Presuppositions

1 On Monday ...

- Conversational implicatures are consequences of a cooperative principle that the discourse participants follow the conversational maxims (Quantity, Quality, Relevance, Manner)
- Unlike entailments, implicatures are cancellable.
- Scalar implicatures (see Sauerland 2012 for a review)
  - Lexical approach
  - Pragmatic approach
  - Grammatical approach

2 Scalar implicatures in downward-entailing contexts

- Scalar implicatures are not evoked in (1a) and (2a).

  (1) Under the semantic scope of negation
  a. John didn’t invite Andy or Billy.
     i. × Not that [John invited Andy or Billy but not both].
     ii. √ Not that [John invited Andy or Billy or both].
  b. Andy or Billy wasn’t invited by John.

  (2) In the antecedent of a conditional
  a. If John read some of the books, he will get full credits.
     i. × If John read some but not all of the books, he will ...
     ii. √ If John read at least of the books, he will ...
  b. If John hands in the homework by tomorrow, he will get some of the credits.

- The scale of strength is reversed in downward-entailing context. For instance, the exclusive reading of or is stronger in positive statements, whereas the inclusive reading is stronger in negative statements.

  (3) a. \( p \vee_{\text{excl}} q \Rightarrow p \vee_{\text{incl}} q. \)
      b. \( \neg[p \vee_{\text{incl}} q] \Rightarrow \neg[p \vee_{\text{excl}} q]. \)

(4) Maximize Strength Hypothesis

In a sentence that contains a scalar clause, the strengthening of the scalar clause is licensed only if this strengthening operation does not weaken the meaning of the entire sentence.
3 Presupposition

3.1 Presuppositions and presupposition triggers

• The possessive phrases (a presupposition trigger) trigger an existential inference that “John has a daughter” (a presupposition). In conversations, this existential inference is taken for granted (i.e., being part of the background).

(5) a. John’s daughter will come.
    b. John’s daughter won’t come.

• More presupposition triggers:

(6) a. John knows that Mary hates Bill. 
    b. Mary hates Bill. 

(7) a. John is happy that Mary agrees to marry him. 
    b. Mary agrees to marry John.

(8) a. Mary bakes cookies again. 
    b. Mary has baked cookies before.

(9) a. The student is smart. 
    b. There is an unique student in the context.

(10) a. It was JOHN who broke the computer. 
    b. Someone broke the computer.

(11) a. She is brave! 
    b. The person pointed at is a female.

Exercise: Find out the presupposition triggers in the following sentence:

(12) He is surprised that even the neighbor whom he met only in the parking lot is willing to help his son.

3.2 Presupposition projection

• If \( \phi \) presupposes \( p \), the presupposition \( p \) is inherited by “\( \neg \phi \)”, “if \( \phi \), then \( \psi \)”, “perhaps \( \phi \)” and “\( \phi \)”.

(13) a. John’s daughter is coming.
    b. John’s daughter is not coming.
    c. If John’s daughter is coming, then we will have a party tonight.
    d. Perhaps John’s daughter is coming.
    e. Is John’s daughter coming?

Presupposition: John has a daughter.

Exercise: Use the projection test, demonstrate that an it-cleft triggers an existential presupposition.
Exercise: Identify whether the presupposition of “John’s daughter is coming” is projected in each of the following complex sentences or not.

(14)  a. If the train arrives on time, then John’s daughter is coming.
    b. If John has a daughter, then his daughter is coming.
    c. Either John’s daughter is coming, or John doesn’t have a daughter.

Discussion: Both (a-b) yield the inference (c). Based on the projectability of presuppositions, can we conclude that (c) is a presupposition of (a) and (b)? Why or why not?

(15)  a. All of the students left.
    b. Not all of the students left.
    c. Some of the students left.

3.3 Presupposition accommodation

- A presupposition of a sentence must normally be part of the common ground of the utterance context in order for the sentence to be felicitous. This process of an addressee assuming that a presupposition is true (even in the absence of explicit information that it is), is called presupposition accommodation.
- If the presupposition cannot be properly accommodated (i.e., the presupposition is not true in the common ground), then we say that there is a presupposition failure.

(16)  a. # John’s daughter is coming, but John doesn’t have a daughter.
    b. [There are two TFs for LING 106.] # The TF of LING 106 is very helpful.

- In third-value logic, if a sentence suffers a presupposition failure, its value is ‘#’ (undefined).

(17) If \( p \) is a presupposition of \( \phi \), then \( \phi \) is undefined whenever \( p \) is not true.

<table>
<thead>
<tr>
<th>( p )</th>
<th>( \phi_p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 or 0</td>
</tr>
<tr>
<td>0</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>#</td>
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- We know that presuppositions project over negation. But, in the following sentence, the presuppositions from the negative clause isn’t true. Why is it that this sentence is felicitous?

(18) John’s daughter is not coming, since John doesn’t have a daughter.

The existential presupposition of John’s daughter is accommodated under the semantic scope of negation.

(19)  a. # John has a daughter, and it is not the case that [his daughter is coming], since he doesn’t have a daughter.  
     Global accommodation
    b. \( \sqrt{\text{It is not the case that [John has a daughter and his daughter is coming]}, \text{since he doesn’t have a daughter.}} \)  
     Local accommodation
4 Distinguish presuppositions, entailments, and implicatures

• Definitions:
  – *p entails q* (written as “$p \Rightarrow q$”) means: whenever $p$ is true, $q$ is true.
  – *p presupposes q* (written as “$pq$”) means: $q$ is backgrounded and taken for granted by $p$.
  – *p (conversationally) implicates q* means: $q$ follows from the interaction of the truth conditions of $p$ together with general principles of conversational exchange.

• If $p$ has an inference $q$, we can use the following tests to identify whether $q$ is an entailment/ presupposition/ implicature of $q$.
  – Contradiction test
    If $p$ entails $q$, then “$p$ but not $q$” should be intuitively contradictory.
  – Projection test
    If $p$ presupposes $q$, then $q$ should be inherited by “not $p$”, “if $p$, then $r$”, “perhaps $p$” and “$p?$”
  – Cancellability test
    If $p$ conversationally implicates $q$, then $q$ should be cancellable.

Exercise: In each of the following examples, the *a* sentence presupposes and/or entail the other sentences. Specify which sentence is a presupposition, which is a simple entailment, and which is both an entailment and a presupposition. (C&M 2000: pp. 32)

(20) a. That John was assaulted scared Mary.
    b. Mary is animate.
    c. John was assaulted.
    d. That John was assaulted caused fear in Mary.
(21) a. That John was assaulted didn’t scare Mary.
    b. Mary is animate.
    c. John was assaulted.
    d. That John was assaulted didn’t cause fear in Mary.