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'ALIA EST RERUM ALIA TERMINORUM DIVISIO':  
ABOUT AN UNPUBLISHED MANUSCRIPT OF LEIBNIZ

1. From the beginning of his long philosophical career to the end of his life, Leibniz seems to have never dismissed the intent – which, after various pauses, he renewed with the regularity of a recurring dream – to compile long lists of definitions. These lists had, in principle, two different aims: to establish a firm ground for the building of a new encyclopedia and to reform the traditional doctrine of categories. Often in the same “table of definitions” these two aims intertwine. Sometimes the lists are quite short and heterogeneous in content; sometimes they are long and homogeneous, but with many repetitions; and, in general, they all exhibit an unaccomplished, tentative quality which, however, do not diminish their philosophical interest. These lists have been published in the *Vorauedition* or elsewhere; only a handful of them is as yet unpublished.

In this paper I intend to draw attention to an unpublished list of definitions which Leibniz wrote after 1700 and which almost exclusively contains logical items and reflections on logical ontology. I will first give the original Latin text (without the critical apparatus); then I will propose an English translation of the most relevant passages; and finally I will present a short commentary to the translated passages.

2. *The Latin text* (LH 7 C Bl. 76 v. A translation will be given of the passages comprised between brackets “<” and “>”).

*Alia est rerum alia terminorum divisio.*

*Terminus est cogitabile quod potest esse subiectum propositionis verae estque vel implicans contradictionem, nempe chimaera, vel possibile seu non implicans, nempe reale.*

*Reale est terminus possibilis seu distincte cogitabilis, ut homo, doctus, causa, actio.*

<Rursus terminus sumitur vel materialiter, et ita est ens, cuius diversi termini sunt eadem res ut rex et propheta in Davide, nempe idem est rex

qui est propheta. Vel terminus sumitur formaliter, ut rex qua rex, nempe etsi non sit alius rex quam propheta, tamen aliud est regem esse aliud prophetam esse. David qua rex differt a Davide qua propheta. Diversi ergo sunt termini sed ens idem. Interim in terminis quoque formaliter spectatis distinctio est. Interdum enim in idem resolvuntur veluti figura triangula et figura trilatera, item rectangulum aequilaterum et quadrilaterum aequiforme, ubi notio est eadem; interdum vero diversa notio est, ut aureum et rotundum, etsi monetae conveniant quam ducatum vocamus. Termini ergo differunt re, cum diversa entia spectant, forma cum ad diversas notiones spectant, consideratione, cum diversa dicunt seu cogitanda exhibent. Idem est quidam rex et quidam propheta, omne triangulum et omne trilaterum. Stemus ergo in rebus ipsasque notiones secundas ut res consideremus>.

*Terminus est vel Nihil ut Blitiri, vel aliquid.*

*Aliquid est subiectum propositionis verae, estque vel impossibile, quod dicitur Chimaera, vel ens.*

*Ens est aliquid possibile, ut Deus, homo, scientia, scriptio, motus.*

Ens vel est *subsistens* quod tantum subiectum esse potest, vel *attributum*, quod est constituens praedicati alterius entis ut scientia constituit ut aliquis sit sciens. Actio ut agens. Sed nonne datur tertium? <Sic tempus, locus, neque est subsistens nec attributum. Idem est de numero, ordine. Sic decem non est attributum ullius rei. Neque enim de aggregato neque de singulis dici potest numerus denarius. Idem est de relatione quae communis, v. g. similitudo duorum. Datur itaque attributum quod est simul in pluribus subiectis. Talia ergo sunt ordo, adeoque tempus et locus>.

A possible translation of the first passage between brackets:

Again a term is taken either materially, and thus it is a being the different terms of which are the same thing, as king and prophet in David – i. e. the same person who is a king is a prophet as well; or a term is taken formally as a king insofar as he is a king – i. e. even though the king is not a different person from the prophet, yet to be a king is different from being a prophet. David, insofar as he is a king, differs from David insofar as he is a prophet. Therefore the terms are different, but the being is the same. In some circumstances, however, even the terms considered formally admit of a distinction. In fact, by means of analysis, they give rise, sometimes, to the same – as in the case of a triangular and a trilateral shape or in the case of an equilateral rectangle and an equiform quadrilateral, where the notion is the same; sometimes the notion is different, as in the case of “golden” and “round”, even if both apply to the coin which we call “ducat”. Therefore terms differ in the following way: about the thing – insofar as they concern different beings; about the form – insofar as they concern different notions; about the way of considering – insofar as they mention or show different thoughts. A certain king and a certain prophet are the same, and so are ev-

ery triangle and every trilateral. Thus, we have to stay with things and to consider as things all second notions as well.

### Commentary

3. As is well known, Leibniz's use of "term" is quite puzzling. In our text (in the part I have not translated), he defines a *term* as «something which can be thought and which can be the subject in a true proposition». This seems to be quite in agreement with the definition of a term as the meaning of a word, which we find in a letter to Des Bosses of 1712.<sup>1</sup> But in the text under consideration, Leibniz plainly writes that *Blitiri*, which was traditionally mentioned as a typical linguistic expression with no meaning, *is* a term. Without excusing Leibniz's inaccuracies in the use of the term "term", I think that we can easily explain these inaccuracies if we take into account his peculiar attitude towards nominalism. In the period that dates from the composition of the *Dialogue*<sup>2</sup> (1677) to that of *New Essays*<sup>3</sup> (1704-5), Leibniz firmly claims that men cannot think without signs – whether they be written or spoken words, letters or numbers, or simply mental images or perceptions of some sort. At the same time, Leibniz recognizes that words and other signs are meaningful only if they express some idea or ideas. The point is that men cannot have – with the exception of a handful of cases – direct access to ideas (in particular if the ideas are sufficiently complex): the psychological act of grasping an idea – an act which gives rise to what Leibniz calls a "concept" – is always associated in our mind with the use of words or other signs.<sup>4</sup> Thus language is something which interposes itself between the realm of ideas and us; and our thoughts are, for the most part, "blind thoughts" (*cogitationes caecae*) made of words (or of other signs).<sup>5</sup> In this sense, words *are* concepts or, better said, substitutes for concepts. It is not inappropriate to think that this point of view induced Leibniz to use the expression "term" in a quite inaccurate way, which blurs the differences between conceptual content and its linguistic expression. At any rate it seems not too far from the spirit – if not from the literal meaning – of Leibniz's writings to consider a term as a meaningful linguistic expression. Therefore we can re-define a term in a Leibnizian sense as a linguistic expression associated with a meaning, which can be the

<sup>1</sup> Cf. GP II, p. 470.

<sup>2</sup> Cf. GP VII, pp. 190-191.

<sup>3</sup> Cf. A VI, vi, p. 77.

<sup>4</sup> *Ibid.*

<sup>5</sup> Cf. GP IV, p. 423.

subject (or predicate) in a sentence. That an expression is meaningful does not necessarily imply, however, that it is associated with a concept or an idea. If I read or hear the compound name “round-square”, I am certainly able to understand the meaning of the two composing words “round” and “square” and I am also able to understand that the compound refers to something which is, simultaneously, round and square. But in this case neither a thing nor an idea corresponds to the compound word, because the expression “round-square” gives rise to a contradiction.<sup>6</sup>

4. Terms – as Leibniz writes in our text – may be considered in three different ways: 1) from the extensional point of view, simply taking into account the object (or objects) which fall under them; 2) in a formal way, looking at their *intension* or conceptual content; 3) according to the peculiar way in which they «mention or show different thoughts». Leibniz characterizes the first way of considering terms by means of the expression “materially” (*materialiter*), which is strongly reminiscent of the “material supposition” and of the analogous “taking a term materially” of the scholastic logicians.<sup>7</sup> However “materially” here alludes not to the linguistic structure or grammatical form of the term itself – according to its prevailing meaning in medieval times – but to the subject matter or “thing” to which the term properly refers. Even though terms – with the exception of proper names – name properties or peculiar aspects of things – as, for instance, “yellow” or “round” or “man” – they refer, insofar as we consider them materially, to the things themselves to which the properties are attributed. As clearly emerges from *General Inquiries*, for Leibniz there is no difference between adjectives and substantives: both have the same logical structure, the same “predicative character”, and hence both presuppose a thing (or several things) of which they are the predicates.<sup>8</sup> The logical structure of “yellow” or of “man”, for example, is interpreted by Leibniz as implying something – a concrete thing – which is respectively yellow or a man. Thus, different terms may refer to the same individual. Leibniz’s example is that of “king” and “prophet”, which, in the case of the Biblical David, have identical denotation.

<sup>6</sup> Cf. GP IV, p. 424 and p. 450.

<sup>7</sup> Cf. Ludovicus Carbo, *Introductionis in Logicam, sive Totius Logicae Compendii Absolutissimi*, Libr. VI, Venetiis, apud Io. Baptistam et Io. Bernardum Sessam, 1597, p. 35: «Est ergo suppositio materialis illa qua terminus significat se ipsum, seu vocem; ut “homo est vox”, homo dicitur supponere materialiter, quia seipsum, seu vocem ipsam significat: quae suppositio reperitur in vocibus etiam non significativis».

<sup>8</sup> Cf. G. W. Leibniz, *Allgemeine Untersuchungen über die Analyse der Begriffe und Wahrheiten*, Lateinisch-Deutsch, Herausgegeben von F. Schupp, Felix Meiner, Hamburg, 1982, p. 2 (C, p. 356).

Terms, however, even though referring to the same object, may differ *formally* – i. e. regarding form, insofar as they mention different properties or different aspects of the given object. Even though David, the individual, is both a king and a prophet, being a king is a different property from that of being a prophet. Here Leibniz uses “formally” (*formaliter*) in sharp contrast to “materially” (*materialiter*) with the aim of distinguishing the form – or intension or conceptual content – of a term, from its matter or extension. In a short commentary to a book by the Jesuit Aloys Kümmer (edited in 1706), Leibniz sketches an analogous distinction between things and concepts:

Thus things which are really distinct usually are distinguished by means of the senses, whereas things which differ in concept – i. e. those which differ in their *formalities*, even though they are not really different – are distinguished by the mind. On a plane, for example, the triangle and the trilateral are not two different things, but differ in concept only; therefore they are the same thing really, not formally.<sup>9</sup>

Thus, terms are said to differ *formally*, because they differ in their *formalities*. The word “formality” (*formalitas*) is typical of the Scotist tradition, but it cannot be assumed as evidence of any scotistic influence on Leibniz’s philosophy. As is well known, in Leibniz’s time the current scholastic doctrines were characterized by an eclectic attitude which blurred the borders between the different philosophical positions. Therefore, even if an expression is typical of a certain philosophical milieu, from its use one cannot automatically infer that the user adhered to the theses commonly held by people belonging to that milieu.

In a revealing passage of the *New Essays*, which is also very important for setting the terminological distinction between *extension* and *intension* of a term, “formality” is explicitly held by Leibniz as a synonym of the word “idea”:

... when I say *Every man is an animal* I mean that all men are included amongst all the animals; but at the same time I mean that the idea of animal is included in the idea of man. “Animal” comprises more individuals than “man” does, but “man” comprises more ideas or more *formalities*: one has more instances, the other more degrees of reality: one has the greater extension the other the greater intension.<sup>10</sup>

<sup>9</sup> VE 5, p. 1086. Cf. also here (same page): «Quicquid Subiecto inhaeret, formalitas dici potest, et denominatio».

<sup>10</sup> Cf. A VI, vi, p. 486 (english transl. by P. Remnant and J. Bennett, Cambridge, Cambridge University Press, 1981).

Hence we may paraphrase what Leibniz writes on formalities saying that terms which differ formally are different in virtue of their conceptual content and that not all conceptual distinctions give rise to real distinctions (a conclusion which maintains a Scotist flavour as well).

5. Till now I have attempted to illustrate what Leibniz properly means by the first two ways of considering a term, out of the three mentioned above. The task has been not particularly difficult, because there are many other texts in which Leibniz proposes or discusses the distinction between these two different ways. Problems arise, however, with the “third way”, which seems to have been explicitly recognized only in our text. As Leibniz observes, terms considered formally may express the same conceptual content in a different guise. And what the “third way” of considering a term takes into account is precisely the guise or manner in which a term “arranges” or “presents” a given conceptual content. Clearly, this “arrangement” or “presentation” must depend partly *on language* – i. e. on the different possibilities we have of expressing the different aspects of an idea. At the same time it seems to depend also on the fact that a term expresses a complex idea or formality. If two terms express the same simple idea – i. e. an idea which cannot be further analyzable – then they *name* the same thought in different ways and do not «mention or show different thoughts» (as Leibniz writes).

Leibniz tries to clarify this point with his standard example of the terms “triangle” and “trilateral”. “Triangle” and “trilateral” differ from each other because they represent different ways of considering the same idea (i. e. that of a geometrical figure with three sides and three angles). “Triangle” and “trilateral” are not different *formalities*, but simply different ways of thinking of the same formality. That the formality is the same – Leibniz claims – can easily be shown by means of conceptual analysis: if we proceed to analyse the concept corresponding to “triangle” we individuate a set of basic notions or ideas which characterize the concept corresponding to “trilateral” as well.

In our text the *formalities* are objective, independent of the different ways in which we can consider them, whereas the “way of considering” gives rise to *different expressions* of the same formality. Thus, the third way of considering a term seems to be determined by the way (or ways) in which the *formalities* are considered by the mind. As I observed above, this is apparently the only text in which Leibniz makes this claim, and what is puzzling about it is that it seems to be in neat contrast with Leibniz’s main doctrine on formalities. If we look again at the passage previously quoted from Leibniz’s commentary on Kümmer’s book, we see that the two terms

“triangle” and “trilateral” are there assumed plainly to express *two different formalities*, not two different ways of considering the same formality. In Leibniz’s words, “triangle” and “trilateral” «are the same thing really, not formally».<sup>11</sup> One can hope for more light looking at another passage from *New Essays*, in which the “triangle-trilateral” issue is explicitly considered:

... someone who said *The triangle and the trilateral are not the same* would be wrong, since if we consider it carefully we find that three sides and three angles always go together ... However, one can still say in the abstract that *triangularity is not trilaterality*, or that the formal causes of the triangle and of the trilateral are not the same, as the philosophers put it. They are different aspects of one and the same thing.<sup>12</sup>

“Triangularity” and “trilaterality” are said to be “the formal causes” (but a more literal translation would be: “the formal reasons”) respectively, of the triangle and of the trilateral; and they are “different aspects of one and the same thing”. In this case too, Leibniz seems to agree that “triangle” and “trilateral” correspond to two different *formalities*. What is the same is not the idea, but the “thing” – presumably all the concrete instances of triangles, which are, simultaneously, triangular and trilateral.

As Benson Mates observes, the “triangle-trilateral” issue is also of some importance for understanding Leibniz’s attitude towards the substitutivity principle *salva veritate* (and, hence, Leibniz’s attitude towards identity).<sup>13</sup> The expressions “triangle” and “trilateral” are Leibniz’s favourite examples for showing that, in some peculiar contexts, the substitutivity principle fails. And, if we look at the way in which Leibniz characterizes these contexts, we can gain precious hints concerning *formalities*. Consider, for example, the following passage from a text written about 1686:

A = B means that A and B are the *same* – i. e. that one can be substituted for the other anywhere. (Unless it is precluded, as happens in those contexts in which one states that a given term is considered in a peculiar respect. For instance: even though the triangle and the trilateral are identical, if one states *The triangle insofar as it is a triangle has 180 degrees*, one cannot substitute *trilateral* for *triangle*. Here there is something material which precludes the substitution).<sup>14</sup>

<sup>11</sup> VE 5, p. 1086.

<sup>12</sup> A VI, vi, p. 363 (english transl. by P. Remnant and J. Bennett).

<sup>13</sup> Cf. B. Mates, *The Philosophy of Leibniz. Metaphysics and Language*, Oxford-New York, Oxford University Press, 1986, pp. 123 ff.

<sup>14</sup> VE 8, p. 1935 (C, p. 261).

What is interesting here is, first of all, Leibniz's use of the expression "material", which has, in this circumstance, a meaning very near to that of the medieval tradition, as opposed to the meaning considered above. Second, we may observe that preventing the substitutivity in the given context is the fact that a term *is considered* in a peculiar respect. Once more it is the *way of considering* which puts in evidence the *formal* difference between two terms, which are (the formal difference notwithstanding) identical. In *General Inquiries*, propositions which do not allow the substitutivity of equivalents are called "formal" and "reflexive": they «assume one of the coincidentials in such a way that it is distinguished from the others» and they «do not so much speak about a thing, as about *our way of conceiving it*»<sup>15</sup> (emphasis mine). Similarly, in a text on geometry written about the same time as *General Inquiries*, Leibniz writes a short remark with the aim of emphasizing that the substitutivity principle for terms holds in all the propositions which are "direct" (*directae*) – i. e. in all those propositions «which do not take into account the way of considering (*nec in ipsum considerandi modum reflectuntur*)».<sup>16</sup> Thus, Leibniz seems to be claiming that the concept corresponding to "triangle" is different from that corresponding to "trilateral" (their *formalities* are different); and, consequently, he seems to assume: 1) that it is the *way of considering* the denotation of a term that gives rise to a *formality*; 2) that his *salva veritate* principle provides a criterion for the identity of *things* not of *concepts*.

6. Therefore, the problem arises of how to evaluate the position assumed by Leibniz in our text. If the "third way" of considering a term is explicitly mentioned only here, then one may argue that it is something which does not correspond to Leibniz's prevailing view. And hence it can be assumed to be a position held on this occasion and suddenly dismissed. But it seems to me that this is not so. I have the impression that what we see here is Leibniz's ambiguous attitude towards nominalism. The ambiguity consists mainly of Leibniz's acceptance of the existence of ideas and essences of things, on the one hand, and of his simultaneous adhesion, on the other, to a kind of cautious nominalism which undermines the importance of abstract terms and ideas, on the other.<sup>17</sup>

At the beginning of *General Inquiries*, for example, Leibniz claims that the fact that "triangle" and "trilateral" coincide can easily be shown by

<sup>15</sup> G. W. Leibniz, *Allgemeine Untersuchungen...*, p. 34 (C, pp. 366-367).

<sup>16</sup> Cf. M. Mugnai, *Leibniz's Theory of Relations*, Stuttgart, F. Steiner Verlag, 1992, p. 147.

<sup>17</sup> Cf. M. Mugnai, *Leibniz's Theory...*, pp. 18 ff.

means of analysis, and states in a odd way the following general principle about logical coincidence: if terms «are analysed until it appears *a priori* that they are possible, and if the same terms appear formally, then different terms are the same». <sup>18</sup> Given two terms *A* and *B*, they coincide «if the one can be substituted in place of the other without loss of truth, or if, on analysing each of the two by substitution of their values (i. e. of their definitions) in place of the terms, the same terms appear on both sides». <sup>19</sup> As Leibniz specifies, “the same terms” means “the same *formally*” - i. e. at the end of the analysis it is necessary that on both sides of the copula the same *formalities* or ideas appear as component parts of *A* and *B*: «the same I mean, formally – for example, if *L*, *M* and *N* appear on both sides». <sup>20</sup> Here Leibniz seems to hold a point of view quite similar to that of our list of definitions: terms like “triangle” and “trilateral” have the same ideal or conceptual content. Presumably, then, they are not different *formalities*, but simply different ways of expressing the same *formalities* or the same finite set of ideas.

That “triangle” and “trilateral” are different expressions of the same idea can be inferred as well from the following short passage from *New Essays*:

... I have remarked earlier that there are redundant ways of expressing *ideas*, which add nothing to *things*. It is as though someone were to say “By *Triquetrum* I mean a trilateral triangle” and to infer from that that some trilaterals are not triangular. <sup>21</sup>

To Des Bosses (about 1712), however, Leibniz clearly writes that «Triangle and Trilateral are the same being, but different terms: they differ formally, not materially». <sup>22</sup>

Thus, in some texts Leibniz writes that terms like “triangle” and “trilateral” differ formally, whereas in other texts, written at about the same period, he plainly states that “triangle” and “trilateral” are only different expressions of the same formality or of an identical set of ideas. Analogously, whereas in most of his writings Leibniz holds that the *salva veritate* principle provides a criterion for the identity of things, there are texts (*General*

<sup>18</sup> G. W. Leibniz, *Allgemeine Untersuchungen ...*, p. 20 (C, p. 362); english transl. in: Leibniz, *Logical Papers*, ed. by G. H. R. Parkinson, Oxford, Clarendon Press, 1966, p. 53.

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

<sup>21</sup> A Vi, vi, p. 423 (english transl. by P. Remnant and J. Bennett).

<sup>22</sup> GP II, pp. 470-71.

*Inquiries*, for instance, as we have seen) in which he claims that terms like “triangle” and “trilateral” are interchangeable *salva veritate*, because they express the same idea (or ideas). All this can be easily explained if we take into account that for Leibniz the existing world splits up, as it were, into two different realms: that of (existing) things and that of the ideas, or essences, corresponding to things. Both realms are “real” and each existing thing has an ideal counterpart – an essence which, like the thing itself, is one in number. The same essence, however, may be expressed by several definitions:

To reinforce the distinction between essence and definition, bear in mind that although a thing has only one essence, this can be expressed by several definitions, just as the same town can be represented by different drawings in perspective depending on the direction from which it is viewed.<sup>23</sup>

In the same vein, as we have seen, Leibniz observes that «there are redundant ways of expressing *ideas*, which add nothing to things».<sup>24</sup> Thus, if, on the one hand, different definitions of the same essence are not different essences, but simply different ways of presenting one and the same essence, on the other, a conceptual distinction does not correspond to any distinction among things.

In Leibniz’s logical ontology, terms considered as linguistic items express ideas or concepts, and denote things. Concepts and ideas are objective, non-linguistic in nature and independent of their expressions: they do not exist in space and time, but they have a kind of existence in what Leibniz names “the realm of ideas” (*regio idearum*).<sup>25</sup> Hence, insofar as Leibniz tries to be coherent with his “provisional nominalism”,<sup>26</sup> it is quite natural that he should look at terms as directly denoting things; whereas if he emphasizes the “realistic” side of his ontology, he considers terms as representing first concepts or ideas. That the nominalistic mood is prevalent, however, is easily shown by our text, where Leibniz, after having distinguished the *formalities* from the ways of considering them, states that, in the last analysis, what really matters is “staying with things”.

<sup>23</sup> A VI vi, p. 294 (english transl. by P. Remnant and J. Bennett).

<sup>24</sup> Cf. A VI, vi, p. 423.

<sup>25</sup> On Leibniz’s use of the expression *regio idearum* cf. VE 7, p. 1461: «Ego soleo dicere esse aliquid in regione idearum itaque spatium numericum videtur esse tantum consideratione quadam existentiam in regione idearum, quasi in spatio aut tempore»).

<sup>26</sup> On Leibniz’s nominalism *per provisionem* cf. Grua, p. 547 and M. Mugnai, *Astrazione e realtà. Saggio su Leibniz*, Milano, Feltrinelli, 1976, pp. 133 ff.; B. Mates, *The Philosophy of Leibniz*, p. 170 ff.

7. Another element of interest in our text can be found in the second passage between brackets, of which I offer a translation:

Thus time and place are neither subjects nor attributes. And the same holds for numbers and orders. Thus "ten" is not an attribute of any thing. In fact the number ten cannot be said either of the aggregate or of the single numbered things. The same holds for relations which are common to the related things – for instance, the similarity of two things. Hence, there are attributes which are at the same time in several subjects: of this kind are, therefore, orders and even time and place.

The most relevant points of the entire passage are two: 1) Leibniz, after having asked himself if there is a third kind of "things" besides subjects and attributes, answers the question positively; 2) numbers and relations are said to share some common feature, which determines their belonging to this third kind of entities.

That numbers and relations have something in common is a claim widely held by scholastic authors. Consider, for example, what Ockham says in the following passage: «Similarity stays for (*supponit*) two similar things considered simultaneously, as in the case of the name of a number [...] Thus Socrates is not two, even though Socrates and Plato are two».<sup>27</sup> Relying on this scholastic tradition, Leibniz thinks that numbers are neither predicates of single things nor predicates of the aggregate (or set) of numbered things: they are attributes of a special kind, which, like relations «are simultaneously in several subjects». What is striking here is that, at first glance, Leibniz seems to recognize that relations (and numbers) belong to an autonomous "third kind" of beings besides subjects (substances) and attributes, contrary to his "official" doctrine that relations *are not beings (entia)*.<sup>28</sup> On a more careful reading, however, we may attempt to maintain some coherence on Leibniz's part on this point. In fact, Leibniz does not explicitly state that numbers and relations are *beings (entia)* – a conclusion which plainly contrasts with his main ontological views. He writes that all beings are substances or attributes; he asks himself if there is something "third" besides substances and attributes and answers that numbers and relations are this third kind of "thing". Clearly, if the realm of all beings divides itself into substances and attributes and if relations and numbers are something "third", in addition to substances and attributes, then relations and numbers cannot be beings (*entia*) in the same sense in which sub-

<sup>27</sup> Ockham, *Quodlibeta septem*, ed. by J. C. Wey in *Opera Philosophica et Theologica*, New York, The Franciscan Institute, St. Bonaventure, vol. IX, 1980, p. 616.

<sup>28</sup> Cf. M. Mugnai, *Leibniz's Theory of Relations ...*, pp. 18 ff.

stances and attributes are. And if they are attributes, they must be attributes of a special kind.

In this case we are faced with a typical Leibnizian attitude about relations: on the one hand, Leibniz emphasizes that relations *inhere simultaneously in several subjects*; on the other, he claims that *because* of that very fact, they cannot be real attributes of things. As is well known, Leibniz agrees with the scholastic thesis that the same accident cannot inhere in things numerically distinct. Therefore, relations are not real accidents or real properties, but “mere ideal things”, as we read in the fifth letter to Clarke.<sup>29</sup> Otherwise stated: relations do not inhere properly in things – their kind of inherence is merely mental, a product of our thinking-together several things at once. Thus, if Leibniz plainly recognizes the true logical nature of relations – insofar as he recognizes their “multiple inherence” – this happens at the expense, as it were, of their ontological reality. Relations have a “diminished being” and are not real, as substances and accidents are.<sup>30</sup>

A major element of interest in our text lies in the fact that here Leibniz mentions, as a characteristic property of relations, “multiple inherence” and states that *numbers* share with relations this same property. Clearly, insofar as numbers inhere simultaneously in several subjects, they have a mere mental nature as well. And, properly speaking, their “inherence” is not real, but is due to our capacity to think-together a plurality of things in the same act of thought. Chauvin’s *Lexicon philosophicum* helps us better understand of what Leibniz says about numbers.<sup>31</sup> Under the entry *Numerus*, Chauvin writes that a number «says a plurality of unities» and that it implies a «simultaneity of the same unities» – i. e. that a number expresses a *relation* between our minds and a plurality of things. Therefore a number is made up of matter and form: matter is constituted of «things which can be numbered, as, for instance, coins»; form is «the idea by means of which a plurality of things is reduced to unity» by means of an act of the understanding. Hence, whereas form is dependent on mind, matter is not. In this case too, the analogy with relations is very strong: whereas for a (real) relation it is necessary that some individuals exist and that the mind grasp them in an act of thought, for the existence of numbers it is necessary that a plurality of things (objectively) exist and that the mind have the possibility of grasping them in a single act of thought. As Chauvin observes – and surely Leib-

<sup>29</sup> Cf. GP VII, p. 401.

<sup>30</sup> Cf. M. Mugnai, *Leibniz's Theory of Relations ...*, pp. 18 ff.

<sup>31</sup> Cf. Stephanus Chauvin, *Lexicon Philosophicum*, Leeuwarden, 1713 (second edition) - Reprinted: Duesseldorf, Stern Verlag, Janssen & Co, 1967, p. 444.

niz would agree – the *form* of a number is not something which adds itself really to the numbered things. The idea which constitutes the *form* of a given number is a modification of the mind of the person who is thinking – it is not a modification of the numbered things. This *form* «may be named an “extrinsic denomination”».<sup>12</sup>

This shows once more how deep the influence of scholastic (and late-scholastic) doctrines is on Leibniz's ontology and philosophy of logic.

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<sup>12</sup> *Ibid.*