The Semantics of the Modistae

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Summary: Some late 13th-century logical texts written by authors connected with modistic grammar show an approach to logic that parallels the attempt to found grammar in reality. A distinctive mark of the Modistic approach to logic seems to lie in the conception of meaning that emerges from commentaries on the *Ars nova* and from sophismata: signification is the essence of linguistic signs, and this implies the semantic irrelevance of context with respect to both the elimination of ambiguity and the determination of denotation to present, past, or future objects. With this in mind, one should speak less of a "Logic of the Modistae" than of a "Semantics of the Modistae".

0. Introductory remarks

In his famous article "Die Logik der Modistae" Jan Pinborg (1975a) analyzed three possible features of a modistic approach to logic:¹

- 1) the theory of meaning
- 2) the conception of the object of logic,
- and strictly dependent on the latter -
- 3) the theory of intentions.²

In this paper, I will not deal with the theory of first or second intentions, nor will I repeat what I wrote about the object of logic (cf. Marmo 1990, 1991a, 1991b), I would instead like to enlarge the scope of my previous work on the subject of modistic theory of meaning (Marmo 1994), considering here also commentaries on the *Ars vetus* and on the *Prior Analytics* stemming from the same group of logicians, in an attempt to uncover some specifically

¹ Since Pinborg 1975a, other scholars have accepted as an established fact that a 'modistic paradigm' was predominant in logic at the end of XIIIth century, in Paris and Bologna: cf. Knudsen 1982, Tabarroni 1988, Lambertini 1989 and 1992, Andrews (forthcoming).

² See also Pinborg 1974, 1975b, 1980.

modistic tenets on language and meaning.³ Many features of the modistic approach to language have already been pointed out by Pinborg (1975, 1976); I will arrange them in a different form, adding some more details and putting them in a larger framework.

I will discuss first whether any extrinsic criterion for recognizing modistic logical works might be worked out from the analysis of commentaries on the *De interpretatione*, then I will proceed to some points of doctrine, examining some commentaries on the *Categories*, on the *Topics*, on the *Elenchi*, and on the *Prior Analytics*.

1. The use of modistic grammar in commentaries on the De interpretatione

Among extrinsic criteria useful for recognizing modistic logical works I would list, first, the fact that they are written by authors who also commented on Priscian using the triplet of *modi significandi*, *modi essendi*, and *modi intelligendi*; and, second, that they apply specific modistic grammatical concepts to logical problems. Good examples are Peter of Auvergne's commentary on the *De interpretatione* – where the distinction between active and passive *modi significandi* is suggested for the first time⁴ – and Gentilis of Cingoli's commentary on the same work, where the Bolognese master interprets Aristotle's distinction between noun and verb in plain modistic terms.⁵ There is no need to go into further detail; the latter is an ex-

³ In my book (Marmo 1994) I tried to draw a sharp distinction between the theory of grammatical signification (what I called "metasemantics") and that of signification: in the modistic scheme of the construction of the *pars orationis* (see below, section 3.1, and Marmo 1994: ch. 3) signification precedes grammatical signification, and it is the object of a semantic theory, which is traditionally developed in logical works. That is why one should talk about a "semantics" of the Modists rather than about a "logic" (see also Perler 1995: 348).

⁴ In Periherm., qq. 34-35, in Ebbesen 1993a: 167-68 (cf. Pinborg 1977: xxvi).

⁵ In Periherm.: 62rb: "Dico ergo quod nomen potest considerari tripliciter ut spectat ad propositum, quamquam unus illorum modorum non sit bene proprius. Vno modo 'nomen' potest dici aliquid intellectum sub debitis modis intelligendi (significandi, ms.) nominis, secundum quod nomen significat per modum habitus et quietis et determinate apprehensionis siue per modum substantie qualificate, sicut dixerunt antiqui. Alio modo 'nomen' dicitur esse aliquid significatum per uocem sub debito modo significandi, scilicet per modum habitus et quietis et determinate apprehensionis, ita quod hic [[nos]] uox applicatur ad rem. Alio modo dicitur 'nomen' uox significans sub debito modo significandi, scilicet per modum habitus

treme and rare case that easily finds exceptions: Parisian masters, such as Radulphus Brito,⁶ do not subscribe to Gentilis' interpretation. This means that extrinsic criteria, and analysis limited to one topic or one type of commentary, can be used only to draw positive conclusions, but not negative ones: even if Brito does not apply current grammatical definitions of noun and verb to the interpretation of the second chapter of the *De interpretatione*, he remains one of the outstanding modistic logicians, as we shall see.

In the majority of cases extrinsic relationships to modistic grammar are not sufficient either to label a logical or a semantical theory as modistic, or to include an author in a group of supposedly modistic logicians. In many cases, deeper connections between grammatical and logico-semantical theories have to be searched for.

And here comes a better example from the commentaries on the *Categories*.

2. The categories and the modi essendi: a real foundation for logic

If genera are different and co-ordinate (i.e., non-subordinate to one another), their differentiae are themselves different in kind. (*Cat.* 3, 1b16-17)

Commenting on this passage from the *Categories*, Gentilis of Cingoli says that the categories (as supreme genera) are separated not only by their essences, but also by something else, which he calls *modi praedicandi*. Similar passages can also be read in the

et quietis et determinate apprehensionis. Nec proprie ptest accipi 'nomen' primo modo, scilicet secundum quod dicit aliquid intellectum [aliquid intellectum] sub debito modo intelligendi per modum habitus quia ut sic illi uero(?) non competit 'uox', nec per 'uocem' diffiniremus ipsum, set potius: nomen est aliquid intellectum per modum habitus et quietis et ad placitum cuius nulla pars separata intelligitur. Nec etiam proprie accipitur 'nomen' 3º modo dictum, scilicet pro uoce significante aliquid sub debito modo significandi per modum habitus, quamquam ita esset bona predicatio et formalis 'nomen est uox' illo modo accipiendo 'nomen', quia sicut infra patebit hic determinatur de nomine secundum quod subicitur et predicatur; uox autem nec subicitur, nec predicatur; nam ut sic ista esset falsa 'homo est animal', quia ista uox 'homo' non est ista uox 'animal'; set potius predicatur et subicitur illud quod per uocem significatur, et ideo solum accipitur 'nomen' illo alio modo dicto, scilicet quod dicit michi significatum per uocem sub debito modo significandi per modum habitus."

⁶ In Periherm., q. 5: 107rA-B.

commentaries by Peter of Auvergne, Simon of Faversham, Durandus of Auvergne, Radulphus Brito, Thomas of Erfurt, and Angelo of Arezzo, a pupil of Gentilis.⁷ All these commentators hold that the *modi praedicandi* proper to each category derive, thanks to an act of the intellect, from *modi essendi* and cannot be reduced to one another. As Simon of Faversham suggests, the grammarians' thesis of the origin of the *modi significandi* in the *modi essendi* finds its logical counterpart in the theory of the correspondence between *modi praedicandi* and *modi essendi* or *proprietates rerum*:

Predicamenta enim distinguuntur penes modos essendi, quia distinguuntur penes modum predicandi; propter hoc enim distinguitur substantia ab aliis. Sed modi predicandi sumuntur a modis essendi sicut modi significandi. (*In Pred.*, q. 12: 85)

In order to have a complete parallel between the two theories we would need some clarification of the relations that hold between *modi intelligendi* and *modi praedicandi*. In the commentaries on the *Categories*, however, almost no attention is paid to this topic. The only author, to my knowledge, who gives a complete and consistent description of the relations between *modi essendi*, *modi intelligendi* and *modi praedicandi* is Angelo of Arezzo at the outset of his commentary on the *Categories*.

He defines *praedicamentum* as the order of the predicables according to their higher or lower degree of generality. There are four sorts of 'order'.⁸ The first is the order that exists among all beings of the universe: it is called *perficimentum*, since it is the order of things according to their degree of perfection. But it is not relevant to my point, here. There is a second sense of 'order', where we meet the *modi essendi*: it is called *essentia* and it is the order of things insofar as they are distinguished by their *modi essendi* as such. Examples of these *modi essendi* are the properties of 'being independent of everything else' (*per se stare*), 'having a body' (*ratio corporis*), 'living', 'having sensations', 'thinking' (each of these properties is also an *apparens*). The third kind of order is called *intelligimentum*. It is caused by the same *modi essendi*, but only insofar as they are understood by the intellect and used in order to grasp the things themselves. (He acknowledges that this name sounds

⁷ See references to their texts in footnotes to the table at the end of the present chapter.

⁸ In Pred.: 24vA-B (see texts in Marmo 1992a: 361-62, nn. 35-38).

quite odd to his students' ears, and tries to excuse his word-coining by appealing to the *penuria nominum*). The last type of order is ascribed to things insofar as they are understood through the *modi intelligendi* and these are transformed into *modi* (or *rationes*) *praedicandi*. Taken this way the order is named *praedicamentum*. The result of this theoretical (and word-coining) effort is that of placing all the modes connected with the *modi praedicandi* in a system which corresponds to that of the *modi significandi*.

Two things, however, need to be considered here. First of all, it is difficult to say how far a system such as this was actually adopted by Parisian or Bolognese logicians of the last decades of the thirteenth century. I could only find very rare references to the *modi intelligendi* as distinct from the *modi praedicandi*. Furthermore, the problem of the *modi praedicandi* did not receive the same emphasis in the field of logic as did the *modi significandi* in the field of grammar. And this is, of course, quite understandable, since the notion of *modus praedicandi* did not play any relevant role except in the treatment of Aristotelian categories. Only Simon of Faversham, as seen above, hinted at a parallelism between the two series of modes.

However, in another text by Angelo and in a passage in an anonymous commentary on the *Sophistici elenchi*, I found what may be a clue to understanding the role of the *modi praedicandi*, not only in the first part of logic, but in the frame of a modistic approach to language as well. Solving a *dubitatio*, Angelo specifies that the fourth order did not receive the name of *subiectamentum* from the *modus subiciendi*. It could well have received this name, he argues, but since the predicate plays the role of the form in a proposition, while the subject plays that of the matter, the name has been drawn from the worthier element, that is, the form. In this context Angelo says something quite enlightening about the role of the *modi praedicandi*:

modus predicandi est formalis ratio predicati, modus uero subiciendi subiecti.9

⁹ In Pred.: 24vB: "Sed tu dices: cum in quolibet predicamento sint res apte nate subici et etiam predicari, quare non denominauit a modo subiciendi sicut a modo predicandi, ut dicatur 'subiectamentum'? Dico ad hoc quod denominauit a modo predicandi et non a modo subiciendi, eo quod predicatum ipsum habet rationem forme et per consequens dignioris. Sed subiectum habet rationem materie et indignioris. Et per consequens, quia modus predicandi est formalis ratio predicati, modus uero subiciendi subiecti, pro tanto a modo predicandi denominauit predicamentum et non a modo subiciendi, eo quod denominatio ut in pluribus fit a digniori."

I would like to recall in this connection a text by the Anonymous-SF on the *Elenchi*:

Terminus iterum addit supra ista rationem subicibilis et praedicabilis, et secundum istas distinctas rationes distinctos habemus terminos, scilicet subiectum et praedicatum, nam praedicatum cum subiecto habet rationem praedicabilis, et subiectum respectu praedicati habet rationem subicibilis.¹⁰

Angelo's system fits perfectly with the form-matter analysis of language that was largely adopted by the Modists.¹¹ From this point of view, the *modi* or *rationes praedicandi*¹² represent a new form which is added to a part of speech (as matter) in order to make it enter a proposition as predicate. Like the *modi significandi*, they originate from the properties of the things through the mediation of the intellect that receives them (as *modi intelligendi*).

The following table summarizes the system of the *modi essendi* (or *praedicandi*) that define the different categories:

¹⁰ Anonymous-SF, *In El.*, q. 41: 83-84. But see also a different explanation of the subject-predicate functions by Martin of Dacia, *Modi sign.*, IV.13: 9: "Terminus autem est dictio sive pars orationis et dictur a terminando, quia terminus terminat totam resolutionem loyci. Loycus enim non potest ire ultra terminum, quia resolvit sillogismum in propositiones, propositiones autem in subjectum et praedicatum, qui sunt termini loyci. Unde subjectum et praedicatum a diverso situ denominantur." (cf. Thomas of Erfurt, *Gram. Spec.*, 6: 148).

¹¹ See Marmo 1994, ch. 2-3. Angelo of Arezzo does not seem to be completely consistent about this point. Elsewhere in his commentary on the *Categories*, he criticizes the application of the notion of form and matter to the analysis of the phonic level of language (see Marmo 1994: 89, n. 30).

¹² In some sources, *modi significandi* and *rationes consignificandi* are used interchangeably (see Marmo 1994: 155); in some other sources, there seems to be a relation of presupposition between *rationes consignificandi* and *modi significandi activi*, so that the latter gives a vocal expression the possibility of consignifying the properties of things, or yields in it a relation of consignification (see Marmo 1994: 157, n. 61).

¹³ See Peter of Auvergne, *In Praed.*, q. 16: 28; Simon of Faversham, *In Pred.*, q. 13: 87; Durandus of Auvergne, *In Praed.*, q. 8: 12b; Gentile of Cingoli, *In Pred.*: 23vA; Angelo of Arezzo, *In Pred.*: 28vA, 30rA.

¹⁴ See Peter of Auvergne, *In Praed.*, q. 24: 42; Simon of Faversham, *In Pred.*, q. 33: 114; Durandus of Auvergne, *In Praed.*, q. 17: 18a; Gentile of Cingoli, *In Pred.*: 28vB; Radulphus Brito, *In Pred.*, q. 14: 81v; Thomas of Erfurt, *In Pred.*: 124rB.

modi essendi / praedicandi	praedicamenta
per se stantis / sus bsistendi in se ipso et substandi alii / non esse in subiecto $^{\rm 13}$	substantia
essendi in alio ut ipsum est habens partes / habendi partes per se ¹⁴	quantitas
informandi subiectum, sic quod nullum respectum et nullam extensionem causet; distinguendi; denominandi; cognoscendi; essendi principium operationis ¹⁵	qualitas
habendi se in respectu ad quoddam aliud / essendi in alio in comparatione ad aliud / ad alterum dependere tanquam ad terminum ¹⁶	relatio
motus vel fluxus ut est ab ipso agente ¹⁷	actio
motus vel fluxus ut recipitur in patiente ¹⁸	passio
(m. e.) causatus in locato corpore ex applicatione loci ad ipsum ¹⁹	ubi
(m. e.) causatus in corpore locatum ex habitudine quam locum habet ad ipsum et ad eius partes ²⁰	positio
(m. e.) causatus in re temporali ex habitudine et applicatione temporis ad ipsum 21	quando
ut accidens extrinsecum comparatum ad substantiam sicut habitum ad habentem ²²	habitus

¹⁵ Gentile of Cingoli, *In Pred.*: 42rA. He comments on this list of modes: "Set est intelligendum quod unus est ille modus qualitatis, set ipsum circumloquitur per omnes illos modos, eo quod sibi non est nomen impositum qualitatis et talis modus predicandi non reperitur in aliqua re alterius predicamenti."

¹⁶ See Peter of Auvergne, *In Praed.*, q. 54: 75; Simon of Faversham, *In Pred.*, q. 41: 132; Durandus of Auvergne, *In Praed.*, q. 35: 24a; Gentile of Cingoli, *In Pred.*: 35vA and 36rA-B; Angelo of Arezzo, *In Pred.*: 48rA; Radulphus Brito, *In Pred.*, q. 25: 91v.
17 See Durandus of Auvergne, *In Praed.*, q. 5: 12a; Simon of Faversham, *In Pred.*,

q. 12: 83; Gentile of Cingoli, In Pred.: 50rB.

¹⁸ Ibid.

¹⁹ See Durandus of Auvergne, *In Praed.*, q. 5: 12a; Simon of Faversham, *In Pred.*, q. 12: 83.

²⁰ *Ibid.*

²¹ See Durandus of Auvergne, *In Praed.*, q. 5: 12a; Simon of Faversham, *In Pred.*, q. 12: 84.

²² Ibid.

3. Meaning, denotation, and context: commentaries on the *Elenchi*, on the *Topics*, and on the *Prior Analytics*

3.1. The passage quoted above from the anonymous commentary on the *Elenchi* is part of a text in which the concepts of vox, signum, dictio, pars orationis, and terminus are distinguished within a graded classification system. Parallel texts can be read both in grammatical and logical texts (commentaries on the Categories, on the De interpretatione, and on the Sophistici elenchi). The conception of meaning (or signification) that they imply can be seen as a distinctive mark of the modistic approach to language: the relation of signification (ratio significandi), posited by an act of voluntary imposition, is added to the voice as a form to its matter, so that it becomes a sign or, better, a 'linguistic sign' called *dictio*. As I have shown elsewhere,²³ the concept of dictio represents the common theoretical background of the approach to language and signification that was developed both in grammatical and logical texts by arts teachers in Paris and Bologna. In their view, the original imposition does for the linguistic sign what nature does for a natural thing, and the relation of signification is explicitly described by some authors as the essential or substantial form of the *dictio*, just like pronunciation is the essential form of the vox, or the modus significandi (or relation of consignification) is the essence of the *pars orationis*.²⁴ These properties or relations are crucial for the scientific foundation of grammar and logic, and they present language as a multi-layered object: every property informs the inferior layer and builds up a linguistic entity of a higher degree. As I will try to show, many positions developed by logicians of the group indicated by Pinborg (1975a) are directly connected with this general framework.

3.2. A direct consequence of the view that signification is the essence of linguistic signs is the thesis of the semantic irrelevance of the context, or the lexical item's semantic independence of context.²⁵ It is motivated by the following type of argumentation:

²³ See Marmo 1994: ch. 3; and for a shorter presentation Marmo 1995.

²⁴ Angelo of Arezzo, as we saw, adds that the *modus praedicandi* is the essence of the predicate (*ratio formalis praedicati*).

²⁵ Pinborg talked about "kontextunabhängige Analyse der Bezeichnung" (1971: 251).

Accidentale non transmutat essentiale; set impositio est essentialis in termino, et additio huius quod <est> 'sanus est' uel alterius est accidentalis; ergo non potest tolli significatum eius per illius termini additionem (...).²⁶

As I have remarked (1994: ch. 5.5.1), from this principle many logicians of this period, commenting on the *Sophistici elenchi*, maintain that the context is relevant for solving equivocity only when the equivocal term is immediately linked to a modifier that pertains to just one of its meanings, as in *canis latrabilis currit* where *canis* and *latrabilis* make up one syntactical element (*extremum*); in all other instances, *de virtute sermonis*, the context is completely irrelevant. In particular:

1) when a modifier is added to the term mediately, i.e. as a predicate, so that subject and predicate do not constitute one syntactical component (as in *canis currit*), the resulting sentence is ambiguous and corresponds to as many sentences as the term has meanings;

2) when a quantifier is added to the term, as in *omnis canis currit*, it does not distribute the term over all its meanings, but it performs as many distributions as the term has meanings.²⁷

The commentators on the *Elenchi* distinguish the case of equivocal term from that of the analogical one, that is, from that of a term signifying different things according to a certain priority. The latter is affected by the context in exactly the opposite way an equivocal term is: when taken alone, that is with no modifier immediately added, it signifies only its first meaning; it becomes ambiguous, however, when a modifier is immediately added to it and the modifier pertains to its secondary meaning.²⁸

As a further consequence of the aforementioned principle, these commentators hold that word order is irrelevant for the elimination of syntactical ambiguity, since transposition of words is an accident as compared to the essential feature of their signification. This amounts to saying that *pugnantes vellem me accipere* and *pugnantes vellem accipere me* are equivalent and are both affected by the same kind of propositional ambiguity (that is, amphiboly).²⁹

²⁶ Anonymous of Prague, In El., q. 19: 85vB.

²⁷ Cf. Ebbesen 1977, 1979, 1980; Marmo 1994: ch. 5, 1995.

²⁸ Cf. Marmo 1994: ch. 5.2, 1995: 170-71.

²⁹ Cf. Marmo 1994: ch. 6.2, 1995:177-78.

As I remarked above, these logicians draw these conclusions *de virtute sermonis*, that is from the point of view of what the original imposition put in language. Some of them, however, are inclined to admit that from a different point of view, roughly speaking that of the actual usage of language, context (including word order) might be seen as a clue for interpreting ambiguous phrases.³⁰

3.3. As we will see, there is a remarkable parallel between the way in which some of these logicians (such as the pseudo-Boethius, Simon of Faversham, and Radulphus Brito) deal with the problem of denotation (or reference to individuals) in their commentaries on *Prior Analytics*, and the discussion on ambiguity I have sketched above.

There is a simple explanation for this fact: in this case as well as in that of polysemy the relevance of context is again in discussion, but this time with respect to denotation. In the following sections I will deal with the following issues:

- 1. universal quantification and denotation of supposita;
- 2. the relevance of predication for *ampliatio* and *restrictio*.

3.3.1. Before presenting the first question, it is expedient to outline the modistic treatment of universal quantifiers.

Boethius of Dacia discusses the nature of *omnis* both in his *Modi significandi* and in his commentary on Aristotle's *Topics*: according to him, *omnis* signifies a *modus rei* (rather than a *res*) and it refers specifically to the relationship holding between the term (or the common nature signified by it) and its *supposita*, i.e. the individuals which participate in that very nature. Boethius makes his point adding that *omnis* does not tell anything about the relation between subject and predicate:

dicendo 'omnis homo' significatum harum dictionum bene potest intellegi sine respectu ad praedicatum, sed non potest intellegi sine respectu termini ad supposita. (*Top.* II, q. 2: 111)

Boethius' position is the opposite of that of Kilwardby, Albert the Great, and the tradition of *Syncategoremata*. They maintained that the action of the distributive sign starts from the subject and ends

³⁰ Cf. Marmo 1994: ch. 5.5.4 and 6.2.3, 1995: 174-79.

with the predicate.³¹ At the end of the century, we read the same position as Boethius' in Brito's commentary on the *Topics*. Again, the relation between universal quantifier and subject term is explained in terms of *modi significandi*:

cum quocumque habet signum universale proportionem, ei potest addi; sed signum universale habet modum distribuentis et dividentis aliquid in plura supposita; ergo potest addi ei quod significat per modum per se stantis et multiplicabilis in plura supposita; sed terminus communis secundum se sumptus significat per modum per se stantis et est multiplicabilis in plura supposita; ideo etc.³²

Understandably, this way of dealing with logical relationships is highly problematic, but this is not my point here. For my purpose, it is important to stress the fact that the Modists always considered dyadic relations as the starting point of every syntactical analysis. A universal quantifier is syntactically connected to the term which immediately follows it, and distributes it over its individuals, making denotation possible. As we will see, this procedure is followed by Modists also in their discussions about *ampliatio* and *restrictio*.

Before proceeding to my second point, just a few words on the debates about the range of distribution of a universal term: if universally quantified, does a common term denote present, past, and future *supposita*?³³ Does it denote actual and potential *supposi*-

³¹ Cf. Robert Kilwardby, *In Periherm.*, ms. Cambridge, Peterhouse 206: 72vB (aduerbium "habet compositionem essentialem ad uerbum, sic est in hac dictione 'omnis', quia eius potestas incipit ad subiectum et terminatur ad predicatum"); *In Analytica priora*, ms. Cambridge, Peterhouse 205: 88rB-vA; Robert Bacon, *Syncategoremata*, ms. Digby 204: 88ra; Albert the Great, *Liber I Priorum analyticorum*, I.7, ed. A. Borgnet, vol. I, Paris, 1890: 468. It must be remembered also that archbishop Kilwardby in 1277 condemned a position like the one expressed by Boethius: "Item, quod signum non distribuit subiectum in comparatione ad praedicatum" (*Chartularium Universitatis Parisiensis* I: 558, n. 474; cf. Lewry 1981: 245, nn. 89-93, and 267).

³² In Top. II, q. 2, ms. Paris, BN, lat. 11132: 27vA (transcr. N.-J. Green Pedersen). **33** Relevant texts are the following: Boethius of Dacia, *Top.* II, q. 5: 116-119 ("utrum hoc signum 'omnis' distribuat pro suppositis in potentia"); Anonymous-MF, *In An. post.* I, q. 26 (utrum signum additum termino communi distribuat ipsum pro suppositis praesentibus, praeteritis et futuris unica distributione"), in Pinborg 1973: 52-54 (ed. as q. 24: see list of questions in Marmo 1991a: 109); Anonymous-C, *In An. post.* I, q. 33: 87vB; Anonymous, *In An. pr.* I, q. 56, in Pinborg 1971: 260-63; Siger of Brabant, *Sophisma "Omnis homo de necessitate est animal*", ed. in Bazán (ed.) 1974: 43-52; Radulphus Brito, *In Top.* II, q. 6, in Pinborg 1971: 274-75.

ta? Simplifying a bit, the two questions deal with very closely related subjects: as Boethius of Dacia suggests, future and potential *supposita* are just the same; past *supposita* are no *supposita* at all; therefore, actual *supposita* are only present individuals. But if according to him (and, later on, according to Brito) the universal quantifier distributes the subject term only over actual (or present) *supposita*, all the other logicians maintain that it distributes over all its supposita. This is considered by them a direct consequence of the nature of the *impositio nominum*: nouns are imposed to signify common natures, indifferent to existence and non-existence;³⁴ furthermore, according to Aristotle's definition of noun (and the grammarian's definition of its *modi significandi*) no noun signifies (or co-signifies) time; therefore, when a common noun is quantified, it must denote all its *supposita*, with no reference to their position in time.

3.3.2. Even if these logicians make no use of the subdivisions of the theory of *suppositio*, they discuss two other properties of terms traditionally linked to *suppositio*: *ampliatio* and *restrictio*. In one of the texts published in Pinborg 1971, the problem of *restrictio* is directly related to both the question of the relevance of predication for denotation, and that of the reference to present, past, and future individuals. In his commentary on *Prior Analytics*, an anonymous logician discusses the question whether a common term could be restricted by the predicate (a verb, in this case), so that if the verb is present, it is restricted to present individuals, if past to past ones, and if future to future individuals.³⁵ His position is consistent with the general frame I sketched above: a common term is indifferent to time in its signification as well as in its denotation, so that in a universal proposition it always refers to all its *supposita* and the verb has no influence whatsoever on it. The anonymous author makes

^{34 &}quot;Sed nos videmus quod natura termini communis universalis potest determinari ad quodlibet tempus per aliquid adiunctum ex natura sua, ut homo praeteritus, futurus et praesens, manente eadem ratione. Quare indifferens se habet natura communis termini ad quodlibet tempus" (Anon.-MF, *In An. post.* I, q. 26: 53). Cf. Marmo 1989: 163-64 (where I presented this as "Scotus' solution to the problem of meaning", not realizing that it was common doctrine at Scotus' time).
35 In An. pr. I, q. 57: 263-66.

reference to a group of logicians who maintain that such a *restrictio* is the case. He calls them "ponentes restrictionem".³⁶

As a matter of fact, we can read a whole debate on this subject in at least two sophismata by Peter of Auvergne, preserved in three manuscripts (cf. Ebbesen 1993b: 58). In his sophisma "Omnis phoenix est", two opinions are presented and rejected before Peter offers his own interpretation. According to the first one a *restrictio* of the range of denotation of the subject due to the verb is possible, because some verbs signify actions that can be true only of existing individuals (such as *currere* or *disputare*) and some other verbs signify actions that can be 'saved' also by non-existing objects (such as *contingere* or *posse*): when the first kind of verb is added, the subject term denotes existing individuals; when the second kind is added, the subject term signifies both existing and non-existing things.³⁷

The second opinion is an attempt to justify *restrictio* from a modistic point of view (significantly it is presented by Peter as a position worked out "by some colleague"). According to this opinion, a term followed by a present tense verb denotes present things, and so on for the other tenses; and this is because *compositio* (the *modus significandi* proper to the verb) is present in a present tense verb, past in a past tense one, and so on.³⁸

38 "Et propter hoc solet aliter dici, sicut etiam tangebatur a quodam sociorum,

³⁶ In An. pr. I, q. 57: 264; cf. Peter of Auvergne, *Sophisma* XIII "Omnis homo est", ms. Firenze, Bibl. Medicea Laurenziana, S. Croce 12 sin., 3: 77vB ("secundum illos qui ponunt restrictiones"); Simon of Faversham, *In An. pr.* I, q. 60: 127^arA.

³⁷ "Ad istud dicitur quandoque quod terminus communis supponens alicui verbo supponit secundum exigentiam illius verbi vel praedicati; sed supponens communibus verbis supponit pro praesentibus et contingentibus, et qualiter hoc contingat sic patet: Quaedam enim sunt verba quae significant actus suos qui nati sunt salvari in existentibus tantum, sicut 'currere', 'disputare', quae quidem supponunt esse, et terminus communis supponens talibus verbis supponit pro existentibus, quia supponit pro eis quae sequuntur ad ipsum; nunc autem sequitur 'homo currit, ergo homo est'. Quaedam autem sunt quorum actus sunt nati salvari in non existentibus, sicut 'potest' et 'contingit', et ideo terminus supponens talibus verbis indifferenter supponit pro entibus et non entibus, ut 'contingit hominem esse animal' vel 'homo potest esse animal' supponit li 'homo' pro eo quod est homo vel quod potest esse homo, quia potentia hominis ad animal supponit potentiam alicuius hominum homo *spat. vac. VIII litt.* enim, et non potest nisi quia aliquid est in potentia ad ipsum" (Peter of Auvergne, *Sophisma* V, q. 2, transcr. and coll. by Sten Ebbesen.)

It is easy for Peter to reject both of these opinions since the first one offers no explanation of its thesis, and the second one gives a wrong justification: *compositio*, as well as the other *modi significandi* of the verb, can have no tense. His conclusion is that

terminus supponens verbo de praesenti de se non habet quod supponit pro praesentibus: supponit enim suum significatum de se pro suppositis per indifferentiam, sicut etiam in suo significato non includit aliquod tempus (...). De se igitur non habet ut supponat pro praesentibus et praeteritis. Item, nec habet illud a praedicato (...). (*Ibid.*)

Other logicians of the next generation, such as Simon of Faversham and Raduphus Brito, agree with Peter's criticism. One of the strongest argument put forward by Simon of Faversham in favour of this same position makes appeal to the grammatical and the lexical components of the verb, in order to conclude that none of them could exercise any influence on the common term:

dicendo sic 'homo currit', si li 'currit' restringat 'hominem', aut restringat ipsum per naturam compositionis aut per naturam rei uerbi aut per naturam temporis consignificati per uerbum. Non ratione compositionis, quia omne restringens aliud restringit ipsum ad sui naturam; si ergo li 'currit' restringit hominem ratione compositionis, cum compositio sit quidam modus significandi, tunc li 'currit' restringeret ipsum ad modum significandi, ita quod subiectum esset eiusdem modi significandi cum uerbo, quod nullus ponit (...). Nec potest dici quod dicendo 'homo currit' predicatum restringat subiectum ratione rei uerbi, quia tunc hec esset uera solum duobus currentibus 'omnis homo currit', quia omnis homo cui inest res significata per predicatum currit. Nec est dicendum quod predicatum restringat subiectum ratione temporis, quia idem tempus manet in uerbo in propositionibus affirmatiuis et negatiuis et \idem/ tempus consignificatum manet in uerbis ampliatiuis et restrictiuis, si ponantur.³⁹

quod terminus supponens verbo de praesenti restringitur ad supponendum pro praesentibus, compositio enim verbi de praesenti praesens est, et de praeterito praeterita, et de futuro futura; compositio autem ipsa medium est inter subiectum et praedicatum, et denotatur esse unum mediante compositione, et propter hoc dicerent quod restringitur subiectum a compositione sicut et praedicatum ad supponendum pro praesentibus, et de modo significandi de praeterito quod est in verbo de praeterito ad supponendum pro praeteritis, et in futuris pro futuris" (*ibid.*). The author of the sophism "Omnis phoenix est" (ms. Paris, BN, Lat. 16135: 62vB-67vB; part. ed. in Libera 1991: 211-17) might be the target of Peter's criticism (cf. Tabarroni 1993: 197-98).

³⁹ In An. pr. I, q. 60: 127^arA; cf. Anon., In An. pr. I, q. 57, in Pinborg 1971: 264; Radulphus Brito, In An. pr. I, q. 46, in Pinborg 1976: 272.

Simon makes explicit appeal to the grammatical definition of the verb which signifies *per modum distantis*, i.e. as a syntactical element distinct from the subject term.⁴⁰ The predicate (or the verb) cannot change the range of denotata of the subject term for the same reason a predicate cannot select the meaning of an equivocal subject term (as in *canis currit*): they do not constitute a unitary syntactical element, so they do not behave like *unum extremum*.⁴¹ It is no big surprise, therefore, to find out that *restrictio* is admitted only when a modifier is immediately added to a common term.⁴² Ampliatio, on the contrary, is admitted by virtue of the

^{40 &}quot;Dico quod non est necessarium subjectum restringi a predicato nec restringitur; et ratio huius est quia restringere nichil aliud est quam facere terminum stare pro paucioribus quam staret secundum naturam suam; set predicatum adueniens subiecto non potest hoc facere, nisi dicatur quod terminus hoc habeat ex sua impositione, et disputare de impositione nominis nichil est; quare etc. Probatio minoris: quia logicus nichil debet ponere nisi causa reddi possit ex \ea que apparent in/ rebus <uel> funda<n>tur super res; nunc autem uidemus in re quod determinans et determinatum oportet esse indistincta loco et subiecto, sicut apparet de forma et materia; nunc autem in propositionibus predicatum et subiectum sunt distincta loco et subiecto: predicatum enim et subiectum diuersos situs habent; predicatum enim \ut/ distans distinguitur(?) a subjecto, unde uerbum (quod est nota predicandi) dicitur significare in ratione distantis, quia cedit in alterum extremum. Arguamus ergo sic ex hiis que apparent in re: \in re autem/ uidemus quod determinans et determinatum sint indistincta loco \et subjecto/; ergo sic erit in propositionibus; set predicatum et subiectum sunt distincta loco, quia predicatum et subiectum habent diuersos situs, unde secundum gramaticos uerbum, quod est nota predicandi, significat[ur] per modum distantis; et ideo predicatum non determinat subjectum" (Simon of Faversham, In An. pr. I, q. 60: 127vB). About the modus significandi distantis, see Marmo 1994: 179-88.

⁴¹ "Nunc autem praedicatum et subiectum, quamquam significentur esse unum, non tamen ut unum extremum, nec tamen uno intellectu concipiuntur, sed ut diversis, et ideo unum non determinat aliud vel restringit ita quod faciat ipsum esse minus quam esset illud" (Peter of Auvergne, *Sophisma* V, q. 2, quoted above).

⁴² "Nichilominus, si determinatio immediate adueniat determinabili, ipsa potest ipsum restringere, quia determinatio adueniens determinabili immediate significatur esse unum et ut unum; et ideo determinatio immediate addita suo determinabili ipsum restringit. Set loquendo de determinatione et determinabili que mediate adiunguntur, unum alterum non restringit; unde negantur restrictiones [restrictiones] mediate, quia dicendo 'homo est albus (-um ms.)' 'homo' non determinatur per 'album'; si autem dicatur 'homo albus currit', tunc homo et album significantur esse unum et ut unum; propter quod restrictiones immediate concedi possunt" (Simon of Faversham, *In An. pr.* I, q. 60: 127vB). Cf. Anon., *In An. pr.* I, q. 57 and q. 74, in Pinborg 1971: 265 and 273; Radulphus Brito, *In An. pr.* I, q. 46, in Pinborg 1976: 272-73.

res significata by verbs such as *contingit* or *potest*, and is considered as an application of the principles that govern analogical terms.⁴³

To complete the picture and the parallel with the discussions about equivocity in the commentaries on the *Sophistici elenchi*, it must be said that the rejection of *restrictio* is argued only *de virtute sermonis*. A different point of view on language allows *restrictio*, according to Simon of Faversham:

Dicendo ergo sic 'homo currit' 'homo' supponit pro presentibus, preteritis et futuris currentibus et non currentibus; unde in ista locutione sunt duo consideranda, scilicet *uirtus sermonis* et *ueritas locutionis*. Quantum est *ex uirtute locutionis* 'homo' non determinatur ad homines presentes, nec ad preteritos, nec ad futuros; quantum tamen *ex uerificatione locutionis* oportet quod determinetur ad presentes. Unde omnes tales orationes false sunt quantum ad sensum quem faciunt; sunt tamen uere quantum ad sensum in quo fiunt (hec est distinctio antiqua). (*In An. pr.* I, q. 60: 127ªrA – emphasis mine)

The reference to the old distinction is quite enlightening: again, a pragmatic point of view on language, that of the language user,

⁴³ Cf. Simon of Faversham, In An. pr. I, q. 61: "dico quod hec uerba 'potest' et 'contingit' ampliant ratione rei significate, et hoc per hanc uiam: quando aliquid dicitur de duobus, de uno per prius, de alio per posterius, sumptum per se stat pro eo de quo dicitur per prius; acceptus autem mediate cum alico pertinente ad secundarium significatum stat pro utrumque" (f. 128rA); cf. also q. 59: 127rB-vB ("utrum iste diuerse acceptiones sint diuerse cause ueritatis, aut sint diuersi sensus multiplicis"); Anon., In An. pr. I, q. 76, ms. Firenze, Bibl. Medicea Laurenziana, S. Croce 12 sin., 3: 56vB-57rA ("utrum ista propositio 'omne b contingit esse a' habeat plures sensus uel acceptiones"); Radulphus Brito, In An. pr. I, q. 46: "ampliatio est quando terminus potest sumi pro pluribus suppositis ex adiunctione termini quam prius posset stare. Modo istud est possibile, ergo ampliatio est possibilis. Major patet. Sed probatio minoris, quia terminus communis secundum se sumptus per prius dicitur de supposito in actu et per posterius de supposito in potentia et per attributionem ad suppositum per se (...). Modo ex usu auctorum habemus nec possumus aliter probare quod terminus communis sumptus secundum se stat pro illo de quo dicitur per prius, sed sumptus cum determinatione pertinente ad secundarium significatum et hoc mediate, tunc stabit pro utroque significato et est oratio tunc distinguenda (...). Modo quaedam sunt praedicata huiusmodi scilicet quae pertinent ad secundam acceptionem sive ad secundum significatum termini sicut 'potest' et 'contingit' et similia talia. Ergo talia praedicata ampliant terminum ipsum et faciunt ipsum stare pro pluribus quam si secundum se sumeretur, quia quando secundum se accipitur solum accipitur pro suppositis in actu, sed quando sibi additur 'potest' vel 'contingit' accipitur pro utrisque" (in Pinborg 1976: 274-75). About analogous terms and their criticism by Radulphus Brito (in his commentary on the *Elenchi*, where a different standpoint prevails) and John Duns Scotus, see Marmo 1994: ch. 5.4.3.

where the context, the intentions of the speaker and his presumed truthfulness have some weight, is opposed to the pure analysis of semantic content, to the code-based semiotics, which is confirmed as a characteristic feature of the earlier stage of Modism.

4. Conclusion

Even a cursory reading of the logical commentaries written by Masters of Arts between Boethius of Dacia and Radulphus Brito shows some interesting correspondences and parallels between their approach to grammar and logic. First of all, and quite obviously, logic as well as grammar does not deal with the phonic side of language. The surface manifestation of thought does not concern the logician any more than the grammarian: logic and grammar are both rational sciences and can no longer be labelled as sermocinales scientiae.44 The correspondences between grammar and logic, however, are not limited to this negative feature. Both disciplines share a concern with reality. Their objects cannot be mere creations of the human mind: it is necessary for them to have a foundation in reality. As a consequence, the modi significandi, which are the proper object of grammar, are conceived as derived from the properties of the things and as common to all individual languages: grammar is therefore a universal and a priori science having as its object a universal feature of language. Logic aspires to this same type of universality, and discussions about logic as a science reveal the same concern about its foundation in reality as those about the science of grammar.⁴⁵ In some authors, as we saw, the parallel between the two disciplines is pushed very far: the system of the derivation of the modi significandi from the modi essendi is applied to that of the modi praedicandi from the modi essendi.

⁴⁴ See, for example, Anonymous-C, *In An. post.*, pro., in Marmo 1991a: 122; Gentilis of Cingoli, *In Pred.*: 17rB; Radulphus Brito, *In Porph.*, q. 2: 37v-38r.

⁴⁵ See, for example, Boethius of Dacia, *Top.* I, q. 6: "omnis scientia aut est accepta a rebus aut est figmentum intellectus. Sed nulla scientia est figmentum intellectus, quia si sic, facile esset fingere infinitas scientias" (p. 25); cf. Simon of Faversham, *In Porph.*, q. 2: 19; Radulphus Brito, *In Porph.*, q. 2: 37r; Id., *In Pred.*, q. 5, ad 3: 73v.

This triadic system of derivation together with the conception of a multi-layered language ensures the theoretical priority of grammar over logic, on the one hand, and of lexical meaning over context and all the pragmatic circumstances of communication, on the other.

A consequence of the theoretical priority ascribed to grammar is that the Modists deal with logical problems from a grammatical point of view: as we saw above, the universal quantifier is first of all considered as a modifier of the subject term and, as I have tried to show elsewhere,⁴⁶ the same holds true for the modalities in their analysis of the fallacies of composition and division. The grammatical model of dyadic relationships between elements prevents their dealing *from a logical point of view* with problems like the scope of quantifiers or of modalities.

Furthermore, the absolute predominance of lexical meaning over context and communication, which can be seen in Martinus and Boethius of Dacia and was clearly shown by Jan Pinborg, seems to be mitigated with the second generation Modists (such as Simon of Faversham, the Anonymous of Prague), and leaves open the way to pragmatic considerations. But, even though the Modists admit the possibility of a pragmatic point of view on language, this remains only secondary: the original imposition still plays the role of essential feature of linguistic items. The theory of the properties of terms is theoretically allowed, but it can survive only in a sort of ecological niche (the Modists, as Pinborg said, prefer to talk about acceptiones terminorum rather than about different kinds of *suppositiones*). As a matter of fact, among these logicians there is no real interest in the properties that terms can get when inserted in a context nor, probably, in a definition of truth in terms of denotation, what Alfred Tarsky called a "semantic definition of truth".

⁴⁶ Cf. Marmo 1992b, 1994: ch. 6.3.

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