Some topic ideas

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Contents

1 Generalized negation

A natural extension of *generalized conjunction* and *generalized disjunction* is *generalized negation*, i.e., allowing negation to apply to any expression which has a boolean type.

- Consider whether this over-predicts the distribution of negation in natural language, drawing on evidence from sentences with negation in English/German.

Some interesting examples to consider (and attempt to analyze):

(1) John and not Mary sneezed.

(2) John, Sue, and not Mary met in the classroom.

(3) *Not John sneezed.

2 Atom vs. set predicates

Main references:

- (Winter 1998)
- (de Vries 2015)

In this class, we've talked about collective predicates such as "gather" as if they are a homogeneous class. However, Winter argues that collective predicates come in two distinct categories: *set predicates* and *atom predicates.*

Some examples of set predicates include familiar collective predicates like *gather* and *meet.*

Some examples of atom predicates include *be a good team*, and *be numerous.*

One of the primary diagnostics for set vs. atom predicate is whether or not the predicate is compatible with a Noun Phrase headed by the determiner *all.*

(4) The students gathered.

(5) All the students gathered.

(6) The students are numerous.

(7) *All the students are numerous.

Assess Winter's account of atom vs. set (perhaps drawing on linguistic data from atom vs. set predicates in German).

3 Overlapping individuals

- Main reference: (Champollion 2016), section 4.

In class, we learned about Champollion's account of *collective conjunction of predicates*, which makes use of *existential raising*, *generalized conjunction* (i.e., intersection), and *minimization.* As he points out, the basic story runs intro trouble when we do collective conjunction of *overlapping predicates.*

(8) A doctor and lawyer met.

(8) can be used in a context where some individuals might be both lawyers and doctors. If we apply minimization in such a case, it returns (i) singleton sets of individuals who are both doctors and lawyers, and (ii) two element sets consisting of an individual who is a lawyer-and-not-doctor, and another individual who is a doctor-and-not-lawyer.

This (erroneously!) predicts that the sentence should be *false* if Mary and Sue met, if Mary and Sue are both doctors and lawyers.

In order to solve this problem, Champollion introduces a more sophisticated notion of existential raising which he calls *choice raising*.

4 Comparing generalized conjunction to *conjunction reduction*

- Main references: (Hirsch 2017a) (also (Hirsch 2017b)).

In class, we learned about how *generalized conjunction* can make sense of the broad distribution of coordination in natural language, together with why it tends to license *distributive inferences*.

For example, in the following sentence, we could analyze *and* as expressing generalized conjunction, since both *every student* and *every professor* are of a boolean type ($ET \to T$).

(9) John saw [every student] and [every professor].

The *generalized conjunction* of *every student* and *every professor* is itself a quantifier of type $ET \to T$, which may be interpreted as quantifiers in object position usually are (i.e., via *quantifier raising*):

(10) $\lambda P \,.\, \textbf{every}(\textbf{student})(P) \wedge \textbf{every}(\textbf{professor})(P)$

There is however an alternative to generalized conjunction, which maintains that conjunction is *always* type $T \to T \to T$, and appeals to a syntactic mechanism of "conjuntion reduction" to make sense of sentences such as (9). According to the conjunction reduction analysis, (9) is *underlyingly represented* as (11).

(11) John saw [every student] and ~~John saw~~ [every professor].

This topic is based on comparing the predictions of generalized conjunction and conjunction reduction, using Hirsch's paper as a starting point.

References

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