Inquisitive Semantics

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This paper is part of a much larger project. Some motivation and examples were given in the introduction. We will only be able to cover a small part of the whole enterprise, focusing mostly on the semantics.

1 Disjunction

• The treatment of disjunction is at the center of the entire account.

A standard (in the *the* standard) employment of 'or' is in the specification of possibilities (one of which is supposed by the speaker to be realized, although he does not know which one), each of which is relevant in the same way to a given topic.

- The main idea is to keep track of the different alternatives (rather than always lumping them together).
- See Figure 1 (p. 3) in the paper.
- Intuition: 'p or q' "draws attention" to the two possibilities associated with p and q, respectively. Whenever a sentence "draws attention" to alternatives, Groenendijk calls it *inquisitive*.
- \blacktriangleright 'p or q' is inquisitive.
- Some problems with disjunction that are ultimately fixed by this account:
 - Following the disjunction in (1a), the *alternative question* in (1b) is redundant.¹
 - (1) a. Alf will go to the party, or Bea will go.
 - b. Will Alf or Bea go to the party?
 - The issue has already been raised by the disjunction in (1a).
 - Disjunctive antecedents:
 - (2) a. If Alf or Bea comes, we will have fun.

¹(1b) can also be read as a polar question, depending on the intonation. That reading is irrelevant here.

b. \Rightarrow If Alf comes, we will have fun, and if Bea comes, we will have fun. (classically invalid)

- Disjunctive consequents:
 - (3) a. If Alf comes, he will bring beer or wine.
 - b. If Alf comes, he will bring beer, or if Alf comes, he will bring wine.

(classically invalid)

- $p \lor q$ plays a dual role:
 - It is *inquisitive* in virture of drawing attention to the two possibilities;
 - It is *informative* in virtue of ruling out the possibility that both p and q are false.
 - ► It is *hybrid*.

2 Questions

- Questions and disjunctions are interpreted in the same way:
- The syntax of the formal language has an operator for question formation: If φ is a sentence, then so is ?φ; the latter is defined as φ ∨ ¬φ.
- However, whether a sentence is inquisitive or informative (or hybrid) is not determined by its syntactic form, but by its semantic interpretation.
- The '?' operator in itself is just a shorthand notation for polar questions and not very interesting. The action happens in the interpretation of disjunction.
- For a preview on CQs, see Figure 2b in the paper.

3 The apparatus

Index: assignment of truth values to the atomic sentences in the language (may be thought of as a possible world).

State: non-empty set of indices.

Support: State σ supports sentence φ , written $\sigma \models \varphi$, iff... (see Definition 1, p. 6).

Comments:

- Strong negation: It's not that σ merely has insufficient information. Rather, φ is *ruled out* in σ .
- Strong disjunction: Even if all indices in σ verify one disjunct or the other, σ may fail to support the disjunction.
- Intuitively, the conditional quantifies over all possible ways of reaching a state which supports the antecedent.

Possibility: set of worlds.

Possibility for φ : Maximal state supporting φ .

Proposition: set of possibilities (i.e., set of sets of indices).

Proposition expressed by φ : Set of possibilities for φ .

4 Conditionals

We will do these step by step on the board.

- proposition denoted by $'p \rightarrow q'$
- proposition denoted by ' $p \rightarrow ?q'$
- proposition denoted by $?p \rightarrow q'$

Comments: The *maximality* requirement in the definition of possibilities is important here. It ensures that the possibility expressed by $p \rightarrow q'$ is the denotation of the material conditional; also that the denotation $p \rightarrow q'$ includes the non-antecedent worlds.

Groenendijk and Stokhof

References