

Provided for non-commercial research and educational use only.  
Not for reproduction or distribution or commercial use



This article was originally published in the *Encyclopedia of Language & Linguistics, Second Edition*, published by Elsevier, and the attached copy is provided by Elsevier for the author's benefit and for the benefit of the author's institution, for non-commercial research and educational use including without limitation use in instruction at your institution, sending it to specific colleagues who you know, and providing a copy to your institution's administrator.

All other uses, reproduction and distribution, including without limitation commercial reprints, selling or licensing copies or access, or posting on open internet sites, your personal or institution's website or repository, are prohibited. For exceptions, permission may be sought for such use through Elsevier's permissions site at:

<http://www.elsevier.com/locate/permissionusematerial>

Klima G (2006), Syncategoremata. In: Keith Brown, (Editor-in-Chief) *Encyclopedia of Language & Linguistics, Second Edition*, volume 12, pp. 353-356. Oxford: Elsevier.

## Syncategoremata

G Klima, Fordham University, Bronx, NY, USA

© 2006 Elsevier Ltd. All rights reserved.

### The History of the Distinction

The medieval distinction between syncategorematic terms ('syncategoremata,' such as 'and,' 'or,' and 'not,' which merely combine other terms) and categorematic terms ('categoremata,' such as 'man,' 'Socrates,' and 'animal,' which can be predicated of things) dates back to the 6th-century grammarian Priscian, who in his *Institutiones Grammaticae*, who in his in turn, attributes the idea to certain 'dialecticians.' Syncategoremata were commonly recognized by Stoics and Neo-Platonics (Pinborg, 1972: 60). However, Peripatetic dialecticians could also take their cue from Aristotle's relevant remark on the copula (the verb 'is' or its equivalent, joining subject and predicate), when he says that it is in itself "nothing, but co-signifies some combination, which cannot be thought of without the components" (*On Interpretation*, 16b24–25). In any case, according to Priscian, the dialecticians he refers to characterized syncategoremata in a similar way: such terms merely cosignify, in contrast to verbs and nouns, which, when combined, make a complete expression. With the emergence of the distinctive logical and grammatical literature of the Middle Ages in the 12th century continuing through the late 15th and early 16th centuries, discussions of syncategoremata became part of the characteristic genres of this literature (Sweeney, 2002), in which our medieval colleagues developed ever more sophisticated characterizations of syncategorematic terms, their distinction from categorematic terms, their function, and their nature. According to Norman Kretzmann's (1982) periodization, we can distinguish the following main stages in the medieval career of syncategoremata:

1. Their emergence as the focal points of certain logical or semantic relationships or special problems of interpretation (in the 12th century, especially the latter half)
2. Their identification as a distinguishable set of topics worthy of development in separate treatises typically called syncategoremata (from the last quarter of the 12th century to the last quarter of the 13th century)
3. Their assimilation into general treatises on logic, sometimes as a group but sometimes dispersed in ways designed to associate particular syncategoremata with more general topics in logic to which they are appropriate
4. Their absorption into the sophisma literature (discussions of logical puzzles generated by problem sentences, the so-called 'sophismata'), in which a particular syncategorema may serve as the germ of a paradox the interest of which is often associated with metaphysics or natural philosophy more than with logic or semantics proper (from the first quarter of the 14th century to the disintegration of scholastic logic).

With the decline of scholastic logic, the logical treatises specifically devoted to syncategoremata or to sophismata focusing on the problems generated by syncategoremata became gradually extinct along with the rest of the characteristic logical literature of the Middle Ages. Yet, the distinction between categorematic and syncategorematic terms has never become entirely forgotten, and it keeps recurring in various guises also in modern philosophy. However, the most sophisticated accounts of the distinction are still to be found in the medieval literature, which is the focus of the rest of this article.

### Syntactic and Semantic Criteria of Drawing the Distinction

It is interesting that Priscian's remark involved two different and by no means equivalent criteria for distinguishing syncategorematic and categorematic terms. On what may be called the 'syntactic' criterion, categorematic terms are those that can function as subjects or predicates of propositions so that their combination yields a complete proposition, whereas syncategorematic terms cannot be subjects or predicates. On the 'semantic' criterion, however, syncategorematic terms are those that merely cosignify (i.e., signify in combination with some other term) but that in themselves do not signify anything. Apparently, the syntactic criterion provides a good test for sorting various parts of speech into either of the two members of the division. However, even if the criterion works, it does not seem to provide a principled reason why certain parts of speech behave in one way or the other. The semantic criterion seems to provide such a reason, but as it stands, it is rather vague.

Indeed, on closer inspection even the syntactic criterion does not seem to fare much better. First, in the appropriate context any part of speech can be a subject or a predicate. For example, the preposition 'of' or the negation 'not,' which are certainly obvious candidates for being regarded as syncategorematic, can be used as subjects in the sentences '*Of* is a preposition' and '*Not* is a negation,' where they are

taken to stand for themselves (and other token phrases of the same type) or, as medieval logicians would put it, in ‘material supposition.’ (Cf. the modern distinction between mention and use.) Accordingly, later medieval authors sometimes refined the syntactic criterion by adding the requirement that syncategorematic terms are those that cannot be subjects or predicates when used ‘significatively’ (i.e., in their proper function) and not with the intent to take them for themselves. However, this refinement clearly indicates that the distinction primarily applies not to words per se but, rather, to their different uses. This point is further reinforced by the fact that parts of speech that on the simple syntactic criterion would be deemed syncategorematic in some of their uses can be subjects or predicates even when taken significatively. For instance, adjectives that cannot serve as subjects on their own can be predicates (e.g., contrast the grammatical ‘A man is brave’ with the ungrammatical ‘A brave is a man’), and they can have substantive uses (in Latin marked by the neuter gender), in which they can even serve as subjects (as in the Latin sentence, *Album est coloratum* ‘[What is] white is colored,’ but even in English we can say, ‘Blue is a soothing color’). Furthermore, logicians, who were primarily interested in the semantic features of syncategoremata, would not regard adjectives and adverbs as syncategorematic without further ado.

Therefore, to distinguish such terms from syncategoremata pure and simple, they introduced a further distinction. The two most influential authors of the 13th century on this topic, William of Sherwood and Peter of Spain, both distinguished ‘pure categoremata’ (i.e., subjects and predicates) from their dispositions or determinations (Peter of Spain, 1992: 38–41; William of Sherwood, 1941: 48). However, they also distinguished those dispositions of subjects and predicates that belong to them insofar as they are subjects and predicates (such as ‘signs of quantity,’ i.e., quantifiers), the pure syncategoremata, and those dispositions that belong to the things that are signified by subjects and predicates regardless of the fact that they are subjects and predicates. The latter are just categorematic dispositions of pure categoremata, such as adjectives and adverbs. For example, in the proposition ‘Every wise man is running,’ the pure syncategorematic term ‘every’ is a determination of the subject term of this sentence in relation to the predicate, determining that the sentence is true only if the predicate applies to everything that falls under the subject. Thus, ‘every’ applies to the subject insofar as it is the subject of the predicate of this sentence. However, the determination ‘wise’ pertains to ‘man’ regardless of what the latter is subjected to and how. This determination merely determines that of all man only the wise are considered (i.e.,

those things that have the property signified by the adjective).

Thus, adjectives and adverbs, even in their purely adjectival or adverbial uses, on this criterion are no longer regarded as pure syncategoremata, even if they cannot be self-standing subjects or predicates. Rather, they are regarded as categorematic parts of complex subjects and predicates signifying the dispositions of the things signified by nouns and verbs, the principal parts of such complex subjects and predicates.

Further refinements of the distinction were provided by the nominalist philosophers of the 14th century (see **Nominalism**), such as William Ockham, John Buridan, and Albert of Saxony, with reference to their conception of a ‘mental language,’ a natural system of representation constituted by mental concepts, the mental acts of a human mind to which spoken or written parts of speech are systematically subordinated, rendering these spoken or written signs meaningful (see **Mentalese**). In this setting, any part of a spoken or written language is said to signify immediately the concept to which it is subordinated, and it is said to signify ultimately the object or objects conceived by means of the concept to which it is subordinated (Buridan, 2001: xxxiv–xli). However, since some concepts have only the function of combining simple concepts into complex ones (e.g., a mental copula or conjunction), or just to modify the representative function of other concepts (e.g., a mental term-negation), but in themselves do not have the function of representing any objects, such concepts themselves are syncategorematic in mental language. Thus, the purely syncategorematic terms of spoken or written languages will be those that are subordinated to such syncategorematic concepts.

For example, as Buridan (2001: 234) remarks,

The copulas ‘is’ and ‘is not’ signify different ways of combining mental terms in order to form mental propositions, and *these different ways [of combining] are in their turn complexive concepts*. . . . And so also the words ‘and,’ ‘or,’ ‘if,’ ‘therefore,’ and the like designate *complexive concepts* that combine several propositions or terms at once in the mind, but nothing further outside the mind. These words are called purely syncategorematic, because they signify nothing outside the mind, except along with others, in the sense that the whole complex consisting of categorematic and syncategorematic words does signify the things conceived outside the mind, but this is on account of the categorematic words.

Buridan’s younger contemporary, Albert of Saxony (1974: f. 2v), provides further clarification of what we should understand by the significative function of syncategorematic terms when he observes:

If the terms ‘every,’ ‘no,’ etc. are taken materially, then they certainly can be subjects or predicates of propositions, as when we say ‘Every is a universal sign,’ or ‘Or

is a [disjunctive] conjunction,' or 'No is an adverb,' or 'And is a copulative conjunction.' For in these propositions these words are not taken significatively, since *they do not exercise the function [non exercent officium] which they were imposed to exercise*. So, in the proposition 'Every is a universal sign,' 'every' does not distribute anything, in 'No is an adverb,' 'no' does not negate anything, and likewise, in 'And is a copulative conjunction,' 'and' does not copulate anything; therefore, in these propositions these terms are taken not syncategorematically, but categorematically.

Therefore, syncategorematic terms, when they are taken significatively, are imposed to exercise the logical functions of modifying the semantic functions of categorematic terms with which they are construed on account of being subordinated to mental acts that exercise these functions on the mental level. Indeed, as Albert of Saxony (1974: f. 3r) notes, this is precisely the reason why in their significative function they cannot be subjects of predicates. Thus, Albert presents the semantic distinction on the mental level as the ultimate reason for the syntactic criterion of the distinction on the spoken level. Indeed, later medieval treatises (in the late 14th and early 15th centuries) on concepts and mental language, such as those by Thomas of Cleves, Paul of Gelria, or Peter of Ailly, draw the distinction as pertaining directly and primarily to acts of the mind. These authors describe 'mental categoremata' as being acts of conceiving of some objects, as opposed to 'mental syncategoremata,' which are rather different modes or ways of conceiving of the objects conceived by the former (Bos and Read, 2001: 14, 54–57, 96, 130; Peter of Ailly, 1980: 18–19; see also the previous quote from Buridan). From this characterization, and from the common medieval doctrine that the semantic functions of spoken and written terms are determined by the semantic functions of the concepts to which they are subordinated, we get as a simple corollary the usual semantic and syntactic features of (pure) syncategoremata, namely that they are cosignificative rather than significative on their own, and that taken significatively they cannot be referring terms of propositions.

Although the distinction drawn in these terms was not in vogue in early modern philosophy, it is significant that John Locke would characterize the parts of speech he calls 'particles' (but that his medieval colleagues would recognize as syncategoremata) as being "marks of some action or intimation of the mind" – that is, some mental operation on ideas of the mind (Locke, 1995: bk. IV, c. 7, n. 4). Later, Immanuel Kant would describe pure concepts of understanding as 'logical functions,' directly preparing the way for Gottlob Frege to describe quantifiers as 'second

order concepts' (i.e., as concepts operating on concepts).

## Philosophical Significance of the Distinction

Syncategorematic terms present a particular problem for those philosophers who would take the primary function of elements of a language to be the signs or names of things. For in the case of syncategorematic terms, we just do not seem to have obvious candidates among things in the world for these terms to name. Nevertheless, medieval realists, such as Peter of Spain or William of Sherwood, or the modistic grammarians of the 13th and 14th centuries, such as Thomas of Erfurt (for further references, see Zupko, 2003), who professed a close parallelism between *modi significandi* (modes of signifying), *modi intelligendi* (modes of understanding), and *modi essendi* (modes of being), assumed in their ontology certain modes of being or dispositions of things corresponding to the modes of signifying determined by modes of understanding conveyed by syncategorematic terms. Therefore, in this framework, syncategorematic terms do have counterparts in reality: the modes or dispositions of things that 'prompt' us to conceive of and hence signify things in certain ways.

Although these philosophers, logicians, and grammarians were careful to attach only a certain diminished degree of reality to these dispositions, nevertheless, it was precisely their 'ontological liberalism' that prompted William Ockham and his nominalist followers discussed previously to identify syncategoremata primarily with the mental acts modifying the representative function of categorematic concepts. For in this nominalist framework, syncategorematic terms simply have no extramental counterparts: the complex expressions they form with categorematic terms signify only the things signified by the categorematic terms, but in different ways. Thus, for example, as Buridan explicitly concluded, the proposition 'God is God' and the proposition 'God is not God' signify extramentally exactly the same thing as the term 'God' does, but this does not render these expressions synonymous; they signify the same thing differently because of the different syncategoremata signified by them in the mind (Buridan, 2001: 234). This is how late-medieval nominalists were able to have a parsimonious ontology along with a sufficiently 'fine-grained' semantics, by making the necessary semantic distinctions on the conceptual and not on the ontological level.

In addition to these and similar ontological considerations, the reinterpretation of the medieval distinction had even more far-reaching consequences in

early modern and modern philosophy with Kant's reclassification of a number of traditional metaphysical concepts, such as substance and accident, cause and effect, existence, necessity, and possibility, as concepts of pure understanding – that is, as logical functions or syncategoremata. Kant's considerations, especially those concerning existence, directly paved the way for Gottlob Frege's analysis of the notion of existence as a second-order concept, the existential quantifier, which in turn could immediately be exploited by the anti-metaphysical program of logical positivists, such as Rudolf Carnap (1959). Accordingly, without the recent reevaluation of the concepts of existence, possibility, and ontological commitment in the framework of modern possible-worlds semantics, metaphysics probably still could not be regarded as the legitimate philosophical subject in analytic philosophy it has become in the past few decades. As even this example shows, our actual understanding of the medieval distinction still has fundamental significance in our considerations concerning the relationships between language, thought, and reality.

*See also:* Concepts; Mentalese; Nominalism; Nominalism; Objects, Properties, and Functions; Semantic Value.

## Bibliography

- Albert of Saxony (1522). *Perutilis logica*. Venice, (Reprinted by Georg Olms, New York, 1974).
- Buridan J (2001). *'Summulae de Dialectica': an annotated translation with a philosophical introduction by Gyula Klima*. New Haven, CT: Yale University Press.
- Carnap R (1959). 'The elimination of metaphysics through logical analysis of language.' In Ayer A J (ed.) *Logical positivism*. Glencoe, IL: Free Press. 60–81. (Original work published 1931.)
- Carnap R (1931). 'Überwindung der Metaphysik durch logische Analyse der Sprache.' *Erkenntnis* 2, 220–241.
- Bos E & Read S (2001). 'Concepts: the treatises of Thomas of Cleves and Paul of Gelria.' *Louvain-La-Neuve: Editions De L'institut Supérieur De Philosophie, Louvain, Paris: Editions Peeters*.
- Kretzmann N (1982). 'Syncategoremata, exponibilia, sophistimata.' In Kretzmann *et al.* (eds.). 211–245.
- Kretzmann N, Kenny A, Pinborg J & Stump E (eds.) (1982). *The Cambridge history of later medieval philosophy*. Cambridge, UK: Cambridge University Press.
- Locke J (1995). 'An essay concerning human understanding,' e-text, in public domain, <http://www.ilt.columbia.edu>, mark-up copyright © 1995 ILT Digital Classics. (Printed edition: *An essay concerning human understanding*, Nidditch P H ed., 1975.). Oxford: Oxford University Press.
- Peter of Ailly (1980). *Concepts and insolubles*. Spade P V, (trans.). Dordrecht, The Netherlands: Reidel.
- Peter of Spain (1992). *Syncategoremata*. First critical edition with an introduction and indexes by L M de Rijk, with an English translation by Joke Spruyt. Leiden: Brill.
- Pinborg J (1972). *Logik Und Semantik Im Mittelalter: Ein Überblick*. Stuttgart: Frommann-Holzboog.
- Sweeney E (2002, Winter). 'Literary forms of medieval philosophy.' In Zalta E N (ed.) *Stanford encyclopedia of philosophy*. Available at. <http://plato.stanford.edu>.
- William of Sherwood (1941). 'Syncategoremata.' O'Donnell J R (ed.). *Medieval Studies* 3, 46–93.
- Zupko J (2003, Spring). 'Thomas of Erfurt.' In Zalta E N (ed.) *The Stanford encyclopedia of philosophy*. Available at. <http://plato.stanford.edu>.

## Synchronic and Diachronic Variation

**T Nevalainen**, University of Helsinki, Helsinki, Finland

© 2006 Elsevier Ltd. All rights reserved.

### Background

This article discusses alternative ways of saying the same thing, and the generalizations that apply to this linguistic variation both at present and across time. It is the alternative expressions available at a given time that provide the foundations for processes of language change.

Generally speaking, language can be analyzed both synchronically, as it is at a particular point in time, and diachronically, as it changes across time. Introducing these terms in his *Cours de linguistique générale* (1916), Ferdinand de Saussure notes: "Everything that

relates to the static side of our science is synchronic; everything that has to do with evolution is diachronic" (de Saussure, 1916 [1978: 81]).

The historical study of language also presupposes the study of periods of time understood as synchronous and therefore static. An individual speaker, de Saussure maintains, is always confronted with language as a state. More recently, however, sociolinguistic research has shown that language existing at a particular time need not be viewed as static and invariant. This supports the everyday observation that the same meaning can be expressed in various ways under different circumstances. Alternative expressions are most obvious in vocabulary. In English we can choose, for instance, between *answer* and *reply*, *courteous* and *polite*, or *mobile* and *cell phone*. Syntactic