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## QUA-THEORIES

### 1. Reduplicative expressions: some introductory notes<sup>1</sup>

I shall call a theory of the functor ‘*qua*’ a ‘*qua*-theory’. This functor is used in expressions like ‘A *qua* B is C’. Some synonymous expressions are ‘as’, ‘insofar as’, ‘in virtue of’, ‘with respect to’.

‘*Qua*’ is a technical term. The word is the Latin translation of the Greek ‘*he*’ in the expression ‘*on he on*’ which in the seventeenth century gave origin to the term ‘ontology’.

The definition of ontology that Aristotle advanced at the beginning of the fourth book of *Metaphysics* is universally known: “there is a science which studies being *qua* being [...]”. My problem is this: why does Aristotle does not simply say that ontology is the theory of being? Is there any difference between ‘theory of being’ and ‘theory of being *qua* being’?

In brief, the problem is deciding whether the two expressions ‘the theory of being’ and ‘the theory of being *qua* being’ are equivalent. If they are, the ‘*qua*’ does not seem to play any interesting role. On the contrary, if the two expressions are different — that is to say, if there is a difference between the theory of being (*simpliciter*) and the theory of being *qua* being — we should study the role played by the functor ‘*qua*’.

The main reason for distinguishing between theory of being and theory of being *qua* being rests on Aristotle’s opinion that the analysis of being *simpliciter* cannot be developed in a scientific fashion. Aristotle’s intention to submit being to scientific analysis was therefore the principal reason for his adoption of a reduplicative kind of analysis.<sup>2</sup> His position derived from the thesis that being is not a genus.<sup>3</sup>

<sup>1</sup> I wish to thank both D.P. Henry and K. Schuhmann for their detailed comments and B. Smith for helpful remarks on an earlier version of this paper.

<sup>2</sup> The sole assumption that the expressions ‘being *simpliciter*’ and ‘being *qua* being’ are different in meaning runs explicitly counter to the interpretative tradition of Owens and Merlan,

It is well known that Aristotle believed that scientific analysis can be developed only if there is a common genus for the entities under examination. If being does not have a common genus, the study of being cannot be a science.

From this arises a fundamental difference between study of being and study of being *qua* being. If ontology is a science, we must admit that there is a common genus for the entities studied by ontology: the main role of ‘*qua*’ is precisely that of assigning a surrogate for the lacking common genus to beings by making explicit the *context* of the being referred to.

*Qua*-theories will be collectively referred to as reduplicative-theories or as theories of reduplication. Since Aristotle, *qua*-theories have been intensively used, although only in very few cases has there been explicit analysis of the theory as such. Among the authors that conduct discussion of the topic, besides Aristotle and without any claim to completeness, mention should be made of: Albert the Great (*De sophisticos elenchos*, I.III.6), Avicenna (*Ibn-Sina*) (*Sufficientia*), William of Sherwood (*Introductiones ad logicam* 77, 18-28), Occam (*Summa logicae* II.16), Burley (*De puritate artis logicae tractatus longior*), Wyclif (*Tractatus de logica*, I.5), Thomas (*Sentences* III.XI.1; *Summa theologiae*, III.16.8-10); Scotus (*Sentences* III.XI.2). Leibniz also used the theory of reduplication when formulating his principles of identity.<sup>4</sup>

A number of modern writers make reference to the theory: among the analytic philosophers, Frege, Russell and Quine, while more recent contributions have been by Wiggins, Fine, Henry, Benardete, and Bäck.<sup>5</sup>

for whom *kath auto* or *per se* should be construed as *simpliciter* or ‘as such’. A persuasive reason for rejecting their interpretation is the consequences that arise from analysis of geometric entities, which become ideal entities. As Leszl 1975, 155 notes, “This is no doubt how it should be conceived, if the line were supposed to be given as something *ideal* instead of being *idealized* by means of an intellectual process [...] It would be peculiar to find a return to Platonism in the use of precisely those conceptual instruments, such as the qualification ‘*qua X*’, which Aristotle uses in order to avoid any form of Platonism, e.g. to fight against the theory of forms” (my stresses).

<sup>3</sup> The thesis is not controversial and is explicitly asserted in various passages, for example *Metaphysics* III, 3, 998b14 ff (to which should be connected *Topics* VI, 6, 144a36ff); *Metaphysics* I, 2, 1053b22-23, *An. Post.* II, 7, 92b13. See Leszl 1975, 72.

<sup>4</sup> See Angelelli 1967. When discussing some consequences of his famous thesis “*eadem sunt quorum unum potest substitui alteri salva veritate*”, Leibniz adds “*excipiendae autem sunt propositiones reduplicative*” (Couturat 1961, 261). On page 96 of his paper, Angelelli notes also that “the interesting phenomenon of *reduplicatio* seems to have been forgotten in contemporary philosophy; perhaps Bolzano was the first and the last modern logician having paid attention to it, and in a very interesting way indeed”. Schuhmann has informed me that extensive discussions of reduplication are also to be found in Fichte’s *Wissenschaftslehre*.

<sup>5</sup> Wiggins 1980; Fine 1982; Henry 1987; Tichy 1988; Benardete 1990 (ch. 1); Bäck 1991. Bäck’s recent 1996 provides an impressive historical reconstruction of reduplication.

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Anscombe recalls,<sup>6</sup> with regard to the expression ‘under a description’ introduced in an earlier work as a tool of the philosophy of action, that “some people have observed [that] ‘under the description’ is ‘*qua*’ or Aristotle’s ‘*he*’ in modern dress”.<sup>7</sup> The link with the philosophy of action derives from the fact that actions may prove to be intentional under one description and non-intentional under another.

Generally speaking, the problem of reduplication is one of the many facets of the problem of *context dependence*. In his most recent book, the mathematician and phenomenologist Gian Carlo Rota reports a conversation with his colleague Stam Ulam. It is worth reporting the main passages:

(Ulam): Now look at that man passing by in a car. How do you tell that it is not just a man you are seeing, but a passenger?

When you write down precise definitions for these words, you discover that what you are describing is not an object, but a function, a role that is inextricably tied to some context. Take away the context, and the meaning also disappears.

When you perceive intelligently, as you sometimes do, you always perceive a function, never an object in the set-theoretic or physical sense.

Your Cartesian idea of a device in the brain that does the registering is based upon a misleading analogy between vision and photography. Cameras always register objects, but human perception is always the perception of functional roles. The two processes could not be more different.

Your friends in A.I. are now beginning to trumpet the role of contexts, but they are not practicing their lesson. They still want to build machines that see by imitating cameras, perhaps with some feedback thrown in. Such an approach is bound to fail since it starts out with a logical misunderstanding ...

(Rota): Do you then propose that we give up mathematical logic?...

(Ulam): Quite the opposite. Logic formalizes only very few of the processes by which we think. The time has come to enrich formal logic by adding some other fundamental notions to it. What is it that you see when you see? You see an object *as* a key, you see a man in a car *as* a passenger, you see some sheets of paper *as* a book. It is the word ‘*as*’ that must be mathematically formalized, on a par with the connectives ‘and’, ‘or’, ‘implies’, and ‘not’ that have already been accepted into a formal logic. Until you do that, you will not get very far with your A.I. problem.<sup>8</sup>

The main difficulty is that we know very little of contextual dependency. My guess is that the traditional theory of reduplication may provide some hints.

I shall now present and discuss a number of examples of the problems that a theory of this kind should be able to handle. I shall consider three cases: one taken from Aristotle, one from Quine, and one devised by myself.

<sup>6</sup> Anscombe 1981b, 208

<sup>7</sup> Anscombe 1957, 11.

<sup>8</sup> Rota 1997, 57-59.

### Example 1

The following example is taken from Aristotle.<sup>9</sup> The road that leads from Athens to Thebes is the same road that leads from Thebes to Athens: but in the former case it goes uphill, while in the latter it goes downhill. We may therefore say that this road, *qua* road from Athens to Thebes, is uphill, and that this same road, *qua* road from Thebes to Athens, is downhill. One thus concludes that there is a relation between the object and the standpoint or the point of view of looking at it. In entirely similar terms, Anscombe states that, “there aren’t such objects as an A *qua* B, though an A may, *qua* B, receive such-and-such a salary and, *qua* C, such-and-such a salary”.<sup>10</sup>

### Discussion

The problem presented by the above example concerns the thesis that certain ontological aspects or dimensions depend on epistemological evaluations. Husserl introduced the distinction between states of affairs (*Sachverhalt*) and situations of affairs (*Sachlage*).<sup>11</sup> For Husserl, cases like ‘A is part of B’, ‘B contains A as its part’, are two states of affairs which have the same situation of affairs as their foundation. Corresponding to the same situation of affairs may be two or more states of affairs, in the same way as corresponding to the same state of affairs may be two or more propositions (thoughts).

Let us consider again the examples above. The statements ‘A is part of B’ and ‘B contains B as its part’ refer to two different theories of part and whole, one of which has ‘... is part of ...’ as primitive or definitionally-derived, the other of which has ‘... contains ... as its part’ as primitive or definitionally-derived. To say that the two are grounded in the same situation of affairs is merely an allusion to the possibility of showing that the two theories are inferentially equivalent (e.g. the one definition can be set up in the other theory, or something similar). As Henry writes:

The sameness of the alleged situation of affairs is then not something primary or ‘in itself’, but merely (at this stage) an intuitive anticipation of the possibility of some more sophisticated theory which embraces the vocabulary of the two ‘states of affairs’. But this anticipation is not merely metalinguistic. It

<sup>9</sup> And was quoted by Anscombe and Geach 1961.

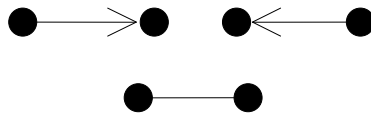
<sup>10</sup> Anscombe 1981b, 208.

<sup>11</sup> Rosado Haddock 1991.

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is about how things are. The theories are interpreted, not taken formalistically or metalinguistically.<sup>12</sup>

On the other hand, the distinction seems manageable between descriptions based on ‘pure’ relations as opposed to descriptions based on ‘directed’ relations. Consider the difference between the following directed and non directed graphs:



The two directed graphs in the first row can be interpreted as ‘the road that leads from Thebes to Athens’ and ‘the road that leads from Athens to Thebes’. These interpretations are explicitly linked to a direction. On the contrary, the graph drawn below ‘says’ *only* that the two vertices (points) are connected. In other words, it exemplifies only the pure situation of ‘being related to’. It is clear that the graphs in the first row result from the graph drawn in the one below as soon as an indication of direction is added (and vice versa).

We may therefore distinguish between two representational spaces: a space composed of situations of affairs (a-directed graphs), and a space composed of states of affairs (directed graphs).

The situation can be further elaborated by introducing a third representational space which mirrors the difference between the ontological viewpoint and the specific representation in the judgements of some cognitive agent. This opposition was first discussed by Daubert. In the words of Schuhmann and Smith:

To capture this opposition between how things stand in themselves and how they are asserted to be in our judgements, Daubert [...] distinguishes between the *Sachverhalt* and what he calls ‘*Erkenntnisverhalt*’, the ‘state of affairs as cognized’ or as ‘unfolded’ in cognition [17v]. The former is the objectively existing structure of things, properties and relations as they are in and of themselves. The latter is that side or aspects of the former which serves as the immediate objectual correlate of a given concrete act of judging [...]

Thus consider: ‘The chairman opens the meeting’, ‘The chairman is opening the meeting’, ‘The meeting is being opened by the chairman’, ‘The opening of the meeting is being conducted by the chairman’, ‘The chairman has opened the meeting’, ‘The meeting has been opened by the chairman’ [17v, 63r]. Each

<sup>12</sup> D.P. Henry, personal communication (January 1994).

of these sentences differs as to its associated state of affairs as cognized, but they are in fact concerned with one and the same objective *Sachverhalt*.<sup>13</sup>

The examples quoted require a theory able to unify them into a coherent whole. This will contain ‘chairman’, ‘meeting’, ‘opening the meeting’, and so forth, as primitive or derived terms. It will be about the worldly structure of meetings — that is, it will be about how things are.

It follows that at least three different levels can be distinguished: the level of the *Sachlage*, the level of the *Sachverhalt*, and the level of the *Erkenntnisverhalt*. From a formal point of view, aspects of the latter can be represented by allowing more edges between two adjacent vertices (as in multigraphs).

The theory of reduplication presented in this paper will concentrate mainly on the *Sachverhalt* level.

#### Example 2

Quine states: “Mathematicians may conceivably be said to be necessarily rational and not necessarily two-legged; and cyclists necessarily two-legged and not necessarily rational. But what of an individual who counts among his eccentricities both mathematics and cycling? Is this concrete individual necessarily rational and contingently two-legged or vice-versa?”<sup>14</sup>

In fact a formal contradiction seems to arise. Consider the mathematical cyclist Jones. If every cyclist is necessarily two-legged, Jones is necessarily two-legged. But if no mathematician is necessarily two-legged, Jones is not necessarily two-legged. So Jones is both necessarily two-legged and not necessarily two-legged.<sup>15</sup>

Quine’s solution is that Jones is necessarily two-legged *qua* cyclist and not necessarily two-legged *qua* mathematician.

#### Discussion

In the above example, the *qua* operator is an indicator of context, of semantic field, of level of description. To assert ‘A *qua* B is C’ is to present an object A under a certain aspect B. Frege speaks of the mode of presentation. Others speak

<sup>13</sup> Schuhmann and Smith 1987a, 367-8. During his lifetime, Daubert published not a single word. Quotations are from a shorthand manuscript transcribed by R. Smid and the references are to page numbers with recto/verso markings. For more information see Schuhmann and Smith 1987a, 358-9. On Daubert’s life see Schuhmann and Smith 1987b.

<sup>14</sup> Quine 1960, 199.

<sup>15</sup> Benardete 1990, 10.

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of ‘the particle of representation’.<sup>16</sup> When it is necessary to distinguish among different senses of concepts or different aspects or different modes of things, or when it is necessary to qualify an expression in some way, the use of *qua* or synonyms thereof is almost unavoidable.

Consider now the difference between ‘Jones *qua* cyclist’ and ‘Jones *qua* Jones’. In the two cases we are confronted with the indication of different levels of description. As a matter of fact, we can construe ‘Jones *qua* cyclist’ as ‘provided that Jones is a cyclist or *one of the cyclists*, he is ...’. In the other case, this reading does not work. In effect, what does it mean to say ‘provided that Jones is a cyclist or *one of the Jones*’?

If Quine is right, there are at least two levels pertinent to the distinction between essence and accident. Jones *qua* cyclist has certain essential properties and certain contingent properties. For example, *qua* cyclist it is essential for him to be two-legged. But Jones *qua* Jones (that is, Jones as such) has other essential properties. Being two-legged is not in fact essential to Jones *qua* Jones. The problem is this: what relations hold among the essential (and accidental) properties of Jones *qua* Jones and the essential (and accidental) properties of Jones *qua* something else (say, B)? There must be some foundational relation between the essential properties of Jones *qua* Jones and those of Jones *qua* B.

### Example 3

Consider now the following cases: (i) ‘Jones is sweeping the leaves’, (ii) ‘Jones, *qua* roadsweeper, is sweeping the leaves’, ‘Jones, *qua* Jones, is sweeping the leaves’. Let us try to *prima facie* interpret these three cases.

### Discussion

The first is a normal case, one which is true or false according to the existence of a corresponding state of affairs in the world, and it does not seem to raise particular problems (apart from those which usually accompany the theories of truth and reference).

The second case differs from the first because it contains the *justification* or the *reason* of the content expressed. For this proposition to be true *two* different conditions must be fulfilled: firstly, the relevant state of affairs must exist (that is, there must be a bearer of the proposition’s truth, as in (i)); secondly, one must verify whether the action described is one of the tasks that the subject is duty-

<sup>16</sup> Dieter Henrich cited in Bernadete 1990, 9.

bound to perform. The two conditions are *independent* of each other: the proposition may be false because, for example, there is no-one who is sweeping the leaves (condition (i)), or because although Jones is sweeping the leaves he is not doing it in his function as a roadsweeper (condition (ii)).

Very different is the case of reflexive reduplication. The linguistic form of this reduplication is typically ‘Jones, *qua* Jones, is ...’. While in the two above cases the truth conditions were respectively due to the existence of an external bearer (case (i)) and to the twofold presence of an external bearer and of a relevant ‘aspect’ (case (ii)), in the third case the truth conditions are also tied to *internal* conditions. The conditions necessary for one to be able to say that ‘A, *qua* A, is B’ is that B is (intensionally) included in A, or that being A entails being B. An interesting variation is to move from the hypothesis that B is *explicitly* contained in A to the hypothesis that B is obtainable from the notes present in A (for example by conjunction, or by means of some other more complex operation). This latter problem is a very awkward one and involves the problem of complex properties (negatives, disjunctives, and so on).<sup>17</sup>

I have already mentioned the relationship between thing and description of the thing (that is, the problem of the dependence of certain ontological aspects on epistemic aspects). The theory of reduplication is relevant here as one of the most interesting tools available to us because it has formal features with which the ontological can be separated from the epistemological component. The former, in fact, is connected with the *reflexive* use of reduplication, characterized by the occurrence of the same term (say A) on both sides of the reduplication functor: ‘A *qua* A is...’. The second case, for which I will use the expression ‘locative reduplication’, is instead characterized by the fact that the term occurring to the left of the functor is different from the one occurring to its right: ‘A *qua* B is...’.

## 2. Towards a systematic theory of reduplication

The above examples enable me to establish some initial premises. I shall say that the functor *qua* (i) makes manifest the relationship between an object, its ontological frameworks, and a certain mode of looking at the object, or (ii) functions as an indicator of the context (semantic field or level of description) in which the object is being considered. In the former case, as I have already said, it is important to find a criterion which enables us to separate cognitive components from ontological ones. In the latter, it is important to recognize the two levels

<sup>17</sup> For treatment of this topic see at least Armstrong 1978 vol. 2; Grossmann 1983; Meixner 1992. For connected topics see Forbes 1992; Hochberg 1992; Simons 1992.

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pertinent to the distinction between essence and accident — that is, the level at which the object is considered in its totality and the level at which it is considered according to one of its moments (that is, its non-detachable parts).<sup>18</sup>

In both cases, the conditions must be found which justify the passage from an analysis of the object *simpliciter* to a reduplicative analysis. When the second level is reached, the formal criteria emerge which can be used to distinguish among the various cases of reduplication. The most important of these criteria is that between the reflexive and locative forms of reduplication. In the former case, the structure of the reduplication takes the form ‘A *qua* A is...’; in the latter it takes the form ‘A *qua* B is...’. I shall call the latter form of reduplication ‘locative’ because it indicates — *localizes*, precisely — the context of description.

Barry Smith has offered the following puzzle: what about ‘A *qua* considered outside any context of description is...’? As far as I can see, there is no puzzle. The ‘B’ in ‘A *qua* B is ...’ ranges on the universe of the theory. The expression ‘considered outside any context of description’ does not refer to an element in the universe of the theory. If so, the expression ‘A *qua* considered outside any context of description is...’ is not a well-formed formula of the language of our theory.

Before beginning systematic analysis, I must classify the expressions of interest to us here. As already said, I shall assume the form ‘A *qua* B is C’ as typical of reduplicative expressions. Expressions in which the operator *qua* appears in other positions may be taken to be merely stylistic, not substantial, variations.

According to the standard Aristotelian analysis developed at the end of the twelfth century, there are two principal types of *qua*-proposition: reduplicative in the strict sense and specificative (or ‘reductive’ in my terminology).

Aristotle’s examples are:

Every man <i>qua</i> rational is risible	reduplicative
The Ethiopian is white with respect to his teeth	reductive

This classic distinction must be refined by distinguishing the reduplicative in reflexive and locative reduplication. A reflexive reduplication uses the same term to the left and the right of *qua*. Locative and reductive reduplications are distinguished by whether or not they admit to simplification — that is, by whether the passage from ‘A *qua* B is C’ to ‘A is C’ is possible.

This amounts to saying that we have the following cases:

simplification<sup>19</sup>

<sup>18</sup> For the difference between parts and moments, see Smith 1982.

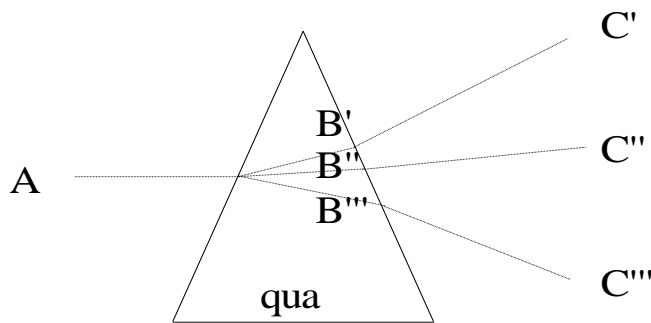
<sup>19</sup> *Salva veritate*.

1. reflexive reduplication	<i>A qua A</i> is C	NO <sup>20</sup>
2. locative reduplication	<i>A qua B</i> is C	YES
3. reductive reduplication	<i>A qua B</i> is C	NO

I now analyse each of these various reduplications in the following order: locative, reductive and reflexive.

### 2.1. Locative reduplication

In this case the *qua* functions as a prism which singles out various aspects of the original entity:



What are the formal aspects of locative reduplicative expressions? In the expression '*A qua B* is C', the three connections A-B, B-C, A-C must be distinguished.

The expression '*A qua B* is C' is a double judgement which can be decomposed into two different expressions: (i) A is B and (ii) every B is C (many mediaevals added 'and being B entails being C'). Other conditions can be added in special cases: for example, causal reduplication arises when B is intended as the cause of C.

In more general terms, we may say that formal analysis decomposes the reduplicative expression into:

- (i) A is B
- (ii) All B's are C's.
- (iii) B is the reason why the A is C.<sup>21</sup>

<sup>20</sup> Unless A is a proper name. Cf. *infra*.

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The type of relation that holds between A and C depends on the type of relation that holds between A and B. If the A-B connection is contingent, then the A-C connection is contingent too; if the former is essential, then the latter is too; and so on.

Simplification manifests interesting relationships with the mediaeval theory of the *suppositio*. Compare, for example:

Trento <i>qua</i> city is sultry	⇒	Trento is sultry
Trento <i>qua</i> word is bisyllabic	⇒	Trento is bisyllabic

The simplification obviously holds in both cases. One notes from the examples that the reduplication also serves to render explicit the *suppositio*, the *mode* in which the subject is considered. When simplification is used, the mode is made implicit, whence the greater likelihood of equivocation. In these cases we have a reduplication which assigns to the subject its reference category (that is ‘material object of a certain type’, ‘linguistic name’, and so on).

Theoretical understanding of this form of reduplication depends on the relationships between A and B. If both of them belong to the same common genus, then the reduplication will have this genus (for example, when B is an element constitutive of the definition of A); otherwise this common genus may not even exist (when B is an accident or a modifier of A).<sup>22</sup> Generally speaking, when the genera of A and B are different, the genus of B predominates.

### 2.2. Reductive reduplication

In the Middle Ages reductive propositions were studied in terms of part and whole. The classic Aristotelian expression

The Ethiopian is white with respect to his teeth

was justified by the fact that the teeth are an integral (material) part of a man. In this case, ‘in respect to’ changes its reference from the body as a whole to a specific part of it. One thus understands why this reduplication became known as reductive.

<sup>21</sup> Maritain 1937. Note that in (iii) ‘reason’ could also be ‘cause’ or ‘instrumental condition’. Cf. Barth 1974, 136. For a formal analysis of reduplication, see Poli 1994.

<sup>22</sup> On modifiers see Poli 1993.

These reduplications do not admit to simplification; that is, the inference from *A qua B is C* to *A is C*.

### 2.3. Reflexive reduplication

Reflexive reduplication is certainly the most interesting case. If one assumes the hypothesis that the theory of reduplication operates by selecting an aspect of *A*, what in this case would be the aspect selected from *A qua A*? More than an aspect, in fact, what we have here is reduplication in the sense of a mechanism which selects the *canonical perspective* from which *A* is considered. On the one hand it seems indubitable that perspectives are intrinsically related to the point of view adopted. On the other, the objectivity of an object seems to be in some way independent of the perspectives on it. From the point of view that interests us here, the objective dimension of objects is precisely that structural invariant that unifies and underlies all its possible perspective-based variants.

A similar proposal is to be found in Merleau-Ponty. Here I draw on the synthesis by Heft: “I see the next-door house from a certain angle, but it would be seen differently from the right bank of the Seine, or again from an aeroplane: the house itself is none of these appearances; it is, as Leibniz said, *the flat projection* of these perspectives and of all possible perspectives, that is, the *perspectiveless* position from which all can be derived, *the house seen from nowhere*”.<sup>23</sup>

For every entity, the perspectiveless selected by the reflexive reduplication is that which is most proper to it, that which asserts it in its essence. As regards general terms, it may be their definition. As regards proper names, it is the direct consideration of the individuality involved, in the sense of ‘this particular individual’. In this latter case, however, reduplicative analysis is no different from direct analysis. The expressions ‘Socrates is...’ and ‘Socrates *qua* Socrates is...’ give rise to the same consequences. Hence it follows that reflexive reduplication performs an independent theoretical role only in cases of general terms. One therefore understands why it is possible to simplify in only one of the two cases. These specifications further emphasise the function of reduplication as a tool for scientific analysis.

Reflexive reduplication is definitional and normalizing. The combined use of reflexive and locative reduplication can be used to map the dependence relationships internal to the so-called radial categories.<sup>24</sup> Generally speaking, therefore, reflexive reduplication is the fulcrum for mappings of prototypicity. The

<sup>23</sup> Merleau Ponty 1963, as reported by Heft 1996, 125, my emphasis.

<sup>24</sup> On the concept of radial category see Lakoff 1987.

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formula ‘man *qua* man’ renders explicit the components that constitute the human being and their (immediate) consequences.

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