Semantics 1 section - Week 4

Truth conditional relations

- The truth-conditional relations *entailment, equivalence, contraries, contradictories* are on the middle layer of the cake (so they are part of the literal, at-issue content of a sentence).

<table>
<thead>
<tr>
<th>Relation</th>
<th>Truth conditions</th>
<th>Entailments</th>
<th>All of these are truth-conditional. They can be broken down to entailment</th>
</tr>
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<tbody>
<tr>
<td>Entailment</td>
<td>A → B</td>
<td>A entails B</td>
<td></td>
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<tr>
<td>Equivalence</td>
<td>A ↔ B</td>
<td>A entails B and B entails A. (Bidirectional entailment)</td>
<td></td>
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<tr>
<td>Contraries</td>
<td>A → ¬B</td>
<td>A and B entail each other’s negation.</td>
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<tr>
<td>(Opposites)</td>
<td>B → ¬A</td>
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<tr>
<td>Contradictories</td>
<td>A ↔ ¬B</td>
<td>A and B are equivalent with each other’s negation.</td>
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<tr>
<td></td>
<td>B ↔ ¬A</td>
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</tbody>
</table>

**Entailment**

**CONTRADICTION TEST**

- To see if something is entailed, check if its opposite is coherent.

  1. a. *Kim lied to Robin.*
     b. *Kim said something to Robin that wasn’t true.*

  2. a. *Jane ate oatmeal for breakfast this morning.*
     b. *Jane had breakfast this morning.*

- Test if (1a) can be true, while (1b) is false.
Implicatures

- # Kim lied to Robin, but what they said was true.
- That is incoherent (it creates a contradiction), so (1a) entails (1b).
- The hashtag in front of the sentence indicates that it’s incoherent.

Non-literal implicated meaning: Implicatures
- The cream topping on the cake of meaning.
- Examples of implicatures:
  3. a. Mary used to swim daily.
     b. Mary doesn’t swim daily any more.
   4. a. Most students like their major.
     b. Not all students like their major.
- In (2) and (3), (a) implicates (b).
- A implicates B, iff you can understand B from A, but A doesn’t entail B.

Implicatures are not entailed

DEFEASIBILITY TEST
- Implicatures are defeasible. They can be undone. They do not pass the entailment test.
  - ✔ Mary used to swim daily and she still does. (3a), but not (3b)
  - ✔ Mary used to swim daily. I wonder if she still does.
  - ✔ Most students like their major and (in fact) all of them do. (4a), but not (4b)
  - ✔ Most students like their major. I wonder if all of them do.
  - So, (3a) doesn’t entail (3b), (4a) doesn’t entail (4b).
- Entailments are not defeasible, as we know from the entailment-test.
  - # Kim lied to Robin and they said the truth.
  - # Kim lied to Robin. I wonder if they said the truth.
  - # Jane ate oatmeal for breakfast this morning and she didn’t have breakfast this morning.
  - # Jane ate oatmeal for breakfast this morning. I wonder if she had breakfast this morning.
REINFORCEMENT TEST

- Implicatures can be reinforced (they can be explicitly stated in the following discourse):
  
  • ✔ Mary used to swim daily but she no longer does.
  
  • ✔ Most, but not all students like their major.
  
- Entailments cannot be reinforced:
  
  • # Mary lied to Robin and she didn’t say the truth.
  
  • # Jane ate oatmeal for breakfast this morning, and she had breakfast this morning.

Implicatures and conversational maxims

- Implicatures aren’t part of the literal content. They arise in context. How?

  • The cooperative principle:

    Participants in a conversation are cooperating to achieve a conversational goal (e.g. information exchange, relationship building, resolving issues).

  • Reasoning about the speaker’s intention:

    To know what a speaker meant in a given situation, the hearer tries to figure out why the speaker said what they said (as opposed to something else).

  • Alternative utterances

    Things that the speaker could have said, but didn’t.

- Implicatures arise when a maxim of the cooperative principle is flouted.

- Flouting a maxim:

  It is obvious in the context that the speaker could have said something more truthful, informative or relevant, or could have said things in different way to be more cooperative. Implicature: They must have had a reason that they didn’t.

Different kinds of implicatures

- Conversational maxims: Participants in a conversation (generally) operate under the assumption that the other participants:
  
  • Say what they believe to be true. (Quality)
  
  • Are as informative as possible. (Quantity I)
Implicatures

- Are only as specific as necessary. (Quantity II)
- Say things that are relevant to the conversation. (Relevance)
- Say things in a way that helps the purpose of communication. (Manner)

**Flouting** maxims leads to implicatures:

“This happens when what a cooperative speaker says so patently violates a maxim that the hearer must infer that the speaker means something different.” (Davis, Wayne, “Implicature”, The Stanford Encyclopedia of Philosophy (Fall 2014 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2014/entries/implicature/>)

- **Quality implicatures:**
  - Irony, Sarcasm, the opposite game

- **Quantity implicatures:**
  - Examples (3) and (4) above, “It is what it is.”

- **Relevance implicatures:**
  - “Do you know the time?”, “Can you pass the salt?”

- **Manner implicatures:**
  - e.g. whispering, shouting, code-switching