

A TREATISE ON IMPLICIT PROPOSITIONS FROM AROUND THE TURN OF THE TWELFTH CENTURY: AN EDITION WITH SOME INTRODUCTORY NOTES

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In his invaluable *Logica Modernorum* L.M. De Rijk has drawn attention to a *Tractatus Implicitarum* which in his opinion is "one of the oldest tracts preserved on implicit propositions in logic"¹.

This tract is contained in MS British Library Royal 9 E XII, a manuscript which was given by a Master David of London to the Augustinian Priory of Merton². If this Master David was the Master David of London who belonged to Gilbert Foliot's *familia*³, we would have in his ownership of

- 1) L.M. De Rijk, *Logica Modernorum. A Contribution to the History of Early Terministic Logic*, vol. II, part I: The Origin and Early Development of the Theory of Supposition, Assen 1967, p.34. The treatise had been noticed for the first time by Fr. Mohan.
- 2) The manuscript is described in G.F. Warner - J.P. Gilson, *Catalogue of the Western Manuscripts of the Old Royal and King's Collections*, vol. I, London 1921, pp.296-297; on f.1r and f.1ov is found the following annotation: "Hunc librum dedit Magister David Londoniensis, Ecclesie Beate Marie de Meriton (Meritona, *Catalogue*). quem qui abstulerit. vel quocumque modo alienaverit. vel pignori subposuerit. vel extra septa ecclesie commodaverit. vel titulum ipsum deleverit. vel mutaverit. anathema sit" (f.1r). The repetition of the annotation on f.1ov is followed in this place by an 'index' of the contents of the MS., which was not noticed by Warner and Gilson: "In hoc volumine continentur Institutiones (in sacram paginam, *add. supra*) Simonis Tornacensis et Questiones theologice et summa magistri Alani porien-sis super Boetium de Trinitate, et Quedam alia".
- 3) On this Master David of London see Z.N. Brooke, *The Register of Master David of London, and the part he played in the Becket crisis*, in *Essays in History presented to R.L. Poole*, ed. H.W.C. David, Oxford 1927, pp.227-245. Mr. N.R. Ker seems to implicitly rule out the identity of owner of this MS. with the Master David of London concerned with Foliot, as he gives "s.xii/xiii" as the possible dates for the owner. Cfr. N.R. Ker, *Medieval Libraries of Great Britain. A List of Surviving Books*, London 1964², p.282.

the MS a very useful *terminus ad quem* for the dating of the writing of this MS and of the composition of some of the anonymous tracts, like the *Tractatus Implicitarum* which it contains. But Foliot's David seems to have died too early to have been the owner and the donor of this MS to the Canons of St. Mary of Merton in Surrey, for paleographers and scholars who have worked on this collective MS have stated that the various items which compose it were written by different hands either between the 12th and the 13th century⁴, or during the first quarter of the 13th⁵, and Foliot's David died in 1189⁶. One could point out that the works of known authors contained in this MS are *all* said to have been *composed* before 1189. But to pin this MS to Foliot's David - in many respects a very tempting idea - one would have to prove that *all* the parts of this MS were actually *written and put together*⁷ before 1189: this would require the construction of sophisticated paleographical arguments which my specific incompetence advises me not to attempt.

Whatever the true story of this MS is, a collation of it and a comparison between the different hands which wrote it show that the tract on implicit propositions stands, at least from a paleographical point of view, by itself: its scribe did not write any of the other tracts contained in the MS, and it is written on a sheet of parchment folded into two folios which forms a quire by itself. Taking into consideration what has been said on the MS so far, and De Rijk's own suggestion about the dating of the tract⁸, it seems to be fairly safe to refer to the *Tractatus Implicitarum* as a work from around the turn of the twelfth century.

Whoever decided to put together what is now for us MS British Library

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- 4) Warner - Gilson, *op.cit.*, p.296; De Rijk, *op.cit.*, p.33; J. Warichez, *Les 'Disputationes' de Simon de Tournai*. Texte Inédit. Spicilegium sacrum Lovaniense, Études et Documents, 12, Louvain 1932, p.LIII.
 - 5) M-T. D'Alverny, *Alain de Lille. Textes inédits avec une introduction sur sa vie et ses oeuvres*. Études de Philosophie Médiévale, vol.52, Paris 1965, p.60, note 10: "Londres BL Royal 9 E XII, manuscrit écrit par plusieurs mains anglaises dans le premier quart du XIII^e s."
 - 6) Z.N. Brooke, *op.cit.*, p.239.
 - 7) The original binding of the MS has been substituted in 1963 with a new binding, and the British Library has unfortunately no records of any description of the original one.
 - 8) De Rijk, *op.cit.*, p.34: "*Tractatus Implicitarum*, a brief anonymous tract on implicit propositions in logic. It ... was written in a different hand than the preceding treatises. It is minute and seems to date from the second half of the twelfth century."

Royal 9 E XII must have been a theologian of discernment, with a definite preference for what scholars have called the 'gilbertine school',⁹: the MS contains the two major works of Simon of Tournai¹⁰ and four works by Alan of Lille¹¹; the remaining anonymous theological material, mostly *quaestiones*, fit quite well into the pattern¹². Since the writings of Simon show an interest in logic¹³, and those by both Simon and Alan constitute one of the most interesting attempts in the late twelfth century to construct

- 9) Cfr. M.-T. D'Alverny, *op.cit.*, p.61. MS BL Royal 9 E XII is described as a "précieux recueil qui reproduit sans doute un florilège constitué par un élève d'Alain et de Simon de Tournai".
- 10) Cfr. ff.11ra-45va [Simon of Tournai, *Institutiones in Sacram Paginam*]: see Richard Heinzmann, *Die 'Institutiones in Sacram Paginam' des Simon von Tournai*. Einleitung und Quästionenverzeichnis. Veröffentlichungen des Grabmann-Institutes, Neue Folge 1, München 1967, p.23; ff.47ra-74va [Simon of Tournai, *Disputationes*], edited by Joseph Warichez, *Le 'Disputationes' de Simon de Tournai*, *cit.* This MS is described at p. LIII, and is referred to in the edition as L.
- 11) Cfr. ff.158ra-167va [Alan of Lille, *De Virtutibus, De Vitiis, De Donis Spiritus Sancti*], edited by O. Lottin *osb.*, "Le Traité d'Alain de Lille sur les Vertus, les Vices et les Dons du Saint-Esprit", *Medieval Studies* 12 (1950) pp.20-56, and re-edited by Lottin in *Psychologie et morale aux XIIIe siècle*, Vol.VI, Louvain 1960, pp. 45-92; introduction: pp.27-43; see also: M.-T. D'Alverny, *op.cit.*, pp.61-64; ff.168ra-210vb [Alan of Lille, *Summa 'Quoniam Homines'*], edited by P. Glorieux, "La Somme 'Quoniam Homines' d'Alain de Lille", *Archives d'histoire doctrinale et littéraire du moyen âge* 20 (1953) pp.113-364; see also: D'Alverny, *op.cit.*, p.60; ff.211ra-213ra [Alan of Lille, *A Commentary on the Creed of the Mass*], edited by N. Häring, "A Commentary on the Creed of the Mass by Alan of Lille (O. Cist.)", *Analecta Cisterciensia* 30 (1974) pp.281-303; ff.216ra-226rb [Alan of Lille, *Regulae Coelestis Juris*]: see D'Alverny, *op.cit.*, p.67; this MS stops at rule 113 [= Migne, PL 210, c.621 to c.681 line 10].
- 12) On these questions see A.M. Landgraf, "Quelques collections de 'Questiones' de la seconde moitié du XII^e siècle", *Recherches de théologie ancienne et médiévale* 6 (1934) 368-393 and 7 (1935) 113-128; also A. Landgraf, *Introduction à l'Histoire de la Littérature Théologique de la Scolastique Naissante*, Édition française par ... A.M. Landry ..., Université de Montréal, Publications de l'Institut d'Études médiévales, vol. 22, Montréal-Paris 1973, pp.113, 120, 147, 158, where can also be found a bibliography on these *questiones*. They are also widely quoted by Landgraf in his *Dogmengeschichte der Frühscholastik*, Regensburg 1952-1956.
- 13) Cfr. R. Klibansky's comment on L. Hödl's paper "Die dialektische Theologie des 12. Jahrhunderts", in *Arts Libéraux et philosophie au Moyen Âge*. Actes du Quatrième Congrès international de Philosophie Médiévale (1967), Montréal-Paris 1969, p.148.

a theological epistemology¹⁴, based on what one would now call the analysis of religious and theological language, the presence in this collection of three short logical tracts does not appear to be inappropriate.

Two of these tracts are of a fairly elementary and introductory nature. One is a short - and incomplete - tract on the *loci*, the other, the *Fallaciae Magistri Willelmi*¹⁵, a rather plain exposition of the Aristotelian fallacies written up, as its author says, for the benefit of "our uncouth theologians"¹⁶. The third, the *Tractatus Implicitarum*, though it has all the marks of a text used in teaching, is a logical essay of a rather more advanced and specialised nature. The only - to my knowledge - surviving copy of an annotated *exemplar* which probably was nothing more than a sort of 'paper', this *Tractatus* owes its publication in the first place to the learned theologian who included it in his personal collection of texts, probably chosen and gathered at the end of his university days.

The *Tractatus Implicitarum* is an essay on the logical and linguistic peculiarities of sentences containing words like 'only', 'but' and 'that which'. These terms were studied during the twelfth and thirteenth centuries in *summulae* or treatises on *proprietaes terminorum*, on *syncategoremata* and on *exponibilia*¹⁷. In the attempt to clarify some points made by the *Tractatus Implicitarum* I shall refer to some of these texts; but of none of them do we know the date of composition, most of them have been

14) Cfr. M.-D. Chenu, "Un essai de methode théologique au XII^e s.", *Revue des Sciences Philosophiques et Théologiques* 24 (1935) pp.258-267, and "Une théologie axiomatique au XII^e s.: Alain de Lille († 1203)", *Cîteaux* 9 (1958) pp.137-142. See also: C. Vasoli, "Ars Grammatica" e "Translatio" teologica in alcuni testi di Alano di Lilla", in *Arts libéraux ... cit.* pp.805-813.

15) Cfr. De Rijk, *op.cit.*, p.34. The *Fallacie Magistri Willelmi* have been edited by De Rijk in *Logica Modernorum, cit.*, Vol. II, Part 2, pp. 679-702. I have found another copy of these two works in MS. Cambridge, Jesus College Q.B. 17 (No. 34; cfr. M.R. James, *A Descriptive Catalogue, cit.* p.44), which contains on ff.9ra-12rb the *Fallacie* and on ff.12va-14rb the treatise on *loci*. This manuscript contains the *Numerale* and the *Tropi* of William de Montibus, and this might support De Rijk's tentative attribution of the *Fallacie* to William de Montibus (Cfr. De Rijk, *Logica Modernorum, cit.*, Vol.II, Part 1, p.35). The only extensive work on William is still the unpublished D.Phil. thesis by Hugh McKinnon, *The Life and Works of William de Montibus*, University of Oxford, 1959.

16) *Fallacie Magistri Willelmi*, in De Rijk, *op.cit.*, p.702: "Hec rudibus theologis nostris ne fallantur de fallatiis proposuimus".

17) Cfr. A. Maierù, *Terminologia logica della tarda scolastica*, Lessico intellettuale europeo vol. VIII, Rome 1972, p.19.

dated within fifty years, and in some cases even such a margin is perhaps too narrow. It is therefore rather difficult, from the point of view of the history of logic, to evaluate the originality of our treatise in relationship to these texts, and clearly impossible to attribute it to a specific decade. Besides, like theological terminology, logical terminology moves very rapidly and not always consistently between the second half of the twelfth century and the beginning of the thirteenth. Theologians and dialecticians were so busy defining and redefining their concepts, sharpening their vocabulary, that even if we were not handicapped by the anonymity and difficulty of dating these texts, it would be very hard to draw a precise line which marked the complicated path of the making of a logical *koiné*.

Yet it is precisely the tentativeness with which the logical terminology moves in this period that makes its study so peculiarly attractive to the historian. In studying these texts and trying to relate them to each other, to explain one with the help of another, to put them in a chronological sequence, one often has the feeling of moving around little pieces of a large unfinished jig-saw, whose elements very rarely fit together: yet this incomplete sketch, with all the discontinuities and contradictions it betrays, is a fascinating portrait of the dialectic between organization and creativity, between the boredom and pedantry of some aspects of the schools and the searching minds of some individuals, eagerly seeking new lines of thought and more brilliant solutions to old problems.

My edition (iii) of the *Tractatus Implicitarum* is introduced (i) by some suggestions about its place in the complicated puzzle of late twelfth century and early thirteenth century logic, and (ii) by a summary of the contents of the treatise. The notes to the text itself (iv) offer a set of cross-references with other texts which might help decipher some of the points raised by the treatise.

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Propositio implicita: this is the central concept around which our treatise is built, and it is on the comparison between the meaning of this expression in our treatise and its usage in other texts from the turn of the twelfth century that we can base some guesses about the place of the *Tractatus Implicitarum* in the development of twelfth-thirteenth century

philosophy of language.

Implicitus itself, to start with, is a word which deserves some attention: one of the two past participles of *implico*, it was used in classical and late Latin to convey the idea of 'tied together', 'entwined', 'mixed together', 'confused'¹⁸. And *implico* meant for the Latin lexicographers not only to entangle, entwine, tie together (*involvere*, *inligare*)¹⁹, but also to mislead (*fallere*)²⁰ and to hinder (*impedire*)²¹. The spectrum of meanings *implicitus* had in Latin is therefore wider than that of 'implicit' in English: and even though in the main 'implicit' still retains much of *implicitus*, it is with some caution that we have to use the word 'implicit' in talking about the *Tractatus Implicitarum*.

But where does the idea of a proposition being implicit come from? Most of the twelfth-thirteenth century logical terminology was either derived from the vocabulary of the Latin grammarians, from Boethius' translation of the *Organon* of Aristotle and his commentaries on it, or created to deal in a new way with the problems raised by these texts, as was the case with Adam of Balsham²². I have failed to find any relevant references in the grammarians, but I found a passage of Aristotle's *De Interpretatione* which, if we read it in Boethius' translation and with the help of his commentaries, seems to me a likely origin of the concept of *propositio implicita*. It occurs in the last chapter of the *De Interpretatione*, chapter 14, which starts off by asking whether the contrary of a statement like 'Callias is just' is 'Callias is not just' or 'Callias is unjust'. The whole chapter is devoted to the analysis of problems of contrariety and contradiction.

In the part of the chapter in which the passage which interests us now occurs, Aristotle, after having said that "the good is both good and

18) Cfr. *Thesaurus linguae Latinae*, under *implico* vol. VII, 1, coll. 640-645.

19) Cfr. Servius, *Aen.* 11. 109, ed. G. Thilo-H. Hagen, vol. II, Lipsiae 1884, p.490 ("*Implicavit, id est involvit invitos*"), and W.M. Lindsay-R.G. Austin-M. Laistner-J.F. Mountford, *Glossaria Latina*, vol. II, Paris 1926, p.79, n.224 ("*Implicatus: inligatus*").

20) Cfr. *Synon. Cic.*, in F.S. Charisii *Artis grammaticae libri*, ed. C. Barwick-F. Kühnert, Lipsiae 1964, p.430.

21) Cfr. Servius, *Aen.* 10.894, ed. cit., p. 474 ("*Implicat impedit*").

22) Cfr. L. Minio-Paluello, "The 'Ars disserendi' of Adam of Balsham 'Parvipontanus'", *Mediaeval and Renaissance Studies* 3 (1954) pp.146-169.

not bad, the one in itself, the other accidentally (for it is accidental to it not to be bad)"²³, compares the opinion 'that which is good is not good' with the belief that 'that which is good is bad': the first "is a false belief about what holds in itself", the second "is a false belief about what holds accidentally, so that the more false belief about the good would be that of the negation" (i.e. 'that which is good is not good'), "rather than that of the contrary" (i.e. 'that which is good is bad')²⁴. After having added that the more false belief about the good - or, we might say, 'that the good is good' - must also be the one more contrary to it, Aristotle says that 'that which is good is not good', being more false, is more contrary to it than 'that which is good is bad'. And he concludes this argument with this phrase

Illa [opinio] vero quae est 'quoniam malum est quod est bonum' implicita est; et enim quoniam non bonum est necesse est idem ipsum opinari.²⁵

23) I quote from *Aristotle's Categories and the De Interpretatione*, Translated with Notes by J.L. Ackrill, Oxford 1966² p.66.

24) Ackrill, *op.cit.*, *loc.cit.*

25) *De Interpretatione vel Periermeneias, Translatio Boethii*, Aristoteles Latinus II, 1, edidit L. Minio-Paluello, Bruges-Paris 1965, 23 b 25-27, p.36. Here *implicitus* is a translation of συμπεπλεγμένος. The only other context in Boethius' translation of the *Organon* where *implicitus* is used is *De Interpretatione* 21 a 1, where it translates πεπλεγμένος. Συμπλέκεσθαι is used in many other contexts by Aristotle: *De Interpretatione* 16 a 24, 21 a 38; *Analytica Priora* 49 a 8; *Topica* 112 b 27, 32; 148 b 23 ff.; *Physica* 189 b 5; 195 b 10, 15; *De Anima* 404 b 29; 405 b 28; 409 b 11; *De Generatione Animalium* 643 b 30; *Metaphysica* 1007 b 2, 1014 a 13, 19; 1062 b 5; 1063 b 23; *Ethica Nicomachea* 1119 b 30. According to Bonitz (cfr H. Bonitz, *Index aristotelicus*, Berlin 1955, *ad vocem*) the instances which I have here printed in italics are those where the verb "logice ... usurpatur de coniungendis in eandem notionem pluribus notis", whereas in *Metaphysica* 1007 b 2 it is used "de coniungendo praedicato cum subiecto, vel accidentem cum substantia" and "grammaticae" in *De Interpretatione* 16 a 23.

As far as Boethius' translation is concerned, *De Interpretatione* 21 a 38, *Analytica Priora* 49 a 8, *Topica* 112 b 27, 32 and 148 b 23 are translated by *complector*. Particularly interesting is *Analytica Priora* 49 a 8 ("praedicamenta ... complexa").

Πλέκω is found in Aristotle in several contexts: *De Generatione Animalium* 555 b 10, 12; *Metaphysica* 1081 a 33; *Poetica* 1452 a 12, 16; 1452 b 32, 33; 1456 a 9, b 9 (Waitz's reading of *De Interpretatione* 16 a 24 has been corrected back to Bekker's reading συμπεπλεγμένος by Minio-Paluello: cfr. *Aristotelis Categoriae et Liber De Interpretatione*, recognovit brevique adnotatione instruxit L. Minio-Paluello, Oxonii 1949 (reprinted 1956 etc.), p.50. In all the passages in the

What does Aristotle mean by saying that 'that which is good is bad' is *implicita*? He means, according to Boethius, *implicita est ... affirmatio contrarii*, that is that whoever believes that 'that which is good is bad' must also believe that 'that which is good is not good'.²⁶ But the most interesting aspect of Boethius' explanation of the passage is that he equates the *opinio implicita* with a *duplex propositio*, that is a proposition which contains another one in itself:

quare *duplex* quodammodo *propositio* est ea quae dicit malum esse quod bonum est. nam etiam illud *in se continet*, quoniam bonum non est.²⁷

Poetica (except 1456 a 9) we find it in the form $\kappa\epsilon\pi\lambda\epsilon\gamma\mu\acute{\epsilon}\nu\omicron\varsigma$ opposed to $\acute{\alpha}\pi\lambda\omicron\upsilon\varsigma$: the Latin translators used the verb *complexor* (*complexus*, *complexus*) in these instances.

For us it is interesting to note that William of Moerbeke translates $\sigma\upsilon\mu\kappa\epsilon\pi\lambda\epsilon\gamma\mu\acute{\epsilon}\nu\omicron\varsigma$ in *De Interpretatione* 23 b 25 as *complexus*. Cfr. *De Interpretatione vel Periermenias*, translatio Guillelmi de Moerbeke (Recensio Ammoniana), Aristoteles Latinus II, 2, *op.cit.*, p.60.

- 26) Cfr. A.M.S. Boethii *Commentarii in librum Aristotelis ΠΕΡΙ ΕΡΜΗΝΕΙΑΣ*, Editio Prima, rec. C. Meiser, Lipsiae 1877, pars prior, p.218 (Migne, PL 64, 389): "Addit ad demonstrationem superiorem argumentum quod monstret magis esse contrariam eam quae negat potius quam eam quae contrarium adfirmat: *implicita est*, inquit affirmatio contrarii. quisquis enim putat id quod bonum est malum esse, fieri aliter non potest, nisi illud quoque putet non esse bonum".
- 27) *Op.cit.*, p.219. Boethius' second commentary runs along the same lines, but expresses more clearly the contrast between *implicita* and *simplex* and states that the first *continet...intra se* the *simplex*. Cfr. Editio Secunda, rec. C. Meiser, Lipsiae 1880, pars posterior, p.485 (Migne, PL 64, 630-631): "Postquam idcirco contrariam potius negationem esse monstravit, quod haec magis esset falsa quam ea quae contrarium adfirmaret, et distinctione falsitatis contrariam esse propositionem opinionemque quae rem propositam negaret edocuit, nunc ex simplicibus *implicitis*que *propositionibus* opinionibusque idem nititur adprobare. dicit enim, quod ea affirmatio quae contrarium ponit *implicita et non simplex sit*. idcirco autem *implicita est*, quod quae arbitratur id quod bonum est malum esse mox illi quoque opinari necesse est id quod bonum est bonum non esse. neque enim aliter esse malum potest, nisi bonum non sit. quare qui quod bonum est malum esse arbitratur, et rem bonam malum putat et eandem ipsam non esse bonum. *non igitur simplex est haec opinio de bono, quoniam malum est. continet enim intra se* illam, quoniam non est bonum". Though *implicita* and *simplex* refer here equally to *affirmatio*, *opinio* and *propositio*, the fact that the argument is all about *propositiones* can be seen from Boethius' summing up at the end of this part of his commentary (*ed.cit.*, p.486-487; Migne, *op.cit.*, col.631) "...quotiens vera est quaedam propositio et duae quae eam perimere possint, si una earum nihil indigens alterius veram propositionem

My suggestion is that it is from the Boethian translation of *De Interpretatione* 23 b 25 and from Boethius' commentaries on it that the expression *propositio implicita* derived - perhaps not solely nor directly - its origins. Though, according to De Rijk, the expression "is not found in the logical treatises of the days of Abailard"²⁸, Abelard's own gloss on *De Interpretatione* 23 b 25 follows Boethius' interpretation:

implicitam ... hoc est implicans eam in se, et quodammodo continens.²⁹

In the late twelfth century the definition of *propositio implicita* as we find it in the *Ars Meliduna* (1154-1180)³⁰ is still very reminiscent of the Boethian interpretation of this passage of Aristotle:

Implicita dicitur propositio que preter principalem significationem - idest preter significationem que ex principalibus attenditur - tamen implicat et continet vim alterius propositionis. Ut *Socrates est aliquid quod currit* implicat istam: *aliquid currit*; et *homo qui est albus, est animal quod currit* has duas: *homo est albus, animal currit*. Unde magis proprie diceretur ista implicans, ille implicite.³¹

perimat, reliqua vero praeter alteram eandem propositionem perimere non possit, illa magis dicenda contraria est, quae sibi sufficiens nec reliquae indigens propositam propositionem perimere valet veram autem propositionem de bono quoniam bonum est sola perimere potest et ad illius verae interitum est sibi ipsa sufficiens illa quae opinatur non esse bonum quod bonum est. illa vero quae opinatur malum esse sibi sola non sufficiet, nisi illa quoque ei auxilietur, quae est id quod bonum est bonum non esse. idcirco enim contraria illa aufert, quia secum negationem trahit. manifestum est hanc quae ad verae propositionis interitum sibi ipsa sufficit recte magis videri contrariam quam quae sibi ipsa non sufficit, nisi ei vis negativae propositionis addatur".

28) Cfr *Logica modernorum*, Vol. II, part I, p.400.

29) Cfr. *Glossa Magistri Petri Abaelardi super Periermenias capp. XII-XIV*, ed. by L. Minio-Paluello in *Twelfth Century Logic. Text and Studies*. II. *Abaelardiana Inedita*, Roma 1958, pp.99-100: "Postquam ostendit quod <ad> 'bonum est bonum' sese habet ut contraria 'bonum non est bonum', non ista 'bonum est malum' (licet utraque ei repugnet), docet etiam qualiter iste due 'bonum est malum' et 'bonum non est bonum' sese habeant ad invicem, dicens 'bonum est malum' esse implicitam quantum ad 'bonum non est bonum', hoc est implicans eam in se, et quodammodo continens; quia quicumque opinatur 'bonum est malum' etiam quod 'bonum non est bonum' opinatur. Sed non conuertitur".

30) This work is contained in MS. Oxford, Bodleian Library, Digby 174, ff. 211ra-241rb. In his *Logica Modernorum*, vol. II, part 1, pp. 264-390, De Rijk gave an analysis of the work, and published extracts from the text. For his reasons of choosing the title *Ars Meliduna* for the tract, see *op.cit.*, pp.276-286; for the dating of the tract, see pp.280-281 and p.286.

31) De Rijk, *op.cit.*, p.354; see our *Appendix* 1-2.

For another work of the turn of the twelfth century, the *Tractatus Anagnini* (1150-1230?)³², not only does an *implicita* contain two propositions, but the *congruitas* - the syntactical correctness - of the *implicita* can be judged by solving or unfastening it into a conjunction of propositions:

Iudicium ... implicitarum potest haberi ex resolutione ipsarum in copulativas.³³

The analysis of all these texts would seem to lead up quite smoothly to our *Tractatus Implicitarum*, whose definition of *implicita* is as follows:

Implicitae propositiones a dialecticis appellantur in quarum quolibet implicantur uel inuoluuntur duae ... Omnis implicita habet duas explicitas ... Omnis implicita aequiualeat copulatiuae constanti ex explicitis.³⁴

But unfortunately the story of *propositio implicita* is not in fact as simple and straightforward as might appear from the strength of the Boethian tradition. *Implicita*, while retaining in the *Tractatus Implicitarum*, in the *Ars Meliduna* and in the *Tractatus Anagnini*, the marks of the Boethian imprint, actually refers - solely in the last two texts, and primarily in the *Tractatus Implicitarum* - to sentences containing a relative clause, which after the middle of the twelfth century came to be called an *implicatio*. Many of the texts of this period which deal with *implicatio* do not talk about *propositio implicita*: but when *propositio implicita* is used, it is always connected with *implicatio*.

Though in the *Tractatus Implicitarum* the relationship between *propositio implicita* and *implicatio* is different from that which we find in all the other texts of around the same period, and its difference

32) This work, which is found in MS. München, Bayerische Staatsbibliothek, Lat. 4652 ff. 65r-92v, was first analysed by M. Grabmann in "Bearbeitungen und Auslegungen der Aristotelischen Logik aus der Zeit von Petrus Abaelard bis Petrus Hispanus", in *Abhandlungen der Preussischen Akademie der Wissenschaften*, Jahrgang 1937, philo.-historische Klasse nr.5, Berlin 1937, pp.36-40, and has been edited by De Rijk in *Logica Modernorum*, Vol. II, Part 2, Assen 1967, pp.218-332. A short analysis of the work, which contains some suggestions about the date of its composition, is to be found in De Rijk, *op.cit.*, Vol. II, Part 1, pp.391-397; De Rijk's reasons for calling this tract *Tractatus Anagnini* is solely the following: "As Anagnia is mentioned several times, we may think of this papal residence as the place of origin. I propose to call these tracts the TRACTATUS ANAGNINI" (p.397).

33) *Tractatus Anagnini*, cit. p.268.

34) See nn. 0.0-0.1

consists mainly in the fact that this connection is more loose, in order to understand properly the meaning of *implicita* in late twelfth-early thirteenth century one has to understand the meaning of *implicatio*.

Implicatio, then, referred to a relative clause. In a sentence like 'the man who runs is discussing', 'who runs' was the *implicatio*, and was understood to restrict or narrow the range of reference of the term 'man'; so usually implicit propositions were discussed as cases of the *restrictio suppositionis*. There were comparatively simple explanations of the problem, like the one we find in the *Summe Metenses* (not later than 1220)³⁵:

Postea videndum est de restrictione facta per inplicationem. Cum ergo dicitur *homo qui currit disputat*, iste terminus *homo* per hanc inplicationem *qui currit* restringitur ad currentes. Quod patet, quia dicit Priscianus quod hoc nomen *qui* cum verbo equivalet suo participio. Sed cum dicitur *homo currens* hoc adiectivum *currens* restringit hoc substantivum *homo*, sic hoc quod dico: *qui currit*, cum ei equivalenceat, restringit eundem terminum.³⁶

According to the *Summe Metenses*, all there is to say about *implicatio* is that the expression 'who runs' is equivalent, according to Priscian's teaching, to the present participle 'running' which, with its adjectival function, restricts the reference of the term 'man'.

For other authors, *implicatio* had to be analysed rather by looking at the difference between the relationship the subject had with the verb of the relative clause and its relationship with the main verb of the proposition: as both the *Tractatus de proprietatibus sermonum* (end 12th-beginning 13th century?)³⁷ and the *Tractatus Anagnini* say, the power of reference of the subject in a proposition of this kind is not determined by the main verb of the proposition, but by that of the relative:

*Tractatus de proprietatibus
sermonum*

Quando ... fit relatio
ad terminum communem
per nomen relativum,

Tractatus Anagnini

Quando hoc nomen *qui* refertur ad aliquod
antecedens ita quod aliud verbum reddat-
tur relativo et aliud antecedenti, tunc

35) This work is found in MS. Paris, Bibliothèque Nationale, Lat. 11.412, ff. 25r-40r; De Rijk has analysed it, publishing extracts from it, in *Logica Modernorum*, cit., Vol.II, Part 1, pp.449-490. De Rijk's argument about the date of the MS. can be found at pp.451-452. The title *Summe Metenses* has been added by De Rijk, on the basis of a possible connection of this work with Metz.

36) De Rijk, op.cit., p.464.

37) This work is contained in MS. München, Bayerische Staatsbibliothek, Lat. 14.458, ff. 41ra-42vb, and was first described by Grabmann (cfr. *Bearbeitungen* cit., pp.16-24). It has been edited by De Rijk in *Logica Modernorum*, cit., Vol.II, Part 2, pp.703-730.

antecedens trahit suam suppositionem a verbo sui relativi.³⁸

antecedens non contrahit suppositionem suam a suo verbo, sed a verbo relativi vel ab alio a quo contrahit relativum.³⁹

The medieval concept of relative term was a rather wide one: it included not only words like *qualis*, *quantus*, and so on, but also terms like *ille*, which was called a relative pronoun, whereas *qui*, as we have seen in the two texts above, was a relative noun. Dialecticians studied very carefully the peculiarities of this little word and the functions it performed. The two following texts, one once more from the *Tractatus de proprietatibus sermonum*, the other from the *Dialectica Monacensis* (1150-1200)⁴⁰, offer an explanation of the functions of *qui* which, though basically the same, is expressed by each text in different words, and might thus help us to see, through a comparison, the kernel of the problem.

Dialectica Monacensis

... sicut dicit Priscianus, hoc nomen *qui* habet in se substantiam infinitam, scilicet *tis*, et articulum subiunctum, scilicet *os*, qui articulus facit secundam notitiam de re sive de substantia eiusdem nominis, scilicet *qui*. Et est nota ydempnitatis inter ipsam et rem antecedentis. Unde cum dicitur *homo qui currit*, *disputat*, articulus qui est in hoc nomine *qui*, sumit substantiam eiusdem nominis secundum quod determinata est per rem verbi sequentis et coniungit eam substantie huius termini *homo*, quod est suum antecedens, et tamquam immediate convertitur cum eo et specificat ipsum.⁴¹

Tractatus de proprietatibus sermonum

... hoc relativum *qui* preter officium referendi habet officium implicandi.

Unde ex vi implicationis ponit formam copulatam per suum verbum in re sui antecedentis.

Unde hoc relativum *qui* habet intelligi immediate cum suo antecedenti. Et ita cum nil sit medium inter suppositum et formam, antecedens trahit suam suppositionem ab illo verbo tamquam a proximiori.⁴²

38) *Tractatus de proprietatibus sermonum*, cit., p.724.

39) *Tractatus Anagnini*, cit., p.268.

40) This work found by M. Grabmann (cfr. *Bearbeitungen*, cit. pp. 48-51), is contained in MS. München, Bayerische Staatsbibliothek, Lat. 14.763, ff. 90ra-121rb, and has been edited by De Rijk in *Logica Modernorum* cit., Vol.II, Part 2, pp. 453-638. A description of the MS. is to be found in *Logica Modernorum*, cit., Vol.II, Part 1, pp. 49-54. The work is analysed by De Rijk in *Logica Modernorum*, cit., Vol.II, Part 1, pp.408-415.

41) *Dialectica Monacensis*, cit. p.631.

42) *Tractatus de proprietatibus sermonum*, cit. p.724.

In trying to translate this theory's explanation of the way *qui* functions one must remember that *qui* was considered a noun by Priscian and by the medievals and that in their view each noun signified a substance. The noun *qui* then has in itself an infinite substance and a connective (*articulus*) whose function is to refer to this substance and also to connect it, by establishing a relationship of identity, with the substance of the term to which it is attached. So that when we say *homo qui currit disputat* the connective part of *qui* takes the substance of *qui* as it has been determined by *currit*, and connects it with the substance of the word *homo*. The connective contained in *qui* is almost substituted (*tamquam ... convertitur*), according to the *Dialectica Monacensis*, with the term *homo*, and specifies it *immediate*. As the *Tractatus de proprietatibus sermonum* explains, *immediate* here means that there is no *medium*, no other element interposed between the subject (*suppositum*) *homo* and the form which specifies it (*currit*).

These texts have given us some idea of the linguistic peculiarity the relative noun *qui* had for the dialecticians of the late twelfth-early thirteenth century: *implicatio* was used to describe the relative clause, and *officium/vis implicandi* to describe the way the relative noun functions in relationship to the term to which it is attached and to the verbs of the relative clause and of the main proposition. But what was the meaning they attached to *implicare* and why was it chosen to indicate the function of a relative clause which, as we have seen, restricted the range of reference of the term to which it was added? There are only two texts which set out to explain the meaning of *implico* and the definitions they give are almost identical. But I shall give both parallel texts, as the fuller definition of the *De Implicationibus*⁴³ contributes towards an understanding of the somewhat concise one of the *Dialectica Monacensis*.

De Implicationibus

Implicare est pro constanti et involute aliquid significare. Ut cum dicitur *homo qui est albus currit*. Pro constanti dico, quia preter hoc

Dialectica Monacensis

Si autem queratur quid sit implicare, potest dici quod implicare est

43) This work, which is contained in MS. München, Bayerische Staatsbibliothek, Lat. 14.458, f. 40ra-rb, has been edited by De Rijk in "Some notes on the Mediaeval tract *De insolubilibus*, with the edition of a Tract dating from the end of the twelfth century", *Vivarium* 4 (1966) pp.100-103.

quod asseritur ibi cursus de homine, aliquid datur intelligi, scilicet hominem esse album; *involute* dico quia preter hoc quod ibi proprie et principaliter significatur hominem currere, aliquid intus intelligitur, scilicet hominem esse album. Per hoc patet quod implicare est *intus plicare*. Id enim quod intus plicamus sive ponimus, pro constanti relinquimus. Unde implicare nil aliud est quam subiectum sub aliqua dispositione pro constanti relinquere et de illo sic disposito aliquid affirmare.⁴⁴

aliquid pro constanti relinquere. Unde cum dicitur *homo qui currit, disputat*, hec dictio *qui* circa hunc terminum *homo* cursum implicat, idest pro constanti relinquit.⁴⁵

The etymology of *implicare* for the *De Implicationibus* is *intus plicare*, to fold into. To take the example used by the *Dialectica Monacensis*, *homo qui currit disputat*, it is *cursus*, the concept of running which, through *qui*, is folded into *homo*. *Intus plicare* is also the meaning, according to the *De Implicationibus*, of that rather obscure expression *pro constanti relinquere* which we find both in the *Dialectica Monacensis* and in the *De Implicationibus*: that which we fold into the subject through the relative clause is left securely and permanently attached to that term. So that, as the *De Implicationibus* concludes its definition, "*implicare* is nothing else than to permanently determine the subject in a certain way and, having thus determined it, to go on and affirm something about it"⁴⁶. To use again the example *homo qui currit disputat*: with the *qui currit* we determine the subject *homo*, in this way reducing its range of reference permanently - for as long as this clause is kept in the sentence; and it is of this term *homo*, determined or restricted in this way, that we predicate *disputat*.

44) *De Implicationibus*, cit. p.100; De Rijk reads *precontentum* instead of *pro constanti*. The MS itself in this passage has *pro constanti* in two cases, *pro contenti* in one, and *precontenti* in another. The comparison with the *Dialectica Monacensis*, two more instances in other contexts of the text (cfr. *De Implicationibus*, p.101 and p. 102) in which the reading of the MS is *pro constanti* together with the existence in medieval Latin of the expression *pro constanti* (cfr. R.E. Latham, *Revised Medieval Latin Word-List*, from British and Irish Sources, London 1965², p.109) have convinced me to prefer the reading *pro constanti* to *precontentum*. Besides, *precontentus* is a word whose use is, as far as I know, not attested by any known source.

45) *Dialectica Monacensis*, cit. p.631.

46) *De Implicationibus*, cit. p.100.

Of all the texts we have examined so far, the *Ars Meliduna*, the *Tractatus Anagnini* and the tract *De Implicationibus* call *implicitae* those propositions which contain an *implicatio*. Though the historical origin of the use of the term *implicatio* remains for me uncertain, the relationship between *implicita* and *implicatio* in these texts can be seen as a result of that interplay between the vocabulary of Aristotelian-Boethian logic and the terminology of grammar which characterizes the early Middle Ages.

In a sense, the *Tractatus Implicitarum* too can be seen as one of the products of the merging of the two traditions: but is a unique and new kind of product. The prologue of the *Tractatus Implicitarum* in fact says that any proposition containing either an *implicatio* or words like *solum*, *tantum*, *incipit*, *desinit*, *nunc primo*, *nunc ultimo* is *implicita*, and can be solved into a conjunction of propositions.

The only hint of this wider sense of *implicita* in the logical texts of the turn of the century is a paragraph of the *De Implicationibus* where, after having extended *implicatio* to all the relatives "*incipientia ab hac littera 'q' que habent in se articulum confederatum copulationis*", the anonymous author adds:

Et cum multe alie dictiones habeant facere implicationem, notandum generaliter quod omnes ille dictiones que in locutione in qua ponuntur aliquid reliquunt pro constanti preter id quod principaliter significant, omnes ille dictiones habent facere implicationem.⁴⁷

This is the only text from around the turn of the century in which, however vaguely, *implicita* seems to be stretched beyond *implicatio* in the sense of the relative clause: all the other texts of this period, when dealing with any of the non-relative words mentioned in the prologue of the *Tractatus Implicitarum*, never associate them with *implicatio* and never call *implicitae* the propositions which contain them.

The novelty of the *Tractatus Implicitarum* in relation to the logical textbooks of around the turn of the century points towards two later thirteenth century logical genres: the treatises on *syncategoremata* and those on *exponibilia*. A syncategorematic term is, for William of Sherwood "a secondary word, a kind of word not required for the occurrence of any and every statement - i.e., an adjective, adverb, conjunction, or preposition - determining a principal word ... - i.e., a substantival name or verb

47) *De Implicationibus*, cit. p.101.

... in respect of the relation of predication"⁴⁸. Such words are for him *omnis, totum, uterque, nullus, nihil, neutrum, praeter, solus, tantum, est, non, necessario, contingenter, incipit, desinit, si, nisi, quin, et, vel, an, ne, sive*. Sherwood analyses the logic of these words, and the way they affect the proposition in which they are inserted. Though the *Syncategoremata* include some of the words our treatise deals with, and there are, as can be seen from the notes to the text of the *Tractatus Implicitarum*, many points at which their treatment of these words is related, Sherwood's work covers a much wider area of terms than the *Tractatus Implicitarum* and its genre has many peculiarities which are not shared by our treatise.

The *Tractatus Implicitarum* is perhaps a closer antecedent of another thirteenth century genre, the *Tractatus Exponibilium*. A proposition is *exponibilis* when it contains certain syncategorematic terms; and as the opening passage of the *Tractatus Exponibilium* wrongly attributed to Peter of Spain⁴⁹ shows, these terms are much closer to those which make a proposition *implicita* for the *Tractatus Implicitarum* than the wide range of terms of Sherwood's *Syncategoremata*:

An exponible proposition is one whose meaning is obscure and requires an exposition because of some syncategorematic [word] implicitly or explicitly contained in it, or contained in some word, as in the following: "Man only is animal", "Sortes begins to be white", "The line is finite", and so on. In cases of this kind it must be noted that those things responsible for a proposition being exponible differ in many ways. For some are exclusive signs, as "only" (*tantum*), "alone" (*solum*); others are exceptive, as "with the exception of" (*praeter*), "but" (*nisi*); some are reduplicative, as "insofar as" (*inquantum*), "according as" (*secundum quod*); others introduce beginning or ending, as "begins" (*incipit*), "ends" (*desinit*); others introduce privation of end, as "infinite" (*infinitum*); others introduce excess, as adjectives in the comparative and the superlative degree; others introduce a distinction, as "differs" (*differt*), "other than" (*aliud ab*), and so on; others introduce a special mode of distribution, as "whole" (*totus*), "any one you please" (*quilibet*), and so on. On account of these [syncategorematic words] the proposi-

48) N. Kretzmann, *William of Sherwood's treatise on Syncategorematic Words*, translated with an introduction and notes, Minneapolis 1968, p.16, note 12. Sherwood's work has been edited by J.R. O'Donnell: "The Syncategoremata of William of Sherwood", *Mediaeval Studies* 3 (1941) pp.46-93.

49) The attribution has been recently rejected: see L.M. De Rijk: *Peter Of Spain, Tractatus, called afterwards Summule logicales*. First Critical Edition from the Manuscripts with an Introduction, Assen 1972, pp. LIV-LV.

tion becomes obscure and requires exposition, and so they are said to make a proposition exponible.⁵⁰

But there is also another important point of similarity between the *Tractatus Implicitarum* and the *Tractatus Exponibilium*: like the *implicita* in our treatise, the *propositio exponibilis* can be solved into a conjunction of propositions.

Once again, though, the *Tractatus Implicitarum* defeats any attempt to identify it with any other already known pattern of organization of logical analysis of terms. Neither the *Syncategoremata* nor the *Tractatus Exponibilium* deal with the problem of *implicatio*, which is one of the main themes of our treatise.

The *Tractatus Implicitarum* does not fit exactly with any of the texts we know. Its definition of *propositio implicita* has all the marks of the Boethian terminology, is in some way connected with the meaning *implicatio* has at the turn of the century, and anticipates the thirteenth century definition of *propositio exponibilis*; yet differently from the late twelfth century- early thirteenth century treatises, it does not restrict the meaning of *implicita* to the propositions containing an *implicatio*, and differently from the thirteenth century treatises on syncategorematic terms and on exponibles, it considers equally *implicitae* the propositions containing an *implicatio* and a syncategorematic term. Its similarities with the treatises of the turn of the century on the one hand and the thirteenth century 'new' genres on the other are as strong as its dissimilarities with both groups of texts. Probably nothing more than a short essay in redefining old problems and introducing some new ones, it is in its own way quite original and challenging, even now.

ii

The *Tractatus Implicitarum* seems to me to contain an introduction and five main sections. The introduction (0.0-0.2) gives a definition of *implicita* and two general rules; the first section deals with the word *tantum* (1.1-1.8) *solus* (1.9 and 1.N.2) and, in 1.N.1, with *tantum* and

50) I quote here from Mullally's translation: see J.P. Mullally, *The 'Summulae Logicales' of Peter of Spain*, Publications in Mediaeval Studies 8, The University of Notre Dame, Notre Dame 1945, p.105. The words in parentheses have been added by me, whereas the additions in square brackets are Mullally's.

solum; the second (2.1-2.8) deals with *praeter*; the third (3.1-3.7) with the relative clause *id quod*; the fourth (4.1-4.5) with cases in which falsity or impossibility is asserted of an *implicita* containing *id quod*; the fifth with four propositions containing a relative clause and whose transformation into their *explicitae* seems particularly difficult.

Though the division of the work into five sections and an introduction is justifiable from a textual point of view, another more general distinction can be seen in the treatise. Sections one and two deal with what our text calls exclusive propositions, whereas sections three and four deal with the implicit propositions which contain the expression *id quod*, and section five deals with four implicit propositions containing the relative noun *quod*. It is on the basis of this differentiation between *implicitae* in a looser sense (*exclusivae*) and *implicitae* in a strict sense (those containing a relative clause) that I described earlier the meaning of *implicita* in our text.

0.0 - 0.2 INTRODUCTION: DEFINITION OF IMPLICIT PROPOSITION AND TWO GENERAL RULES

Summary: The dialecticians call implicit propositions those in which two propositions are contained or tied together. Terms which make a proposition implicit are 'that which', 'those (things) which', 'alone', 'only', 'but/except', 'begins', 'ends', 'now for the first time', 'now for the last time' (0.0). Every implicit proposition has two corresponding explicit propositions, and is equivalent to their conjunction (0.1). When a proposition starting with terms like 'now for the first time', 'now for the last time', 'alone', 'only', 'but/except', 'begins', 'ends' is an argument of inductive form, the argument is false, unless the conclusion is reached because of the term (0.2).

The introduction mentions many terms, but the treatise actually only deals with 'alone', 'only', 'but/except' and 'that which' at any length.

The expression *because of the term* is found elsewhere in the treatise and means here that induction is only possible for these implicit propositions when the relationship between the term of the particular proposition and that of the universal one is such that the derived statement follows analytically from the implicit, and therefore only brings out something already contained in the concept of the term of the implicit.

1-2 RULES FOR PROPOSITIONS CONTAINING EXCLUSIVE TERMS

The analysis of *tantum* and *solum* in our treatise consists fundament-

ally of a set of rules about the kinds of exclusion which these terms operate, according to the terms they are attached to. The main aim of most rules (1.1, 1.2, 1.3, 1.4, 1.5, 1.9) is to point out that exclusion only operates at the level of the word these terms are attached to; and this is done by showing that only certain kinds of conclusions, those which do not break from one level into another, can be allowed. Two rules concern two kinds of terms to which an exclusive terms such as *tantum* cannot be attached: the universal quantifier *omnis* (1.7) and an infinite noun, *aliquis* (1.8). Two other rules deal with the problem of the meaning of *tantum* when added to a numeral (1.2, 1.6): a problem which from the twelfth century onwards was the starting point for sophisms and insolubles.

1.1 - 1.9 *Nine rules for 'only' (tantum) and 'alone' (solus)*

Summary: An exclusive term (only) added to a whole does not exclude a part of the whole, nor added to a part does it exclude the whole (1.1). An exclusive term (only) added to a numeral excludes a larger number, not a smaller one (1.2). An exclusive term (only) added to a word designating an individual excludes the opposite individuals of the same determined species (1.3). An exclusive term (only) excludes different things according to the different things to which it is added (1.4). An exclusive term (only) added to a word designating a species excludes the opposite species of the same genus (1.5). An exclusive term (only) added to a numeral according to some excludes otherness, according to others excludes just a larger number (1.6). An exclusive term (only) cannot be added to the universal quantifier (1.7). An exclusive term (only) cannot be correctly added to an infinite word, such as 'some' (1.8). An exclusive word (alone) added to a word designating a thing which exists only excludes existing things (1.9).

The analysis of *praeter* is mainly a careful distinction between the various functions this word has according to the terms to which it refers and also, in this case, according to the place it occupies in the structure of the sentence (2.1, 2.2, 2.4, 2.7, 2.8). Three rules (2.3, 2.5, 2.6) concern cases in which it is not possible to derive a singular or particular proposition from a universal one containing *praeter*.

2.1 - 2.8 *Eight rules for 'but/except/beside' (praeter)*

Summary: When the term 'but' is put after the universal quantifier it is taken only in the exceptive sense (2.1). When the term 'beside' is added to a proper noun or to an appellative noun, and this noun comes at the beginning of the sentence and is not preceded by the universal quantifier, 'beside' is taken in the inclusive sense, and the sentence is to be expounded by a conjunction of propositions (2.2). When there is a sentence

starting with the universal quantifier, and after it comes 'but' with the word which depends on it, one cannot argue from universal to particular (2.3). When a sentence starts with the universal negative quantifier, and after it comes 'but', 'but' is taken partly in the inclusive sense, partly in the exclusive sense (2.4). It is not possible to argue from a universal negative proposition to a particular negative if to the negative expression are prefixed exclusive terms like 'but' or 'unless' (2.5). It is not possible to argue from a universal negative to a particular negative if both propositions start with the term 'except' (2.6). When the term 'except' is followed by the universal positive quantifier and comes before the subject of a sentence, the term is taken in its distributive sense, and the truth of the proposition is to be judged by looking at the sentences which are particular instances of the universal one (2.7). When 'except' comes after the predicate and is followed by the universal quantifier, 'except' is taken in the collective sense: and in this case if the proposition is affirmative it is false; if it is negative it is true (2.8).

The first part of the treatise, then, deals with exclusive propositions, that is with propositions containing *tantum*, *solus* and *praeter*.

Some points about the logic of these words had already been discussed in the early twelfth century by Abelard, and towards the middle of the century by various treatises on logic. But in most of these texts the remarks about these words were scattered and occasional: towards the second part of the century logicians started to collect, put together and organise these loose ends into a more systematic form. Examples of this are the *Ars Meliduna* and the *Tractatus Anagnini*. The way the *Ars Meliduna* deals with these problems is not too easy to follow, as De Rijk only published extracts from it. The way the analysis of these words is organised in the *Tractatus Anagnini* is very similar to that of the *Tractatus Implicitarum*: for the discussion of exclusive terms, the *Tractatus Anagnini* are the closest late twelfth century term of comparison for our treatise. Whereas from the *Synkategoremata* of William of Sherwood and Peter of Spain and the *Tractatus Exponibilibus* of the pseudo-Peter of Spain up to the late scholastic handbooks of the sixteenth and seventeenth centuries, *tantum* and *solus* were to be called exclusive words (*dictiones exclusivae*) and *praeter* and *nisi* exceptive words (*dictiones exceptivae*), both the *Tractatus Anagnini* and the *Tractatus Implicitarum* deal with them under the general heading of *dictiones exclusivae*.

The chapter on exclusive terms in the *Tractatus Anagnini* deals mainly with *solus* and *praeter*, and to a lesser extent with *tantum* and *nisi*: the *Tractatus Implicitarum* deals mainly with *tantum* and *praeter*, *solus* appears only in 1.9, 1.N.1 and 1.N.2, and *nisi* is only mentioned once and very

briefly (2.5).

Three of the rules given for *tantum* in our text can be found under *solus* in the *Tractatus Anagnini*: this overlapping is understandable, as the meanings of the two words are so close. On this matter the *Tractatus Anagnini* say that the basic difference between the two terms is just that *solus* must necessarily refer to a single object or person, whereas *tantum* is not restricted in this way: but fundamentally their functions are identical. In the thirteenth century Sherwood was to deal with the two words separately, though still recognising the great similarity between their functions.

Two other features render the *Tractatus Anagnini* and our treatise very similar. Though their treatment of the exclusives is more systematic than that of earlier twelfth century texts, it is less systematically constructed than the *Syncategoremata* and, even more so, than the *Tractatus Exponibilibus*. Secondly, neither of these texts pose directly the philosophical problems which are connected with the analysis of these terms in the *Ars Meliduna* and in the thirteenth century treatises, such as for instance the question of whether these terms were *syncategoremata* or not.

3 - 5 PROPOSITONS MADE IMPLICIT BY THE RELATIVE CLAUSE

The second part of the *Tractatus Implicitarum* deals with the problems which are raised by the relative noun *quod* joined together with the relative pronoun *id* in the expression *id quod*, and contains a final section devoted to the discussion of four difficult propositions which contain a relative clause.

3 Rules of transformation and inference for implicit propositions containing a relative clause (*id quod*)

This section is mainly concerned with the relationship between an implicit proposition, such as for instance 'Socrates is that which is man' and its *simplex*, which in this example would be 'Socrates is man' (3.5, 3.6, 3.7) and with the relationship between an implicit proposition and its *explicitae* (3.21, 3.22, 3.4). It also gives two general rules about implicit propositions of this kind: they have no contradictory (3.3) and an *implicita* ceases to be such if it is put in the accusative + infinitive

syntactic form - a construction called *dictum* by the Latin grammarians (3.1).

Summary: Every proposition in which there is the expression 'that which' is implicit, unless it is put in the accusative + infinitive syntactic form (3.1). These implicits can be affirmative or negative (3.2). Example of how to derive from an affirmative implicit its explicits (3.21). To obtain the explicits of a negative proposition one must transform the relative noun of the implicit into an infinite noun, and the infinite noun or relative pronoun of the implicit into a relative noun or pronoun, and put it in the second explicit (3.33). Since the conjunction of the appropriate explicits is equivalent to a given implicit, and since the *dicta* of the two explicits can both be false at the same time, from this it follows that no implicit proposition has a contradictory (3.33). If we transform an implicit proposition containing a negation into its corresponding explicits, the negation has to go in the second of the explicits (3.4). An implicit proposition follows from its corresponding *simplex* if the verbs of both propositions are in the same tense (3.5). An implicit proposition does not follow from its corresponding *simplex*, if the *simplex* is negative. When it follows, it is thanks to the term (3.6). If an implicit follows from a proposition, a disjunction containing the first implicit and any other implicit also follows from the first proposition (3.7).

4 RULES OF INFERENCE FOR THE *dicta* OF IMPLICIT PROPOSITIONS CONTAINING A RELATIVE CLAUSE (*ID QUOD*)

This section deals mainly with the *dicta* of implicits when falsity or impossibility of these *dicta* is asserted (4.1,4.2,4.3,4.4) and with the case of the *dictum* of a universal negative implicit of which truth is asserted (4.5).

Summary: Every argument which contains the expressions 'false', 'impossible', 'not true' in its antecedent and the expressions 'true' or 'necessary' in its consequent, is false (4.1). Whenever the mode of falsehood or impossibility comes before or after the *dictum* of an implicit proposition, the relative term which makes the proposition implicit does not make any assertion of existence; but if it is not put in such a construction, it makes an assertion of existence (4.2). Whenever a sentence starts with *de* + ablative, and this is followed by 'false' and by the *dictum* of an implicit proposition, one cannot derive from a sentence of this kind another one, identical to the first one, but in which the term in the ablative in the first sentence is put in the accusative. This can only happen thanks to the term (4.3). Whenever there is a negative sentence which starts with the universal negative quantifier in the ablative, followed by the mode of falsehood and by the *dictum* of an implicit proposition, one can freely derive from this sentence an identical one with the universal negative quantifier in the accusative case. And in this case one can also proceed from the sentence with the universal negative quantifier in the accusative case to the sentence with the same quantifier in the ablative (4.4). Whenever there is a sentence which starts with the universal negative quantifier followed by the mode of truth and

by the dictum of an implicit proposition, one can never derive from a sentence in which the quantifier is in the accusative a sentence in which the quantifier is in the ablative, but one is always allowed to proceed from the construction with the accusative to one with the ablative (4.5).

5 FOUR IMPLICIT PROPOSITIONS FROM WHICH IT SEEMS TO BE DIFFICULT TO DERIVE THEIR EXPLICITS

The final section is related to sections three and four in that it deals with four implicit propositions containing the relative noun *quod*, but it does not contain any new rules. It seems to be devoted mainly to showing how some of the rules expounded in the two previous sections can be applied in particularly complicated cases.

Summary: 'Something which is not man will be the Antichrist': its correct explicits are: 'Something will be Antichrist and that is not man' (5a). 'Of an animal which is not man something is true'; its correct explicits are: 'Something is true of an animal and that is not man' (5b). 'Every animal which is man can laugh'; its correct explicits do not exist; or, if they exist, they should be like this: 'Of some animals anyone is man, and no one of them which is man cannot laugh' (5c). 'Only one (thing) which is animal is a phoenix'; its explicits are: 'Only one (thing) which is animal is a phoenix, and no other (thing) which is animal is a phoenix' (5d).

This is in my view the most original part of the treatise and, as it can be seen from the notes to the text, the only other text which bears any serious resemblance to it is the chapter on implicit propositions in the *Ars Meliduna*. Though there are many elements worth commenting on, I feel the most interesting are the concept of *appellatio dicti* and the relationship between an implicit proposition and its *dictum*.

In a proposition of the kind *verum est Socratem currere*, *Socratem currere*, called *dictum* by the Latin grammarians, was said by medieval logicians to be in *appellatione dicti*. The difference between a proposition like *Socrates currit* and the same sentence put in *appellatione dicti* in a construction like *verum est Socratem currere* is that "the proposition signifies the *dictum* as *enuntiabile*, that is the 'mental equivalent' of the proposition, whereas the *appellatio dicti* names it and represents it in speech"⁵¹. In *verum est Socratem currere*, the *dictum* *Socratem currere* is used, according to the *Ars Burana*⁵² *quasi proprium*

51) A. Maierü, *Terminologia...cit.* p.129. Maierü also offers in his book a precious survey of the theory of *appellatio dicti*. Cfr. *op.cit.*, pp.123-130.

52) This work, contained in MS München, Bayerische Staatsbibliothek,

nomen illius enuntiabilis quod significatur illa propositione. And, as the *Tractatus de univocatione Monacensis*⁵³ very vividly puts it, if the *appellatio dicti* is a sort of proper name of the *enuntiabile*, the words which are in it are to be considered just like syllables of a noun:

*appellatio dicti ponitur loco proprii nominis et dictiones in ea posite quadam consideratione obtinent tantum locum syllabarum.*⁵⁴

This is why, says the *Tractatus de univocatione*, we cannot have a sentence like *verum est Socratem currere, et ipse movetur*: the *ipse* cannot refer here, as it normally would, to Socrates; if it refers to anything it refers to *Socratem currere* as a whole, and is therefore incorrect (*non latine ... dicitur*).

The *Ars Burana* notes that if we put in *appellatione dicti* an implicit like *Socrates est id quod est homo* the *verbum implicationis* in the *dictum Socratem esse id quod est homo* does not change from indicative into infinitive. What the author of the *Tractatus Implicitarum* maintains in 3.1 is that if we put an implicit (x) in a phrase of the form '(x) is true' (x) is no longer an implicit. I suppose the reason for this is that once a sentence is put in *appellatione dicti* its *denotatum* becomes the *enuntiabile* and that, prevented from any relation with the fact itself, which it no longer denotes, the implicit looses, in *appellatione dicti*, all its *vis implicationis*.

The *dictum* appears also in rule 3.3 which, formulated in simpler language, states this: if we have an implicit (x), both the *dicta* of (x)'s explicit and of ~ (x)'s explicit can be false at the same time: therefore (x) has no contradictory. So that if we assume that no man exists and say (3.3a) that something is man and Socrates is not that (something), or that (3.3b) Socrates is something and that (something) is man, the *dicta* of both these conjunctives are false at the same time. This means that the *dicta* of the implicits equivalent to them, namely 'that Socrates is something which is man' (3.3c) and 'that Socrates is not that which is man' (3.3d) are also both false at the same time.

Lat. 4652, ff. 104r-116r, has been described by De Rijk in *Logica Modernorum*, Vol. II, Part 1, pp.42-43, and edited in Vol. II, Part 2, pp.175-213. This quotation is to be found at p.209.

53) This work is contained in MS München, Bayerische Staatsbibliothek, Lat. 14.458, ff. 53va-56rb, and has been briefly described by De Rijk in *Logica Modernorum*, Vol. II, Part 1, pp.406-407, and edited in Vol. II, Part 2, pp.333-351.

54) *Tractatus de univocatione Monacensis*, cit. p.350.

iii

EDITION OF THE TREATISE

Preface

1) The text of the *Tractatus Implicitarum* as we have it in MS British Library, Royal 9 E XII is a copy of an exemplar which must have had marginal notes, and was therefore a text annotated either by the author himself or by a student.

The most obvious evidence for this is the *Nota* 1.N.2 which in the MS is inset as a separate textual unit in folio 98va, where it occupies 20 half lines of the column. But there are other quite clear insertions of notes, such as 1.N.1, 1.N.2, 4.N.1, and possibly 1.9.

2) I have proposed only three major emendations to the text:

a. The insertion of *termini* between *gratia* and *accidat* at 0.2: it was suggested by the general sense of the sentence, but also by analogy with 3.6 and 4.3.

b. The emendation of *implicitas* into *exclusivas* under 0.2b2: this is suggested by the fact that our treatise considers *praeter* too an exclusive term (cfr. 2.5) and by the strength with which the author underlines the division between *implicitae* in the strict sense and *implicitae-exclusivae* at 3.1.

c. The emendation of 1.1a1-1.1b2 (elimination of three *non*) is no doubt the most drastic, and is perhaps disputable. I have emended the text here because the examples, in the form in which they are found in the MS, seemed to me to contradict the meaning of the rule (1.1); and as I found this rule in the same form in the *Tractatus Anagnini* and in Aquinas, this prompted me to decide that in the *Tractatus Implicitarum* the rule was expressed correctly and the examples were wrong.

3) The orthography has been normalized to that of Lewis' and Short's *A Latin Dictionary*.

4) I have given a number to the rules and the examples used in the text.

Conspectus of the signs used

I have marked in the margin all the rules and the examples. The arabic numerals to the left of the colon indicate the section, those to the right of the colon the number of the rule within the section. The examples are indicated by letters, in alphabetical order, within each rule. When the examples are followed by an arabic numeral, the number indicates their place in a syllogistic argument. When they are followed by a small roman numeral, the number indicates that, within the argument, some additional logical remarks are made.

I have also used the following abbreviations:

abl.: for *ablativus*

acc.: for *accusativus*

ap.dic.: for *in appellatione dicti*

con.: for *conversa (propositio)*

uic.: for *dictum*

ex. : for *explicita (propositio)*

sin.: for *singularis (propositio)*

Sigla

L: MS London, British Library, Royal 9 E XII

L^c: manus quae correxit L

TRACTATUS IMPLICITARUM^a

- 0.0 /f.98ra/ Implicitae propositiones a dialecticis appellantur in quarum qualibet implicantur uel inuoluuntur duae.^b
Implicitas faciunt tales termini *id quod*, *ea quae*, *solum*, *tantum*^c, *praeter*, *incipit*, *desinit*, *nunc primo*, *nunc ultimo*.
Iuxta implicitas primo habetur haec regula:
- 0.1 Omnis implicita habet duas explicitas. Item:
Omnis implicita aequiualeat copulatiuae constanti ex explicitis.^d
Verbi gratia:
- 0.1a *Socrates est id quod est homo*
haec implicita aequiualeat huic copulatiuae constanti ex explicitis:^e
- 0.1a ex. *Socrates est aliquid et illud est homo*
haec est uera, quare et implicita uera.
- 0.1b *Nunc primo scis aliquid*
haec implicita aequiualeat huic copulatiuae:
- 0.1b ex. *Nunc scis*^f *aliquid et nullus alius homo scit aliquid*
haec est falsa, quare et implicita falsa.
- 0.1c *Solus Socrates scit aliquid*
haec implicita aequiualeat huic copulatiuae:
- 0.1c ex. *Socrates scit aliquid et nullus alius homo scit aliquid*
Conuersae uerae:
- 0.1c con. *Aliquid scit solus Socrates*
- 0.1b con. *Aliquid nunc primo scis, Aliquid nunc primo uides*
Ad praedictas implicitas habetur haec regula:
- 0.2 Quotiens, praeposito tali termino *nunc primo*, *nunc ultimo*, *solum*, *tantum*, *praeter*, *incipit*, *desinit* a minus communi ad maius commune fit progressio, falsa est argumentatio, nisi gratia <termini> accidat conclusio.

^a Inscriptionem ex operis explicit desumpsi

^b duae + scilicet propositiones L^c

^c tantum solum tantum L

^d constante ex implicitis L

^e constante ex implicitis L

^f nunc primo scis L

Verbi gratia:

- 0.2a1 *Nunc primo scis hoc, ergo*
- 0.2a2 *nunc primo scis aliquid.*
- 0.2a1 *Nunc primo scis hoc, ergo*
- 0.2a3 *nunc primo scis hoc uel aliud.*
- 0.2b1 *Nunc primo uides Socratem, ergo*
- 0.2b2 *nunc primo uides alterum istorum.*

Et quia exclusiuae dictiones implicitas faciunt propositiones, considerandae sunt regulae quae iuxta exclusiuas^g proponuntur.

Prima haec est:

- 1.1 Dictio exclusiua adiuncta toti non excludit partem, nec e conuerso adiuncta parti excludit totum.

Verbi gratia:

- 1.1a1 *Tantum uulneras Socratem, ergo*
- 1.1a2 *caput^h Socratis; uel sic:*
- 1.1a2 *Tantum uulneras caput Socratis, ergo*
- 1.1a1 *Socratemⁱ; uel sic:*
- 1.1b1 *Tantum hoc est album, ergo*
- 1.1b2 *illud^j est album, demonstrata parte.*

Item, alia regula:

- 1.2 Dictio exclusiua adiuncta numerali uocabulo excludit maiorem numerum, non minorem.

Iuxta hanc regulam, talia argumenta sunt uera:

- 1.2a1 *Tantum unus phoenix est, ergo*
- 1.2a2 *non duum uterque est.*
- 1.2b1 *Tantum duos oculos habes, ergo*
- 1.2b2 *non tres.*

Conuersae autem falsae.

Item, alia regula:

- 1.3 Dictio exclusiua adiuncta indiuiduali uocabulo excludit opposita indiuidua eiusdem speciei specialissimae.

Verbi gratia:

- 1.3a1 *Tantum Socrates est hic intus, ergo*
- 1.3a2 *non Plato.*

^g implicitas L
^h ergo non caput L
ⁱ ergo non Socratem L
^j ergo non illud L

Item, alia regula:

- 1.4 Dictio exclusiua diuersas contrahit exclusiones diuersis adiunctis.

Verbi gratia:

- 1.4a *Tantum hic homo est hic intus: haec uera*

- 1.4b *Tantum hoc animal est hic intus: haec falsa.*

Contra sic:

- 1.4aa *Si hic homo est hic intus,*

- 1.4ba *hoc animal est hic intus,*

et e conuerso. Sed:

- 1.4a *Tantum hic homo est hic intus, ergo*

- 1.4b *tantum hoc animal est hic intus*

quod falsum est, posito quod unus homo sit hic intus et mille asini.

Item:

- 1.5 Dictio exclusiua adiuncta speciali uocabulo excludit oppositas species eiusdem generis.

Ut:

- 1.5a1 *Tantum homo est hic intus, ergo*

- 1.5a2 *nullus asinus est hic intus.*

- 1.N.1 Nota:

- 1.N.1a1 *Hoc solum est album, ergo*

- 1.N.1a21 *nihil aliud praeter hoc est album: bene prouenit.*

Item:

- 1.N.1a1 *Hoc solum est album, ergo*

- 1.N.1a22 *nihil aliud quam hoc est album: non prouenit pro parte quae aliud est a suo toto.*

Instantia:

- 1.N.1b1 *Tantum unus nummus habetur a te, ergo*

- 1.N.1b2 *nihil aliud quam unus nummus habetur a te.*

Item, demonstretur tempus quod cum mundo incepit et cum mundo desinet esse; haec uera est:

- 1.N.1c *Tantum hoc tempus fuit: et tamen plura tempora fuerunt.*

Similiter:

- 1.N.1a1 *Hoc solum est album, demonstrato aliquod totum; et tamen multa sunt alba, quia multae partes illius totius.*

Item:

- 1.6 Dictio exclusiua adiuncta numerali uocabulo quidam dicunt quod excludit alteritatem, alii dicunt quod numerum.
Verbi gratia:
- 1.6a *Tantum unum tempus est*; quidam sic exponunt: '*unum idest non aliud*'. Sic falsa. '*Unum idest non duum utrumque*'. Sic uera. Nos autem dicimus quod haec tantum sit uera *Tantum unum tempus est* quod sic exponunt *Tantum unum* et coetera idest *non duorum utrumque*, et concedimus quod unum et aliud tempus sit. /f.98rb/
Item:
- 1.7 Dictio exclusiua non potest adiungi uniuersali signo.
Unde tales sunt incompetentes:
- 1.7a *Tantum omnis homo est hic intus*
1.7b *Tantum nullus homo est hic intus*
1.7c *Tantum uterque est hic intus*
1.7d *Tantum neuter est hic intus*
Item:
- 1.8 Exclusiua dictio non proprie potest adiungi infinito nomini - ut
- 1.8a *Tantum quidam homo est hic intus*
Proprie autem potest adiungi numerali uocabulo - ut
- 1.8b *Tantum unus homo est hic intus*
Item:
- 2.1 Quando haec dictio *praeter* ponitur post uniuersale signum, tantum exceptiue tenetur - ut
- 2.1a *Omnis homo praeter Socratem est hic intus*, idest:
2.1aa *Omnis homo excepto Socrate est hic intus*
Item:
- 2.2 Quando haec dictio *praeter* adiungitur proprio nomini uel appellatiuo, proprio nomine uel appellatiuo ante posito sine uniuersalitatis signo, inclusiue tenetur, et est exponenda locutio per copulatiuam coniunctionem.
Verbi gratia:
- 2.2a *Praeter Socratem Plato loquitur*, idest:
2.2a ex. *Et Socrates et Plato loquuntur*.
2.2b ex. *Praeter Socratem Brunellus est aliquid*, idest:
2.2b *Et Socrates et Brunellus est aliquid*.
2.2b con. *Praeter Socratem aliquid est Brunellus*, idest:

- 2.2b con.ex. *Et Socrates et aliquid quod nec est Socrates nec pars eius est Brunellus.*
- 2.2c *Praeter Socratem aliquid est album, idest:*
- 2.2c ex. *Et Socrates et aliquid quod nec est Socrates nec pars eius est album.*
- 1.N.2 Item. Quidam dubitant an haec sit conueniens:^k
- 1.N.2a *Solus Socrates est asinus.*
Quidam dicunt quod sit nugatoria quia implicat falsum et
- 1.N.2a innuit: *Socrates est asinus.*
Quidam iudicant per copulatiuam coniunctionem ex explicitis
- uerbi gratia:
- 1.N.2a *Solus Socrates est asinus, idest*
- 1.N.2a ex. *Socrates et nullus alius homo quam Socrates est asinus:*
haec falsa, quare implicita falsa.
Item:
- 2.3 Haec dictio *praeter* adiuncta casuali, praeposito uniuersalitatis signo, ab uniuersali ad particulare non fit progressio.
Unde haec est uera:
- 2.3a *Quodlibet praeter hominem est non homo*
Haec autem falsa:
- 2.3b *Aliquid praeter hominem est non homo*
Unde sic argumentatur:
- 2.3a *Quodlibet praeter hominem est non homo, ergo*
- 2.3b *Aliquid praeter hominem est non homo*
Item:
- 2.4 Praeposito uniuersalitatis signo negatiuo huic termino *praeter* partim inclusiue, partim exclusiue tenetur.
Verbi gratia:
- 2.4a *Nullus homo praeter Socratem currit, idest:*
- 2.4a ex. *Socrates currit et nullus alius currit*
Item:
- 2.5 In negando a maius communi ad minus commune. non fit progressio praeposito tali termino exclusiuo *praeter* uel *nisi*. Et cum hoc argumentum sit necessarium
- 2.5a1 *Nihil est rudibile, ergo*

^k haec nota ad caput I pertinere uidetur, sed cum hoc loco in ms. inueniatur, eam non transferendam putauit

- 2.5a2 *nullus homo est rudibile,*
 appposito exclusiuo termino erit falsum;
 uerbi gratia:
- 2.5aa1 *Nihil praeter asinum est rudibile, ergo*
- 2.5aa2 *nullus praeter asinum est rudibile.*
 Item.
 Et cum hoc argumentum sit necessarium:
- 2.5b1 *Nihil est homo, ergo*
- 2.5b2 *nullus asinus est homo;*
 appposito exclusiuo termino erit falsum:
- 2.5ba1 *Nihil nisi asinus est in hoc momento, ergo*
- 2.5ba2 *nullus homo nisi asinus est in hoc momento.*
 Item.
- 2.6 Praeposito tali termino <praeter> ab uniuersali negatiua ad singularem negatiuam non fit progressio.
 Verbi gratia:
- 2.6a *Praeter te nullus homo currit, ergo*
- 2.6aa *Praeter te Socrates non currit.*
 Item.
- 2.7 Quando haec dictio *praeter* construitur cum uniuersali signo affirmatiuo ex parte subiecti tunc distributiue tenetur, et est iudicanda propositio secundum suas singulares.
 Verbi gratia:
- 2.7a *Praeter omnem hominem aliquid est risibile*
- 2.7b *Praeter quaelibet aliqua sunt*
- 2.7c *Praeter quemlibet hominem Socrates uel aliud est risibile*
- 2.7a Et est sensus primae propositionis - huius scilicet *Praeter*
- 2.7a sin. *quemlibet hominem et coetera* - idest *praeter hunc, praeter illum*, et sic de singulis aliquid est risibile.
- 2.7b *Praeter quaelibet aliqua sunt*
- 2.7b sin. Sensus huius est: *praeter haec aliqua sunt, praeter illa aliqua sunt* et sic de singulis.
- 2.7c *Praeter quemlibet Socrates uel aliud et coetera*
- 2.7ca Sensus huius est: idest *praeter quemlibet aliquid est risibile.*
 Iste enim terminus *Socrates uel aliud* aequipollet huic termino *aliquid.*
 Nota tamen quod si sic dicas

- 2.7cb *Praeter quemlibet hominem Socrates est risibile*
non est nugatoria - expone enim eam per suas singulares hoc modo;
- 2.7cb sin. *Praeter hunc hominem, praeter illum* et sic de singulis;
cum enumerando singulos perueneris ad Socratem, nugatoria erit,
Item.
- 2.8 Uniuersali signo posito uersus praedicatum^l collectivae /f.98va/
tenetur, et sunt falsae affirmatiuae, negatiuae uerae.
Verbi gratia:
- 2.8a *Aliquid est risibile praeter omnem hominem*: haec falsa
- 2.8aa *Aliqua sunt praeter quaelibet*: et haec falsa.
- 2.8b *Nihil est risibile praeter omnem hominem*: haec uera
- 2.8bb *Nulla sunt praeter quaelibet*: et haec est uera.
Item.
- 1.9 Dictio exclusiua adiuncta nomini rei existentis non excludit
nisi existentia.
Sit ergo positum quod omnis homo currat excepto Socrate,
et Plato sit mortuus; unde haec est uera:
- 1.9a *Solus Socrates non currit*
Iuxta hanc regulam tale argumentum fallit:
- 1.9b1 *Et Socrates et Plato non currit, ergo*
- 1.9b2 *non solus Socrates non currit.*
Hoc argumentum falsificetur per expositorias.
Ad implicitas in quibus ponitur iste terminus *id quod* redeundum
est.
- 3.1 Omnis propositio in qua ponitur iste terminus *id quod* est im-
plicita, nisi ille terminus ponatur in appellatione dicti;
positus enim in appellatione dicti,^m non est implicita.
Verbi gratia:
- 3.1a *Socratem esse id quod est homo est uerum.*
Haec non est implicita, quia iste terminus *id quod* ponitur in
appellatione dicti.
- 3.2 Talium implicitarum alia affirmatiua, alia negatiua.
- 3.21 Affirmatiua, ut

^l praedicamentum L

^m positus -- dicti additum est in margine ab eadem manu quae scripsit
tractatum nostrum

- 3.21a *Socrates est id quod est homo, idest:*
- 3.21a ex. *Socrates est aliquid et illud est homo*
Item.
- 3.22 Negatiuae habebis explicitas si nomen relatiuum uertas in nomenⁿ infinitum, et nomen infinitum uel pronomen relatiuum in pronomen relatiuum uel in nomen ultimo positum.
Verbi gratia:
- 3.22a *Socrates non est id quod est homo - sic expone:*
- 3.22a ex.1 *Aliquid est homo et Socrates non est illud - uel*
- 3.22a ex.2 *Aliquid est homo et Socrates non est homo*
Item.
- 3.3 Cum copulatiuae constantes ex explicitis aequipolleant implicitis et cum dicta explicitarum simul possint^o esse falsa, inde est quod dicimus nullam implicitam habere contradictoriam.
Verbi gratia.
- 3.3a dic.ex. *Aliquid esse hominem et Socratem non esse illud*
- 3.3b dic.ex. *Socratem esse aliquid et illud esse hominem*
Haec dicta simul possunt esse falsa, nullo homine existente; quare dicta implicitarum simul possunt esse falsa; haec scilicet:
- 3.3b dic. *Socratem esse id quod est homo*
- 3.3a dic. *Socratem non esse id quod est homo*
- 1.N.2 Nota magistri nostri dixerunt quod ubicumque implicita uera, et eius explicita, et e contrario: hoc uidetur esse falsum.
Haec enim est implicita:^p
- 1.N.2a *Socrates non est id quod est homo*
Eius explicitam dicunt esse:
- 1.N.2a ex.1 *Aliquid est homo et Socrates non est illud*
Istius explicitae implicita est falsa, haec scilicet
- 1.N.2a *Socrates non est id quod est homo, posito quod Socrates sit homo; et ista est uera*
- 1.N.2a ex.1 *Aliquid est homo et Socrates non est illud.*

ⁿ in nomen + in nomen L

^o possunt L

^p Haec glossa, quae in codice nostro in margine sed ab eadem manu conscripta inuenitur, in codicis nostri exemplari marginalis euidenter erat.

Cum ergo ista uera et illa sit falsa, non uidetur esse uerum quod ubicumque implicita uera, et eius explicita uel e contrario.

Ad hoc dicimus quod ubicumque implicita uera, et eius explicita; et sic sumendam esse huius implicitae

1.N.2a *Socrates non est id quod est homo*
explicitam:

1.N.2a ex.2 *Aliquid est homo et Socrates non est homo.*

Item, alia regula.

3.4 Negatiua particula posita in implicita est ponenda in ultima parte.

Verbi gratia:

3.4a *Aliquid quod non est homo erit Antichristus, sic expone:*

3.4a ex. *Aliquid erit Antichristus et illud non est homo*
quod patet, quia iste terminus erit requirit nominatiuum casum, scilicet *aliquid*.

Item:

3.4b *Aliquis homo non est id quod ipse desiit esse; sic expone:*

3.4b ex. *Aliquis homo desiit esse aliquid et ipse non est illud.*

Item:

3.5 Ex simplici propositione sequitur implicita, si tempus condeclinatur tempori

3.51a1 *Si tu es homo,*

3.51a2 *tu es id quod est homo.*

3.52 Futurum futuro, ut

3.52a1 *Si tu eris homo,*

3.52a2 *tu eris id quod erit homo.*

3.53 Praeteritum praeterito, ut

3.53a1 *Si tu fuisti homo,*

3.53a2 *tu fuisti id quod fuit homo.*

Sed si tempus non condeclinatur tempori, tunc non prouenit.

Item:

3.6 Ex simplici negatiua non sequitur implicita, nisi gratia termini.

Verbi gratia:

3.6a1 *Socrates non est homo, ergo*

3.6a2 *Socrates non est id quod est homo:*

non prouenit, posito quod nullus homo sit, quia consequens

propositio ponit esse hominem, antecedens non.

Item, ad praedicta obicitur:

3.6b1 *Si Antichristus est homo,*

3.6b2 *Antichristus est id quod est homo,*

et e contrario. Sed

3.6b3 *Antichristus erit homo, ergo*

3.6b41 *Antichristus erit id quod est homo*

Non /f.98vb/ prouenit, quia tempus non condeclinatur tempori;
deberet enim dici: ergo

3.6b42 *Antichristus erit id quod erit homo.*

Unde tu sic insta:

3.6b2 ex. *Antichristus est homo et aliquid est homo; sed*

3.6b3 *Antichristus erit homo, ergo*

3.6b41 ex. *Antichristus erit homo et aliquid est homo.*

Item.

3.6c1 *Si Antichristus est id quod est homo,*

3.6c2 *Antichristus est homo. Sed*

3.6c3 *Antichristus non est homo: ergo*

3.6c4 *Antichristus non est id quod est homo.*

Non prouenit, quia antecedens propositio quae est implicita
non habet destructoriam.

Instantia:

3.6d1 *Si Antichristus est homo et aliquid est homo.*

3.6d2 *Antichristus est homo. Sed*

3.6d3 *Antichristus non est homo, ergo*

3.6d4 *Antichristus non est homo et aliquid est homo.*

Item, alia regula:

3.7 Quotiens aliqua implicita sequitur ex aliqua propositione eadem
implicita proposita sub disiunctione cum qualibet alia implicita
sequitur ex prima propositione.

Verbi gratia, cum haec consequentia sit uera

3.7a1 *Si Socrates est homo*

3.7a2 *Socrates est id quod est homo*

erit et haec uera:

3.7a1 *Si Socrates est homo,*

3.7a3 *uel Socrates est id quod est homo, uel Socrates est id quod*

est asinus.

Contra hanc regulam sic obicitur:

- 3.7a1 *Si Socrates est homo,*
 3.7a3 *uel Socrates est id quod est homo, uel Socrates est id quod*
est asinus. Sed
 3.7a1 *Si Socrates est homo,*
 3.7a4 *Socrates tantum est id quod est homo. Ergo*
 3.7a1 *Si Socrates est homo,*
 3.7a5 *Socrates est uel non est id quod est asinus.*

Instantia:

- 3.7a1 *Si Socrates est homo,*
 3.7a6 *uel Socrates est id quod est homo, uel aliquid est asinus et*
Socrates est illud. Sed
 3.7a1 *Si Socrates est homo,*
 3.7a4 *Socrates tantum est id quod est homo. Ergo*
 3.7a1 *Si Socrates est homo,*
 3.7a7 *aliquid est asinus et Socrates est uel non est illud.*

Item:

Omnis talis consequentia falsa est ubi in antecedenti propositione ponitur talis terminus *falsum*, *impossibile*, *non uerum* et in consequenti propositione talis terminus *uerum*, *necessarium*.

Verbi gratia:

- 4.1a1 ap.dic. *Si falsum est Socratem esse id quod est asinus,*
 4.1a2 ap.dic. *uerum est Socratem non esse id quod est asinus.*

Quod inde patet, cum enim utraque istarum possit esse falsa:

- 4.1a1 *Socrates est id quod est asinus,*
 4.1a2 *Socrates non est id quod est asinus.*

Mentitur consequentia quae dicit: si haec falsa, illa est uera. Possunt enim simul esse falsae.

Concedenti quod

- 4.1a1 ap.dic. *Si falsum est Socratem esse id quod est asinus,*
 4.1a2 ap.dic. *uerum est Socratem non esse id quod est asinus,*
sic obicitur:
 4.1a1 ap.dic. *Si falsum est Socratem esse id quod est asinus,*
 4.1a2 ap.dic. *uerum est Socratem non esse id quod est asinus, et:*
 4.1a2 ap.dic. *Si uerum est Socratem non esse id quod est asinus,*

- 4.1a2 *Socrates non est id quod est asinus, et:*
- 4.1a2 *Si Socrates non est id quod est asinus,*
- 4.1a3 *aliquid est asinus et Socrates non est illud, et:*
- 4.1a3 *Si aliquid est asinus et Socrates non est illud,*
- 4.1a4 *aliquid est asinus.*
- Ergo a primo:
- 4.1a1 ap.dic. *Si falsum est Socratem esse id quod est asinus,*
- 4.1a4 *aliquid est asinus.*
- Sed necessarium est primum
- 4.1a1 dic. *falsum esse Socratem esse id quod est asinus*
- ergo necessarium et consequens
- 4.1a4 dic. *aliquid esse asinum.*
- Item. Praeposita regula consideretur in argumentatione,
- uerbi gratia: sicut falsa est haec consequentia
- 4.1a1 ap.dic. *Si falsum est Socratem esse id quod est asinus,*
- 4.1a21 ap.dic. *uerum est Socratem non esse id quod est asinus*
- sic falsa est et ista argumentatio:
- 4.1a1 ap.dic. *Falsum est Socratem esse id quod est asinus, ergo*
- 4.1a21 ap.dic. *uerum est Socratem non esse id quod est asinus*
- non prouenit. Sed si dicitur: ergo
- 4.1a22 ap.dic. *non est uerum Socratem esse id quod est asinus,*
- bene prouenit, quia agitur ibi de eodem dicto.
- Sic insta huic argumento:
- 4.1a1 ap.dic. ex. *Falsum est Socratem esse aliquid et illud esse asinum,*
- et Socratem non esse illud.*
- 4.N.1 Nota: cum in talibus locutionibus a falso ad uerum fiat pro-
- gressio, a uero ad falsum fiet suppositis dictis singularium.
- Verbi gratia:
- 4.1a21 ap.dic. *Verum est Socratem non esse id quod est asinus, ergo*
- 4.1a1 ap.dic. *falsum est Socratem esse id quod est asinus.*
- Sed suppositis locutioni dictis particularium non prouenit,
- uerbi gratia:
- 4.N.1a1 ap.dic. *Verum est aliquid esse id quod est homo, ergo*
- 4.N.1a2 ap.dic. *falsum est aliquid non esse id quod est homo.*
- Talia enim dicta sunt subcontraria, et in subcontrariis a
- uero, ad falsum non fit progressio, sed a falso ad uerum.
- Item, alia regula:

4.2 Quotiens modus falsitatis uel impossibilitatis praeponitur uel postponitur dicto implicitae, terminus faciens implicitam non facit positionem sed, positus extra appellationem, facit positionem.

Unde talia argumenta fallunt:

4.2a ap.dic. *Falsum est Socratem esse id quod est lapis, ergo*

4.2a ex. *aliquid est lapis et Socrates non est illud; uel sic:*

4.2b ap.dic. *Impossibile est Socratem esse id quod est lapis, ergo*

4.2b ex. *aliquid est lapis et impossibile est Socratem esse illud.*

Item, alia regula:

4.3 Quotiens modus falsitatis praeponitur dicto implicitae ablatiuo anteposito, ab ablatiuo ad accusatiuum non fit progressio nisi gratia termini.

Verbi gratia:

4.3a ap.dic. abl. *De aliquo homine falsum est ipsum esse id quod est lapis, ergo*

4.3a ap.dic. acc. *aliquem hominem falsum est esse id quod est lapis:*
non prouenit, quia prima non facit positionem; secunda autem facit, e contrario autem bene prouenit.

Item, alia regula:

4.4 Quotiens modus falsitatis cum appellatione dicti implicitae sequitur uniuersale /f.99ra/ signum negatiue ab ablatiuo ad accusatiuum et ab accusatiuo ad ablatiuum generalis fit progressio.

Verbi gratia:

4.4a ap.dic. abl. *De nullo homine falsum est ipsum esse id quod est lapis, ergo*

4.4a ap.dic. abl. *nullum hominem falsum est esse id quod est lapis;*
et e contrario: ab accusatiuo ad ablatiuum.

Item:

4.5 Quotiens iste modus uerum cum appellatione dicti implicitae sequitur uniuersale signum negatiuum, ab ablatiuo ad accusatiuum numquam fit progressio, sed ab accusatiuo ad ablatiuum semper.

Verbi gratia:

4.5a ap.dic. acc. *Nullum hominem uerum est esse id quod est lapis, ergo*

4.5a ap.dic.abl. *de nullo homine uerum est ipsum esse id quod est lapis:*

bene prouenit.

E contrario falsum, quia secunda facit positionem,
prima non.

Item:

5 Sunt implicitae de quarum explicitis dubitatur, quales sunt istae:

5a *Aliquid quod non est homo erit Antichristus*

5b *De animali quod non est homo aliquid est uerum*

Quidam sic sumunt explicitam huius implicitae

5a *Aliquid quod non est homo erit Antichristus:*

5a ex.1 *Aliquid non est homo et illud erit Antichristus*

Haec explicita falsa, quare et illa implicita.

Nos autem dicimus hanc esse ueram

5a *Aliquid quod non est homo erit Antichristus*

et sic sumendam eius explicitam:

5a ex. 2 *Aliquid erit Antichristus et illud non est homo*

5a-i Haec explicita uera, quare et illa implicita; et est ratio
quare sic sumenda sit explicita, quia iste terminus *aliquid*
supponit uerbo futuri temporis, scilicet *erit*, et sortitur
ab eo appellationem.

Unde ponendus est iste terminus *aliquid* cum illo uerbo in
explicita

5a ex.2 hoc modo: *Aliquid erit Antichristus et illud non est homo.*

5a-ii Item, alia ratio: strictius tenetur nomen relatiuum quam
suum antecedens,

5a unde si sic exponeretur *Aliquid quod non est homo et coetera*

5a ex.1 *Aliquid non est homo et illud erit Antichristus*, iam contra
artem fieret: progredereetur enim in argumentatione a minus
ad maius commune.

5a-iii Item, alia ratio: cum nomen relatiuum supponat uerbo prae-
sentis temporis, et in explicita loco illius nominis relati-
ui ponatur pronomen relatiuum, illud pronomen debet ita
uerbo supponere cui supponit nomen relatiuum positum in
implicita.

Verbi gratia:

- 5a *Aliquid quod non est homo erit Antichristus*
 sic sume explicitam:
- 5a ex.1 *Aliquid erit Antichristus et illud non est homo*
 et sic praemissa implicita erit uera.
 Sed obicitur:
- 5a *Aliquid quod non est homo erit Antichristus* exponitur enim sic:
- 5a ex.2 *Aliquid erit Antichristus et illud non est homo*
 Eodem modo hanc esse ueram dicunt
- 5a *Aliquid quod non est erit Antichristus* secundum priorem
 expositionem.
 Ad hoc dicimus quod secundum priorem expositionem esset uera
 si esset propositio; sed non est propositio, quia est nuga-
 toria locutio.
 Item obiciunt et hoc modo:
- 5a2 *Omne quod non est homo est non homo*
- 5a1 *Aliquid quod non est homo erit Antichristus*
- 5a3 *Ergo non homo erit Antichristus.*
 Nota quoniam iste terminus *aliquid quod non est homo* adiunc-
 tus uerbo praesentis temporis exponitur per hunc terminum
non homo. Appositus autem uerbo futuri uel praeteriti tempo-
 ris non sic exponitur.
 Unde tu sic insta:
- 5a2 *Omnis homo est id quod est homo et e contrario*
- 5a4 *Sed aliquis homo erit Antichristus*
- 5a3 *ergo non homo erit Antichristus*
 Vel sic obicitur:
- 5a1 *Aliquid quod non est homo erit Antichristus*, ergo
- 5a ex. *aliquid non est homo et illud erit Antichristus.*
 Instantia:
- 5a3 ap.dic. *Aliquid quod esse asinum non est uerum est homo*, ergo
- 5a3 ap.dic.ex. *aliquid esse asinum non est uerum et illud est homo.*
 Item: dubitatur de explicita huius implicitae:
- 5b *De animali quod non est homo aliquid est uerum*
 Quidam sic sumunt explicitam:
- 5b ex.1 *Aliquod animal non est homo et de eo aliquid est uerum*
 sed male sumunt explicitam: progrediuntur enim a minus

communi ad maius commune; strictius enim tenetur relatiuum
quam suum antecedens.

Nos autem dicimus sic sumendam esse explicitam:

5b ex.2 *Aliquid est uerum de animali et illud non est homo*
Sed obicitur:

5b *De animali quod non est homo aliquid est uerum*
huius implicitae explicita est:

5b ex.2 *Aliquid est uerum de animali et illud non est homo*
Haec explicita necessaria est, quare et illa implicita;
posito tamen quod nullum animal sit, haec est nugatoria

5b *De animali quod non est homo aliquid est uerum*
nihilominus^q necessarium erit significatum illa locutione;
unde proferam explicitam loco illius implicitae ad hoc quod
conueniens sit locutio.

Praedictis sic obicitur:

5b1 *Si de aliquo animali aliquid est uerum,*

5b2 ap.dic.abl. *de eo est uerum ipsum esse uel non esse.*

Quod si concedat, sic procede:

5b3 ap.dic.abl. *Necessarium est de animali quod non est homo esse uerum*
ipsum /f.99rb/ esse uel non esse,

5b4 *Et cras aliqua dies erit; ergo*

5b5 ap.dic.abl. *Tunc erit uerum de animali quod non est homo esse uerum*
ipsum esse uel non esse, sed

5b6 ap.dic.abl. *Tunc erit falsum de animali quod non est homo esse uerum*
ipsum esse; ergo

5b5 ap.dic.abl. *Tunc erit uerum de animali quod non est homo esse uerum*
ipsum non esse; ergo

5b5 ap.dicacc.1 *Tunc erit uerum aliquod animal quod non est homo non esse;*
ergo

5b5 ap.dicacc.2 *Vel tunc erit uerum aliquod animal non esse hominem uel*
aliquod animal non esse.

Solutio.

Primum argumentum falsum est, hoc scilicet:

5b1 ap.dic.abl.2 *Necessarium est de animali quod non est homo aliquid esse*
uerum; ergo

5b3 ap.dic.abl. *Necessarium est de animali quod non est homo esse uerum*

q nihil tamen ominus L

ipsum esse uel non esse.

Et impedit uniuocatio hoc argumentum.

In prima enim propositione ex adiunctione memoratiuae prae-
positionis ablatiuo, et sequente tali termino *aliquid est*
uerum ampliatur ille ablatiuus ad ea appellandum quae sunt
uel fuerunt uel erunt appellata ipsius.

Sed in sequenti propositione ex adiunctione uerbi praesentis
temporis ad appellandum ea quae sunt.

Tu ergo priori argumento insta per expositorias hoc modo:

5b1 *Si de aliquo animali aliquid est uerum,*

5b2 ap.dic.abl. *de eo est uerum ipsum esse uel non esse; sed*

5b7 ap.dic.abl. *Necessarium est de animali aliquid esse uerum et illud non*
esse hominem; ergo

5b8 ap.dic.abl. *Necessarium est de animali esse uerum ipsum esse uel non*
esse, et ipsum non esse hominem.

Item, dubitatur de explicita huius implicitae:

5c *Omne animal quod est homo est risibile*

Ad hoc dicimus quod haec propositio nullam habet explicitam,
uel si habet, sic esse sumendam:

5c ex. *Aliquorum animalium quodlibet est homo et nullum est homo*
quod non sit risibile

Similiter et de ista:

5d *Unum solum quod est animal est phoenix*
sic sume explicitam:

5d ex. *Unum solum quod est animal est phoenix et nihil aliud quod*
sit animal est phoenix.

Explicit tractatus implicitarum.

NOTES TO THE TEXT

0.0-0.2

After having given a definition of *propositio implicita* (0.0), and a first general rule (0.1), our author gives a few examples (0.1 a-c) to show how a *propositio implicita* can be transformed into an equivalent conjunctive proposition made up of the *explicitae*. The examples make it clear that the truth-values of the *implicita* are the same as those of the conjunctive proposition: true only if both parts of the conjunction are, and false in the other three cases (T.T=T; F.T=F; T.F=F; F.F=F).

The second general rule (0.2) states that whenever we have propositions containing any of the terms listed in 0.0, with the exception of *id quod* and *ea quae*, and we try and reason inductively, our argument is false. On this cfr. the *Logica 'Ut dicit'* (a treatise contained in MS London, British Library Royal 8 A VI, ff. 57r-65v, described by De Rijk in *Logica Modernorum*, vol. II, part 1, *cit.* pp.25-33 and pp.438-440, and edited in vol. II, part 2, pp.375-411) p.394, and *Dialectica Monacensis*, *cit.* p. 487. This rule is applied by William of Sherwood à propos of the term *solus*:

"Item regula quod non tenet processus ab inferiori ad superius cum fit in subiecto exclusio, verbi gratia, solus Sortes currit; ergo solus Sortes movetur. Secundum hoc procedit hoc sophisma: solus Sortes est idem soli Sorti. Probatio: Sortes est idem soli Sorti et nihil aliud est idem soli Sorti; ergo solus Sortes etc. Contra: ergo solus Sortes est indifferens a solo Sorte; ergo non differens; ergo non differt a solo Sorte. Contra: Plato non differt a solo Sorte; haec est vera; ergo haec est falsa: solus Sortes etc. Dicendum quod in hoc argumento 'solus Sortes est non differens, ergo solus Sortes non differt' est fallacia consequentis, quia 'esse non differens a solo Sorte' est in minus quam 'non differre a solo Sorte', quia hoc convenit soli Sorti; illud autem Sorti et aliis. Sed contra: propositio affirmativa de praedicato infinito et negativa de praedicato finito cum constantia subiecti aequipollent ut hae duae 'Sortes est non albus', 'Sortes non est albus'; ergo hae duae aequipollent 'Sortes est non differens', 'ergo Sortes non differt'; ergo addita utrobique exclusionem aequipollebunt; ergo tenet argumentum." (Sherwood, *Synkategoremata*, ed. O'Donnell, *cit.* p.65 (Kretzmann, pp.73-74): see above i, n.48).

Ralph Strode, in his *Consequentiae*, approaches the problem of induction from an exclusive proposition in a more refined way: if the *dictio exclusiva* is understood as added to the subject, we can have induction (*tantum homo currit, ergo tantum animal currit*); but if it is added to the predicate,

no induction is allowed (so from *tantum homo currit* we cannot derive *tantum homo movetur*):

"Et quia uis conclusionis importata per dictionem exclusiuam cuiusmodi sunt isti termini *tantum solum dumtaxat praecise* non cadit super terminum immediatum sed mediatum, inde est quod ab inferiori ad suum superius a parte subiecti, dictione exclusiua addita subiecto, tenet consequentia, ut *tantum homo currit, ergo tantum animal currit*; sed a parte praedicati non ualet, unde non sequitur: *tantum homo currit, ergo tantum homo movetur*. Et ratio huius est quia quando exclusiua ponitur in aliqua propositione, et superius et inferius ponitur a parte subiecti, distribuitur praedicatum modo quo dictum est: quia quando arguitur ab inferiori ad suum superius cum distributione addita praedicato, ualet consequentia, quia bene sequitur *homo uidet omne album, ergo animal uidet omne album*; sed non econtra, scilicet a parte praedicati, unde non sequitur *tantum homo currit, ergo tantum animal movetur*." (Cfr. Strodi *Consequentiae cum commento Alexandri Sermonete... Venetiis... per Laçarum de Soardis, sumptibus Heredum nobilis viri domini Octaviani Scoti civis Modoetiensis et Sociorum. 1517 Die 8 Aprilis, f.27ra.*)

1.1

The *Tractatus Anagnini* give the very same rule:

"Propter predictam varietatem exclusionis contingit quod hec dictio '*solus*' iuncta nomini totius non excludit partem, nec e converso. Unde vere sunt iste: '*solus Socrates <est>*', '*solum caput Socratis est*'. (Tractatus Anagnini, cit. p.318).

I have found no trace of this rule in the other texts of the *Logica Modernorum*, nor in William of Sherwood. But Aquinas mentions it in his commentary on the Sentences:

"Maior est unio Filii ad Patrem, quam partis ad totum. Sed dictio exclusiua adiuncta toti non excludit ad partem: non enim sequitur: *Solus Socrates est albus, ergo pes eius non est albus*. Ergo cum exclusio fiat ratione diversitatis, videtur quod non excludatur Filius per dictionem exclusivam adiunctam Patri." (Thomas Aquinas, *Scriptum super libros Sententiarum*, in librum primum, Dist. XXI, quaest. I, art. 2, 3^{um} argum.)

It is interesting to note that Dist. XXI, 1 of the first book of the Sentences of Peter Lombard (*Quaeritur quomodo possit dici solus Pater vel solus Filius vel solus Spiritus Sanctus, cum sint inseparabiles*), which derived from a problem raised by Augustine in the *De Trinitate* VI, vii-ix, (cfr. Migne PL 42, 929-930, or CCL 50, 237-239) was, from the first still unpublished glosses on the Sentences up to the late medieval commentaries, always interpreted as an example of the ambiguous nature of the *dictiones exclusivae*. See for instance the following thirteenth century gloss, found in MS Oxford, Bodleian Library Can. Patr. Lat. 189, f. 49ra (bottom margin), which in glossing this passage refers the reader back to Dist.

XIX,12 ("tantus est solus Pater, vel solus Filius, vel solus Spiritus Sanctus, quantum simul illi tres"...):

"Tantus est solus Pater quantum simul tres.

Aut li *solus* determinat subiectum in comparatione ad praedicatum, et sic falsa est. Hoc falsum: *Pater tantus est, et cetera, et Filius uel Spiritus Sanctus non est tantus et cetera.*

Aut li *solus* sistit in subiecto et hoc cathegorematicae, et sic falsa est et implicatiua falsi. Hoc falsum: *Pater qui est solus et cetera.*

Aut sistit in subiecto syncathegorematicae ut, cum in Patre sit ypostasis et proprietates, *haec dictio exclusiva solus* excludit oppositas proprietates ab ypostasi Patri: et sic uera est. Hoc falsum: qui est solummodo Pater ita quod nec Filius nec Spiritus Sanctus estSimiliter distingui posset haec: *Pater solus est Deus...*"

I have found in MS Oxford, Corpus Christi College C 52, f.27rb and in MS Oxford, Bodleian Library, Bodl. 746 (SC 2768), f.36v equally interesting early thirteenth century glosses.

It would be interesting to work on the history of the interpretation of Sentences I,XXI,1, for such a work could provide us with a diachronic picture of the relationship between logic and theology from a very specific point of view. Starting points for such a history would be: Albertus Magnus, *Opera*, vol.25, ed.A. Borgnet, Paris 1893, pp.556-564; Johannes Duns Scotus, *Opera*, vol.17, Civitas Vaticana 1966, pp.295-300; Alexander De Hales, *Opera*, vol.12, Quaracchi 1951, pp.213-214; Bonaventura, *Opera*, vol.1, Quaracchi 1882, pp.378-387; Ockham, *Super quattuor libros Sententiarum*, Ludguni 1496 (reprint London 1962) I, dist.XXI, q. unica, ff.25va-26rb; Aegidius Romanus, *In primum librum Sententiarum*, Venetiis 1521 (reprint Frankfurt a.M. 1968), pp.116-119.

Twelfth century theologians like Alan of Lille and Peter the Chanter were already quite well aware of the problems raised by the *dictiones exclusivae*. Alan of Lille says, in *Regula XXIX* of his *Regulae coelestis iuris* (Migne, PL 210,635):

"Quotiescumque dictio exclusiva adiungitur homini essentiali, nomen potius facit in genus rei, quam in rem generis; nec est pro quo fiat suppositio, sed indeterminate fit sermo de aliquo. Ut cum dicitur: Unus Deus, solus Deus, tantum Deus.

Sicut enim in naturalibus adiuncto uno exclusivo nomini appellativo non est pro quo fiat suppositio, sed potius nomen fertur ad genus rei, non ad rem generis, ut cum dicitur *tantum homo* vel *solus homo est hic intus*, non pro Petro vel pro Paulo fit suppositio, sed pro homine indeterminate; sic cum dicitur *Unus Deus* vel *solus Deus* vel *tantum Deus* non pro Patre vel Filio vel Spiritu Sancto fit suppositio, sed pro re huius naturae indeterminate. Unde non concedimus: *Unus Deus genuit unum Deum*, vel *solus* vel *tantum*, nec *unus solus Deus gignit* vel *gignitur*, qui pro nulla [sc. persona] fit suppositio."

1.3 and 1.5

These two rules can be found in the *Tractatus Anagnini* (cit. p.318)

"Ammodo considerata sunt diversa genera exclusionum que operatur hec dictio '*solus*'.

Quando coniungitur generi generalissimo, excludit alia genera generalissima, ut '*solum substantia*' idest: non qualitas, non quantitas.

Quando autem generi subalterno, excludit alia genera subalterna, ut '*solum corpus*' idest: non animatum corpus, non animal.

Quando speciei specialissime, excludit alias species specialissimas maxime eiusdem predicamenti, ut '*solum homo*', idest: non capra, non asinus. Unde concedimus: '*iste loquitur solum de homine qui dicit: "hic homo est", "hec albedo est"*'.

Quando coniungitur proprio nomini, excludit alia appellata priorum nominum, ut '*solum Socrates*', idest: non Cicero, non Plato."

Peter the Chanter makes a very similar point in one of his discussions of christological problems as can be seen from the following remark on *tantum*: see J-A. Dugauquier, ed. *Pierre le Chantre, Summa de Sacramentis et Animae Consiliis*, Troisième Partie (III,2b), *Liber Casuum Conscientiae* (Analecta Mediaevalia Namurcensia, 21), Louvain-Lille 1967, p.49o:

"Item. Natura est huius exclusivae dictionis tantum, quod non excludit nisi similia. Ut '*Socrates est tantum albus*': sic excluduntur qualitates. '*Socrates est tantum homo*': sic non excluditur quin sit dialecticus, grammaticus et huiusmodi. A simili cum dico '*Christus est tantum Deus*', non possunt dicere quod ibi excludatur humanitas intellecta adiectivae et in habitu per hoc nomen homo. Non enim excluditur sic Christum esse humanatum. Sicut cum dico '*Socrates est tantum homo*' non excluditur sic quin Socrates sit galeatus."

William of Sherwood, too, distinguishes between the power of a *dictio exclusiva* (*solus*, in his case) of excluding *generaliter* (=all other genera) and *specialiter* (=inside the same genus). William of Sherwood, *Syncategoremata*, ed. O'Donnell, cit.pp.64-65 (Kretzmann pp.72-73):

"Item regula quod haec dictio '*solus*' quandoque excludit generaliter, quandoque specialiter, verbi gratia, *solus Sortes* currit. Primo modo sensus est: nihil aliud a Sorte currit, ut excluditur generaliter omne aliud a Sorte; secundo modo significat specialiter quod nihil aliud a Sorte currit in eodem genere. Et quaeritur quae sit causa huius diversitatis. Et dicunt quidam quod hoc est quia haec dictio '*aliud*', quae cadit in eius significatione, dicitur multipliciter, aliud scilicet genere sicut quantitas et substantia, et aliud scilicet specie sicut homo et asinus, et aliud numero sicut Sortes et Plato. Et primo modo facit '*solus*' generalem exclusionem; secundo specialem; tertio numeralem. Isti autem dicunt non tantum duos modos sed tres. Sed contra: secundum hoc, cum facit generalem exclusionem, non excluderet nisi ea quae sunt aliorum generum; quod falsum est quia tunc excluditur omne aliud. Et dicunt quod hoc est ex diversitate praedicamenti, scilicet quod non excluduntur nisi ea quae nata sunt participare praedicatum. Cum ergo praedicatum natum sit inesse omnibus, excludit generaliter omne aliud; et cum sit natum inesse specialiter rebus alicuius generis, excludit specialiter res illius generis.

Exemplum primi: solus Sortes est; exemplum secundi: solus Sortes currit. Sed contra: bene dicitur 'solus Sortes est Sortes' et 'tantum homo est risibile', et tamen nihil est extra haec subiecta quod natum est recipere haec praedicata; unde secundum illos nihil excluditur.

Item cum eodem praedicato solemus ita distinguere, scilicet quod ferri possit exclusio generalis vel specialis; ergo non est ex diversitate praedicati. Dicendum quod haec diversitas provenit ex hoc quod haec negatio 'non alius', quae iacet in hac dictione 'solus', potest negare simpliciter vel in genere. Si simpliciter, tunc removet specialiter alia illius generis et fit specialis exclusio.

1.2 and 1.6

These two rules deal with the power of exclusion of *tantum* when it is added to a numeral, and say that it excludes any larger number (1.2) and that does not exclude 'otherness' (*alteritatem*) (1.6). As our author says (*quidam dicunt quod excludit alteritatem, alii quod numerum*) there were two different opinions on this second point. Amongst the *quidam* who maintained that the *dictio exclusiva excludit alteritatem* must have been the author of the *Tractatus Anagnini*:

"Quando hec dictio solus adiungitur nomini numerali, duplex fit exclusio, maioris numeri et diversitatis: maioris numeri, ut '*solum unum*', idest *non duo*; diversitatis, ut '*solum unum*', idest: *non aliud*." (*Tractatus Anagnini, cit. p.318*).

William of Sherwood gives a rule for *tantum* which is almost identical with 1.2, and in the explanation of the rule he adds some elements which help us understand the debate about whether the *dictio exclusiva* means *non aliud* or not:

"Est autem regula quod haec dictio 'tantum' adiuncta termino numerali excludit maiorem numerum et non minorem, ut si dicatur 'tantum tres', non potest inferri: non ergo duo, sed: non ergo quattuor vel quinque. Sed contra: cum sic dicitur, excluditur omne aliud quam tres, sed duo sunt aliud quam tres, quia non sunt tres; ergo excluduntur duo. Et dicendum quod haec dictio 'tantum' excludit non omne aliud, sed quod est aliud respectu praedicati; aliquod autem est praedicatum respectu cuius duo sunt aliud ab eo quod est tres et aliud respectu cuius non. Primo modo excluduntur tam minor quam maior numerus; secundo modo tantum maior. Exemplum primi: tantum tres sunt tres, vel tantum tres trahunt navem, et sumatur coniunctim. Exemplum secundi: tantum tres currunt." (William of Sherwood, *Synkategoremata, cit. p.68* (Kretzmann p.82).)

Later medieval logicians devoted much attention to the problem of the kind of exclusion operated by the *dictio exclusiva* when added to a numeral. Ockham's treatment of the problem, though much more subtle and refined than that of Sherwood's - and placed in a much more systematic frame of reference

• still reminds the reader of the twelfth and thirteenth century debates on the subject.

"Iuxta tertiam impropriam acceptionem dictionis exclusivae potest accipi tertia regula ista, *quod quando dictio exclusiva additur termino numerali, sive aequivalenti, vel connotanti numerum vel unitatem, illa propositio est distinguenda, eo quod potest esse exclusio proprie vel improprie*. Primo modo excluditur omne illud de quo non verificatur subiectum; secundo modo excluditur maior pluralitas quam illa cui denotatur praedicatum competere; et potest vocari exclusio maioris pluralitatis. Et secundum hoc ista propositio est distinguenda 'tantum quatuor homines sunt hic intus', quia supponatur quod quatuor homines sunt hic intus et non plures, tunc 'si fiat exclusio proprie accipiendo dictionem exclusivam, denotatur quod quatuor homines sunt hic intus, et quod nulla alia a quatuor hominibus sunt hic intus, et per consequens quod lapides non sunt hic intus, et quod equi non sunt hic intus, nec asini, nec quod duo homines sunt hic intus, quia duo homines sunt alii a quatuor hominibus. - Si autem fiat exclusio maioris pluralitatis, tunc denotatur quod quatuor homines sunt hic intus et non plures quam quatuor. Et tunc sunt istae eius exponentes 'quatuor homines sunt hic intus' et 'non sunt plures homines hic intus quam quatuor'; et sic est vera, posito priori casu. Et sic solvitur istud sophisma 'tantum unum est', nam proprie accepta dictione exclusiva, ista est vera 'tantum unum est', nam utraque exponens est vera, ista videlicet 'unum est' et 'nihil aliud ab uno est'. Similiter est de ista 'tantum unum animal est homo'. Sed si dictio exclusiva accipiatur improprie, secundum quod est exclusiva maioris pluralitatis, tunc est falsa; et tunc sunt istae suae exponentes 'unum est' et 'non sunt plura quam unum', sicut exponentes istius 'tantum unum animal est homo' sunt istae 'unum animal est homo' et 'non plura animalia quam unum sunt homines'. Similiter est de ista 'tantum alterum istorum est', demonstrando duo entia; nam sumpta dictione exclusiva proprie, vera est, quia utraque exponens est vera si non sunt plura quam illa duo, scilicet Deus et angelus. Si sumatur improprie, falsa est, quia tunc denotatur quod alterum istorum est et non utrumque." (William of Ockham, *Summa Logicae*, ed. G. Gál - S. Brown, St. Bonaventure N.Y. 1974, pp.301-302).

Wyclif's position on this point is much less complex than Ockham's and does not really go beyond that achieved by twelfth-thirteenth century logicians:

"Nota quod quando dictio exclusiva additur dictioni significanti numerum ultra binarium illa propositio potest exponi duobus modis; scilicet ratione alietatis et ratione pluralitatis; ut ista: *tantum 12 sunt apostoli Dei*; potest sic exponi: *12 sunt apostoli Dei, et non alii quam 12 sunt apostoli Dei*. Et sic minor est falsa." (John Wyclif, *Tractatus de Logica*, ed. M.H. Dziewicki, London 1893 (repr. New York-London-Frankfurt a.M. 1966), vol.14 of the *Works*, and vol. 1 of the *Logica*, p.53.)

See on this also Richard Lavenham:

"Quando dictio exclusiva additur termino numerali a parte subiecti, illa propositio habebit duplicem modum exponendi, videlicet, ratione

alietatis et ratione pluralitatis. Unde illa propositio: 'Tantum unum est' sic exponitur ratione alietatis: 'Unum est, et nihil aliud quam unum est'. Sed ratione pluralitatis sic exponitur: 'Unum est, et non plura sunt'. Item, ista: 'Tantum quattuor homines sunt in claustro' sic exponitur ratione alietatis: 'Quattuor homines sunt in claustro, et nulli alii quam quattuor homines sunt in claustro'. Sed ratione pluralitatis sic exponitur: 'Quattuor homines sunt in claustro, et non plures quam quattuor sunt in claustro'. Et ista propositio: 'Tantum unum est' ratione alietatis est falsa, sed exponendo eam ratione pluralitatis est vera. Item, ista propositio: 'Tantum quattuor homines sunt in claustro' ratione alietatis est impossibilis, sed ratione pluralitatis est possibilis. Et est impossibilis alio modo, eo quo sic includit contradictoria, quae sequitur: Tantum quattuor homines sunt in claustro; ergo, duo homines sunt in claustro; sed omnes duo homines sunt alii quam quattuor; ergo, alii quam quattuor homines sunt in claustro. Et ex alio latere sequitur: Tantum quattuor homines sunt in claustro; ergo, nulli alii quam quattuor homines sunt in claustro. Et hoc exponendo eam ratione alietatis. Similiter, ista propositio: 'Tantum duodecim sunt apostoli dei' ratione alietatis est falsa; sed ratione pluralitatis est vera. Et si arguatur sic: 'Tantum duodecim sunt apostoli dei; ergo, omnes apostoli dei sunt duodecim', negatur consequentia. Sed si obiciatur quod hic arguitur ab exclusiva ad suum universale, etc., dico quod regula non tenet nisi arguatur in singulari numero." (Richard Lavenham, *Tractatus exclusivarum*, edited by P.V. Spade, "Five Logical Tracts by Richard Lavenham", in *Essays in Honour of Anton Charles Pegis*, ed. J.R. O'Donnell, Toronto 1974, p.114.)

1.4

This rule states that the exclusive term changes its power of exclusion according to the different terms and kind of terms to which it is added. A similar point seems to be made by the *Summa Sophisticorum Elenchorum*, a gloss composed probably between 1140 and 1160, contained in MS Paris, Bibliothèque Nationale Lat. 15.141, ff.1ra-46vb, first described by L. Minio-Paluello (cfr. L. Minio-Paluello, "Jacobus Veneticus Grecus, Canonist and Translator of Aristotle", *Traditio* 8 (1952) p.304 and "Note sull' Aristotele Latino Medievale VI: Boezio, Giacomo Veneto, Guglielmo di Moerbeke, Jacques Lefèvre d'Étaples e gli 'Elenchi Sofistici'", *Rivista di Filosofia Neoscolastica* 44 (1952) p.400, n.2 now in *Opuscula. The Latin Aristotle*, Amsterdam 1972, pp.228 and 166), and edited by L.M. De Rijk, *Logica Modernorum*, Vol.I, Assen 1962, pp.257-458; the passage which interests us here is to be found on pp.366-367:

"Item:

'iste versus habet duos iambos tantum
sed omnes duo iambi tantum sunt duo pedes tantum
ergo iste versus habet duos pedes tantum.'

Sophisma est secundum accidens. Non enim quicquid assignatur parti, et toti, vel: subiecto, et predicato. Quia, quamvis hoc universale

duos iambos <habere> insit huic versui cum hac determinatione '*tantum*', non tamen sequitur quod suum totum; idest *duos pedes*, insit eidem cum eadem determinatione, scilicet '*tantum*'.

Vel potest dici quod hoc adverbium '*tantum*' mutat significationem ex diversis adiunctis, quia in prima propositione accipitur '*tantum*' respectu iamborum, cum dicitur: '*iste versus habet duos iambos tantum*', sed in conclusione accipitur respectu pedum, ut cum infertur: '*ergo iste versus habet duos pedes tantum*'. Et secundum hoc erit in tertio modo equivocationis hic parallogismus."

This passage is interesting also because it seems to contradict rule 1.1 of the *Tractatus Implicitarum*.

1.7 and 1.8

These two rules concern the kind of terms to which we cannot correctly attach an exclusive term. In connection with 1.8 we must note that the meaning our author attaches to *nomen infinitum* is the grammatical one, as found in Varro, *De Lingua Latina* VIII, §§ 45,80 (ed. L. et A. Spengel, Berolini 1885, pp.180,191), as opposed to the Aristotelian one, as we find it defined in the *De Interpretatione* 16a29.

1.7 states that *tantum* cannot be added to the universal quantifier.

Sherwood seems to allow as correct a proposition of the kind 'only every man is running'. Cfr. William of Sherwood, *Introductiones in logicam*, in M. Grabmann, *Die Introductiones in logicam des Wilhelm von Shyreswood* (†nach 1267), "Sitzungsberichte der Bayerischen Akademie der Wissenschaften", philos-histor. Abteilung, 10, München 1937, pp.75-76. The same seems to be true with Ockham, who says:

"...quando dictio exclusiva additur termino communi *distributo*, quod potest esse *exclusio proprie dicta*, et tunc *excluditur omne illud de quo non verificatur illud cui additur dictio exclusiva*. Aliter potest esse *exclusio improprie dicta*, secundum quod denotatur praedicatum removeri a quolibet alio communi cum signo particulari, de quo non verificatur subiectum; et potest vocari *exclusio communis repugnantis cum signo particulari*. Unde ista '*tantum omnis homo currit*' est distinguenda penes secundum modum aequivocationis, eo quod li '*tantum*' potest teneri proprie, et tunc habet istas exponentes '*omnis homo currit*' et '*nihil aliud ab omni homine currit*'. Vel potest sumi improprie, ut sit *exclusio cuiuslibet communis repugnantis cum signo particulari*, ut habeat istas exponentes '*omnis homo currit*' et '*aliquis bos non currit*' et '*aliquis asinus non currit*' et '*aliqua capra non currit*', et sic de singulis communibus, ut per talem exclusivam - improprie sumpta dictione exclusiva - denotatur praedicatum verificari de termino communi posito in illa propositione cum signo universaliter et non verificari de quocumque alio communi universaliter sumpto. Et ista distinctio numquam habet locum nisi quando dictio exclusiva additur termino communi universaliter sumpto." (Ockham, *Summa Logicae, Pars Secunda, cit.* pp.298-299.)

Lavenham agrees with the *Tractatus Implicitarum* on this, for in his second rule he states that when we have a proposition of the kind 'only every man is running' the proposition is false:

"Secunda regula: *Quandocumque dictio exclusiva additur subiecto alicuius propositionis universalis affirmativae, si subiectum supponit pro multis, tunc est talis propositio falsa.* Verbi gratia, 'Tantum omnis homo currit', posito tamen quod nihil currit nisi homo, ita tamen quod viginti homines currant vel centum. Tunc est illa propositio falsa: 'Tantum omnis homo currit', quia una sua exponens est falsa, videlicet, 'Nihil aliud quam omnis homo currit', quia [aliud quam omnis homo currit, quia] unus homo currit, et iste homo est aliud quam omnis homo; ergo, aliud quam omnis homo currit. Et ista exclusiva: 'Tantum omnis homo currit' convertitur in universalem talem: 'Omne currens est omnis homo' quae universalis est falsa in casu isto." (Richard Lavenham, *Tractatus exclusivarum*, cit. p.113.)

1.N.2

This note is found in the section on *praeter*, after 2.2, but belongs to the section on *tantum*. The note simply says that some wonder whether a proposition of the kind *solus Socrates est asinus* is syntactically correct (*conueniens*), others dismiss it as futile (*nugatoria*), and yet others prove its falsity by unfolding it into a conjunction of *propositiones explicitae*. The problem of whether propositions of this kind are *congruae* or not, and the connection between *congruitas* and *veritas* in this kind of expression, are analysed by the *Tractatus Anagnini* (cit. p.317), the *Dialectica Monacensis* (cit.pp.632-633) and by the tract *De Implicationibus* (cit.pp.101-102). The last two treatises deal more specifically with the problem of propositions *implicantes falsum*.

1.9

The last rule our author gives about the exclusive term *solus* is found at the end of the section on *praeter*, and its misplacement in the text probably indicates that this rule is a later addition, or insertion - in the wrong place - of a marginal note. Here it is stated that an exclusive word added to a noun referring to a thing which exists can only exclude non-existent things. The problem is dealt with by the *Tractatus Anagnini*, which take the opposite view on this subject:

"Dubitatur de hac dictione '*solus*', quam exclusionem habeat quando adiungitur nomini proprio pertinenti ad non existentia cum verbo pertinenti ad existentia et ad non existentia. Quidam eas non recipiunt, immo dicunt eas positae propter resolutionem, ut '*solus Cesar non est*', idest *Cesar non est et non aliud non est*.

Nos autem bene recipimus tales et dicimus quod exclusio non pertinet nisi tantum ad non existentia. Unde falsa est talis: '*solus Cesar non est*', immo Pompeius non est, Antichristus non est. Et fit exclusio tam ad futura quam praeterita." (*Tractatus Anagnini*, cit. P.319.)

2.1, 2.2, 2.4, 2.7, 2.8

These five rules concern the different functions which the word *praeter* can have, according to the kind of sentence in which it occurs.

Twelfth century theologians like Alan of Lille were aware of the differences between the functions of a word like *praeter*, and of how these differences had to be taken into consideration in the exegesis of the text of the Bible:

"*Praeter* aliquando ponitur pro *iuxta*, etc. Aliquando ponitur exclusive, unde David: *Quoniam non est alius praeter te*. Ponitur etiam inclusive, unde legitur in Evangelio quod Deus quinque millia hominum satiavit praeter mulieres et parvulos." (Alan of Lille, *Distinctiones dictionum theologicarum, siue Summa "Quot modis"*, Migne PL 210, 910. (On the problems of the reliability of the text as printed in Migne, see M.-T. D'Alverny, *Alain de Lille, cit.* pp.71-73).)

Alan's distinction between the meanings of *praeter* is basically the same as the one found in the *Tractatus Anagnini*:

Sequitur de hac dictione '*preter*'. De qua sciendum quod ipsa quandoque est localis, quandoque exclusiva, quandoque additiva. Secundum quod localis est, non habet hic locum, ut '*preter hoc*' idest *super hoc*." (*Tractatus Anagnini, cit.* p.320)

It is interesting to note how the terminology of both these texts is still tentatively moving towards a differentiation between *exclusiva* and *exceptiva*.

2.1 and 2.4

According to this rule, *praeter* is taken in an exceptive sense when it comes after the universal quantifier, so that a statement like 'every man but Socrates is in here' means: every man except Socrates is in here. I suppose here our author means to refer to a universal affirmative proposition because, as we see in rule 2.4, matters change when we deal with a universal negative one. In the case of universal negative propositions, in fact (2.4), such as 'no man but Socrates is running', *praeter*, according to our author, is taken *partim inclusive, partim exclusive*. If we look at the *Tractatus Anagnini* we find that they seem to suggest much the same approach to the analysis of the rôle of the word in a universal proposition (apart from the disagreement on whether *praeter*, in the kind of propositions dealt with in 2.1, is to be taken *exceptive* or *partim inclusive, partim exclusive*). And indeed the *Tractatus Anagnini* help us understand the meaning of the expression *partim inclusive, partim exclusive*:

"Quando hec dictio '*preter*' interponitur in propositione universali affirmativa, excludit rem predicati a re sequentis termini et includit

rem predicati circa omnia appellata subiecti termini, ut '*omnis homo currit preter Socratem*'. " (*Tractatus Anagnini*, cit. pp. 320-321.)

According to William of Sherwood *praeter* can be understood as having two functions: it can be taken *additive* (which corresponds to the *inclusiue* of the *Tractatus Anagnini*), or *exceptiue*: and the main exceptive function is subdivided into *instantiue* and *diminutiue*. According to Sherwood the example 2.1a of the *Tractatus Implicitarum* and the first example of the *Tractatus Anagnini* would be understood as a case of *praeter* taken *instantiue*:

"instantiue quando excipit partem a toto respectu praedicati ut hic: omnis homo praeter Sortem currit; significat enim quod Sortes excipiat ab hoc toto 'omnis homo', non secundum rem, sed respectu praedicati, et sic proprie est syncategorema. Et dicitur teneri instantiue quia derelinquit Sortem non currere, quae instat huic: omnis homo currit." (William of Sherwood, *Syncategoremata*, cit. p. 60 (Kretzmann pp. 58-59).)

2.2

This rule states that when *praeter* is added to a proper name or to an appellative noun which is put before the subject and is not accompanied by a universal quantifier, *praeter* is put in an inclusive function (*inclusiue tenetur*), and the logical structure of such an expression can be shown by a conjunctive sentence (*est exponenda locutio per copulatiuam coniunctionem*). So that *praeter Socratem Plato loquitur* means 'both Socrates and Plato speak'. The same rule can be found in the *Tractatus Anagnini*, where it is expressed in a shorter and more stringent fashion:

"Quando interponitur in singulari affirmativa, tunc includitur utrumque, et in ea dicitur poni additive, tum in attributione predicati, tum in abnegatione predicati." (*Tractatus Anagnini*, cit. p. 321.)

In my view this passage shows that the *Tractatus Anagnini* understands *praeter* as put in an 'additive' function. As we have already seen, William of Sherwood too prefers *additive* to *inclusiue*:

"Sciendum quod haec dictio 'praeter'...tenetur additive...cum dicitur: sex clerici sunt hic intus praeter magistrum unum et etiam magister." (William of Sherwood, *Syncategoremata*, cit. p. 60 (Kretzmann, p. 58).)

2.7 and 2.8

These two rules are concerned with the theory of reference, and show that if we take a sentence like *praeter quaelibet aliqua sunt* we have for *quaelibet* what medieval logicians called a *suppositio confusa et distributiva*, which can have a logical descent, or in other words be *mobilis* (for a history of *suppositio* and for an analysis of *confusio* and *descensus*

see A.Maierü, *Terminologia...*, cit.pp.217-317). If a term has a *suppositio confusa et distributiva*, the sentence which contains it can be proved true by substituting for *praeter quaelibet*, to follow our example, particular instances, like *praeter haec*, *praeter illa*, etc. (cfr. 2.7 and 2.7b). But if we reverse the order of the subject and of the predicate, and put the *praeter quaelibet* at the end of the sentence (so that we obtain *aliqua sunt praeter quaelibet* -2.8aa-), the *suppositio* is *confusa tantum* or *immobilis*, so that we cannot verify its truth, and can be true if and only if we change the sentence into a negative one (2.8 and 2.8bb). There is no mention of this problem in the *Tractatus Anagnini*, but the problem is dealt with at length by Sherwood:

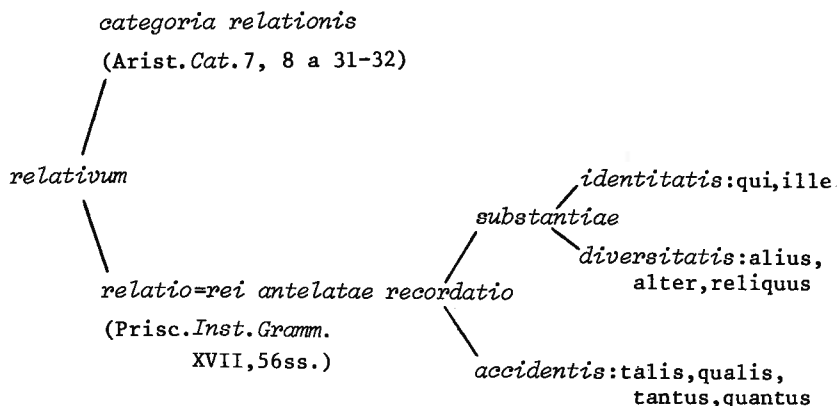
"Est autem notandum quod, cum haec dictio 'praeter' teneatur instantive, semper vult excipere ab aliqua divisione.

Et est regula quod vult reperire divisionem mobilem et reddere eam immobilem; cuius ratio est quod a divisione excipit aliquam partem respectu praedicati. Sed ita oportet excipi illam partem sicut prius fuit in divisione; ergo in ipsa divisione fuit respectu praedicati. Sed similiter supponebatur una sicut alia; ergo supponebantur omnes partes divisim respectu praedicati; unde mobilis fuit divisio. Sed videtur quod non reddit eam immobilem; potest enim inferri: omnis homo praeter Sortem; ergo Plato. Et intelligendum quod regula vult ne possit inferri in subiecto cum sua determinatione; non enim potest inferri: omnis homo praeter Sortem currit; ergo Plato praeter Sortem currit. Adhuc contra regulam sic: omne animal praeter Sortem currit; sed dicendum quod regula non dicit quin aliquo modo teneat descensus, sed quod non universaliter teneat. Tenet enim solum cum fit descensus ad aliquam partem quae continet partem exceptam ut tetigit exceptio. Sed contra: si nihil praeter Sortem currit, Sortes currit, et si Sortes currit, aliquid currit; ergo a primo: si nihil praeter etc.; ergo a destructione consequentis: si non aliquid currit, non nihil praeter Sortem currit; et si haec, aliquid praeter Sortem currit; ergo si nihil, aliquid; quod falsum est." (William of Sherwood, *Synkategoremata*, cit. p.61 (Kretzmann, p.61).)

3.1 to 3.7

This section of the *Tractatus Implicitarum* is devoted to the analysis of *propositiones implicitae* which contain the relative clause *id quod*. Some twelfth century logical texts take into account only the problems raised by *qui* (cfr. *Summe Metenses*, in De Rijk, *Logica Modernorum*, vol.II, part 1, cit. p.464, and *Tractatus Anagnini*, cit. pp.268-269), others only those raised by *id quod* (cfr. *Ars Burana*, cit. p.209), others both *qui* and *id quod* (like the *Ars Emmerana*, cit. p.159 and p.174, but in both cases very briefly). In the *Dialectica Monacensis* (cit. pp.630-631) and in the treatise *De Implicationibus* (cit. pp.100-103) we find a detailed analysis of the difference between the relative noun *qui* and relative pronouns

like *ille*, *iste*, etc. Another text which deals with this sort of problem is the *Ars Meliduna*, whose chapter on implicit propositions can be seen in the *Appendix*. When we come to the *Tractatus* of Peter of Spain, we find a whole treatise (Peter of Spain, *Tractatus*, called afterwards *Summulae Logicales*, cit. pp.185-193 -*Tractatus VIII*-) devoted to the analysis of relatives. Here various kinds of relatives are carefully distinguished. The first distinction is drawn between the 'aristotelian' and the 'grammatical' meanings of *relatio*. Then, within the grammatical approach to *relatio*, a distinction is made between the *relativa substantiae*, which operate a relationship of substances, and the *relativa accidentis*, which relate accidents. The *relativa substantiae* can be further classified as operating a relationship of identity or diversity; so that the scheme of these distinctions would be the following:



Propositions containing a relative clause are considered in the context of the analysis of the *restrictio suppositionis* by the *Summe Metenses*, the *Tractatus Anagnini* and the *Dialectica Monacensis*, and Peter of Spain deals with the relative clause also in his *Tractatus XI* (cfr. Peter of Spain, *Tractatus*, cit. p.202). But other twelfth century treatises deal with this kind of propositions in different contexts: the *Ars Burana* in its analysis of the *appellationes dicti* of categorical propositions, the *Ars Emmerana* and the *Ars Meliduna* in their analysis of hypothetical propositions (the first understands these propositions as doubtful hypothetical ones). In general I think the *Tractatus Implicitarum* follows the line taken by those treatises which consider a *propositio implicita* containing

a relative clause as a kind of hypothetical proposition. Medieval logicians had a concept of hypothetical propositions which was much broader than the one we have today. The *propositio hypothetica* included propositions of the kind 'if...then', which were properly called *hypotheticae conditionales*, and were sub-divided into *temporales*, *locales*, *causales*; but conjunctive and disjunctive propositions were also considered hypothetical propositions. This can be clearly shown by the definition of *hypothetica* in the *Dialectica Monacensis*:

"Est autem ypothetica propositio que habet in sui constitutione duas cathedricas; hoc ideo dico quia una ypothetica potest constitui ex duabus aliis ypotheticis, vel ex una ypothetica et una cathedrica. Dicitur autem ypothetica ab 'ypo', quod est *sub*, et 'thesis', quod est *positio*; inde *ypothetica* quasi *subpositiva*, eoquod omnis ypothetica quadam subpositione quedam enuntiat, et non absolute. Et hoc intellige secundum Boetium, qui copulativas et disiunctas non videntur enumerare inter ypotheticas propositiones, sed solum illas que quadam conditione enuntiant. Ypotheticarum propositionum secundum communiter loquentes tres sunt species: conditionalis - que vere et proprie dicitur ypothetica -, et copulativa et disiuncta." (*Dialectica Monacensis*, cit. p.484.)

It is the implicit presence of two propositions that suggested, I think, the inclusion of the *propositiones implicitae* in the class of hypothetical propositions. The *Ars Emmerana*, which expresses doubts and uncertainty about the *status* of propositions of this sort, remarks quite sensibly that if a *propositio localis* like *tu sedes ubi ego sto* (*Ars Emmerana*, cit. p. 159) is to be considered an hypothetical proposition, one might as well consider *hypotheticae* the *propositiones implicitae*:

"Sed dubitatur de huiusmodi propositionibus, que *implicite* appellantur: 'Marcus est id quod est Tullius'; 'homo est id quod est animal'; 'tantus homo est Socrates quantus homo est Plato'. Non enim magis est ratio quare locales potius dicantur ipothetice quam aliqua istarum. Dicunt quidam huiusmodi propositiones ipotheticas, quidam cathedricas. Ego nec approbo nec inprobo. Tutius tamen est ut dicantur ipothetice quam cathedricas. Sed queretur sub qua specie ipotheticarum contineantur. Ad hoc dici potest quod predicta divisio ipotheticarum non est sufficiens. Sunt enim quedam ipothetice que ficto vocabulo *quantitative propositiones* dici possunt, ut 'tantus est Socrates quantus Plato'; quedam *assimilative*, ut 'talis homo est Marcus qualis Tullius'; quedam *substantive* ut 'id quod est Marcus est Tullius' - si tamen propositiones huiusmodi ipothetice dici debeant". (*Ars Emmerana*, cit. pp.159-160.)

There is in this text a self-conscious awareness of the fact that new terminology is being created, and traces of this awareness can also be seen in the thirteenth century in Peter of Spain: the *assimilative* and the *quantitative* correspond to Peter of Spain's *relativa accidentis* and the

substantive to his *relativa substantiae*.

According to the *Ars Meliduna* the *propositiones implicitae* are those which contain two propositions, in as far as they contain the relative clause. The *propositiones implicitae* are for the *Ars Meliduna* one of four kinds of *propositiones hypotheticae compositae*:

"Deinceps ad compositas ypotheticas transeamus. Compositarum prout hic accipitur '*composita*', quatuor sunt genera. Nam quedam habent in altera sui parte propositionem vel terminum coniunctum, alie disiunctum, alie habent aliquid implicitum per relativam particulam, alie habent continuativam partem sui". (*Ars Meliduna*, cit. p.352.)

There is no definition of *hypotheticae compositae*, and we are only told that propositions containing a conjunctive or disjunctive proposition or term, those which contain a relative clause, and those which contain an implication belong to this class (cfr. *Ars Meliduna*, cit. pp.352-355).

3.3

This rule is found in Peter of Spain's *Tractatus*, where it is described as a *regula antiquorum*, and is rejected: the example used by Peter is slightly different from the one used by the *Tractatus Implicitarum*, as he does not deal with *id quod*, but with the relative pronoun *ille*. The example he uses is '*Omnis homo currit et ille disputat*', and his argument is basically that the contradictory of '*ille disputat*', is not '*ille non disputat*' but '*non ille disputat*'. As I feel Peter's argument is rather interesting, I reproduce it here in full.

"Item. De relativo autem idemptitatis solet dari talis regula ab antiquis: nulla propositio inchoata a relativo habet contradictoriam. Et assignant talem rationem. Cum dicitur '*omnis homo currit et ille disputat*', hoc relativum '*ille*' habet respectum ad hoc antecedens '*homo*' propter dependentiam sue relationis. Sed cum negatio advenit propositioni inchoanti a relativo, dicendo sic: '*ille non disputat*', tunc illa negatio negat verbum quod sequitur et non negat respectum relationis quem habet ad antecedens. Ergo negatio non negat quicquid affirmavit affirmatio. Ergo non contradicit. Ergo, cum hoc sit in qualibet propositione inchoante a relativo, nulla propositio inchoans a relativo habet contradictoriam.

Sed contra hoc obicitur. Quicquid contingit negare, contingit affirmare de quolibet supposito. Sed verbum contingit negare de quolibet supposito, et sic affirmare. Ergo de supposito quod est dictio relativa. Ergo quilibet propositio inchoans a relativo habet contradictoriam. Item. Quilibet propositio sive enuntiatio que est una, habet contradictoriam. Sed omnis propositio inchoans a relativo, dum non sit in ea aliqua dictio equivoca nec plura subiciantur vel predicentur, est una. Ergo omnis propositio inchoans a relativo habet contradictoriam. Item. Dicit Aristotiles in Primo Periarmentias, quod cuilibet affirmationi opposita est negatio, et econverso. Ergo affirmationi inchoanti a relativo.

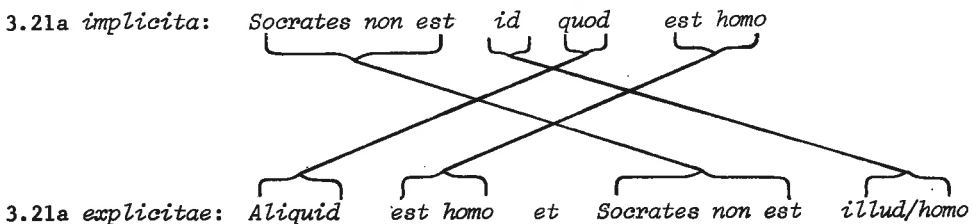
Quod concedimus dicentes predictam regulam esse falsam.

Ad rationem autem eorum respondemus quod relativum comparatur ad suum antecedens et comparatur ad verbum cui subicitur. Unde cum affirmatio et negatio sit oratio affirmativa vel negativa alicuius de aliquo, idest predicati de subiecto, ideo dico quod, sicut patet per diffinitionem predictam affirmationis et negationis, affirmatio et negatio respiciunt tantummodo comparationem subiecti ad predicatum. Ergo in propositione inchoante a relativo tantummodo sumitur contradictoria per comparationem subiecti ad predicatum. Ergo tantummodo per comparationem relativi ad verbum cui subicitur, et non per comparationem relativi ad antecedens. Et sic non oportet negare respectum quem habet relativum ad antecedens, quia ille respectus non est ibi propter naturam affirmationis neque propter dependentiam subiecti inquantum est subiectum, sed propter dependentiam eius quod est subiectum. Quia aliud est subiectum et id quod est subiectum, sicut aliud est predicatum et id quod est predicatum. Et sic quidquid est affirmatum in propositione inchoata a relativo, negatur in sua contradictoria. Et contradictoria istius '*ille disputat*' est ista: '*non ille disputat*', negatione preposita relativo." (Peter of Spain, *Tractatus*, cit. pp.190-191.)

Apart from the interest of Peter's argument, it is worth noting that he labels this rule a *regula antiquorum*. This might indicate either that our *Tractatus Implicitarum* was *antiquus* for the logicians of Peter's time, or that this particular doctrine was considered by Peter old-fashioned and, from a logical point of view, conservative.

3.21, 3.22 and 3.4

These rules concern the transformation of an *implicita* with a relative clause into its *explicitae*. 3.21 is just an example of the transformation of an affirmative *implicita*, and presents no special problems. 3.22 is the rule for the transformation of a negative *implicita* and can be best represented by a diagram:



If we take into account rule 3.4, which states that if we have a negative *implicita* the negation will have to be put in the last of the two *explicitae*, so that we reverse the order of the *implicita*, we are able to understand 3.22 better. Rule 3.22 presupposes that we operate by reversing the order of the *implicita* and simply states that in order to obtain 3.21a ex.

from 3.21a, we transform the *quod* (*nomen relatiuum*) into an *aliquid* (*nomen infinitum* - on the meaning of *nomen infinitum* see above) and we transform the *id* (*nomen infinitum uel pronomen relatiuum*) into either an *illud* (*pronomen relatiuum*) or an *homo* (*nomen*), and put it at the end of the second *explicita*.

3.5

The *condeclinatio temporum* as we find it in rule 3.5 was carefully studied by twelfth century logicians. The *consignificatio temporum uerborum* was one of the ways in which the restriction of *suppositio* was understood (cfr. *Dialectica Monacensis*, cit. pp.619 ff.), and as a consequence the diversity of restriction operated by different tenses on propositions like 'Socrates is', 'Socrates has been', 'Socrates will be' played an important rôle in the analysis of the structures of inference. This becomes more complicated when there is a relative clause, as the *Tractatus Anagnini* point out:

"Quando hoc nomen '*qui*' refertur ad aliquod antecedens ita quod aliud verbum reddatur relativo et aliud antecedenti, tunc antecedens non contrahit suppositionem suam a suo verbo, sed a verbo relatiui vel ab alio a quo contrahit relatiuum. Secundum hoc concedimus istas: '*aliquid quod fuit, non est*', quia hec dictio '*aliquid*' non contrahit suppositionem a verbo presenti, sed a preterito. Hanc autem iudicamus incongruam: '*aliquid quod non est, fuit*'; ponit enim aliquid non esse." (*Tractatus Anagnini*, cit. p.268.)

The argument made by the *Tractatus Anagnini* is that whereas we can safely say 'something which was, it not' - because the word 'something' derives its power of reference from 'was' and not 'is', and it is perfectly legitimate to say of something which was in the past that it no longer is - we could not say 'something which is not, was', because in this case we would posit that something is not, and of this we cannot correctly affirm either that it was, or that it will be, and certainly not that it is.

It is against this background of analysis that rule 3.5 must be understood, and it is thus apparent that, in order to derive the proposition 'you are that which is a man' (3.51a) from a proposition of the form 'you are a man', the *condeclinatio temporum* is a necessary condition, and seems to be also sufficient for the author of the *Tractatus Implicitarum*. But it was not sufficient for the anonymous author of the *Ars Meliduna*:

"Circa implicitas dicimus quod numquam ex simplici sequitur implicita, quia non *Si Socrates est animal, est id quod est animal* nec *si currens disputat, quod currit disputat*." (cfr. *Ars Meliduna*, in our edition of the section on implicit propositions, rule ii and examples 3 and 4.)

3.6

This rule states that from a simple negative proposition it is not possible to derive its *implicita*, *nisi gratia termini*. *Nisi gratia termini* corresponds in my view to the *nisi operetur habitudo terminorum* which we find in the *Ars Meliduna* (cfr. rule iv in our edition), and I think can be best explained by a text of Aquinas who, in explaining the meaning of *necessarium* in the theory of inference, says:

"Necessarium absolute iudicatur aliquid ex habitudine terminorum, utpote quia praedicatum est in definitione subiecti, sicut necessarium est hominem esse animal, vel quia subiectum est de ratione praedicati, sicut hoc est necessarium, numerum esse parem vel imparem." (Thomas Aquinas, *Summa theologiae*, I, q.19, a.3 (quoted by Maieru, *Terminologia...cit.* pp.379-380; Maieru inserts *necessarium est hominem esse animal* in inverted commas: these do not appear in the text of the Leonine edition, and do not seem to me to help towards an understanding of the sense of the period).)

Here Aquinas is talking about the necessity of analytic statements, and this is also the meaning of *nisi gratia termini* as we find it in the *Tractatus Implicitarum* so that the meaning of rule 3.6 would be: the inference from a simple proposition to its *implicita* is impossible, unless the term of the proposition is such that the *implicita* does not actually add anything to what is stated in the *simplex*. As our author says, supposing that there is no man, *Socrates is not that which is man* cannot be derived from *Socrates is not man*, as the *implicita* posits the existence of something which is a man, whereas the *simplex* does not. The *Ars Meliduna* (cfr. our edition, examples 12 and 13) in explaining why it is not possible to derive a *simplex* from an *implicita*, remarks: "quia non coaduniatur[†] hic consecutio habitudine terminorum", which I take to mean: 'because here the consequence is not joined together by the relation between the terms'. But on the meaning on *nisi gratia termini* and the difficulties of its precise interpretation see P.V. Spade, "Five logical tracts...", *cit.* p.80.

Under rule 3.6 the *Tractatus Implicitarum* gives four examples, two of which deal with the problem of the *condeclinatio temporum* in the *implicita* (3.6b: I take the *ad praedicta obicitur* to refer to 3.5) and with a difficulty connected with it: the way out of this difficulty lies in the substitution of the original *implicita* with its *explicita*. The same procedure is applied by 3.6d in relationship to 3.6c, which is actually the *e contrario* of 3.6b1-2; but the point made by 3.6c is rather that of negating the consequent of the *implicita* (its *simplex*), and in that way

[†] [We propose, *salva pace* De Rijk, to read *coadiuvatur*.]

trying to arrive at the contradictory of the *implicita*. According to rule 3.3 this is not possible, as it has no contradictory: "...propositio quae est implicita non habet destructoriam."

3.7

This rule is about disjunction. Assuming *i* to be the *implicita*, *s* to be its *simplex*, and *i'* to be any other *implicita* of the same form as *i*, but with a different subject in the relative clause, this rule states:

$$(s \supset i) \supset (s \supset i \vee i')$$

4.1

This rule is a very interesting example of application of two of the rules of the previous section: cfr. 4.1a, where 3.3 is applied, and 4.1a2-4.a3, where 3.22 is applied.

4.2 to 4.4

For an understanding of the background of the problems discussed by these rules, see *Tractatus de univocatione Monacensis*, cit. pp.347-349.

5b1

For the rather interesting expression *memoratiua praepositio* (=de) see the following text from the *Tractatus de univocatione Monacensis*, cit. pp.343-344:

"Si queratur quare magis ampliet hec prepositio 'de' quam alie prepositiones, talis potest assignari ratio. Hec prepositio 'de' est memorat<iv>a et sermocinalis. Et sermonem fieri de aliquo non exigit illud esse de quo sermo fit. Possum enim loqui tam de non existente quam de etiam existente. Alie prepositiones non habent tale officium; unde non habent ampliari."

But see also *op.cit.* pp.342-343.

APPENDIX

The Ars Meliduna on implicit propositions

As I have said above, De Rijk has edited only some extracts of this extremely interesting tract on logic, found in MS Oxford, Bodleian Library, Digby 174. He has published about a fourth of the chapter on implicit propositions. I have therefore decided to edit here the whole chapter, in order to give the reader a chance of comparing the *Tractatus Implicitarum* with the *Ars Meliduna* on this point. I have reproduced without alterations De Rijk's extract, which goes, in my edition, up to example 20 and ix 75,76.

I have given a number to all the rules and examples: the roman numerals indicate the rules, the arabic ones the examples.

D: MS Oxford, Bodleian Library, Digby 174

- i 235va/ Implicita dicitur propositio quae praeter principalem significationem - idest praeter significationem quae ex principalibus attenditur - tamen implicat et continet uim alterius propositionis. Ut
- 1 *Socrates est aliquid quod currit*
 implicat istam
aliquid currit
 et
- 2 *homo qui est albus est animal quod currit*
 has duas
homo est albus, animal currit.
 Unde magis proprie diceretur ista implicans, illae implicitae.
- ii Circa implicitas dicimus quod numquam ex simplici sequitur implicita, quia non
- 3 *Si Socrates est animal,*
est id quod est animal
 nec
- 4 *si currens disputat,*
quod currit disputat
 Quod enim participium praesentis temporis dicitur a grammaticis resolui in uerbum consimilis temporis et hoc relatiuum 'qui', non expositio est, sed puerile rudimentum.

ii Cfr. *Tractatus Implicitarum* 3.6.

- iii Ad implicitam uero nihil prohibet sequi simplicem. Habenda tamen est determinatio quia non quaelibet simplex sequitur, sed quae remanet sublata relatiua particula et uerbo quod ei redditur.

Ut

- 5 *Si Socrates est aliquid quod currit,*
Socrates est aliquid, et
- 6 *Si est substantia quae est animal,*
est substantia, et
- 7 *Si homo <qui> disputat currit,*
homo disputat.
- Sed non
- 8 *Si homo qui currit disputat,*
homo currit
- nec
- 9 *si aliquid est aliquid quod est animal,*
ipsum est animal.

Et generaliter:

- iv numquam ad implicitam sequitur illa quam implicat, nisi hoc operetur habitudo terminorum.

Ut

- 10 *Si est homo qui est albus est candidus,*
homo est albus qui est candidus
- et
- 11 *si aliquid est homo qui est Socrates,*
aliquid est homo, et
- 12 *si aliquid quod est sciens est grammaticus,*
aliquid est sciens.
- Sed non
- 13 *si aliquid quod est Socrates est homo,*
aliquid est Socrates, nec
- 14 *si quod est grammaticum est sciens,*
aliquid est grammaticum
- quia non coaduniatur hic consecutio habitudine terminorum.

iii Cfr. *Tractatus Implicitarum* 3.5.

5 Cfr. *Ars Meliduna* 1.

iv Cfr. *Tractatus Implicitarum* 3.6.

14 [coaduniatur: potius legendum coadiuvatur]

v Implicitarum uero ad implicitas eadem erit in affirmatiuis habitudo
quae et simplicium ad inuicem. Nam, ubicumque simplex ad simplicem,
et implicita ad implicitam.

Ut

15 *si est homo est animal, et ideo*

16 *si est id quod est homo,
est id quod est animal.*

Similiter

17 *si est homo, est risibile, et e conuerso*

Eodem modo

18 *si est id quod est homo,
est id quod est risibile, et e conuerso.*

Sed non:

19 *si est id quod est homo,
non est id quod est asinus
quamuis sequatur*

20 *si est homo, non est asinus,
sed est id quod non est asinus.*

Obicitur tamen sic:

21 *Socrates est aliquod animal, ergo
est aliquid quod est animal.*

Instantia:

22 *aliquod idolum est argillae, ergo
aliquid quod est idolum, uel*

23 *quilibet ciuis est mas, ergo
quidlibet quod est ciuis, uel*

24 *aliquod album erit iste homo, ergo
aliquid quod est album.*

Aut

25 *Antichristus potest esse aliquod animal, ergo
aliquid quod est animal, uel*

26 *homo aeger uult esse aliquod sanum, ergo
aliquid quod est sanum.*

Aut

27 *hoc enuntiabile est uerum argumentum, ergo*

18 Cfr. *Ars Meliduna* 15+16.

est uerum quod est argumentum;

uel sic

- 28 *haec dictio 'dominus' est simplex nomen, ergo
est simplex quod est nomen.*

Item:

- 29 *Socrates est aliquid quod est animal, ergo
aliquod animal.*

Instantia:

- 30 *Socrates erit cras aliquid quod erit album, ergo
cras erit aliquod album.*

Vel

- 31 *aliquid quod est ciuis est mulier, ergo
aliquis ciuis etc., aut*
32 *aliquid quod est idolum est naturale, ergo
aliquod idolum; uel*
33 *iste uult esse aliquid quod est aegrum, ergo
aliquod aegrum; aut*
34 *hoc nomen est aliquod compositum quod est nomem, ergo
est aliquod compositum nomen.*

Item

- 35 *Socrates est aliquid quod est animal, ergo
est aliquid et illud est animal.*

Instantia:

- 36 *unum solum / 235vb / est animal quod est phoenix, ergo
unum est animal et illud est phoenix. Aut:*
37 *hoc risibile non est rationale quod est Socrates, ergo
non est rationale et ipsum est Socrates.*

Similiter

- 38 *aliquod momentum non est postquam fuit, ergo
non est tempus et ipsum fuit. Aut:*
39 *aliquid non est quod desiit esse, ergo
aliquid non est et illud desiit esse. Vel*
40 *Socrates desinit uidere aliquid,
et illud est animal, etc.*

Similiter:

28 Cfr. 41+47.

29 Cfr. 21.

- 41 *hoc nomen 'dominus' est compositum quod est, ergo
est compositum et ipsum est.*

Item

- 42 *Socrates est aliquid et illud est animal, ergo
est aliquid quod est animal.*

Instantia:

- 43 *Socrates est aliquid et illud est asinus,
demonstrato Brunello, ergo
est aliquid quod est asinus. Vel:*

- 44 *Socrates habet aliquem asinum et ipse loquitur, ergo
habet aliquem asinum qui loquitur. Aut:*

- 45 *hoc animal non est rationale et ipse est Brunellus, ergo
non est rationale quod est Brunellus.*

Similiter:

- 46 *aliquod desiit esse et illud non est, ergo
quod non est <.....>. Aut:*

- 47 *hoc nomen est simplex et illud est hoc nomen 'dominus', ergo
est simplex quod est hoc nomen 'dominus'.*

Amplius:

- 48 *si aliquid est homo, aliquid est animal;
si aliquid est animal, illud est substantia, ergo
si aliquid est homo, aliquid est animal et illud est substantia, ergo
si aliquid est homo, aliquid quod est animal est substantia.*

Instantia:

- 49 *si aliquid est omne album,
aliquid est omne album et ipsum est omne candidum, ergo
si aliquid est omne album, aliquid quod est omne album est
omne candidum. Aut:*

- 50 *si hoc nomen 'et' est simplex et est nomen,
hoc nomen est simplex et ipsum est nomen, ergo
si est 'et' est simplex et est nomen, est simplex quod est nomen.*

Similiter:

- 51 *si aliquid potest incipere esse homo, aliquid potest incipere
esse animal, et illud potest incipere esse substantia; ergo
si aliquid potest incipere esse homo, aliquid quod est animal*

41 Cfr. 28+47.

47 Cfr. 28+41.

potest incipere esse substantia.

Vel sic:

- 52 *si aliquod animal non est homo nec est asinus,
aliquod animal non est rationale et illud non est Brunellus, ergo
si aliquod animal non est homo nec asinus,
aliquod animal non est rationale quod est Brunellus.*

vi Nominalis enim relatio magis est positiva quam pronominalis.

Item:

- 53 *si quidlibet est homo, quidlibet est animal;
si quidlibet est homo, quidlibet est substantia; ergo
si quidlibet est homo, aliquid quod est animal est substantia.*

Instantia:

- 54 *si aliquid est omne album, aliquid est quodlibet album,
et si aliquid est omne album, est omne candidum, ergo
si aliquid est omne album, aliquid quod est quodlibet album
est quodlibet candidum.*

Vel:

- 55 *Si Marcus promittit multos equos, Tullius promittit multos equos,
similiter aliquis homo, ergo
si Marcus promittit multos equos, alios equos quos promittit
Tullius promittit aliquis homo. Aut:*
- 56 *possibile est omne animal esse hominem,
similiter asinum; ergo
possibile est aliquid quod est homo esse asinum.*

Rursus:

- 57 *si aliquid est homo, ipsum est non asinus
si est homo et est aliquid et non est asinus, ergo
si est homo est aliquid quod non est asinus.*

Instantia:

- 58 *si Socrates promittit tantum equum, promittit non lignum;
si promittit tantum equum et promittit aliquid et non promittit
lignum; ergo
si promittit tantum equum et promittit aliquid et non promittit
lignum; ergo
si promittit tantum equum promittit aliquid quod non est lignum.*

Aut:

- 59 *si hoc nomen est nomen simplex, ipsum est non compositum;*
si est nomen simplex et est aliquid et non est compositum, ergo
si est nomen simplex est aliquid quod non est compositum.

Aut:

- 60 *si haec flumina currunt sunt currentia, si currunt et sunt aliqua et*
sunt currentia, ergo
si etc.

Item:

- 61 *si Socrates est aliquis homo, est aliquod animal;*
si est aliquis homo et est aliquid et est animal, ergo
si est aliquis homo est aliquid quod est animal.

Instantia in praedictis.

Similiter:

- 62 *si hoc argumentum est uerum enthymema, ipsum est uerum argumentum;*
si est uerum enthymema, et est uerum et est enthymema; ergo
si est uerum enthymema, est uerum quod est enthymema.

Similiter:

- 63 *si hoc nomen est simplex nomen,*
etc.

Item:

- 64 *aliquod currens disputat, ergo*
aliquid quod currit disputat.

Instantia in temporibus extrinsecis.

Item:

- 65 *si Socrates est homo, Socrates est animal; ergo*
si est homo est id quod est animal.

Instantia:

- 66 *si uult esse aliquod sanum, uult esse idem sano, ergo*
si uult esse aliquod sanum, uult esse id quod est sanum.

Amplius:

- 67 *isti duo uident idem, et uterque uidet aliquid, ergo*
unus uidet aliquid quod alter, ergo
si isti uident idem et uterque uidet aliquid,
unus uidet et aliquid quod alter.

Instantia:

- 68 *aliqua sunt quinque et eadem sunt duo et tria,*

*aliqua sunt quinque et aliqua sunt duo et aliqua sunt tria, ergo
aliqua sunt quinque et aliqua quae sunt duo sunt tria.*

Similiter:

- 69 *istae duae quarum utraque est de diffinitione sunt de eodem
et utraque est de alio, ergo
una est de alio de quo reliqua.*

Amplius:

- 70 *si uterque istorum est, et iste et ille est,
et e contrario;
si alter istorum est, iste uel ille est,
et e contrario;
et si iste est, iste uel ille est, ergo
si iste est alter istorum est, et ita si iste est unus
hominum est, quare
si aliquis homo est, aliquis hominum est.
Hoc soluendum per interemptionem istarum:
si et iste et ille est, uterque istorum est;
si iste uel ille est, alter istorum est.*

- vii *Quia genitiuus pluralis magis positivus est quam nominativi singu-
lares: quippe numerum implicat, unde propositionem implicitam quodam-
modo facit; sed conuersae uerae sunt, quia ex implicita sequitur
simplex.*

Similiter forte non erit uerum:

- 71 *si est homo, est unum uel aliud; aut*
72 *si quidlibet est, et unum et aliud est:*
*quia aliud respectum habet ad ablatiuum subintellectum, ut ita faciat
propositionem implicitam in qua ponitur. Vult enim locutio sic in-
telligi:
si quidlibet est, et unum et aliud ab eo est.*

Amplius:

- 73 *quicquid est homo est album, si ipsum est candidum; ergo
omne quod est homo est album, si ipsum est candidum; ergo
Socrates qui est homo est albus, si ipse est candidus; ergo
aliquid quod est homo est album, si Socrates est candidus.
Similiter:*

vii Cfr. *Tractatus Implicitarum* 3.5.

- 74 *hoc quod est homo albus, est album si ipsum est candidum, ergo
hoc quod est album est album si hoc est candidum.*
Eadem inspectione:
- 75 *quot sunt animalia si ipsa sunt homines
tot animalia si sunt asini.*
- viii *Verae quidem sunt omnes istae si sint cathgoricae;
falsae uero si hypotheticae intelligantur praeposterae prolatae.*
- ix *Rationes quae ad simplicem prohibent implicitam sequi sunt haec.*
- 76 *Si Antichristus est homo, est aliquid quod est homo,
et e conuerso;*
- 77 *Si potest esse iste homo, potest esse istud quod est homo; ergo
si aliquis homo, aliquid quod est homo.*
Item:
- 78 *si iste est aliquod album, est aliquid quod est album,
et e conuerso.*
- 79 *Iste erit aliquid quod est album, et aliquod album erit iste, ergo
iste erit aliquod album,
posito quod incipiat esse nigrum.*
Item:
- 80 *si aliquod album est uel erit Socrates, aliquid quod est uel erit
album est uel erit Socrates;
si aliquod album est Socrates, aliquid quod est album est Socrates,
et e conuerso.
Si Socrates erit aliquod album, erit aliquid quod erit album, ergo
si aliquod animal erit Socrates, aliquid quod erit animal erit Socrates.*
Amplius:
- 81 *si phoenix est animal, id quod est phoenix est animal,
et e conuerso;
si id quod est phoenix non est animal, phoenix non est animal, ergo
e conuerso.*
Item:
- 82 *si animal non est phoenix, animal non est id quod est phoenix,
et e conuerso;
si phoenix est animal, id quod est phoenix est animal,
et e conuerso; ergo
si phoenix non est animal, id quod est phoenix non est animal,
uel non e conuerso.*