

History of Logic from Aristotle to Gödel by Raul Corazzon | e-mail: rc@ontology.co

## Theories of the Copula in the Logical Works of Abelard

### THE USE OF THE COPULA IN ABELARD'S LOGIC

"With Abelard, the term 'copula' enters into western thought. In fact, although widely attested, the use of the term 'copula' in reference to Aristotle's work is totally anachronistic. (16)

What led to this term? In his *Dialectica*, Abelard was mainly concerned with the way syllogisms can be construed. The interest of the copula was in fact derivative from this main concern. As Kneale and Kneale (*The Development of Logic*, 1962: 206) put it, 'it is clear that for his [Aristotle's] theory of syllogism he assumes in every general proposition two terms of the same kind, that is to say, each capable of being a subject and each capable of being a predicate'. Thus, since the only linguistic entities that can play these two roles are nouns (in modern terms, noun phrases), it is easy to understand why the copula became central. Abelard pursued the Aristotelian theory by emphasizing the role of be as the element that can turn a noun into a predicate in a syllogism rather than as the element that provides the sentence with a time specification (see *Dialectica* 161). It is this conceptual shift that underlies the invention of the term 'copula', which is cast on the Latin *copulare* meaning 'to link'. For example, in sentences like *a man* is a mammal and *Socrates is a man* the copula allows the noun phrase *a man* to play the role of the subject, in the first, and that of the predicate, in the second.

Clearly, in such a framework the assumption that the copula can be interpreted as a predicate meaning 'existence' cannot be maintained (...). We have an explicit argument by Abelard to overcome this problem. Let us reproduce it synthetically as follows. A sentence like *Socrates est* (Socrates is), where *est* (is) just occurs with a subject, potentially undermines the theory of the 'copula' as link between a predicate and a subject like in *Socrates est homo* (Socrates is man). To avoid this inconsistency, Abelard appeals to a typical *reductio ad absurdum* (*Dialectica* 137, 162)."

We interpret *Socrates est* as meaning *Socrates est ens* (Socrates is existing, where *ens* is (the Nominative, singular form of) the present participle of *esse*, be). Suppose that *est* means *est ens*, that is, *est* is a predicate meaning existence. Then nothing would prevent a sentence like *Socrates est ens* from being interpreted as *Socrates est ens ens*, and that from being interpreted as *Socrates est ens ens ens*, etc., ad infinitum without reaching a stable meaning.(17)

Thus, Abelard concludes, in the sentence *Socrates est*, the predicate of existence is just not expressed.(18)

#### Notes

(16) See for example J. L. Ackrill's comment on *De Interpretatione* (Ackrill 1963). Aristotle always avoids employment of a special name for the copula: rather he refers to actual instances of εἶναι (be). Not all translators seem to be aware of this fact. In the *De Interpretatione* (*De Int.* 3, 16b, 25), for example, Aristotle says that εἶναι προσσημαίνει δὲ σύνθεσίν τινα . Ackrill's translation says "but it additionally signifies some combination" (Ackrill 1963: 45). Cooke, instead, renders it as "but imply a copulation [sic] or synthesis" (Cooke 1938: 121).(…)

(17) For a discussion on this matter see Kneale and Kneale (*The Development of Logic*, 1962) and Pinborg (*Logik und Semantik im Mittelalter*, 1972).

(18) Correspondingly, the common use of *to be* (or *being*) as a shortened form of *to be* (or *being*) *existent* is to be treated in the same way. The following passage pointed out to me by Giulio Lepschy illustrates the point: *Dixit Deus ad Moysen: ego sum qui sum. Ait: sic dices filiis Israel: qui est, misit me ad vos* (*Exodus*, III 14). From a linguistic point of view, however, this should not be surprising. A similar case is that of *to do* (or *doing*) as a shortened form of *to do* (or *doing*) something. Interestingly, the term 'existence' is not etymologically related to the copula *essere* / εἶναι but to a locative predicate *sisto* and a locative particle *ek-*.

From: Andrea Moro, *The Raising of Predicates. Predicative Noun Phrases and the Theory of Clause Structure*, (Appendix: *A Brief History of the Copula*, pp. 248-261), Cambridge: Cambridge University Press, 1997.

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"Before embarking on a discussion of Abelard's views on sentential predication and the role of the copula, it seems useful to summarize our author's basic views on the noun and verb.

1) 'Nomen' (noun, name) is defined (in the Aristotelian-Boethian tradition) as 'a spoken sound having a signification by convention, without the notion of time, of which no parts are meaningful in separation' (*Dialectica* 121,28-9; cf. 129,4-5 and *Glosses in Peri hermeneias* 334,18ff.). It should be borne in mind that like the Ancients the Medievals too, were in the constant habit of not sharply distinguishing between a noun's (or verb's or any other significative expression's) significate and the 'thing' (whether substantial or accidental) signified in the outside world. (1)

2) Verbum ('verb') is defined (*Dialectica* 129,11-3) as: 'a spoken sound, having a signification by convention, which, in its finite forms, is designative of the present time, of which no part have meaning in separation'.

3) As a logician Abelard is quite explicit throughout his works about the semantic difference between categorematic words (nouns and verbs) and syncategorematic ones (prepositions, conjunctions etc.). As to the differences between the noun and verb his opinions are less stable, it seems. So much seems to be certain, on the semantic level Abelard recognizes a close affinity between the noun and verb as, in his opinion, they are just various tools to convey identical sememes [so e.g. 'cursus' ('course') and 'currere' ('to run')], whereas they only differ by the different ways in which they convey the common sememe ('*modus significandi*').

4) Both nouns and verbs have the job of naming and determining, whereby the difference between 'naming' and 'determining' is only of a syntactic nature, it seems. On the level of naming and determining (onomazein-level), the noun and verb convey, each in their own ways (nominally or verbally, respectively), some semantic content ('sememe'). By this, they constitute some 'idea' ('*conceptio*', '*conceptus*', '*intellectus*') in somebody's mind (the speaker's or the hearer's that is), but still without conveying any complete thought or sense.

5) Contrariwise, on the level of 'statement-making' (*legein* level) the (finite) verb when actually used (2) comes to be really 'statement making', to the extent indeed that it performs this job together with some noun(s) but nonetheless being itself the statement-maker, properly speaking." (pp. 98-99)

## Notes

(1) For this phenomenon, see e.g. De Rijk, *Plato's Sophist. A Philosophical Commentary*, Amsterdam, North-Holland, 1986, Index, s.v. *Name*. For Peter Abelard, see e.g. *Glosses in Peri hermeneias* 126,35-127,13; *Dialectica* 564,6-9 and all the passages in which he explains the *significatio*

*rerum* (vs. *intellectuum*). The distinction always concerns the opposition of *res significata* to *intellectus significans res*, rather than the *intellectus* as such.

(2) For this condition, see N. Kretzmann, *The Culmination of the Old Logic in Peter Abelard*, p. 495, n. 33, cf. De Rijk *Plato's Sophist. A Philosophical Commentary*, 15.23. 15.32 and 16.4 and below p. 101

From: L. M. de Rijk, "Peter Abelard's Semantics and His Doctrine of Being", *Vivarium*, 24, 1986, pp. 85-127.

"The distinction of nouns or names (a category that includes adjectives) from verbs was as much argued over in Abelard's day as in ancient times, and it provided Abelard with an entry to matters that lie at the heart of his philosophy. He rejects Aristotle's view that verbs differ from nouns in having a consignification of time, for he sees no reason not to ascribe a similar consignification to nouns:

For just as 'run' or 'running' indicate running in connection with a person as presently inhering in him. so 'white' determines whiteness in connection with a substance as presently inhering, for it is called white only because of present whiteness. (1)

Abelard is equally unhappy with the idea that verbs, as distinct from other parts of speech, signify only actions and passions, or what might better be called 'receptions' (*passiones*, i.e. the passive correlates of actions). This view runs afoul of the copula which although accepted as a verb can be used to 'join' (*copulare*) to its subject any sort of entity whatsoever.'(2)What distinguishes verbs, in Abelard's view, is that they provide the 'completeness of sense' (*sensus perfectio*) characteristic of whole sentences (*orationes perfectae*) as distinct from mere phrases (*orationes imperfectae*). What is the difference, he asks, between 'A man runs' and 'a running man'? Of constructions such as the latter he remarks:

But a completeness of sense has not yet been brought about in them; for when this expression has been uttered the mind of the hearer is suspended and desires to hear more in order to arrive at completeness of sense, for example. 'is' or some other acceptable verb. For without a verb there is no completeness of sense.' (3)

Verbs can perform this function because they propose the inherence of what they signify in the subject.

Thus we see that this completeness of sense depends mainly on verbs, since only by them is inherence of something in something indicated in a manner expressive of different mental states; without this inherence there is no completeness of sense. When I say 'Come to me' or 'If only you would come to me', in a way I propound the inherence of coming to me in a manner expressive of my order or my desire; in the one case I order that coming should belong to him, in the other I have a desire, namely, that he come.' (4)

The talk of 'inherence', however, must be treated delicately, for it is not Abelard's view that any verb, even the copula, signifies some relational property of inherence. Rather verbs generally signify that which 'inheres', while the copula, according to one of Abelard's accounts of it, signifies nothing at all. If any verb were to signify 'inherence', then it would be unable to perform the 'linking' function, i.e., the function of the copula, which is to 'link' what the predicate signifies to the subject. 'Runs' signifies running and 'links' it as well. The copula 'is' really expresses just this linking function implicit in all verbs; if it were to signify anything on its own it could no more take a predicate noun or adjective and link its significate to a subject than can 'runs'. (5)

This view is taken still further when Abelard separates 'to be' used as a copula from 'to be' used to mean 'to exist'. If the separation is not made we have problems with sentences such as 'Homer is a poet' and 'A chimera is conceivable', where the subjects are non-existent or even impossible.

Abelard's solution is to treat the whole phrase consisting of copula plus predicate noun or adjective as a single verb-phrase and in this way eliminate any idea that 'to be' on its own is predicated of the subject.

Thus it seems to me if I may dare to speak freely, that it would be more rational and satisfying to reason that ... we understand as a single verb 'to be a man' or 'to be white' or 'to be conceivable'. Aristotle indeed says that in 'Homer is a poet-to be' is predicated *per accidens*, i.e., 'to be' is predicated

accidentally of Homer in that the poem belongs to him, but it is not predicated per se of Homer that he is. But since 'to be', as was said, is not a verbal unit, to be predicated *per accidens* is not to be predicated; rather 'to be' is part of the predicate."

Abelard in effect wants us to treat the copula as what a modern grammarian would call an auxiliary, and indeed Abelard draws support for his view from the implausibility of dividing up '*erit sedens*' (will be sitting) into two parts, because of the conflict of tenses between auxiliary and participle." The copula, then, turns out to be a verb-phrase-maker, taking as complements nouns, participles, and whole clauses and turning them into verb phrases. But the process should not be thought to leave the complement with the same meaning it has in isolation, for this leads to logical absurdities. As we have seen, the noun following the copula has in isolation a tense of its own (generally the present), and this can conflict with the tense of the copula. For example, 'This old man was a boy' will be necessarily false if we treat 'boy' as retaining its signification of present time, for then the sentence is equivalent to 'This old man was one of those who is presently a boy.'" What we must do, Abelard says, is treat the whole copula plus predicate noun as a single verb having the tense of the copula. He shows how only in this way can the rules of conversion and syllogistic inference be made to apply to sentences with verbs in tenses other than the present.' (6)" (pp. 144-146, Latin text in the notes omitted)

## Notes

(1) Abelard, *Dialectica* p. 122.22-5

(2) Ibi *Dialectica*, 130.32 - 131.7

(3) Ibi *Dialectica*, 148.26-30

(4) Ibi *Dialectica*, 149.20-6

(5) See Abelard *Philosophische Schriften. I. Die Logica 'Ingredientibus'*, 1919-1927 p. 362.25-9

(6) Abelard, *Dialectica* p. 138.11-22

From: Martin Tweedale, "Abelard and the Culmination of the Old Logic", in: Morman Kretzmann, Anthony Kenny, Jan Pinborg (eds.), *The Cambridge History of Later Medieval Philosophy: From the Rediscovery of Aristotle to the Disintegration of Scholasticism, 1100-1600*, Cambridge: Cambridge University Press 1982.

## THE DIFFUSION OF ABELARDIAN WRITINGS

"The surviving manuscript books containing works by Abelard and by his students and disciples have a history and reveal much about the activities of the anonymous students of Abelard's thought. They were produced, exported, copied and read at great labour and for particular reasons. In their character, in the markings which they bear, in the frequency with which they are encountered in libraries, in the relationship of the copies to each other, can be found indications of the kinds of interests which were aroused by Abelard's teachings and of the uses to which they were put. This is as true of copies of Abelard's own works as of those of his disciples. The study of the diffusion of these manuscripts is complex but it is also the study of the geography of twelfth-century thought and learning; it assists our appreciation of the widespread interest in Abelard's writings and by implication in those of other masters. Our main concern is with manuscripts produced before 1500 and containing the major doctrinal works of Abelard and of his disciples. The poems, the personal correspondence with Héloïse, the smaller occasional letters and pieces are less instructive in

this respect than the logical writings, the biblical commentaries, the *Theologia* and *Sic et Non* in their many versions, the *Ethica* and the *Dialogus*. Manuscripts produced after the twelfth century are less relevant, but are none the less valuable because they presuppose earlier exemplars and because they witness to the history of the copying of particular works.

Several of Abelard's writings are wholly lost. The glosses on Ezechiel which Abelard delivered at Laon and then finished at Paris were transcribed and circulated but do not now survive.(1) The letter in which Abelard attacked Roscelin of Compiègne is only known through Roscelin's reply(2) and from a reference in a letter which Abelard wrote to the bishop of Paris. His *Grammatica* is lost,(3) as is the *Exhortatio* which he delivered to the monks of St Denis.(4) Heloise received from him a *Psalterium* which consisted perhaps of a series of collects to follow the recitation of the Psalms.(5) It is even possible that Abelard wrote both an *Anthropologia* (the counterpart in his teaching about man of the *Theologia* which concerns God and the Trinity) (6) and a *Rhetorica*.(7) He may also have written glosses on the *De syllogismo categorico* and *De syllogismo hypothetico* in his *Introductiones parvulorum*,(8) a commentary on the *De syllogismo hypothetico* in his *Logica Ingredientibus* (9) and further commentaries in the *Logica Nostrorum*. Even of Abelard's surviving works the varying versions and revisions are not fully available. Analysts of Abelard's texts have posited the existence of two versions preceding the surviving version of the *Dialectica* (10) as well as of other versions of his *Logica*.(11) Fr Buytaert believes that the earliest version of the *Sic et Non* is lost. (12) Moreover, among the extant versions completeness is all too infrequently found. Losses have occurred too among the writings of Abelard's followers. The authors of the *Sententie Hermannii*(13) and of the *Sententie Parisienses I* (14) may have composed commentaries on St Paul's *Epistle to the Romans*, while a *Liber Sententiarum*, containing opinions which appeared to be derived from Abelard's teaching, crossed the path of Bernard of Clairvaux in the period before the council of Sens.(15)

The surviving copies of Abelardian works are, however, numerous enough to permit a consideration of the extent and the manner of their diffusion and appeal. Of Abelard's own major works the *Theologia* is found in eighteen manuscripts, the *Sic et Non* in ten, the *Ethica* in five, the *Dialogus* in three, the commentary on the *Hexaameron* in four and that on *Romans* in three. A single manuscript contains a fragment of the *Apologia* and there are single copies of Abelard's logical works.(16)" (pp. 60-62, notes renumbered)

## Notes

(1) *Hist. Calam.*, 11. 196-248.

(2) Ed. Josef Reiners, *Der Nominalismus in der Frühscholastik*, Münster 1910, pp. 63-80; an earlier edition is in PL. 178, 357-72, and see Abelard, *Epist. ad G. episcopum Parisiensem*, (PL. 178, 355-358). Also D. Van den Eynde, 'Les Ecrits perdus d'Abelard', (*Antonianum*, 37, 1962, pp. 467-480), p. 469 and H. Ostlender, *Peter Abaelards Theologia 'Summi Boni'*, BGPTMA [Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters], XXXV, 2/3, 1939 pp. XVIII-XX.

(3) References from the *Theologia Christiana* and *Theologia 'Scholarium'* are analysed by Van den Eynde, *Ecrits perdus*, pp. 473-6. See also M. Dal Pra, Pietro Abelardo. *Scritti filosofici*, Roma-Milano, Bocca, 1954, p. XXXIII, n. 20.

(4) Van den Eynde, *Ecrits perdus*, pp. 469-73.

(5) *Ibid.*, pp. 476-80.

(6) Cf. Abelard, *Expositio in 'ad Romanos'* (PL. 178, 901A); also Buytaert, 'Critical Observations on the "Theologia Christiana" of Abelard', (*Antonianum*, vol. 38, 1963, pp. 384-433) p. 402, n. 4.

(7) References in Abelard's *Super Topica Glossae*, ed. Dal Pra [*Scritti filosofici*], p. 263, 1. 25, p. 267, 1. 16; also *ibid.*, pp. XXII-XXIII.

(8) *Pietro Abelard. Scritti filosofici*, ed. Dal pra, pp. XXV and XXVI.

- (9) References, as to a work yet to be written, are in the *Logica 'Ingredientibus'* ed. Geyer, p. 291, l. 25 and p. 389, l. 7 and in the *super Topica Glossae*, ed. Dal Pra, p. 325, l. 10. Further evidence in M. Grabmann, 'Kommentare zur aristotelischen Logik aus dem 12. und 13. Jahrhundert in MS. lat. fol. 624 der Preussischen Staatsbibliothek in Berlin'. (*Sitzungsberichte der Preussischen Akademie der Wissenschaften*, 1938, pp. 185-210), p. 200.
- (10) N. d'Olwer, 'Sur la date de la *Dialectica* d'Abélard', *Revue du moyen âge latin*, 1, 1945, pp. 375-90 and L. M. De Rijk, *Petrus Abaelardus. Dialectica*, Assen, 1956, pp. XXII-XXIII.
- (11) Geyer, *Untersuchungen*. Peter Abaelards Philosophische Schriften, II, (BGPTMA, vol. 21, 4, 1933, pp. 589-633), pp. 611-12.
- (12) 'The Greek Fathers in Abelard's *Sic et Non*', (*Antonianum*, vol. 12, 1966, pp. 413-453) p. 414.
- (13) Cf. Ostlender, 'Die Sentenzenbücher der Schule Abaelards', (*Theologische Quartalschrift*, vol. 117, 1936, pp. 208-252) pp. 214-15.
- (14) *Sent. Paris.*, ed. Landgraf, p. 29; also Ostlender in *Bulletin Thomiste*, VIII (1931), p. 229.
- (15) See above, p. 14.
- (16) The commentary on the *De interpretatione* in the *Logica 'Ingredientibus'* is an exception; two copies are known, see below, p. 89.

From: David E. Luscombe, *The School of Peter Abelard. The Influence of Abelard's Thought in the Early Scholastic Period*, Cambridge, Cambridge University Press 1969.

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"The very important cod. Milan, Ambrosiana M. 63 sup. which contains on ff. 1r-72r a large part of the *Logica 'Ingredientibus'* in a copy of the late twelfth or early thirteenth century has been in the Ambrosian Library since its foundation in the early seventeenth century; (1) it was received by Cardinal Federigo Borromeo as a gift from Camillo Bossi of Modena in 1605, but its earlier history is not known.(...) The last part of the commentary on Aristotle's *De interpretatione* contained in this manuscript has been shown by Dr Minio-Paluello(3) to have issued from a circle in which were debated problems similar to those discussed by Abelard, and the same manuscript also contains on ff. 72v-81v a commentary on Porphyry's *Isagoge* composed by a disciple of Abelard.(4) Dr. Minio-Paluello believes that the authentic and complete version of Abelard's commentary on the *De interpretatione* in the *corpus* of his *Logica 'Ingredientibus'* is found in a copy made by an Italian scribe of the late twelfth century in cod. Berlin, Deutsche Staatsbibliothek lat. fol. 624, ff. 97r-146r. This manuscript belonged to St Victor in Paris in the later middle ages.(5)" (pp. 88-89)

## Notes

- (1) Ed. from this manuscript by B. Geyer; for descriptions see Geyer, *Abaelards Philosophische Schriften*, 1, X, and L. Minio-Paluello, *Abaelardiana Inedita*, p. XVI. The manuscript was noted by B. Montfaucon, *Bibliotheca Bibliothecarum*, I, 521n and in the *Histoire littéraire de la France*, XII (1763), 130.
- (3) *Abaelardiana inedita*, pp. XVI-XXI.
- (4) *Glossae super librum Porphyrii secundum vocales*, ed. C. Ottaviano [*Testi medioevali inediti. Fontes Ambrosiani, III*. Edited by Carnelo Ottaviano. Firenze, Olschki, 1933]; incomplete ed. by B. Geyer. See also Geyer, *Untersuchungen*, pp. 601-12.
- (5) The commentary was discovered by M. Grabmann, 'Kommentare', pp. 203-5, and the latter part of it is ed. by Minio-Paluello, op. cit., pp. 1-108. For descriptions of the manuscript see Grabmann, 'Kommentare', especially pp. 185-6, and Minio-Paluello, op. cit., pp. XII-XVI.

From: David E. Luscombe, *The School of Peter Abelard. The Influence of Abelard's Thought in the Early Scholastic Period*, Cambridge,: Cambridge University Press 1969.

“The evidence of all these manuscripts contributes to an understanding of the nature of the appeal of Abelard's writings and of those of his followers to twelfth-century scholars. Manuscripts containing Abelard's logical writings are relatively few in number. Although, as John of Salisbury shows in his *Metalogicon* and Abelard in his *Historia Calamitatum*, logic was the subject of passionate disputes arousing widespread interest, documents presenting these debates are not abundant.(2)

Of Abelard's logical writings some are lost and only one (the commentary on the *De interpretatione* in the *Logica Ingredientibus*) survives in more than a single copy. Yet in comparison with the works of contemporaries, those of Abelard survive extremely well for the logical writings of Roscelin, William of Champeaux, Master Alberic, Jocelyn of Soissons, Bernard of Chartres and Robert of Melun are entirely lacking while from Adam of the Petit Pont we have only two copies of the *Ars disserendi*.(3) The habit of publishing one's logical teaching may have been underdeveloped among the logicians and quite possibly manuscripts of logic have had a poorer chance of surviving through the centuries. Those of Abelard are for the most part exceptional in bearing clear, contemporary indications of their author. The evidence collected suggests that the logical teaching of Abelard and of other masters was discussed not only in Paris but also in several other centres, at Fleury on the Loire, in the circle of Robert of Torigny, in some of the religious houses of Germany and possibly too in Italy. Copying, however, appears to have ceased in the thirteenth century and it is then that a new period begins in the history of logic characterized by the work of such masters as Lambert of Auxerre, William of Shyreswood and Peter of Spain and by the absorption of further translations of Aristotle's logical writings.” (pp. 93-94)

### Notes

(2) To say this is not to ignore the series of discoveries made by the late M. Grabmann in several of his more recent articles.

(3) Ed. L. Minio-Paluello.

From: David E. Luscombe, *The School of Peter Abelard. The Influence of Abelard's Thought in the Early Scholastic Period*, Cambridge,: Cambridge University Press 1969.

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The manuscript *F* cited at the end is the cod. Orleans, Bibliothèque Municipale 266.

English Summary of the *Sententie of Abelard* (from: *Twelfth Century Logic: Texts and Studies. Vol II: Abelardiana inedita*. Edited by Minio-Paluello Lorenzo. Roma: Edizioni di Storia e Letteratura 1958., pp. XLVI-XLVIII).