta* and *abstracta*. According to Leibniz, the term *calidum* is to be understood as signifying some hot thing, not the quality of heat had by a thing: that would be to confuse it with the related abstract term *calor*. He distinguishes the two through the possibility of their indicating a numerical identity. If A and B are *concreta* (say *calidum* and *siccum*), it is possible that A and B signify one and the same thing (or as Leibniz says, are one and the same) – a subject that is both hot and dry. The corresponding *abstracta*, however, *calor* and *siccitas*, signify two different things which may inhere in one subject, but cannot be identified with either it or each other (VE 2.324; cf. LH IV, 7, C, Bl. 99v).

While it is strictly speaking part of a semantic theory, and not an ontological one, Leibniz’s doctrine of terms meshes neatly with his nominalism. According to the latter, existence belongs solely to concrete or substantial beings; accidents or attributes are in reality no more than states or modifications of substance. Leibniz’s limitation of significance solely to concrete terms supports this assumption to the extent that it bars terms like *humanitas*, which might be taken to designate certain types of abstract or universal being. Furthermore, the account he gives of the significance of general terms like *homo* or *calidum* implies that these are not to be understood as standing for universals, but instead for particular types of individuals¹⁷. The material reference that is thereby assigned to a concrete term is distinct from that of modern semantics. While some terms may

¹⁶ VE 1.187, 2.356–7. At VE 1.187 Leibniz says that to add the term *subjectum* to a substantival term would be to create a tautology.

¹⁷ “*Ens omne singulare seu individuum est, sed Termini sunt vel singulares vel universales, v.g. cum hominem intelligo in genere, quemlibet intelligo*” (VE 2.406). “. . . [U]niversales nihil aliud significant quam quamlibet substantiam singularem. . . . Cum enim dico *Hominem*, dico quodcunque singulare subsistens rationale” (VE 2.411; cf. VE 1.187).

itself. Through an examination of his doctrine of terms we have found that by "subject" he may also mean any singular thing (*a s u b j e c t u m c u m p r a e - d i c t o*) which is designated by a concrete term, but which may not, under that description, be identified as an individual substance; or he may mean the bare notion of a subject which is involved in our understanding of any concrete term.

4. Let us now return to the question of predication. Leibniz's *d e f a c t o* exclusion of all terms save those which are themselves understood as expressing the predication of a subject has the consequence that predicative *p r o p o s i t i o n s* of the form "A is B" have a complex sense. If our grasp of any concrete term involves the supposition of something of which it, *q u a* predicate, is true, then the predicative relation of any two concrete terms can be expressed as a conditional:

A is B if and only if, if X is A then X is B,

where the expression X on the right-hand side of the equivalence stands for the common "bare subject" of the terms and plays a role not unlike that of a free variable in modern logic. In general, then, a predicative proposition involving concrete terms asserts that whatever we understand of a subject through the proposition's subject *t e r m* entails, or includes, whatever we understand of the same subject through the predicate *t e r m*:

"A proposition is that which says, as regards two terms or two attributes of things, that one, called the *p r e d i c a t e*, is contained in the other, called the *s u b j e c t*, in such a way that the predicate must apply to everything to which the subject applies" (GP VII 43-4).

It is clear from this that a necessary and sufficient condition for the truth of such a proposition is the principle of concept containment; the concept expressed by the predicate term must be included in that expressed by the subject term. The point to be emphasized, however, is that by itself this condition does not explain what predication means for Leibniz; indeed, as we have seen, it can even lead us astray if we imagine the containment relation to be a transparent expression of an ontological relation.

On the interpretation I have been developing, the significance of any true predication is that it provides an explanation of something's having some quality F in terms of its having some larger set of qualities that includes F. Thus X is a living thing, because X is an animal; X is an animal, because X is a man; X is man because X is a king; and so on. That there should simply be an indefinite extension of such a series of reasons is not inconceivable; but it is inconsistent with Leibniz's general assumption that reality is fully determinate. If we expect his account of predication to have an application to the world, we must suppose that there is something which can establish a limit to any actual series of predications.

In section 8 of the *Discourse on Metaphysics* Leibniz considers an account of "the nature of individual substance" which identifies it, in a manner similar to Aristotle's *Categories*, as an ultimate subject of predication:

"... when a number of predicates are attributed to a single subject while this subject is not attributed to any other, it is called an individual substance" (GP IV 432).

Alexander or Bucephalus involves everything which can be predicated of that to which the name "Alexander" is ascribed. For whoever knows Alexander perfectly knows his entire nature and history"²¹.

It is now also possible to clarify the difference between a "full" term and one that is "complete". A full term contains every term whose predication it entails. However, it places no bounds on there being terms which entail the predication it expresses. By contrast, there can be no term which entails the predication expressed by a complete term, since by definition it contains every term predicable of the same subject. This condition is not satisfied by general terms like *man* or *king*. Although such terms contain all the terms predicable of them, they do not contain all the terms predicable of the *same subject*.

Leibniz associates this difference with the further failure of general term to determine the identity of an individual substance or to provide a criterion for distinguishing it from every other actual or possible individual. A term like *king*, for example, may designate any one of a multitude of individuals, which are, under this description, indistinguishable one from the other. As he remarks in section 8 of the *Discourse*:

"... if we abstract it from its subject, the quality of being a king which belongs to Alexander the Great is not sufficiently determined for an individual; it does not include the other qualities of the same subject or everything which the concept of this prince includes" (GP IV, 432).

Leibniz's view, going back to his 1663 dissertation, *Disputatio metaphysica de principio individui*, is that a principle of individuation is only provided through a consideration of the entire being [e n t i t a t a] of a thing; or equivalently that all its predicates are essential to its being what it is as distinct from any other thing²². Thus only a complete concept, defined as containing everything that is predicable of the same subject, is capable of determining its nature as a unique individual²³.

5. Before concluding it would be instructive to consider some of the attempts made by Leibniz at defining the idea of a complete concept in the years immediately preceding the *Discourse on Metaphysics*. In an essay that may date from as early as 1681, he writes:

21 "Complectum est, cuius conceptus omnia involvit praedicata ejusdem subjecti, ideoque est ipse subjecti ultimi sive suppositi conceptus. Ita conceptus Alexandri aut Bucephali omnia involvit, quae de eo praedicari possunt, cui tribuitur Alexandri appellatio; nam qui Alexander perfecte cognoscit, omnem eius naturam et historiam novit" (LH IV, 7, C, 105r).

22 Cf. Mates, *op. cit.*, Chaps. VII–VIII and XIV, pp. 251–3.

23 "Item tot posse esse substantias singulares quot sunt diversae combinationes omnium attributorum compatibilium. Et hinc patet principium individuationis, de quo irritae habentur multorum Scholasticorum concertationes. Titus est robustus, doctus, rationalis, etc. Conceptus autem ille ex quo omnia ista sequuntur quae de eo dici possunt, est conceptus substantiae eius singularis" (VE 2.411). Cf. VE 1.186, 2.268, GP II, 49.

Finally, in another twist, we learn that when serving as a predicate a complete term “designates” a singular substance:

‘If B is a predicate of A, and C or D or E are any other predicates of the same A, then if it can be demonstrated by means of B that any of these is a predicate of A, then B will designate a singular substance...’²⁹

In what is perhaps a slightly later work, *Notationes Generales* (ca. 1683–6), Leibniz explicitly develops the connection between his analysis of the logical character of substance and his concept containment theory of truth. He begins with a series of definitions, including a statement of the condition that a simple proposition is true:

‘If the predicate is contained in the subject, i.e. if when the terms A and B are resolved it appears that the content or concept of the predicate is contained in the concept of the subject. For this reason also Aristotle was accustomed to say that the predicate is in the subject.’³⁰

Later he offers a definition of a complete term, or a term expressing a singular substance, similar to that found in the preceding essay:

‘If the same thing is B and also C and D, etc., because it is A; or if a term A involves all the terms B, C, D, etc. which can be said of the same thing, the term A expresses a singular substance itself, or the concept of a singular substance is a complete term containing everything which can be said of it.’³¹

Having affirmed that a complete term affords us the concept of a singular substance, Leibniz illustrates this with an example resembling one which appears in section 8 of the *Discourse on Metaphysics*:

‘Thus if anyone is strong, and quick-tempered, and learned, and a king, and leader of an army, and victor at the Battle of Arbela, and all the other things which are said of Alexander the Great – God, at any rate, considering the singular essence of Alexander the Great, will see it as a complete concept in which all these things are contained virtually, or from which they all follow. ‘King’ cannot be inferred from ‘strong’, nor ‘victor’ from ‘leader’, but from the concept to Alexander are inferred ‘strong’, ‘king’, ‘leader’ and ‘victor’. And that there is such a concept is obvious from the definition of ‘true proposition’ explained a little earlier. For when we say ‘Alexander is strong’, we mean nothing else than that ‘strong’ is contained within the notion of Alexander, and likewise for the rest of Alexander’s predicates’.³²

29 ‘Praedicatum ipsius A sit B, et sit aliud ejusdem A praedicatum quodcumque C vel D vel E.

Quod si jam istud praedicatum quodcumque ipsius A, de eo demonstrari potest per B, tunc B designabit substantiam singularem...’ (ibid.).

30 ‘Verum est propositio simplex, si praedicatum in subjecto continetur, hoc est si resolutis terminis A et B, (quod fit substituendo alios terminos aequipollentes magis distinctos) apparet valorem sive conceptum praedicati contineri in conceptu subjecti. Unde et Aristoteles dicere solet praedicatum inesse subjecto’ (VE 1.184).

31 ‘Si idem sit B et sit etiam C item D etc. quia est A, seu si terminus A omnes terminos B et C et D, etc. qui de eadem re dici possunt involvit, terminus A exprimit substantiam singularem sive substantiae singularis conceptus est terminus completus, omnia continens quae de illa dici possunt’ (VE 1.186).

32 ‘Ita si quis sit robustus, et calidus, et doctus, et Rex, et Dux exercitus et victor pugnae ad Arbelam, aliaque ejusmodi quae de Alexandro Magno dicuntur, utique Deus Alexandri Magni essentiam singularem intuens, videbit conceptum aliquem completum in quo omnia ista, virtute continentur, sive ex quo omnia ista consequuntur. Ex robusto non potest inferri

of the doctrine of completeness are discernible in his early philosophical writings until the late 1670s the term retains a general significance: an *e n s c o m p l e t u m*, or substance, is that which contains “everything” [o m n i a], or the “entire nature of things” [n a t u r a m r e r u m t o t a m]⁶. In the early 1680s a shift in Leibniz’s usage of the expression is evident. It now appears almost exclusively in the context of defining, in a precise logical way, a specific sort of concept or notion (or the being which possesses such a notion). A well-known instance of this definition appears in section 8 of the *Discourse on Metaphysics*:

“... the nature of an individual substance or complete being [u n e s t r e c o m p l e t] is to have a notion so perfect [s i a c c o m p l i e] that it suffices to include and to render deducible from it all the predicates of the subject to which this notion is attributed” (GP IV 433).

There can be little doubt that Leibniz regarded this as an instructive way of characterizing an individual substance, for statements like it occur again and again in work composed during the decade leading up to the *Discourse on Metaphysics* and the Arnauld correspondence. Among these are many specifically devoted to providing definitions of key philosophical terms⁸. With slight variations, Leibniz’s definition of a concept takes the form:

(3) X is a complete concept (notion, term) if and only if it contains all the predicates of the subject of which it is predicable⁹.

6 “Substantia seu Ens completum mihi est illud solum quod involvit omnia, seu ad cuius perfectam intelligentiam nullius alterius opus est intellectione” (10/1667: A 6.3.399). “Hinc patet omne subiectum ultimatam esse Ens completum, et involvere totam rerum naturam hoc est ita ut ab ipso perfecte intellecto, id est ex intellectis illis quibus a quolibet alio discerni potest, concludi possit quaeenam possibilita existant” (ca. 1679: VE 5.967: Grua 540) “Res complete seu s u b s t a n t i a est cuius completa notione omnia quae in ipsa unde et omnia aliena seu totum universum” (n.d.; VE 1.55).

7 “Terminus concretus completus est, qui jam omnia comprehendit, quae de eodem subjecto praedicari possunt, dicitur et substantia singularis” (VE 1.191). “Terminus substantiam singularem exprimens involvat omnia praedicata sui subjecti; seu est terminus completus” (VE 1.182). “Terminus completus est, ex quo omnia praedicata ejusdem subjecti demonstrari possunt, seu qui totam subjecti naturam exprimit” (LH IV, VII B 4 Bl. 13: SF 478). “Omnis notio ex qua omnium ejusdem subjecti attributorum ratio reddi potest, est notio ipsius substantiae, et Terminus completus substantiam exprimit” (VE 2.329). The preceding are all from pieces which predate the *Discourse on Metaphysics*. A somewhat later (ca. 1695) instance of the definition is quoted by G. UTERMÖHLEN in her paper *Leibniz’ Antwort auf Christian Thomasius’ Frage Quid sit Substantia? (Studia Leibnitiana*, 11, 1979, pp. 88–9): “Completum Ens est, quod habet completum conceptum, ex quo scilicet omnia deduci possunt quae de eodem subjecto dicuntur . . . S u b s t a n t i a est Ens simplicium completum” (LH IV 3, 1, d, Bl. 1). See also C 403, VE 2.417 (quoted n. 3); VE 1.186, 2.411 (quoted below, section 5); LH IV, 7, C, Bl. 105r; VE 2.406, 3.490.

8 For a discussion of these pieces see H. SCHEPERS, *Leibniz’ Arbeiten zu einer Reformation der Kategorien*, in: *Zeitschrift f. philos. Forschung*, 1966, 539–67; and *Begriffsanalyse und Kategorialsynthese. Zur Verflechtung von Logik und Metaphysik bei Leibniz*, in: *Studia Leibnitiana, Suppl.* 3, Wiesbaden 1969, S. 34–49.

9 For the most part, Leibniz seems to regard the expressions “concept”, “notion” and “term” as interchangeable (e.g. GP III 224). Nevertheless there is considerable variation in his usage of the latter. One particularly egregious example of this is C 243 (PL 39), where he first says that “every simple term is a name” and follows this almost immediately with the claim

invariably leads to a philosopher's basic metaphysical assumptions. This is certain the case with Leibniz.

For Leibniz, a logical predication is expressed in a proposition formed from terms and the copula est. In discussing the conditions for the truth of such a proposition, Leibniz frequently refers us to the scholastic dictum praedicatum inest subiecto. It is natural to read this statement as making a claim about the metaphysical circumstances which ground a proposition's truth. Yet this is more than one way of interpreting it. The dictum might, for example, be understood to assert that a true predication is determined by a metaphysical relation "inherence" or "inexistence" which holds between two distinct types of being substance and accident. On this view, to say truly that Socrates is hot or Socrates a man is to say that a separate being — the quality of heat or humanity — inheres in Socrates, "as in a subject". In *De Accidentibus*, a piece which Grua dates ca. 1667 (Grua 546–7), Leibniz makes clear his opposition to any theory of this sort. "It is worth considering," he begins, "whether accidents have something other than their reality and in what this consists. And if in fact we suppose real accidents, either their reality is a part of the reality of some substance or it adds a new reality to a substance." His argument, in brief, is that neither option is coherent, as any change in the reality of a substance, what Leibniz takes to be a necessary consequence of accidents contributing to that reality, makes it that a substance ceases to exist. Although this argument strictly tells only against real accidents Leibniz moves from it to reject the reality of predicative beings in general: although humanity is both a persisting and an essential quality of any human being, he denies that a substance's having it will involve its inherence in that substance. Thus Leibniz adopts a version of nominalism which restricts reality to substantial beings which are not themselves predicted of other beings:

"Up to now I see no way of avoiding these difficulties than by considering abstractly as real things but as composita loquendi . . . and to that extent I am a nominalist at least provisionally. I would say therefore that a substance is changed or that its attributes are different at different times, for this supports no uncertainty: but it is not necessary to consider whether there are various realities in a substance that are the fundamentals of its various predicates, and indeed if the matter is raised adjudication is difficult. It suffices to posit only simple substance as real things and to assert truths about these" (Grua 547)¹¹

Given that the basis for a true predication cannot lie in the inherence of a distinct being in a subject, Leibniz infers that, properly understood, predication consists solely in the stating of facts about things, not the assertion of a special sort of relation between things. Accidents which are conceived as being "in" a subject are reality only states or modifications of substances, and hence ontologically identical with them¹². This, however, does not exhaust Leibniz's treatment of predication

¹¹ For a discussion of Leibniz' nominalism see B. Mates: *Nominalism and Eyander's Swornin: Studia Leibnitiana Suppl.*, 21, Wiesbaden, 1980, 213–35 and *The Philosophy of Leibniz: Metaphysics and Language*, Oxford 1986, Ch. X. The passage follows Mates translation.

¹² "Possimus etiam substantias vocare res, et attributa vel certe attributorum concretorum abstracta, modis" (VE 2.412). Cf. *Nouveaux Essais*, A 6.6.145, 217 (GP V 132, 202 GP II 458; LH IV, 7, C, Bl. 99v.

dition for the truth of which is that the content of whatever we say of a thing contained within a perfect understanding of it.

3. Further light is shed on this matter by considering some of Leibniz's basic ideas about the semantical properties of terms. The view of predication that we have been considering is implicit in the doctrine of terms incorporated in his 1686 *Essai General Inquiries about the Analysis of Concepts and Truths*. There he makes the following claims (cf. C 356, 360; PL 47. 51):

- (1) "All terms (except the privative not-A) are understood of individuals or concrete things i.e. there appear no non-logical abstract terms",
- (2) "All terms are substantive; i.e. adjectival terms are understood to be completed by terms enseres",
- (3) "All terms are either general, in which case they designate any individual of a given nature or they are singular, in which case they designate some definite individual."

Leibniz elaborates these views in numerous logical and linguistic studies composed during the early 1680s. We may see him as establishing a threefold division of terms into abstracta, substantiva/concreta and adjectiva/concreta. Although a place is provided for abstract terms like humanitas and calor, Leibniz frequently claims that they should be excluded¹⁴. Propositions can indeed be formed from abstracta as though they designated beings which subsisted perse. We may say, for example, that humanity is less than divinity. Nevertheless, such propositions remain deceptive, since in the "truth things" a quality always requires some subject (suppositum) in which to subsist (VE 2.238-9)¹⁵. In keeping with this, the class of terms presupposed by the *General Inquiries*, substantiva/concreta, are said to "involve" or "connote" a subject (VE 1.181, 186; LH IV, VII, B 4, Bl. 13f). Such terms may be either general like homo (man) or rex (king), in which case they "involve some vague substance or uncertain subject", or singular like Socrates, in which case they designate a "certain and definite singular substance" (LH IV, 7, B, 4, Bl. 1 SF 479). In either case, Leibniz implies, our understanding of a substantial term requires our grasp of an implicit predication. It "involves a subjectum cui

14 C 243, 354, 435, 512-3; VE 1.182, 1.191, 2.357. See also the *Nouveaux Essais*: "L'usage aussi que ce sont les abstractions, qui font naître le plus de difficultés, quand on veut éprouver, comme savent ceux qui sont informés des subtilités des Scholastiques, de ce qu'il y a de plus épineux tombe tout d'un coup si l'on veut bannir les Estres abstraites se resout à ne parler ordinairement que par concrets et de n'admettre d'autres termes que les demonstrations des sciences, que ceux qui representent des sujets substantiels. Ainsi c'est le mot qu'aere inscipo, si je l'ose dire et renverser les choses que de prendre les qualités ou autres termes abstraits pour ce qu'il y a de plus aisé et les concrets pour que chose de fort difficile" (A 6.6.217; GP V 202).

15 In objecting to abstracta Leibniz also cites their propensity to proliferate ad infinitum, creating the impression of levels upon levels of abstract being. Cf VE 2.35 "Abstracta saepe mentis nostrae figmenta sunt . . . si humanitas est res aliqua, utique intelligi potest essentiam eius ab ipsa re esse distinctam, et habebimus si ita fingere placet quaedam humanitalitatem; et hoc ibi in infinitum. Unde scholasticorum tricae abstracta."

designate things which actually exist, this is not a part of Leibniz's account of their significance. To say that *triangulum*, for example, is a concrete term is simply to say that our understanding of it consists in the idea of some, unspecified triangular thing; it is to make no claim about whether there exist such things.

From the point of view of Leibniz's theory, a more important fact is that, in general, the understanding which is conveyed by a concrete term will be insufficient to identify its subject as an individual substance. This point is obviously a crucial one. In a passage I cited earlier, Leibniz draws a distinction within the class of concrete terms between those like *homo* or *rex*, which involve "a vague substance or uncertain subject" and those like *Socrates*, which designate "a certain and definite singular substance". Although he gives the same account of the semantic character of these two types of term, that they "involve a subject" or are analyzable into a term such as *subjectum* or *res* and an adjectival term connoting a quality predicated of it, Leibniz also argues that in the case of singular term like *Socrates*, as opposed to general terms like *homo* or *rex*, the connotative aspect of the term is sufficient to fix the identity of its subject as an individual substance. I shall return to this point later.

Putting together the various features of Leibniz's account of concrete terms, we can recover two different senses in which he acknowledges something's being a "subject of predication". First, by a "subject" he may mean a *subjectum praedicatio*: a particular type of individual which is designated by a concrete term and whose essence or nature is (partially) grasped through our understanding of that term. Second, the word "subject" may simply refer to the term *subjectum* (equivalently, *ens* or *res*), that is, the bare notion of a subject which is implicated in our understanding of any concrete term. In this case, when the subject is separated from whatever is understood or predicated of it, it signifies no particular type of being; it is merely the notion of "something of which other things are predicated"¹⁸. Having distinguished these two senses of "subject" we have surmounted one problem raised in our initial discussion of the definition of a complete concept: that when Leibniz refers to a "subject of predication" he could only mean the subject term of a proposition or else individual substance

18 Responding to Locke's criticisms of the notion of substance, Leibniz argues in the *Nouveaux Essais* that a concrete or substantial being and its attributes are distinguishable only through an act of mental abstraction: only in this way can we prise apart and give a separate life to, on the one hand, a subject or substratum, and on the other, what is predicated of it: "En distinguant deux choses dans la Substance, les attributs ou prédicats et le sujet commun de ces prédicats, ce n'est pas merveille, qu'on ne peut rien concevoir de particulier dans ce sujet. Il le faut bien, puisqu'on a déjà séparé tous les attributs, où l'on pourroit concevoir quelque détail. Ainsi demander quelque chose de plus dans ce pur *subjectum generale*, que ce qu'il faut pour concevoir que c'est la même chose (p.e. qui entend et qui veut, qui imagine et qui raisonne) c'est demander l'impossible et contrevenir à sa propre supposition, qu'on a faite en faisant abstraction et concevant séparément le sujet et ses qualités ou accidens" (A 6.6.218; GP V 202).

Leibniz allows that this statement is true but claims it does not go far enough, sin it offers only a “nominal” explication of substance. “Nominal” is of course an expression Leibniz uses elsewhere to refer to a definition which fails to supply a precise possibility of something — what is provided by a “real” definition (e.g. VII 293–4; P 11–12). In section 8 he makes no explicit appeal to this theory of definition, nevertheless there exists an obvious relation between it and the issue we have been discussing. The link is Leibniz’s assumption that the nature or essence of any being is defined through God’s perfect understanding of it, i.e. through a relation which includes all that can be said of that being.

Leibniz’s criticism of his initial attempt at a definition of substance in section 8 suggests that what this attempt fails to provide is an understanding of what it is to be a being capable of serving as an ultimate subject of predication¹⁹. The “nominal” definition of substance is insufficient because it invokes no more than the bare notion of a subject of which all other things are predicated. What is needed instead is a definition that will make explicit the nature of a being which is an “ultimate subject” in Leibniz’s fuller sense of the term — i.e. an ultimate subject of complete predication. It is precisely this which is supplied by the definition of complete concept:

“... the nature of an individual substance or complete being [unestre complete] have a notion so perfect [siacople] that it suffices to include and to render deducible from it all the predicates of the subject to which this notion is attributed”²⁰.

The meaning of this definition should now be clear. A concrete term, or the concept expressed by that term, is necessarily understood of a subject (in Leibniz’s weaker sense). It involves the predication of a subject and it stands in logical relations to other terms which are understood of the same subject. For the most part, terms which are understood of a subject will not provide a ground for every other term which can be understood of the same subject (i.e. every partially coexistent term). They cannot therefore express the notion of an ultimate subject of predication, for that must provide a reason for everything which is understood of whatever it is understood of, and thus serve as the limit to a series of predications of that sort considered above. By definition, this is what is expressed by the complete concept of an individual substance:

“A complete [term] is that of which the concept involves all the predicates of the subject, and so it is the concept of an ultimate subject or suppositum. Thus the concept

19 This is consistent with his subsequent effort in section 8 to deliver an interpretation of the relation of essence and of the idea of true predication, in terms of the principle of concept containment. For, as we saw, this interpretation likewise relies on a relation between the essences of things as they are known to God.

20 GP IV, 433. Cf. Leibniz in his notes on Jungius: “Si varia accidentia variae potentiae coguntur hinc commune aliquod subjectum colligitur, quo ista colligantur et continentur, quod substantia appellatur. . . (Respondeo alibi ostendi in quo consistat vera natura substantiae, nempe in notione completa. . .)” VE 4.845.

"In order to investigate the nature of substance or a subsisting thing [s u b s i s t e n t i s], it must be considered whether many different attributes are said of the same subject, none of which is itself a subsisting thing."²⁴

Leibniz goes on to propose that "the concept of a subsisting thing . . . is that which includes all those attributes which can be said of the same thing of which it itself can be said". And so,

"a subsisting thing is nothing except a complete term, or what all things which can be attributed to it or to the same thing as it are in. Thus if the same thing is B and C and D and E, etc., because it is A, A will be a s u b s t a n c e or complete term. From this it is clear that nothing is in a complete term p e r a c c i d e n s, or all of its predicates can be demonstrated from its nature"²⁵.

While this passage manages to communicate the sense of completeness which Leibniz associates with something's being an ultimate subject of predication, it confronts any distinction between a substance or subsisting thing and a complete term. Leibniz makes no attempt to keep separate, on the one hand, a term which is predicable of a subject and contains everything else predicable of the same subject, and on the other, the individual such a term designates.

From other early writings we get a sense of the uncertainty that attended Leibniz's initial attempts at defining a complete concept or term in a way which would make it a characteristic feature of any individual substance. In one piece he notes, and then effaces, a definition which again identifies substance with a complete term:

"A S u b s t a n c e is a Complete Term, expressing the total nature of a subject . . ."²⁶
He then discovers a version of his standard definition of a T e r m i n u s c o m p l e t u s:

"A C o m p l e t e T e r m is that from which all the predicates of the same subject can be demonstrated, or what expresses the total nature of a subject . . ."²⁷
Whatever such a term is truly predicated of, he goes on to say, is a determinate subject, individual, or singular substance:

"If A is B, and B is a complete term, then A will be a s i n g u l a r s u b s t a n c e, or a determinate subject, commonly called an individual"²⁸.

24 "Ut substantiae seu subsistentis naturam investigemus, considerandum est, si plura attributa diversa de eodem subjecto dicantur, nullum eorum esse subsistens quiddam, ut calidum et lucidum, et hic, hodie situm, de hoc eodem igne dicuntur" (VE 2.411; cf. 329).

25 "Conceptus autem subsistentis . . . est qui omnia illa attributa includit, quae de eodem dici possunt, de quo ipsum dici potest. Ita ut subsistens nihil aliud sit quam Terminus completus, seu cui omnia illa insunt, quae ipsi vel eidem cui ipsum attribui possunt. Itaque si idem est B et C et D et E, etc. quia ipsum est A, erit A s u b s t a n t i a seu terminus completus. Hinc Termino completo nihil inest per accidens, seu omnia eius praedicata possunt ex eius natura demonstrari" (ibid.).

26 "S u b s t a n t i a est Terminus [Ens] completus, totam subjecti naturam exprimens . . ." (LH IV, 7, B, 4, Bl. 13).

27 "T e r m i n u s c o m p l e t u s est, ex quo omnia praedicata ejusdem subjecti demonstrari possunt, seu qui totam subjecti naturam exprimit . . ." (ibid.; S. 479).

28 "Si A sit B, et B sit terminus completus, erit A s u b s t a n t i a s i n g u l a r i s, seu subjectum certum quam vulgo individuum vocant" (ibid.).

In the *Notationes Generales*, a piece which may predate the *Discourse on Metaphysics* by several years, we find the outlines of Leibniz's analysis of the logical properties of substance in an essentially finished form. The connection between his "concept containment" theory of truth and the complete concept of an individual substance is explicitly developed. As we saw earlier, it is a necessary consequence of the former that for any substance there is a concept (known to at least God which contains everything predicable of it. Something more, however, is required to support the claim that possession of a complete concept is a sufficient condition for something's being an individual substance. Leibniz's implicit understanding of predication is as a saying of something of some thing — a nominal *res* or *subiectum*. As he sees it, the problem of defining what it is to be a substance or *per se* real being is reducible to the problem of defining the condition under which what is said of a subject is sufficient to determine it as an ultimate subject in our fuller sense of term, i.e. an ultimate *subiectum cum praedicato*. This is to specify it as having a complete concept: one which includes all that is consistently sayable of the same subject and is therefore able to serve as a deductive ground for any predication of it. This condition is also associated in Leibniz's mind with what must be known of a subject in order to guarantee a principle of individuation, or to distinguish it from every other individual substance.

Given that Leibniz seems simply to define, as though by fiat, a concept which satisfies these requirements, one might wonder whether his achievement doesn't, in Russell's words, represent all the advantages of theft over honest toil. That would be to misunderstand the character of his project. In seeking to define the complete concept of individual substance Leibniz means to provide us with metaphysical knowledge. Here the only criterion for success is the distinctness of our understanding, the degree to which our notions mirror those of God. With his definition of a complete concept this is surely what Leibniz saw himself as having achieved³³.

Rex, neque ex duce victor, sed ex Alexandri conceptu inferuntur et robustus: et Rex et dux et victor. Et talem quidem conceptum dari manifestum est ex definitione verae propositionis paulo ante explicata. Nam cum dicimus Alexanderes robustus, nihil aliud volumus quam robustum in Alexandri notione contineri idemque est de caeteris Alexandri praedicatis" (ibid.).

³³ For helpful discussion of the issues discussed in this paper I would like to thank Profs. B. Mates, C. Mercer and H. Schepers. I would also like to offer my thanks to Prof. A. Heinekamp, Prof. Schepers and their colleagues at the Leibniz-Archiv, Hannover and the Leibniz Forschungsstelle, Münster for the warm hospitality they showed me during a visit to Germany in 1985. This was made possible by financial support from the Social Sciences and Humanities Research Council of Canada.