Syncategoremata are not logical constants

Catarina Dutilh Novaes
Faculty of Philosophy
University of Groningen
Introduction

- The medieval concept of syncategorematic terms is often viewed as a forerunner of the modern concept of logical constants.

- However, there are significant dissimilarities in how medieval authors conceived the role of syncategoremata within logical theorizing and modern conceptions of logical constants.

- Reflecting on these differences allows us to evaluate critically assumptions and theoretical commitments underlying current discussions on logical constants.
Introduction

• The medieval concept of syncategorematic terms is often viewed as a forerunner of the modern concept of logical constants.

• However, there are significant dissimilarities in how medieval authors conceived the role of syncategoremata within logical theorizing and modern conceptions of logical constants.

• Reflecting on these differences allows us to evaluate critically assumptions and theoretical commitments underlying current discussions on logical constants.
Introduction

• The medieval concept of syncategorematic terms is often viewed as a forerunner of the modern concept of logical constants.
• However, there are significant dissimilarities in how medieval authors conceived the role of syncategoremata within logical theorizing and modern conceptions of logical constants.
• Reflecting on these differences allows us to evaluate critically assumptions and theoretical commitments underlying current discussions on logical constants.
Plan of the talk

1. Crash course on syncategoremata
2. Logical constants in current philosophy of logic
3. Comparing syncategoremata to logical constants
4. Conclusions
1. Crash course on syncategoremata
Categoremata vs. syncategoremata

• Originally a grammatical and semantic distinction, not a logical one.
• Starting point is Aristotle in *On Interpretation* (16b24-25): some terms have signification by themselves, while others (e.g. copula) acquire signification only when conjoined with terms of the first kind.
Categoremata vs. syncategoremata

- Originally a grammatical and semantic distinction, not a logical one.
- Starting point is Aristotle in *On Interpretation* (16b24-25): some terms have signification by themselves, while others (e.g. copula) acquire signification only when conjoined with terms of the first kind.
Categoremata vs. syncategoremata

- Originally a grammatical and semantic distinction, not a logical one.
- Starting point is Aristotle in *On Interpretation* (16b24-25): some terms have signification by themselves, while others (e.g. copula) acquire signification only when conjoined with terms of the first kind.
A syntactic or semantic distinction?

- Syntactic criterion: whether a term can (categorema) or cannot (syncategorema) be the subject or the predicate of a sentence.
- Semantic criterion: whether a term signifies things ‘by itself’ (categorema) or not (syncategorema).
- Already at an early stage it was clear that these two distinctions are not necessarily co-extensional.
- Both criteria are not free of problems, and much of the Latin medieval literature on syncategoremata focuses on refining and improving the distinction.
A syntactic or semantic distinction?

- **Syntactic criterion**: whether a term can (*categorema*) or cannot (*syncategorema*) be the subject or the predicate of a sentence.
- **Semantic criterion**: whether a term signifies things ‘by itself’ (*categorema*) or not (*syncategorema*).
- Already at an early stage it was clear that these two distinctions are not necessarily co-extensional.
- Both criteria are not free of problems, and much of the Latin medieval literature on *syncategoremata* focuses on refining and improving the distinction.
A syntactic or semantic distinction?

- **Syntactic criterion**: whether a term can (*categorema*) or cannot (*syncategorema*) be the subject or the predicate of a sentence.
- **Semantic criterion**: whether a term signifies things ‘by itself’ (*categorema*) or not (*syncategorema*).
- **Already at an early stage it was clear that these two distinctions are not necessarily co-extensional.**
- **Both criteria are not free of problems, and much of the Latin medieval literature on *syncategoremata* focuses on refining and improving the distinction.**
A syntactic or semantic distinction?

- Syntactic criterion: whether a term can (*categorema*) or cannot (*syncategorema*) be the subject or the predicate of a sentence.
- Semantic criterion: whether a term signifies things ‘by itself’ (*categorema*) or not (*syncategorema*).
- Already at an early stage it was clear that these two distinctions are not necessarily co-extensional.
- Both criteria are not free of problems, and much of the Latin medieval literature on *syncategoremata* focuses on refining and improving the distinction.
Syncategoremata and logic

- In the 13th and 14th centuries, discussions on syncategoremata were fully integrated into the standard logical curriculum (‘si’, ‘omnis’, ‘vel’).
- Object of investigation of logicians even more than of grammarians.
- It was clear to medieval authors that at least some syncategoremata had features and functions that were best studied from the point of view of logic.
Syncategoremata and logic

• In the 13\textsuperscript{th} and 14\textsuperscript{th} centuries, discussions on syncategoremata were fully integrated into the standard logical curriculum (‘\textit{si}’, ‘\textit{omnis}’, ‘\textit{vel}’).

• Object of investigation of logicians even more than of grammarians.

• It was clear to medieval authors that at least some syncategoremata had features and functions that were best studied from the point of view of logic.

• William of Sherwood, \textit{Sycategoremata} (first half 13\textsuperscript{th} century).
Syncategoremata and logic

- In the 13\textsuperscript{th} and 14\textsuperscript{th} centuries, discussions on syncategoremata were fully integrated into the standard logical curriculum (‘\textit{si}’, ‘\textit{omnis}’, ‘\textit{vel}’).
- Object of investigation of logicians even more than of grammarians.
- It was clear to medieval authors that at least some syncategoremata had features and functions that were best studied from the point of view of logic.
- William of Sherwood, \textit{Sycategoremata} (first half 13\textsuperscript{th} century).
Syncategoremata and logic

- In the 13th and 14th centuries, discussions on syncategoremata were fully integrated into the standard logical curriculum (‘si’, ‘omnis’, ‘vel’).
- Object of investigation of logicians even more than of grammarians.
- It was clear to medieval authors that at least some syncategoremata had features and functions that were best studied from the point of view of logic.
2. Logical constants in current philosophy of logic
Demarcational function for logical constants

- A widespread view: the boundaries of logic as a discipline can be determined by a demarcation of the class of logical constants.

1) The subject of logic is the validity of arguments.
2) Arguments are valid in virtue of their (logical) forms.
3) The form of an argument is (at least partially) determined by the logical constants occurring in it.

- 1, 2 and 3 imply that the boundaries of logic are defined by the concept (class) of logical constants.
Demarcational function for logical constants

• A widespread view: the boundaries of logic as a discipline can be determined by a demarcation of the class of logical constants.

1) The subject of logic is the validity of arguments.
2) Arguments are valid in virtue of their (logical) forms.
3) The form of an argument is (at least partially) determined by the logical constants occurring in it.

• 1, 2 and 3 imply that the boundaries of logic are defined by the concept (class) of logical constants.
Demarcational function for logical constants

- A widespread view: the boundaries of logic as a discipline can be determined by a demarcation of the class of logical constants.

1) The subject of logic is the validity of arguments.
2) Arguments are valid in virtue of their (logical) forms.
3) The form of an argument is (at least partially) determined by the logical constants occurring in it.

- 1, 2 and 3 imply that the boundaries of logic are defined by the concept (class) of logical constants.
Demarcational function for logical constants

- A widespread view: the boundaries of logic as a discipline can be determined by a demarcation of the class of logical constants.

1) The subject of logic is the validity of arguments.
2) Arguments are valid in virtue of their (logical) forms.
3) The form of an argument is (at least partially) determined by the logical constants occurring in it.

- 1, 2 and 3 imply that the boundaries of logic are defined by the concept (class) of logical constants.
Demarcational function for logical constants

• A widespread view: the boundaries of logic as a discipline can be determined by a demarcation of the class of logical constants.

1) The subject of logic is the validity of arguments.
2) Arguments are valid in virtue of their (logical) forms.
3) The form of an argument is (at least partially) determined by the logical constants occurring in it.

• 1, 2 and 3 imply that the boundaries of logic are defined by the concept (class) of logical constants.
3. Comparing syncategoremata to logical constants
1) The scope of logic

- For medieval authors, the scope of logic went well beyond the current ‘borders’ of the discipline, including philosophy of language, semantics and epistemology.
- Syllogistic (arguments) occupied a central position, but syllogistic was not thought to exhaust the scope of logic.
- The very concern with sharply demarcating logic as a discipline is not to be found in the Latin medieval authors (a Kantian obsession?).
1) The scope of logic

• For medieval authors, the scope of logic went well beyond the current ‘borders’ of the discipline, including philosophy of language, semantics and epistemology.

• Syllogistic (arguments) occupied a central position, but syllogistic was not thought to exhaust the scope of logic.

• The very concern with sharply demarcating logic as a discipline is not to be found in the Latin medieval authors (a Kantian obsession?).
1) The scope of logic

- For medieval authors, the scope of logic went well beyond the current ‘borders’ of the discipline, including philosophy of language, semantics and epistemology.
- Syllogistic (arguments) occupied a central position, but syllogistic was not thought to exhaust the scope of logic.
- The very concern with sharply demarcating logic as a discipline is not to be found in the Latin medieval authors (a Kantian obsession?).
2) Validity in virtue of logical form

- Absence of the idea that the grounds for the validity of arguments pertain to a subset of their vocabulary (exception: Abelard, for *some* arguments).
- E.g. Buridan viewed the validity of arguments as pertaining to the impossibility of the antecedent being the case while the consequent is not.
- Plenty of room for conceptions of validity other than the ‘interpretational’ notion (Etchemendy), not strictly related to a special subset of the vocabulary.
2) Validity in virtue of logical form

- Absence of the idea that the grounds for the validity of arguments pertain to a subset of their vocabulary (exception: Abelard, for *some* arguments).
- E.g. Buridan viewed the validity of arguments as pertaining to the impossibility of the antecedent being the case while the consequent is not.
- Plenty of room for conceptions of validity other than the ‘interpretational’ notion (Etchemendy), not strictly related to a special subset of the vocabulary.
2) Validity in virtue of logical form

- Absence of the idea that the grounds for the validity of arguments pertain to a subset of their vocabulary (exception: Abelard, for some arguments).
- E.g. Buridan viewed the validity of arguments as pertaining to the impossibility of the antecedent being the case while the consequent is not.
- Plenty of room for conceptions of validity other than the ‘interpretational’ notion (Etchemendy), not strictly related to a special subset of the vocabulary.
3) Logical constants and the form of arguments

- Form vs. matter =>

  Syncategoremata vs. categoremata?

I say that, in the previous considerations (as we are speaking here of matter and form), we understand by the ‘matter’ of the proposition or consequentia the purely categorical terms, i.e. subjects and predicates, omitting the syncategorematic terms that enclose them and through which they are conjoined or negated or distributed or forced to a certain mode of supposition. All the rest, we say, pertains to the form. (Buridan 1976, 30)
3) Logical constants and the form of arguments

- Form vs. matter =>
  
  **Syncategoremata vs. categoremata?**

_I say that, in the previous considerations (as we are speaking here of matter and form), we understand by the ‘matter’ of the proposition or consequentia the purely categorical terms, i.e. subjects and predicates, omitting the syncategorematic terms that enclose them and through which they are conjoined or negated or distributed or forced to a certain mode of supposition. All the rest, we say, pertains to the form._ (Buridan 1976, 30)
3) Logical constants and the form of arguments

• But Buridan himself recognized that the categorematic vs. syncategorematic partition is not a straightforward, clear-cut division.

• For example, he recognized the existence of ‘limit cases’, such as the verbs ‘to see’, ‘to want’, ‘to know’, which perform functions relevant to both form and matter of a sentence/argument.

• For Buridan (and other authors), the demarcation between categorematic and syncategorematic terms is characterized by a certain degree of fluidity.
3) Logical constants and the form of arguments

- But Buridan himself recognized that the categorematic vs. syncategorematic partition is not a straightforward, clear-cut division.
- For example, he recognized the existence of ‘limit cases’, such as the verbs ‘to see’, ‘to want’, ‘to know’, which perform functions relevant to both form and matter of a sentence/argument.
- For Buridan (and other authors), the demarcation between categorematic and syncategorematic terms is characterized by a certain degree of fluidity.
3) Logical constants and the form of arguments

- But Buridan himself recognized that the categorematic vs. syncategorematic partition is not a straightforward, clear-cut division.
- For example, he recognized the existence of ‘limit cases’, such as the verbs ‘to see’, ‘to want’, ‘to know’, which perform functions relevant to both form and matter of a sentence/argument.
- For Buridan (and other authors), the demarcation between categorematic and syncategorematic terms is characterized by a certain degree of fluidity.
Conclusions

- Medieval authors did not view the categorematic vs. syncategorematic distinction as related to the scope of logic.
- Fluidity: no search for exact borders, suggesting an open-ended conception of logical constants.
- It is of logical interest to study the systematic behavior of specific terms, but they do not need to perform a demarcational function for logic as a discipline or concept (logicality).
Conclusions

- Medieval authors did not view the categorematic vs. syncategorematic distinction as related to the scope of logic.
- **Fluidity:** no search for exact borders, suggesting an *open-ended conception of logical constants*.
- It *is* of logical interest to study the systematic behavior of specific terms, but they do not need to perform a demarcational function for logic as a discipline or concept (logicality).
Conclusions

- Medieval authors did not view the categorematic vs. syncategorematic distinction as related to the scope of logic.
- Fluidity: no search for exact borders, suggesting an open-ended conception of logical constants.
- It is of logical interest to study the systematic behavior of specific terms, but they do not need to perform a demarcational function for logic as a discipline or concept (logicality).