

## APPENDIX to Lecture 7: Implicatures, Presuppositions, Etc.

### Some definitions of the distinctions among entailments, semantic and pragmatic presuppositions, conversational implicatures, and conventional implicatures.

As you read about expressives, you will see debates about whether they should be classified together with presuppositions or not, and you will see from those debates that not everyone agrees what the defining characteristics of the various classes are. Let's collect some definitions or partial characterizations for reference. We may refine them in later lectures.

**1. Entailment:** A sentence *A* entails sentence *B* iff every situation that makes *A* true makes *B* true (or: in all possible worlds *w*, if *A* is true in *w*, then *B* is true in *w*).

This definition is standard and uncontroversial. You will find it in every textbook of modern logic and of formal semantics. Note that it assumes that *A* and *B* are unambiguous, so it should be understood as relativized to a particular analysis of each sentence. And if the sentences contain context-dependent elements, they should be evaluated in the same context, with the same assignment of values to their context-dependent elements.

Entailment is the central notion in truth-conditional semantics. Whenever we see a contrast between semantics – what a sentence literally says, its semantic content – and pragmatics, you can be sure that the entailments of a sentence are part -- a central part -- of its semantics.

Some properties of and tests for entailment:

- Non-cancellability: entailments cannot be cancelled.
- Entailments are properties of sentences (but they must be disambiguated sentences which express complete propositions); entailments of utterances are derivative from entailments of sentences.
- Conventionality: entailments are part of the conventional meaning of linguistic expressions.
- Behavior under negation etc: The entailments of a sentence are in general NOT preserved under negation. (Of course some of them may happen to be; but some will be negated. What happens under negation, in *if-then* sentences, etc., is all determined by the normal principles of logic.)
- Anti-backgrounding: The point of asserting a sentence is to add its entailments to the common ground. While some of the entailments of a sentence may already have been part of the common ground, they shouldn't all be, or the sentence would be totally uninformative.
- Non-detachability. If you replace some words or phrases by others with identical semantic content, the entailments will not change, since by definition the entailments depend only on the truth-conditional content of the sentence.

**2. Conversational implicature:** An utterance *A* in context *c* conversationally implicates proposition *p* iff use of *A* in the given context pragmatically implies *B* by virtue of conversational maxims.

Since the term was invented by Grice in the 1960's, the definition remains closely connected with Grice's theory of conversational maxims. Conversational implicatures are uncontroversially on the pragmatic side of the semantics-pragmatics border.

Some properties of and tests for conversational implicatures:

- Cancellability: conversational implicatures can be cancelled by adding some explicit material. (This is generally true for pragmatic inferences.)
- Conversational implicatures are not properties of sentences, but of utterances of sentences in context.
- Non-detachability: Conversational implicatures are calculated on the basis of the content of what is said, not on its linguistic form, so you can't remove them just by changing the choice of words used – if the literal semantic content stays the same, the implicatures will stay the same. (This isn't true for presuppositions or for conventional implicatures.)
- Non-conventionality: Conversational implicatures are not part of the conventional meaning of linguistic expressions. (In fact you have to know the conventional meaning of a sentence before you can compute its implicatures in a given context.)
- Calculability: Conversational implicatures can be calculated from the literal meaning plus the co-operative principle and the conversational maxims.
- Reinforceability: (Sadock 1978) Conversational implicatures seem to be the only kind of semantic or pragmatic inferences that are freely reinforceable – that is, you can conjoin an overt statement that says the same as some implicature without getting any feeling of redundancy. (*some but not all; A or B or both; etc.*)
- Not backgrounded: Conversational implicatures arise from the making of utterances; they are not assumed to be part of the conversational background or common ground.
- Behavior under negation etc: unpredictable. Since conversational implicatures are calculated based on the whole content of what was said in the given context, they can't easily be thought of as occurring "under" negation etc.

**3. Semantic presupposition:** A sentence *S* presupposes a proposition *p* if *p* must be true in order for *S* to have a truth-value (to be true or false). \*Note that this requires that we allow some sentences to lack a truth-value.

Some properties of and tests for semantic presuppositions:

- Non-cancellability. Semantic presuppositions are non-cancellable, since if they do not hold, the semantic value of the sentence cannot even be computed.
- Semantic presuppositions are properties of sentences.
- Conventionality: semantic presuppositions are part of the conventional meaning of words and constructions.
- Backgrounded: For a sentence to be usable in a given context, its semantic presuppositions should already be part of the conversational background or common ground, though it may also be easy for the hearer to *accommodate* them.
- Behavior under negation etc: Semantic presuppositions are preserved under negation, in questions, in *if*-clauses. See discussion of plugs, holes, filters (introduced in (Karttunen 1973); see (Kadmon 2001, Chapter 5)) and the whole topic of "presupposition projection".
- Detachability: truth-conditionally equivalent words and phrases *can* have different semantic presuppositions.
- Non-independence from at-issue meaning: Normally presuppositions have to be true as a precondition for the truth (or falsity) or general admissibility of the at-issue meaning.

#### 4. Pragmatic presupposition:

**Backgrounding definition:** An utterance *A* in context *c* pragmatically presupposes proposition *p* if *p* is backgrounded and taken for granted by the speaker in *c*.

**The “appropriateness in context” definition:** An utterance *A* in context *c* pragmatically presupposes proposition *p* iff *A* is appropriate in *c* only if *p* is in the common ground (is mutual knowledge of the speaker and hearer) in context *c*.

This definition is from (Levinson 1983), citing work by Stalnaker, Kempson, Lycan and others. The following definition is very similar.

**Precondition for felicitous utterance:** Kadmon (2001) uses the following definition from (Chierchia and McConnell-Ginet 1990, p.283): The hallmark of a presupposition is that it is taken for granted in the sense that its assumed truth is a precondition for felicitous utterance of the sentence and places a kind of constraint on discourse contexts that admit the sentence for interpretation.

Note that the definition above is offered as a definition for *presuppositions in general*, reflecting a view that once we have a dynamic semantic theory like Kamp’s and Heim’s, we may not need to worry so much about the semantics-pragmatics distinction.

Some properties of and tests for pragmatic presuppositions:

- Cancellability? Pragmatic presuppositions are more cancellable than semantic presuppositions, but probably less cancellable than conversational implicatures – it’s not a totally clear property. Whether a presupposition is cancellable depends in part on its source.
- Pragmatic presuppositions are properties of utterances.
- Conventionality: pragmatic presuppositions may or may not be lexically triggered – some are, some are not. (See (Kadmon 2001), Section 11.1, Conventional triggering vs. conversational triggering.)
- Backgrounded: For a sentence to be appropriate in a given context, its pragmatic presuppositions should already be part of the conversational background or common ground, though it may also be easy for the hearer to *accommodate* them.
- Behavior under negation, etc: The “S-family” tests apply to semantic and pragmatic presuppositions alike, as do the notions of plugs, holes, and filters.
- Non-independence from at-issue meaning: Normally presuppositions have to be true as a precondition for the truth (or falsity) or general admissibility of the at-issue meaning.
- Detachability: truth-conditionally equivalent words and phrases *can* have different pragmatic presuppositions, in the cases where they are lexically triggered.

**5. Conventional implicature:** part of the meaning of a word or construction but not part of its truth-conditions. An implicature which arises from the particular choice of words or syntax, rather than from conversational maxims. See (Potts 2002, 2005, to appear). Potts argues that these are fully semantic, not pragmatic, and are a species of entailments, but on a separate dimension, independent of “at-issue” meaning.

Some authors – especially earlier -- have equated conventional implicature with presupposition, but conventional implicatures can add new information; see Potts (2005, to appear).

Some properties of and tests for conventional implicatures (Potts):

- Non-cancellability. Conventional implicatures are commitments, and give rise to entailments, though separate from the “at-issue” entailments of a sentence.
- Conventionality: Conventional implicatures are by definition part of the conventional meaning of a word or construction.

- Detachability: most conventional implicatures *are* detachable, since they come from specific words or constructions and not just from the truth-conditional content of what is said. So substituting a semantically equivalent word or expression can result in changes in conventional implicatures.
- Speaker-orientation: The commitments made via conventional implicatures are made by the *speaker* of the utterance, and except in special circumstances remain ‘speaker-oriented’ even when embedded.
- Independence from at-issue meaning: conventional implicatures are logically and compositionally independent of at-issue meaning.
- Behavior under negation, etc: Since conventional implicatures are independent from at-issue meaning, and are (almost) always ‘speaker-oriented’, they normally survive under negation, in *if*-clauses, etc.
- Non-backgrounding: Conventional implicatures are not generally assumed to be part of the conversational background; they often give new, “supplementary”, information.

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