Propositional Content without Propositions

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Handout 2

Views of propositions

1. The relational view

(1) a. John thinks that Mary is happy.

    b. think(John, the proposition that Mary is happy)

- propositions as the meaning of sentences

- propositions as the denotations of sentences

The function of *that*:

a common view: *That* is an operator that applies to a sentence that expresses a proposition

into an term that denotes or refers to a proposition.

the proposition denoted: An entity reflected in the structure of the term itself (on the

structured propositions view ('complexe significabilia' (medieval term))

The common view cannot be right:

clausal complements without complementizer:

(2) a. John thinks [O Mary is happy].

    b. John believes Mary to be happy.

    c. John hopes [PRO to win].

Another view:

Verbs taking clausal complements are intensional verbs: they take intension, not the extension

of their complement as argument

Yet another view (in fact quite common):

Clausal complements are like incomplete descriptions: they denote propositions only in a particular context, depending on speaker intentions

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2. Conceptions of propositions

2.1. propositions as sets of alternatives

Propositions as sets of possible worlds:

the set of worlds in which the sentence / the proposition would be true

Motivation:

Disposition of agent to behave as if the actual world was one of those circumstances

Further good applications: beliefs of small children, animals

Problem:

identification of logically equivalent beliefs

- identification of all necessarily true beliefs

(3) a. John beliefs that 2 plus 2 is four.

   b. John believes that 166 minus 40 is 126.

- identification of all necessarily false beliefs

- identification of other logically beliefs true in the same circumstances

(4) a. John thinks that Mary is happy.

   b. John thinks that Mary is happy and it is raining or not raining.

remedy:

Replace propositions as sets of (complete) worlds by

- sets of situations: structured entities

- sets of situations as partial possible worlds (primitives): Kratzer, …

Problems remain:

(5) a. John thinks that Mary is happy.

   b. John thinks that happiness is something that Mary has.

   c. John thinks that happiness is instantiated in Mary.

Remedy:

Replace propositions as sets of alternatives by structured propositions

Structure of proposition reflects syntactic structure of sentence

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3. Structured propositions

A simple example of a structured proposition:

(6) [*that Mary is happy*] = <happiness, Mary>

components of structured propositions: meanings or referents (direct reference)

What has to be added: truth conditions for structured propositions:

(7) A structured proposition <P, d> is true in a world w at a time t iff d $\in$ $[P]^{w, t}$.

Different conceptions of structured propositions concern:
- nature of propositional components
- structure of structured propositions

3.1. nature of propositional constituents

- distinction in type?
- Should propositional constituents anticipate truth-evaluation or should truth evaluation be a matter of interpreting relation of propositional constituents in a structured proposition?
- structured propositions as completely ordered:
no type distinction needed:
take first element to be property / relation and other elements in a particular order to be arguments
- with type distinction:
function-argument structures; no complete ordering needed: set of function and argument sequence

3.2. 'degrees' of structural fine-grainedness

Example: definite descriptions:
(8) a. John thinks that Mary is happy.
   b. John thinks that Sue's mother is happy.

(9) a. <happiness, <mother, Sue>>

    b. <happiness, Mary>

<u>Cresswell:</u>

Embedded sentences may denote structured propositions of different degrees of fine-grainedness, partly dependent on the embedding verb, partly depending on context

<u>Degree of fine-grainedness:</u>

- truth predicates, logical predicates:

(10) a. It is true that Mary is happy.

    b. It is that Sue's mother is happy.

- dispositional belief

- occurrent thought

(11) John was thinking that S

- verbs expression:

(12) a. John said that S.

    b. John whispered that S.

    c. John wrote that S.

use of modifiers:

(13) John said literally that S.

<u>The view:</u>

In a context, involving linguistic and nonlinguistic information, a sentence expresses / denotes a structured proposition based on a contextual partition into constituents.

The components of structured propositions may correspond to smaller or larger constituents of the sentence.

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4. Hyperintensionality that is not structure-induced

- different names

- pronounciation of names

(13) a. Pierre thinks that Londres is nice.

    b. Pierre thinks that London is nice.

include modes presentation as 'unarticulated constituent':

- concepts, conceptual roles, words ..

(14) <H, <Mary, m>>

A general issue about modes of presentation:

They are not fully determined by speaker's intentions (Schiffer): A speaker would not be able to specify what mode of presentation he exactly had in mind.

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5. The structure of structured propositions

- Structured propositions as sequences (common view)
- Structured propositions as tree structures, corresponding to the syntactic tree of the sentence (Carnap, Lewis, ..)

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6. Other expressions than predicates and terms and structured propositions

quantifiers:

(15) a. John thinks that Mary likes everyone.

   b. John thinks that everyone likes Mary.

quantifiers as single semantic values:

sets of properties (or equivalent) (generalized quantifiers)

Changing function-argument structure:

(16) a. <EVERYONE, LIKING, Mary>

   b. <EVERYONE', LIKING, Mary>

variables in structured propositions: 'parametric individuals' (Situation Semantics)

scope of different quantifiers:

(17) a. John thinks that someone likes everyone.

    b. John thinks that everyone likes someone.

Connectives (Soames):

(18) a. John thinks that S and S'.

Semantic values of connectives: truth functions

(18) b. as denoting functions: val($<$AND, p, p'$)$ = true iff AND(val(p),val(p')) = true.

(18) c. as denting relations: AND(p, p) iff val(p) = val(p) = true

another treatment of quantifiers and connectives (etc):

as syncategorematic expressions: that is, they do not have a conceptual meaning, cannot contribute an actual or conceptual entity to a structured proposition.

As elements in structured proposition that contribute only to the truth evaluation of the proposition:

(18) d. val ($<$AND, p, p$>$) = true iff val(p) = true and val(p') = true

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7. Problems for structured propositions

7.1. the unity of propositions problem

7.2. the problem of the representational status of propositional components

Jeffrey King's account of the problems for propositions:

Relativize the interpretation of a structured proposition to the interpretation of the corresponding sentences, with its grammatical structure and truth conditions

Propositions as facts:

facts that a *structured proposition* has such and such truth conditions in virtue of representing a sentence in a particular language with those truth conditions