

Buridan's Logic and the Ontology of Modes

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Summary: The aim of this paper is to explore the relationships between Buridan's logic and the ontology of modes (*modi*). Modes, not considered to be really distinct from absolute entities, could serve to reduce the ontological commitment of the theory of the categories, and thus they were to become ubiquitous in this role in late medieval and early modern philosophy. After a brief analysis of the most basic argument for the real distinction between entities of several categories ("the argument from separability"), I point out that despite nominalist charges to the contrary, "older realists" – that is, authors working before and around Ockham's time – were not committed to such real distinctions, and thus to an overpopulated ontology, by their *semantic* principles. However, what *did* entail such a commitment on their part, along with the argument from separability, was treating abstract terms in several accidental categories as "rigid designators", that is, essential predicates (species and genera) of their *supposita*. Therefore, although in the form of "extra-categorical" *modi essendi* modes were well established in earlier medieval thought, their appearance *within* the theory of categories was conditioned on analyzing several abstract terms in the accidental categories as non-essential predicates of their particulars, something that "older realists" would in general not endorse. (This does not mean that even "older realists" were universally committed to really distinct entities in all ten categories. See on this e.g. notes 13 and 18.) Next, I show how this type of analysis is achieved "automatically" by Buridan's theory of "eliminative" nominal definitions (in contrast to the older "non-eliminative" theory). However, since "realist" semantic principles in themselves did not yield a commitment to really distinct entities in all categories, it was also open for later "realists" to operate with not-really-distinct modes in several categories, although using different, "non-nominalist" tactics to treat the abstract accidental terms signifying them as non-rigid designators. The conclusion of the paper is that, as a consequence, both nominalist and later "realist" thinkers were able to achieve the same degree of ontological reductions in their respective logical frameworks, and so it was not so much their ontologies as their different logical "tactics" that set them apart.

Real distinction and the argument from separability

In one of his questions on Aristotle's *Physics*, Buridan invites us to consider whether an object of a certain shape (*figuratum*) is identical with or distinct from its shape (*figura*).¹ Although the ques-

¹ Buridan, *Quaestiones Physicorum*, lb. 2. q. 3. To be sure, in the question Buridan distinguishes between taking *figuratum* for the *substance* having some shape and

tion in itself might not seem too exciting, the way it was handled by Buridan and other medieval philosophers has far-reaching implications concerning their general conceptions of the relationship between language, thought, and reality.

To see these implications, let us take, as philosophers so often did over the centuries, a piece of wax. First let us roll it into a ball. So now our piece of wax is spherical. Then let us shape it into a cube, so that now, say, one minute later, we have the same piece of wax as before, but with a different, cubic shape. So now it is cubical.

This much is common experience, so probably nobody would raise objections to the above description of the process of the transfiguration of our piece of wax. But here is another description of the same process. Let us call our piece of wax² *W* for brevity's sake. When we rolled *W* into a ball, then it became spherical, that is to say, sphericity came into existence in *W*. Thus, if we refer to the time when *W* was shaped into a ball as t_1 , we can say that at t_1 *W*'s sphericity existed. However, at the later time, let us call it t_2 , when *W* was shaped into a cube, *W* took on cubic shape, that is to say, *W*'s cubicity came into existence, while its sphericity perished. So at t_2 *W*'s sphericity did not exist, while *W*'s cubicity did.

Now, humanist squeamishness about the barbarity of the contrived abstract terms aside, many philosophers would certainly feel uneasy about the coming and going of the strange new entities apparently referred to by these terms in this new description. After all, why should we admit such new, obscure entities into our ontology?

Apparently, we are forced to do so on the basis of the following simple argument, which henceforth I will refer to as *the argument from separability*.³ When *W* first was a sphere, this was on account of its having spherical shape. Then, after its change, *W* became a

taking it for the *quantity* of the substance thus and so shaped. As he assumes the distinction of substance and quantity, he says that *figuratum* taken in the first way without a doubt signifies something distinct from what *figura* signifies, and thus the question really concerns the identity or distinction of the *quantity* of a substance and *its* shape. However, since in the following discussion the distinction between substance and quantity will not be relevant, for the sake of simplicity of expression I will ignore this nicety, and will speak freely, for example, about the identity or distinction between a piece of wax and its shape. I do not think this will do any harm if we keep in mind that what is *really* at stake for Buridan here is the distinction between the *quantity* of the wax and the shape that renders this quantity thus and so arranged in space.

2 Or, rather, its quantity: see previous note.

cube, on account of taking on cubic shape. But since spherical shape certainly cannot be the same as cubic shape, and nothing can have two different shapes at the same time, when *W*'s cubic shape came into existence, its spherical shape must have ceased to exist. And so, since after the change *W* remained in existence, while its spherical shape ceased to exist, *W* cannot be identified with its spherical shape before the change; indeed, by parity of reasoning, nor with its cubic shape after the change. Thus, in order to account for this change we must assume three distinct entities in our analysis: *W*, *W*'s spherical shape, and *W*'s cubic shape.

Ockham's charge

This is, however, precisely the kind of consideration William Ockham would reject as arising from a mistaken, what we might call "realist", conception of the relationship between language and reality, according to which – says Ockham – "a column is to the right by to-the-rightness, God is creating by creation, is good by goodness, just by justice, mighty by might, an accident inheres by inherence, a subject is subjected by subjection, the apt is apt by aptitude, a chimera is nothing by nothingness, someone blind is blind by blindness, a body is mobile by mobility, and so on for other, innumerable cases".⁴ And this is nothing, but "to multiply beings according to the multiplicity of terms ..., which, however, is erroneous and leads far away from the truth".⁵

Despite Ockham's accusation (to be echoed by later nominalists over and over again),⁶ the "realists" Ockham attacks were not

³ Perhaps it is interesting to note here that Scotus referred to the same type of argument as *via separationis*. In any case, this seems to indicate that by his time this type of argumentation was considered as one of the basic types of argument to decide issues of ontological distinctness. Cf. *Joannis Duns Scoti Opera Omnia*, t. 7, *Quaestiones subtilissimae super libros Metaphysicorum Aristotelis*, Parisiis, apud Ludovicum Vivès, 1893, lb. 7, q. 1, pp. 350-355.

⁴ Ockham, *Summa Logicae*.169.

⁵ *Ibid.* p.171.

⁶ "the realists are those who contend that things are multiplied according to the multiplicity of the terms," whereas "those doctors are called nominalists, who do not multiply the things principally signified by terms according to the multiplicity of the terms." This is from the manifesto of the Parisian nominalist doctors of 1474, printed in Franz Ehrle, *Der Sentenzenkommentar Peters von Candia*, Münster, 1925, p. 322. Quoted and translated by Menn: Forthcoming.

committed to an overpopulated ontology by their *semantic* principles. First of all, it should be clear that the “obscure entities” purportedly referred to by these contrived abstract terms are not the universal, eternal beings of some Platonic heaven of ideas. The entities to be considered here are just as individual and just as temporal as the things we are all familiar with in our everyday experience.⁷ Secondly, and this is more to the present point, as far as “realist” *semantic* principles are concerned, these entities need not even be “new”, that is, they need not even be distinct from the other, “familiar” entities, such as the piece of wax we started out with.

The main principles of a “realist” semantics

To see this in more detail, let us consider the following. The “realist” semantics Ockham attacks can be characterized at least by the following assumptions:

1. Concrete as well as abstract common terms signify ultimately whatever their concepts represent as their formal objects. I shall call what they ultimately signify their *significata*.⁸

⁷ In fact, the theory of ideas in the crude form in which it is usually presented was regarded by late medieval philosophers as so absurd that some even doubted Plato would have ever held it in that form. “Adeo opinio Platonis apparet impossibilis, ut fuerint nonnulli suspicati Aristotelem id imposuisse Platoni. Et certe Augustinus, qui fuit Platonicus, lib. 83 *Questiones*, q. 46, dicit, quasi interpretans Platonem, ideas non esse nisi rationes in mente Creatoris, nec esse distinctas ab essentia divina, sed essentiam Dei esse Ideam omnium rerum, quia est quodam modo omnia, atque adeo Deus se intuens ut exemplar res extra producit, quae est concors sententia theologorum. [...] At vero creditu est difficillimum Aristotelem, tempore ipso Platonis, eisque discipulis viventibus rem tam absurdam imposuisse Platoni, nisi Plato dixisset.” D. Soto: *In Isagogen*, q. 1, p. 30. II. Cf. Aegidius Romanus, ISN, d.19, pars 2, q. 1, and Wyclif: 61-69.

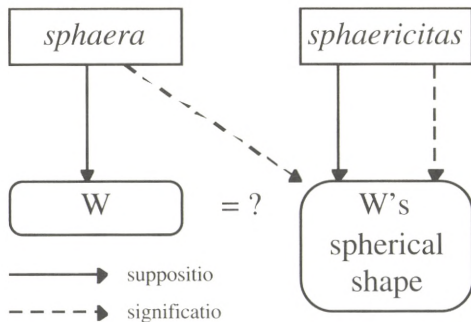
⁸ Both from primary sources and from secondary literature we usually get a characterization according to which these ultimate *significata* are the *forms* of particulars. However, that the ultimate *significata* of common terms need not necessarily be regarded metaphysically as *forms* in all cases was a commonplace among thinkers who otherwise would provide such a characterization. As St. Thomas wrote: “...dicendum est quod illud a quo aliquid denominatur non oportet quod sit semper forma secundum rei naturam, sed sufficit quod significetur per modum formae, grammaticae loquendo. Denominatur enim homo ab actione et ab indumento, et ab aliis huiusmodi, quae realiter non sunt formae.” QDP, q. 7, a. 10, ad 8 Cf. also e.g. Cajetan: “Verum ne fallaris cum audis denominativum a forma denominante oriri, et credas propter formae vocabulum quod res denominans debet esse forma eius quod denominatur, scito quod formae nomine in hac materia in-

2. As the subject of a proposition, a common term supposits *personally* for (i.e., refers to) whatever is in actuality in respect of its *significata* (relative to the time and modality of the copula of the proposition, taking into account the possible ampliative force of the propositional context).⁹ What is thus supposed for by a term in the context of a proposition I shall briefly call here the term's *supposita*.

3. On account of their different mode of signifying (*modus significandi*), the *supposita* of abstract terms are the same as their *significata*, whereas the *supposita* of concrete terms may or may not be the same as their *significata*. In any case, the *supposita* (and hence also the *significata*) of abstract terms are always the same as the *significata* of their concrete counterparts. So, this semantic principle specifies only that the *significata* and *supposita* of abstract terms are the same, and that they are the same as the *significata* of their concrete counterpart, but it leaves open the question whether the *supposita* of a concrete term are the same as its *significata*. Using our example of W and its sphericity, this is shown in the following figure:

telligimus omne illud a quo aliquid dicitur tale, sive illud sit secundum rem acci- dens, sive substantia, sive materia, sive forma." Cajetan, *In Praedicamenta*: 18. In general, it is precisely this point that lies at the bottom of the distinction between *extrinsic vs. intrinsic denomination*. In fact, Buridan attributes the original idea of the distinction between semantic and metaphysical considerations to Averroes: "Nam, sicut dicit Commentator, duodecimo *Metaphysicae*, grammaticus videt in multis differre dispositionem et dispositum, et sic movetur ad imponendum eis nomina diversa, ut 'albedo' et 'album'; et quia non est ejus inquirere an in omnibus vel in quibusdam sic differant dispositio et dispositum, ipse secundum similitudinem ad illa in quibus manifeste differunt imponit etiam aliis nomina per modum dispositionis et dispositi, seu determinationis et determinabilis, vel etiam determinati, derivando ab abstracto concretum vel e converso, relinquens metaphysico considerationem an illa nomina supponant pro eodem vel pro diversis, propter quem diversum modum significandi grammaticalem illa nomina habent diversos modos praedicandi." Buridanus, *Lectura de Summa Logicae: De Praedicabilibus*, c. 7, n. 4.

⁹ Thus, *album* in *album currit* refers to whatever is actual at the time of the utterance of this proposition in respect of what is signified in it by *album* (whatever it is in itself), that is, all things that are white at that time. However, say, in *album currebat*, owing to the past tense of the verb, the same term refers to whatever is or was actual in the same respect, that is, whatever is or was white at that time. For further details and reconstruction of the theory of ampliation see Klima: Forthcoming.



4. An affirmative categorical proposition is true if and only if the *supposita* of its subject are actual in respect of the *significata* of its predicate (relative to the time and modality of the copula, taking into account the possible ampliative force of the propositional context) as determined by the quantity of the proposition. (This, of course, is just a general formulation of the familiar *inherence theory of predication*.)

These semantic principles in the form listed here, of course, appear nowhere in the works of medieval logicians. Still, I think it can be claimed with a justifiable degree of confidence that they provide a fair characterization of the kind of semantic theory that was at work in the logical doctrines Ockham attacked.¹⁰ However, on the basis of this characterization it should also be clear that Ockham's attack, as far as the issue of the ontological commitment of this semantic theory is concerned, was rather unjustified.

Ockham's charge disproved

Ockham's charge, which Buridan shares,¹¹ is that the "realists" posit distinct entities for each term in each category as their *significata*. In view of 3, however, we can see that, *as far as the semantic theory is concerned*, this need not be the case at all. In fact, using the

¹⁰ For references to justify the historical correctness of these formulations, especially in St. Thomas Aquinas's case, see Klima 1996.

¹¹ "Notandum est quod de actione et passione et de aliis quattuor ultimis praedicamentis ego non intendo sequi doctrinam auctoris *Sex Principiorum*. Quia puto quod erravit ex eo quod credit nullos terminos diversorum praedicamen-

previous example, it is easy to see that these semantic principles leave open the question whether we should regard *W* and its shape as the same entity or as distinct entities. For concerning our example this theory states only the following. At t_1 *W* was a sphere, so at t_1 the proposition ‘*W* is a sphere’ was true. Hence, by 4, the theory is committed to holding that at t_1 *W* was actual in respect of the significate of the predicate ‘sphere’, which, by 3, is what can be referred to in another proposition by the corresponding abstract term, namely, ‘sphericity’. Thus, the theory is committed to holding that at t_1 *W* was actual in respect of sphericity, which is just another way of saying that *W*’s sphericity existed, whence we can conclude further that the theory is committed to holding that at t_1 the proposition ‘A sphericity exists’ was true. However, again, in virtue of 3, this commitment *does not* imply a further commitment to a “new” entity besides *W*, for *W*’s sphericity, namely, what was supposed for by the term ‘sphericity’ in this existential claim, *as far as the semantic theory is concerned*, may or may not be identical with *W*, namely, with one of the *supposita* of the term ‘sphere’ at t_1 in the proposition ‘A sphere exists’.

But then, what can we make of the fact that at t_2 *W* still existed, whereas its sphericity ceased to exist? Again, *as far as the above-described semantic theory is concerned*, this fact need not imply the distinction between *W* and its sphericity. For in terms of this theory, if we assume the identity of *W* and *W*’s sphericity, all this means is that whereas the term ‘*W*’ at t_2 still supposed for *W* in the context of the proposition ‘*W* exists’, the term ‘sphericity’ no longer supposed for the same thing in the context of the proposition ‘A sphericity exists’ at the same time.

In fact, if we take a look at Buridan’s reply to the same type of argument we can see that his solution is essentially the same: despite the fact that, in virtue of its transmutation, *W*’s sphericity ceased to exist, while *W* remained in existence, we need not thereby be committed to their distinction, for we may analyze the description of this change solely in terms of the change of the supposition of the term ‘sphericity’. What happened need not be re-

torum supponere pro eodem, et ideo credit quod actio esset una forma et passio alia, et quod passio esset effectus actionis; quod est totum falsum, ideo dicta ejus fecerunt multos errare.” Buridanus, *Lectura de Summa Logicae: De Praedicamentis*, c. 6, n. 1.

garded as one entity ceasing to be while the other remained in existence. Rather, what we had here was just one and the same entity staying in existence, which before the change could be referred to both by the name 'W' and by the name 'sphericity', but which after the change could be referred to only by the name 'W', but no longer by the name 'sphericity'.

“Rigid designators” and the argument from separability

This analysis, however, immediately gives rise to at least two further questions. First, if it is not the ceasing to be of W's sphericity that accounts for the fact that the term 'sphericity' can no longer refer to W's sphericity, then what is it? *Something*, after all, *did* change here! Second, if Buridan's solution was in principle available to the upholders of the older semantic theory attacked by Ockham, then why is it that they, in fact, would maintain a distinction between W and W's sphericity? Was there some further (semantic, or perhaps other) reason besides these simple semantic principles on account of which they were in fact committed to such a distinction?

It is the answer to the first question that for Buridan, and, most significantly, for late-medieval “realists” as well, gives rise to the ontology of modes. (To be sure, talk about *modi*, especially, about “extra-categorical” *modi essendi*, was nothing new in Buridan's time.¹² The novelty in the treatment of *modi* in late-medieval phi-

12 In fact, such an “old realist” as Giles of Rome, felt it inevitable to introduce *modi essendi* as the *esse essentiae* (as opposed to the *esse existentiae*) of the *forma partis* (as opposed to the *forma totius*) and of accidental forms. (Aegidius Romanus, *Theoremata*, th. VIII.) Indeed, he even goes on to explain that such a *modus* is not a third thing besides the accidental form and its subject. (*Theoremata*, th. XV.) Yet, he insists that the accidental form itself can never be the same as its subject, for from the union of an accident and its subject there can never result one nature. Also, he insists that, since whatever is in a category is there on account of its nature, nothing can be in two categories. (*Theoremata*, th. XIII-XIV.) So, since these *modi essendi* are not categorical entities, despite the fact that *outside* of the categories Giles recognizes *modi* and along with them some distinction that is not a distinction of one thing from another, he does not find such considerations applicable to the *per se* entities he acknowledges *within* the categories. And, most importantly from the point of view of our present argument, apparently he does so precisely because he regards the abstract terms of the nine accidental categories as the direct, essential predicates (*species* and *genera*) of their particulars *in linea praedicamentali*.

losophy, therefore, seems to be rather their systematic introduction into the theory of the categories.¹³) However, to see why the same new ontological scenario should emerge for an uncompromising nominalist and for late-medieval “realists” alike, we have to deal first with the second question.

Let us, therefore, consider again the original argument for the distinction of *W* from its sphericity. Very simply stated, the reason why we concluded that *W* had to be distinct from its sphericity was that during the transmutation *W* remained in existence, while its sphericity did not. Now why does this seem to be a sufficient reason for our conclusion? The answer is simple: if *W* and its sphericity are one and the same entity, then the assumption that *W* exists at t_2 while its sphericity does not implies the contradiction that one and the same entity both exists and does not exist at the same time. Therefore, *W* and its sphericity cannot be the same entity. This argument is simple and conclusive. But then how can Buridan deny its conclusion?

We have to notice here that the validity of this argument rests on a tacit assumption, which is so simple that it is quite easily overlooked, although almost everything else depends on it in this question. When in the argument we make the assumption to be refuted, namely, that *W* and its sphericity are one and the same entity, we also make the tacit assumption that the terms ‘*W*’ and ‘*W*’s sphericity’ – to borrow an expression from modern semantics – designate *rigidly* whatever they designate.¹⁴ If a term designates

13 An interesting “transitional” figure in this regard seems to be Durand de Saint Pourçain. See Durandus de Sancto Porciano, ISN d. 33, q. 1, where he makes a special point of the denominative character of the predicates signifying *modi* (among which he also considers *tangere* and *tangi*). Cf. also his ISN d. 30, q. 2, n. 15, approvingly referred to by Suarez (Suarez, *Disputationes*, disp. 7, sect. 1, n. 19.) Another, perhaps even more important figure seems to be Henry of Ghent, who explicitly talks about categorial relations as modes. See Henninger, 1989, pp. 40-58. (I am grateful for this reference to Russ Friedman.) Indeed, Henry apparently utilized modes to account also for the last six categories, which, despite the fact that he is chronologically “older”, would *doctrinally* place him among the “later realists”. I think this observation may have enormously interesting historical implications concerning the formation and interaction of nominalist and realist trends in later-medieval philosophy and theology, but pursuing these issues lies far beyond the scope of this paper. Further interesting remarks concerning the emergence of categorial *modi* in the works of Peter Olivi and Jean de Mirecourt can be found in Maier 1958. Cf. also n. 18.

14 See Kripke 1980: *passim*.

rigidly whatever it designates, then it designates its designatum or designata in any possible circumstances in which this designatum exists or these designata exist. Now, in fact, it is only with something like this assumption in mind that we can conclude from the transmutation of *W* that the entity that was designated by the term ‘*W*’s sphericity’ at t_1 does not exist at t_2 . For otherwise, if we do not assume this rigidity, then nothing prevents the same entity that was designated by this term at one time from persisting and still ceasing to be designated by the same term at another time. But it is easy to see that this is precisely the point also of Buridan’s solution.

This is most obvious in Buridan’s reply to the argument, which he posited earlier in his *quaestio* in the following form:

Again, tomorrow this magnitude which now is spherical will exist, and tomorrow the sphericity will not exist, because the magnitude will not be spherical, but cubical; therefore, this magnitude is not the same as this sphericity.¹⁵

His response points out that without the assumption of the rigidity of designation, the argument is formally invalid:

To the other [argument] I reply that the argument is formally invalid, for we could argue in the same way that this man is not the same as this white thing, pointing to the same thing, for tomorrow this man will exist, but this white thing will not exist.¹⁶

The reason why the comparison with the case of the white man who gets separated from his whiteness is justified is explained more clearly in the next reply:

To the other [argument] I reply that it is in the same way and not otherwise that this magnitude can be separated from this sphericity as a man from this white thing, provided that this man is white; for this separation cannot occur so that this magnitude would exist at a certain time when this sphericity will not exist. But the separation *can* occur so that this magnitude exists at a certain time, when, however, it is not a sphericity, *so this sphericity will exist, when it* [i.e. the magnitude] *will not be a sphericity*.¹⁷

15 “Item cras erit hec magnitudo que nunc est sperica et cras non erit spericitas quia magnitudo non erit sperica sed cubica, ergo non est eadem hec magnitudo et spericitas.” Buridanus, *Quaestiones Physicorum*, lb. 2. q. 3.

16 “Ad aliam dico quod forma argumenti non valet, sic enim argueretur quod non est idem homo et iste albus demonstrando eodem, quia cras erit iste homo, sed non erit iste albus.” Ibid.

17 “Ad aliam dico quod eodem modo et non aliter potest haec magnitudo separari ab hac sphericitate sicut hic homo ab hoc albo, posito quod iste homo est al-

However, this last, crucial remark, namely that the sphericity of the wax will still exist when the magnitude will no longer be a sphericity, expresses precisely the denial of the claim that the term ‘sphericity’ rigidly designates whatever it designates, that is, the claim that the term ‘sphericity’ is an essential predicate of anything of which it is true at all.

So it seems that the difference between the upholders of the older theory on the one hand, and Buridan, as well as late-medieval realists, such as Soto, Fonseca, and Suárez on the other, boils down to this, namely, that while the former would consider abstract terms in the accidental categories to be essential predicates of their particulars, the latter would reject this assumption.¹⁸ But if so, then what accounts for this “change of mind”? Indeed, who is right? Or is this just a matter of changing conventions?

Now, this point, as it obviously affects the distinction of the categories, was certainly not regarded as a matter of convention by the “realists”. Indeed, it was not regarded as such by Buridan either. He remarks:

bus; non enim potest sic esse separatio quod haec magnitudo sit aliquando quando ista sphericitas non erit. Sed sic potest esse separatio quod sit ista magnitudo aliquando quando (quod *ed.*) tamen non sit sphericitas, unde haec sphericitas erit quando illa non erit sphericitas.” Ibid., emphasis mine.

18 What seems to be at the bottom of the “older realist” commitment, then, is interpreting abstract accidental terms as the genera and species, that is, essential predicates, of their particulars. To be sure, even those authors who can justifiably be regarded as “older realists” in the sense of working within the semantic framework outlined above plus endorsing the view that abstract terms in the accidental categories are essential predicates of their supposita (such as Thomas Aquinas or Giles of Rome, or even such a *chronologically* later – yet, *doctrinally* “older” – figure as Cajetan, indeed, anyone who held that abstract accidental terms could be arranged on “predicamental trees” analogous to the familiar one in the category of substance) were prepared to regard several abstract terms as non-essential predicates of their supposita. But then they either had to regard such terms as not being (properly) in a category, or deny that *all* abstract accidental terms are essential predicates of their supposita, in which case, of course, it was open to them to identify entities across categories. (For this point see n. 30 below.) So, perhaps, in the strict sense of holding that all abstract terms in all nine accidental categories should be essential predicates of their supposita, and consequently holding the distinctness of these supposita from the supposita of substance terms and from those of terms from other categories, only Ockham’s possibly imaginary opponent could be considered an *absolute* “older realist”. On the other hand, it is also interesting to observe that the unidentified author of the *Logica Campsale*

Neither can the distinction of the categories be taken simply from the distinction of utterances, for we should not change the number [of categories] commonly given by the philosophers on account of different languages. Also, we impose utterances to signify by convention. Therefore, the number of categories would be a matter of convention, which is unacceptable.¹⁹

On the other hand, it is not just the distinction of things either that accounts for this distinction, for the same things may be supposed for by terms that belong to different categories:

... we should know that the distinction of these categories cannot be taken from the [distinction of] things for which the terms in the categories supposit, for, as was argued earlier, the same calidity is action and passion, and quantity, and quality, and relation; and the same Socrates is a man, and white, and three cubits, and father, and agent, etc.²⁰

However, what *is* regarded by Buridan as accounting for the distinction of the categories is the difference between the connotations of the various concepts by which we conceive of possibly the same things:

But [the distinction of the categories] is taken from the diverse intentions according to which terms are connotative or even non-connotative in different ways. It is from these diverse connotations that the diverse modes of predication of terms about first substances derive; and thus [the categories] are distinguished directly and immediately in accordance with the diverse modes of predication about primary substances.²¹

Anglicj, valde utilis et realis contra Ocham (Pseudo-Richard of Campsall, 1982), being a staunch defender of the real distinction of the entities in all ten categories, actually fits very well the description of Ockham's opponent(s), so this opponent (or these opponents) may not have been entirely imaginary after all. In any case, a comprehensive account of which authors and to what extent could be regarded as "older realists" in this *doctrinal* sense is beyond the scope of this paper.

19 "Nec potest eorum [sc. praedicamentorum] distinctio sumi simpliciter ex parte vocum, quia non oportet propter diversa idiomata mutare numerum quem communiter ponunt philosophi. Et voces etiam imponuntur ad significandum ad placitum. Ideo plurificarentur praedicamenta ad placitum nostrum, quod est inconveniens." Buridanus, *Quaestiones in Praedicamenta*, q. 3, pp.17-18.

20 "... sciendum, quod non potest distinctio horum praedicamentorum sumi ex parte rerum, pro quibus termini praedicamentales supponunt, quia sicut prius arguebatur, eadem caliditas est actio et passio et quantitas et qualitas et ad aliquid; et idem Sortes est homo et albus et tricubitus et pater et agens, etc." *ibid.*

21 "Sed [distinctiones praedicamentorum] sumuntur ex diversis intentionibus, secundum quas termini sunt diversimode connotativi vel etiam non connotativi. Ex quibus diversis connotationibus proveniunt diversi modi praedicandi termino-

Again, this much, as far as *concrete terms* are concerned, is common doctrine both for Buridan and for the older as well as the later “realists”. However, there is one particular aspect of Buridan’s treatment of the categories which brings him together with later “realists”, and distinguishes both his and the latter’s approach from that of the older “realists”. This is his treatment of several *abstract terms* from the nine accidental categories as being connotative, and thus as being non-essential predicates of their particulars.²² But, as we can see, this is precisely what allows him to reduce the number of the kinds of really distinct entities, while formally keeping the distinction of the ten categories.

Nominal definitions and the semantic complexity of abstract terms

Treating several abstract terms as connotative rather than absolute terms, and hence regarding them as accidental rather than essential predicates of their particulars, is not just a capricious in-

rum de primis substantiis; et ita directe et immediate distinguuntur penes diversos modos praedicandi de primis substantiis.” Ibid.

22 Cf.: “De prima dubitatione secundum dicta alias manifestum est, quod multi sunt termini vocales non habentes in mente conceptus simplices sibi correspondentes, sed quod terminus vocalis habet conceptum sibi correspondentem complexum ex multis simplicibus. Et sic ille terminus vocalis indiget diffiniri diffinitione explicante quid nominis per orationem complexam ex multis dictionibus saepe ad diversa praedicamenta pertinentibus. Et sic talis terminus dicitur esse de unoquoque illorum praedicamentorum; non tamen simpliciter, sed secundum quid, scilicet cum additione, loquendo ut quia est de tali praedicamento quantum ad talem terminum, quem includit, et de alio praedicamento quantum ad alium talem terminum. Sed tamen ego credo, quod simpliciter sine additione debeat dici de illo praedicamento, cujus magis retinet modum praedicandi secundum suam totalem aggregationem. Verbi gratia licet prandium significet comestionem de mane et cena comestionem in vespere, tamen prandere et cenare pertinent ad praedicamentum ‘agere’ et non ad praedicamentum de quando, quia si quaeratur, quid Sortes facit, dicimus quod ipse prandet vel quod ipse cenat. Sed si quaeramus, quando comedet Sortes vobiscum respondetur forte, quod cras, et tunc quaeritur magis specificice, scilicet quando cras, et respondetur: in prandio, vel respondetur: in cena. Et sic illud praedicatum ‘in cena’ est de praedicamento ‘quando’, et non de praedicamento actionis simpliciter loquendo. Unde licet ‘in cena’ et ‘cenare’ bene habeant aliquas easdem significationes, tamen cum illis habent diversas connotationes, propter quas habent diversos modos praedicandi. Et similiter reponitur hoc in uno praedicamento et illud in alio.” Buridanus, *Quaestiones in Praedicamenta*, q. 14: 103.

novation on Buridan's part. He has serious theoretical reasons for doing so, rooted in the very principles of his philosophy of mind and language.

For Buridan what a term signifies is determined by the kind of concept the term is subordinated to, but the syntactic features of spoken or written terms do not provide us with a safe guide to decide whether they are subordinated to simple or complex concepts. In particular, the syntactic simplicity of a spoken or written term may conceal just any sort of conceptual, and hence semantic complexity. But then the way for us to find out about this sort of hidden complexity is conceptual analysis: by providing the exact nominal definition of such a simple term we reveal precisely this hidden semantic complexity, when the grammatical construction of the nominal definition faithfully mirrors the conceptual construction hidden by the syntactic simplicity of the spoken or written term.²³ Therefore, as Buridan himself explicitly concludes, if a term has a nominal definition, then the term has to be subordinated to a complex concept.²⁴ However, a complex concept corresponding to a nominal definition has to be connotative. The reason for this is that the only complex absolute concepts are those corresponding to quidditative definitions, which can be given only of absolute terms.²⁵ But absolute terms do not have nominal defi-

²³ For more on this see Klima 1991.

²⁴ "In secunda clausula manifestatur quorum terminorum sunt tales diffinitiones. Propter quod sciendum est quod dictiones vocales impositae sunt ad significandum conceptus immediate, et mediantibus eis res conceptas significant. Sunt autem conceptus nostri aliqui simplices, aliqui ex pluribus simplicibus complexi, prout alias dictum est. Si ergo imponatur dictio aliqua ad significandum conceptum simplicem, sive incomplexum, tunc talis dictio non est interpretabilis, sed si alicui sit ignota ejus significatio, notificabitur sibi aliquando per aliam dictionem synonymam, sicut puero gallico per idioma gallicum docetur idioma latinum, aliquando docetur hoc per ostensionem rei significatae et vocis expressionem, sicut infanti a matre docetur suum idioma, aliquando etiam docetur hoc per dictionis descriptionem vel quidditativam diffinitionem. Sed si dictio imposita fuerit ad significandum conceptum ex pluribus simplicibus conceptibus complexum, tunc indiget interpretatione per plures dictiones significantes seorsum illos conceptus simplices ex quibus est in mente complexio. Sic enim 'philosophus' interpretatur 'amator sapientiae' (dicitur enim 'philosophus' a 'philos' graece, quod est 'amator' latine, et 'sophos', quod est 'sapientia', quasi 'amator sapientiae'), et ideo nihil plus vel nihil aliud debet nobis significare ista dictio 'philosophus' quam ista oratio 'amator sapientiae', et e converso. Notandum est autem quod aliquando conceptum complexum ex pluribus simplicibus imponimus ad significandum per

nitions, since they are subordinated to simple concepts.²⁶ Therefore, any term that has a nominal definition is subordinated to a complex concept which has to be connotative, and so the term has to be connotative too. So, if we are able to provide a nominal definition of an abstract term, then the abstract term in question “automatically” comes out from this analysis as connotative, and thus, if its *connotata* are distinct from its *supposita*, as an accidental predicate of its particulars.²⁷ Therefore, providing nominal definitions of abstract terms referring to these particulars can be used to “eliminate” these particulars as distinct entities, for such an analysis will at once invalidate the principal argument for their distinction from entities referred to by absolute terms.

However, at this point it is very important to note a fundamental difference between the way Buridan treats nominal definitions, and the way “realists” treat them. The difference can be most clearly seen if we compare Buridan’s treatment with what Cajetan says about nominal definitions in his commentary on Aquinas’s *De Ente et Essentia*:

Just as the *quid rei* is the quiddity of the thing, so the *quid nominis* is the quiddity of the name: but a name, as it is the sign of the passions that are objectively in the soul (from bk.1. of Aristotle’s *Perihermeneias*), does not have any other quiddity

unam simplicem dictionem vocalem, sicut possumus facere ad placitum nostrum, et expedit saepe ad brevius loquendum. Et aliquando conceptus complexus ex determinatione et determinabili pro aliquo supponit, et aliquando pro nullo, sicut dictum est alias, sicut ‘animal album’ pro aliquo supponit, aut etiam ‘animal non album’, sed ‘homo hinnibilis’ pro nullo supponit, vel etiam ‘equus non hinnibilis’. Si ergo conceptum complexum significatum complexe per hanc orationem vocalem ‘animal album’ ego volo significare per dictionem incomplexam, ut per hanc vocem ‘A’, et similiter conceptum ‘hominis hinnibilis’ per hanc vocem ‘B’, tunc haec dictio ‘A’ pro aliquo supponit, sicut ‘animal album’, et haec dictio ‘B’ pro nullo supponit, sicut nec ‘homo hinnibilis’. Et utraque dictio habet diffinitionem dicentem quid nominis; nam haec oratio ‘animal album’ est diffinitio hujus dictionis ‘A’ et haec oratio ‘homo hinnibilis’ hujus dictionis ‘B.’” Buridanus, *Lectura de Summa Logicae: De Demonstrationibus* c.2, n. 4.

25 “Quinta clausula apponit etiam istam aliam proprietatem, scilicet quod termini connotativi, sicut sunt termini accidentales concreti et multi tales abstracti, non habent diffinitiones proprie dictas quidditativas.” *ibid.*

26 “Unde solus terminus vocalis cui non correspondet conceptus simplex, sed complexus, habet proprie diffinitionem dicentem quid nominis, scilicet praecise significantem quid et quo modo ille terminus significat.” Buridanus, *Lectura de Summa Logicae: Sophismata* c. 1, conclusio 11a.

27 Cf. Buridanus: *Quaestiones in Praedicamenta*, q.2: 9-12.

than this, namely that it is a sign of a thing understood or thought of. But a sign, as such, is in a relation to what is signified: so to know the *quid nominis* is precisely to know what the name is related to, as a sign [is related to] what is signified. Such knowledge, however, can be acquired through the accidental properties of what is signified, as well as through its common, or essential properties, or simply by a gesture, or whatever else you like. For example, if we ask a Greek about the meaning of *anthropos*, if he points to a man, at once we know the *quid nominis*, and similarly in other cases. But to those asking about the *quid rei*, it is necessary to indicate what belongs to the thing in virtue of its essence. And this is the essential difference between the *quid nominis* and the *quid rei*: namely, that the *quid nominis* is the relation of the name to what it signifies; but the *quid rei* is the essence of the thing related or signified. All the other differences that are usually claimed follow from this difference: namely, that the *quid nominis* is of non-entities, complexes, [defined] by accidental, common, and external [properties]; while the *quid rei* is of incomplex entities [defined] by their proper, essential [properties]. For a spoken word's relation can be terminated to non-existents, and it can be clarified by accidental and similar properties, but the thing's essence can be known only by proper, essential properties of incomplex things.²⁸

As can be seen, Cajetan's nominal definitions, in contrast to Buridan's, need not at all be synonymous with their *diffinita*, whence they do not serve any sort of conceptual analysis that Buridan had in mind with *his* nominal definitions. For Cajetan a nominal definition can be just any sort of indication of a sample of the *supposita* of a term, indeed, it may have nothing to do with the signification of its *diffinitum*. But then, giving a nominal definition of a

28 "Sicut quid rei est quidditas rei, ita quid nominis est quidditas nominis: nomen autem, cum sit nota earum quae sunt obiective in anima passionum (ex primo Perihermeneias), non habet aliam quidditatem nisi hanc, quod est signum alicuius rei intellectae seu cogitatae. Signum autem ut sic, relativum est ad signatum: unde cognoscere quid nominis nihil est aliud, quam cognoscere ad quid tale nomen habet relationem ut signum ad signatum. Talis autem cognitio potest acquiri per accidentalitatem illius signati, per communia, per essentialia, per nutus, et quibusvis aliis modis. Sicut a Graeco quaerentibus nobis quid nominis anthropos, si digito ostendatur homo iam percipimus quid nominis, et similiter de aliis. Interrogantibus vero quid rei oportet assignare id quod convenit rei significatae in primo modo perseitatis adaequate. Et haec est essentialis differentia inter quid nominis et quid rei, scilicet quod quid nominis est relatio nominis ad signatum; quid rei vero est rei relatae seu significatae essentia. Et ex hac differentia sequuntur omnes aliae quae dici solent: puta quod quid nominis sit non entium, complexorum, per accidentalitatem, per communia, per extranea; quid rei vero est entium incomplexorum per propria et essentialia. Relatio enim vocis potest terminari ad non entia in rerum natura, et complexa, et declarari per accidentalitatem et huiusmodi, essentia autem rei non nisi per propria essentialia habetur de entibus incomplexis." Cajetanus, *Super Librum De Ente et Essentia*: 290.

term need not reveal anything about the simplicity or complexity of the concept it is subordinated to. Thus, for those who hold such a conception of nominal definitions there is nothing in giving a nominal definition that would make them conclude that the concept of the term thus defined must be complex, and that, as a consequence, the term itself should be an accidental predicate of its particulars.²⁹

Conclusion: separability, modes, and the disintegration of scholastic discourse

As we have seen, despite nominalist charges to the contrary, “realist” *semantic* principles in themselves did not determine the distinctness of the semantic values of abstract and concrete terms, and so by these principles alone “realists” were not committed to the distinctness of the semantic values of abstract terms in the nine accidental categories either. The principal argument for the distinctness of these semantic values, the argument from separability, however, does imply such a commitment, if these abstract terms are regarded as “rigid designators”, that is, as essential predicates of their particulars. In fact, the main reason for this type of commitment in the case of “older realists” seems to be precisely their treating (most, not necessarily all) abstract accidental terms as signifying the species and genera of particular accidents *in linea recta praedicamentali*, and hence as being their essential predicates.³⁰

²⁹ In fact, Cajetan in his *Commentary on the Categories* insists that Aristotle’s theory concerns entities as conceived by simple concepts. So in his conception such eliminative analyses of categorial concepts would be excluded from the start. See Cajetan, *In Praedicamenta*, Prologus: 1-7.

³⁰ Cf. St. Thomas Aquinas, *De Ente et Essentia*, c. 7; see also Aegidius Romanus, *Theoremata*, theorems XIII-XIV, and Cajetan, *In Praedicamenta*: 188-92. For the qualification that “most, not necessarily all” accidental terms were so treated, see in particular the alternative opinions Cajetan refers to in this passage, and the way Soto uses the old distinction between *relativa secundum esse* vs. *secundum dici*. Indeed, even Aquinas allows the possibility of one and the same entity belonging to different categories: “Sed si actio et passio sunt idem secundum substantiam, videtur quod non sint diversa praedicamenta. Sed sciendum quod praedicamenta diversificantur secundum diversos modos praedicandi. Unde idem, secundum quod diversimode de diversis praedicatur, ad diversa praedicamenta pertinet. Locus enim, secundum quod praedicatur de locante, pertinet ad genus quantitatis. Se-

But then, anyone who wishes to get rid of this type of commitment obviously has to eliminate the “rigidity” of abstract accidental terms in some way or another. A powerful nominalist tactic to this effect was conceptual analysis in terms of nominal definitions. Such analysis eliminates the apparent semantic simplicity of abstract accidental terms, thereby showing that the abstract term in question is not absolute, but connotative, and so it is not essentially true of its particulars. As a result, a nominalist can justifiably claim that such a term may become false of its particulars without the perishing of its particulars. But then in the case of such a term the argument from separability does not work, and so apparently nothing prevents the identification of its semantic values with those of other, absolute terms.

Thus, if we say that the nominal definition of ‘sphericity’ is ‘a quantity whose outermost points are equidistant from a given point’, then it may seem obvious that a quantity which is now a sphericity may remain in existence without remaining a sphericity, on account of simply changing the distance of its outermost points from a given point in space. However, this of course will not cause its perishing, it will only change the *way* it is arranged in space, its *modus*. But this *modus* does not have to be another thing over and above the quantity of a body thus and so arranged in space. Indeed, if it were something really distinct from the quantity thus and so arranged, then it could be separated from this quantity by divine power, which means that there could be a quantity with definite dimensions, but no shape, or, conversely, there could be a shape, but no quantity so-shaped, which is absurd.³¹

cundum autem quod praedicatur denominative de locato, constituit praedicamentum ubi. Similiter motus, secundum quod praedicatur de subiecto in quo est, constituit praedicamentum passionis. Secundum autem quod praedicatur de eo a quo est, constituit praedicamentum actionis.” *In Meta.* lb. 11, lc. 9, n. 2313. See also n. 34. below.

³¹ Of course, “older realists”, such as Scotus, were also quite aware of the possibility of this type of argumentation (for example, in the case of real relations), which Stephen Menn calls the “voluntaristic argument”. See Menn: Forthcoming. Their solution was to refer to the essential dependency of one thing on another, which, despite their real distinction, would render their separation contradictory, and hence not possible even by divine power. In a different context, Henry of Ghent also talks about the inseparability of real relations from their foundations on account of their essential dependency on them: “De relativis etiam secundum esse dictum erat, quod quaedam erant relativa per se secundum duos modos, sci-

Thus the spherical shape is just a quantity thus and so arranged, and it ceases to be this quantity when the quantity ceases to be thus and so arranged. So the *modus* referred to by the term 'sphericity' is nothing but the thing referred to by the absolute term 'quantity'. Still, it is *not* the same thing as this quantity, absolutely speaking, for the same thing may go on existing without its continuing to be this *modus*. So the *modus* cannot be said to be the same thing, absolutely speaking, yet it cannot be said to be a distinct thing absolutely speaking either. So it has to be distinct just *somehow* [*aliqua*], in a qualified sense, namely, as Suárez would call such a qualified distinction, *modally*.³²

On the basis of this reconstruction I think it is easy to see how naturally the ontology of *modi* arises in such a framework.³³ But, as a matter of fact, not all elements of this framework are necessary for the emergence of *modi*. As we could see, to invalidate the argument from separability it was enough to regard abstract accidental terms as non-rigid, that is, as non-essential predicates of their particulars. Buridan's method to show that such a term is non-essential is conceptual analysis in terms of nominal definitions. But this is not the only possible way to arrive at the same conclusion. In fact, the "older realists" already had appropriate tools for treating several abstract accidental terms as non-essential predicates of their particulars, and so, as not necessarily picking out really distinct entities. As Domingo Soto's work shows, the traditional distinction between *relationes secundum esse* and *relationes secundum dici*, combined with identifying relations with their foundations, can achieve exactly the same result in ontology as the different,

licet modo numerorum et modo potentiarum. Quae sunt verissima relativa, quia referuntur per essentialem dependentiam fundatam in aliquo quod per se pertinet ad utrumque eorum, in quantum refertur ad reliquum, ita quod singulum sit relativorum per se, et id quod habet in se, per se refertur ad suum correlativum. Ita quod, si desinat referri, hoc est quia deficit per se in ipso illud super quod fundatur ille respectus, et si de novo incipit referri, hoc est quia de novo incipit esse in eo id super quod ille respectus fundatur, sive fuerit ipsa essentia eius super quam fundatur, sive aliquid aliud." Henricus de Gandavo, *Quodl.* III, q. 10. But then, it seems that Henry's more radical solution was eventually to opt for the real identity and merely *intentional distinction* of relations and their foundations. See n. 13 above.

³² Cf. Suárez, *Disputaciones*, disp. VII, sect. I.

³³ For further details concerning Buridan, see Normore 1985. For comparisons with Ockham, see Adams 1985.

nominalist tactic.³⁴ But, instead of using Buridan's eliminative nominal definitions, Soto uses these "old tricks" to eliminate real distinctions between the semantic values of terms belonging to several categories, especially of those belonging to the last six categories, containing the Pseudo-Porretanus's by then infamous "six principles". Indeed, quite characteristically, he expresses astonishment at the fact that others think nominal definitions could not be given of absolute terms, a direct consequence of Buridan's understanding of the function of nominal definitions. As he says:

Furthermore, a nominal definition is what explicates the quiddity of a name, and the quiddity of a name is its signification: that definition, therefore, which explicates what a name signifies, is the nominal definition. And this, as Aristotle says in bk. I. of his *Posterior Analytics*, is presupposed from the beginning of each science. For example, if we set out to deal with the science about man, we have to presuppose what the name 'man' signifies. And the phrase which explains what it signifies is the nominal definition, even if it would not explain the nature of man at all, as if you were to say, "man signifies the animal than which none is more excellent". And so I do not know from where recent authors [*iuniores*] took it that an absolute name cannot be defined by a nominal definition, for what is signified by an absolute name, such as 'elephant', is just as well explained, as [what is signified by] the name 'white'.³⁵

34 "Est ergo conclusio quod sex ultima praedicamenta sunt relativa secundum dici, quae non sunt vere relativa, sed res absolutae, quae tamen explicari non possunt nisi per respectum ad res a quibus dependent". Soto, *In Categorias*, 237 b. Cf.: "Cum enim substantia omnium sit fundamentum, tria in rebus est considerare, scilicet, aut id quod est substantia, aut accidens quod formaliter est in substantia, aut res quae extrinsecus sunt circa substantiam. Res primi generis sunt in praedicamento substantiae. Res secundi generis sunt in tribus proximis praedicamentis; si enim accidens quod formaliter est in substantia est absolutum, aut est quantitas aut qualitas, et si relativum, est ad aliquid. Res tertii generis pertinent ad sex ultima praedicamenta." *ibid.* In fact, since Soto also argues that even *relationes secundum esse* properly in the category of relation are not really distinct from their *fundamenta*, precisely because, as we would say, they are not rigid designators of their particulars, his ontology is basically the same as Buridan's. See *ibid.*: 213-17.

35 "Rursus definitio quid nominis est illa quae explicat quidditatem nominis, & quidditas nominis est eius significatio: illa ergo definitio, quae explicat quid nomen significet, est quid nominis. Quae (ut auctor est Aristo.i.post.) praesupponitur in initio cuiusque scientiae: vt aggredienti investigare scientiam de homine, supponendum est quid significat ly homo. Et illa oratio qua declaratur quid significat, est definitio quid nominis, licet nullam naturam hominis explicaret. Vt si diceres, homo significat illud animal, quo nullum est praestantius. Et ideo nescio unde collegerunt iuniores, quod nomen absolutum non potest definiri definitione quid nominis, postquam ita bene explicatur, quid significat nomen absolutum, elephas, sicut nomen album." Soto: *Summulae*, f. 22c. For this usage of *iuniores* cf. f. 214 i.

Nevertheless, despite this difference with regard to nominal definitions, both Soto and Buridan are able to regard the semantic values of several abstract accidental terms as not really distinct entities from the semantic values of absolute terms on account of the fact that they treat these abstract terms as connotative, although on different grounds.

“Nominalists”, in their theory of signification, make the fundamental distinction between absolute and connotative terms, which establishes only absolute terms as essential predicates of their particulars, or as we would say, rigid designators, and hence the only carriers of ontological commitment to really distinct entities. Combining this semantics with the eliminative nominal definitions of abstract terms, the desired ontological reductions are “automatically” achieved.

Later “realists” remain “realists” insofar as they stick to old semantic principles as well as to old reductionist tactics. But at the same time, apparently prompted by the “nominalist” charges, they are also eager to show that they are no more committed to an unreasonably overpopulated ontology than the nominalists are. A natural consequence of this program was the consistent use of *modi* – not only in the form of “extra-categorical” *modi essendi*, as they appeared in the works of “older realists”, but also in the form of “categorical” entities – culminating in Suárez’s systematic treatment of the theory of distinctions. However, this systematic use of *modi* apparently opened up the conceptual possibility of eliminating *all* really distinct accidents, “which – as Descartes puts it – would be added to substances (like little souls to their bodies), and could be separated from them by divine power”.³⁶ Indeed, since aside from considerations concerning the theology of the Holy Eucharist, the main reason for assuming the distinct existence of inherent accidents was the mostly implicit assumption that their abstract names were their essential predicates, the elimination of this assumption, *both by the nominalists and by the later realists in their own ways*, naturally led to the elimination of really distinct accidents in favor of the modes of substances in most categories by both groups of thinkers. But then it should come as no surprise that it was precisely the possibility of this sort of elimination, by whatever conceptual means available, that was to be ea-

36 AT 3: 648, quoted and translated in Menn 1995: 185.

gerly seized upon by the representatives of the emerging modern science and philosophy, who in this way could do away with *all* the “obscure entities” purportedly referred to by the “barbaric” abstract terms of “the schools”.³⁷

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