Introduction
Generalized Quantity implicatures
Outlook

Pragmatics & Game Theory
Session 2: Conversational Implicature

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WiSe 13/14
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Tasks
- Weekly homeworks (submitted on ILIAS before class!!!)
- Course attendance
- Graded Schein: Final written exam

Relevance: Final exam/Ungraded Schein preconditions
- Manner: Maximal missing two times
- Quantity: Submitting all homeworks
- Quality: Minimal 80% of total homework score
Course Info

Web Access

- Homepage:
  http://www.sfs.uni-tuebingen.de/ roland/PGT1314
- ILIAS: WS 2013-1014 → Philosophische Fakultät → AS/CL → P&GT (Password: swordfishpgt)
- Note: homeworks have to be submitted on the ILIAS platform

Completing attendance list
Small Example from Monty Python’s ‘Life of Brian’.

- They took everything we had, and not just from us, but from our fathers... and what have they ever given us in return?
- +++ definitely/obviously nothing! (Rhetorical question)
- Apart from the sanitation, the medicine, education, wine, public order, irrigation, walls, the fresh water system and public health - What have the romans ever done for us?
- +++ definitely/obviously nothing! (Rhetorical question)
Homeworks Question 1

What are the five important contributions of conversational implicatures according to Levinson (pp. 97-100)?

1. Implicature stands as a paradigmatic example of the nature and power of pragmatic explanation of linguistic phenomena
2. Implicature provides some explicit account of how it is possible mean more than what is actually said
3. The notion of implicature seems likely to effect substantial simplification in both the structure and the content of semantic description
4. Implicature seems do be simply essential if facts of language are to be accounted for properly, e.g. it puts constraints in what can be possible lexical item in natural languages
5. The principles that generate implicatures have a very general explanatory power: a few basic principles provide explanations for a large array of apparently unrelated facts
Homeworks Question 2

What are the Gricean maxims of conversation? What do they specify?

**Conversational Maxims**

**Quality:** Make your contribution true; do not convey what you believe false or unjustified.

**Quantity:** Be as informative as required.

**Relevance:** Be relevant.

**Manner:** Be perspicuous; avoid obscurity and ambiguity and strive for brevity and order.

They specify what participants have to do in order to converse in a maximally efficient, rational, co-operative way.
Homeworks Question 3

Name at least five linguistic phenomena that can be explained by implicatures.

- multiple meaning of function words like conjuncts metaphors (X and (then) Y)
- patent falsehood, irony (Steve is a real genius, England rules the sea)
- rhetorical questions (They took everything we had, and not just from us, but from our fathers... and what have they ever given us in return? What have the romans ever done for us?)
- obvious tautologies (War is war. Kids are kids.)
Homeworks Question 4

What are the four characteristics of implicatures according to Grice?

1. **Non-conventionality:** Not part of the expression’s meaning but part of the truth condition.
2. **Cancellability:** Implicatures can be denied without self-contradiction.
3. **Non-detachability:** Any way you had expressed the proposition you uttered would have given rise to the same implicatures.
4. **Calculability:** You can trace a line of reasoning leading from the utterance to the implicature.

**Example 8**

I broke a finger yesterday. \(\rightarrow\) It was one of mine.

I broke a finger yesterday, it was Mike Tyson’s finger.

**Example 9**

I broke a digit yesterday. \(\rightarrow\) It was one of mine.
Homeworks Question 5

What linguistic levels must be referred to in the derivation of an implicature?

- In general: the semantic representation or logical form of the utterance, together with the attendant truth conditions. As an exception the maxim of manner makes essential reference to the surface of the utterance.

In what ways differ conventional from conversational implicatures?

- In their characteristics: they are non-cancellable, detachable, non-calcuable, conventional
Signification subtypes

- total signification
  - said
  - implicated
    - conventionally
    - conversationally
      - generalized
      - particularized

Abbildung: Grice’ suggestion of a partial picture of signification subtypes (Levinson 2000)
Example 1-3

A: Can you tell me the time?

-> of the present moment, as standardly indicated on a watch, and if so please do so tell me.

B: Well, the milkman has come.

-> No, I don’t know the exact time of the present moment, but I can provide some information from which you may be able to deduce the approximate time, namely...

A: Generalized, Quantity
B: Particularized, Relevance
Example 4 and 5

Example 4

A: The lone ranger jumped on his horse and rode into the sunset.

$\Rightarrow$ First he jumped on his horse and then he rode into the sunset.

Example 5

A: The capital of France is Paris and the capital of England is London.

Conventional
Example 8 and 9

**Example 8**

A: The flag is white.

$\Rightarrow$ completely white.

**Example 9**

A: The flag is white, red and blue.

$\Rightarrow$ not completely white.

Generalized, Quantity
Example 10 and 12

Example 10-11

A: It is possible that there’s life on Mars.

$\Rightarrow$ It is possible that there is no life on Mars.

Example 12

A: It is possible that there’s life on Mars, and in fact it is now certain that there is.

Conventional
Example 18

A: Where’s Bill?

B: There’s a yellow VW outside Sue’s house.

$\Rightarrow$ Bill has a yellow VW, thus he is probably at Sue’s house.

Particularized, Relevance
Example 19

A: I’ve just run out of petrol.

B: There’s a garage just around the corner.

$\Rightarrow$ The garage is (probably) open so you may obtain petrol there.

Conversational, Relevance
Example 20

A: Let’s get the kids something.

B: Okay, but I veto I-C-E-C-R-E-A-M-S.

$\rightarrow$ and I don’t want to mention the word ice-cream in presence of the children.

Conversational, Manner
Example 24

A: Nigel has fourteen children.

+> and not more, but exactly fourteen.

Generalized, Quantity (Scalar Implicature)
Example 26

A: How did Harry fare in court the other day?
B: Oh, he got a fine.

$\Rightarrow$ He didn’t get also something much worse like life sentence.

Generalized, Quantity
Example 27

A: Pass the salt.

+ > Now.

Generalized, Relevance
Example 29

A: Open the door.

$\Rightarrow$ Open the door in a normal way.

Example 30

A: Walk up to the door, turn the door handle clockwise as far as it will go, and then pull gently towards you.

$\Rightarrow$ Open the door in a specific way (e.g. more careful, silent).

Generalized, Manner & Quantity (Division of Pragmatic Labor)
Example 33

A: What if the USSR blockades the Gulf and the oil?
B: Oh come on, Britain rules the seas!

$\Rightarrow$ There is nothing that Britain could do.

Particularized, Quality (Irony)
Example 36

A: Was Mussolini going to be moderate?

+> Definitely not!

Particularized, Quality (Rhetorical question)
Example 38

A: Either John will come or he won’t.

$\Rightarrow$ calm down, there’s no point in worrying about whether he’s going to come because there’s nothing we can do about it.

Generalized, Quantity (Tautology)
Example 41

A: I do think Mrs Jenkins is an old windbag, don’t you?

B: Huh, lovely weather for March, isn’t it?

--> Hey, watch out, her nephew is standing right behind you.

Particularized, Relevance
Example 43

A: Miss Singer produced a series of sounds corresponding closely to the score of an aria from Rigoletto.

+> Open the door in a normal way.

Example 44

A: Miss singer sang an aria from Rigoletto.

+> Open the door in a specific way (e.g. more careful, silent).

Generalized, Manner & Quantity (Division of Pragmatic Labor)
Grice stated a general pattern for working out an implicature $q$ from an utterance $p$ (between speaker $S$ and hearer $H$):

- $S$ has said that $p$
- there's no reason to think $S$ is not observing the maxims, or at least the co-operative principle
- in order for $S$ to say $p$ and be indeed observing the maxims or the co-operative principle, $S$ must think that $q$
- $S$ must know that it is mutual knowledge that $q$ must be supposed if $S$ is to be taken to be co-operating
- $S$ has done nothing to stop $H$ thinking that $q$
- therefore $S$ intends $H$ to think that $q$, and in saying that $p$ has implicated $q$
Quantitative Implicature

Q₁: Make your contribution as informative as required.
Q₂: Don’t make your contribution more informative than required.
Signification subtypes

- Total signification
  - Said
    - Conventionally
      - Generalized
    - Conversationally
      - Particularized

Abbildung: Grice' suggestion of a partial picture of signification subtypes (Levinson 2000)
Scalar Implicature: Linguistic Scale

Linguistic Scale

Set of linguistic alternates, or contrastive expressions of the same grammatical category, which can be arranged in a linear order by degree of informativeness or semantic strength: \(\langle e_1, e_2, ..., e_n \rangle\)

- whereby \(e_i\) is a linguistic expression or scalar predicate
- for a sentential frame \(A\) it holds that \(A(e_i)\) entails \(A(e_j)\) if and only if \(i < j\)

Example:

- \(\langle \text{all}, \text{some} \rangle\) is a semantic scale: \(A(\text{all})\) entails \(A(\text{some})\)
- All boys came to the parts \(\Rightarrow\) Some boys came to the party.
Scalar Implicature: Definition

Scalar Implicature

Given any scale of the form \( \langle e_1, e_2, ..., e_n \rangle \). If the speaker asserts \( A(e_i) \) then for all \( j < i \) he implicates \( \neg A(e_j) \).

Scale \( \langle \text{all, some} \rangle \)

\( A(\text{all}) \Rightarrow A(\text{some}) \):
All boys came to the party. \( \Rightarrow \) Some boys came to the party.

\( A(\text{some}) \Rightarrow \neg A(\text{all}) \):
"Some boys came to the party" \( \Rightarrow \) Not all boys came to the party.
Scalar Implicature: Examples

- \langle \text{all, many, some} \rangle: \text{some} \rightarrow \text{not many/all}; \text{many} \rightarrow \text{not all}
- \langle \text{and, or} \rangle: \text{or} \rightarrow \text{not and (both)}
- \langle n, \ldots 3, 2, 1 \rangle: 2 \rightarrow \text{not 3, not 5 \ldots not } n
- \langle \text{excellent, good} \rangle: \text{good} \rightarrow \text{not excellent}
- \langle \text{always, often, sometimes} \rangle
- \langle \text{succeed V-ing, try to V, want to V} \rangle
- \langle \text{certain that } p, \text{ probable that } p, \text{ possible that } p \rangle
- \langle \text{must, should, may} \rangle
- \langle \text{love, like} \rangle
- \langle \text{none, not all} \rangle
Scalar Implicature: Derivation

How a Scalar Implicature derives

Given a scale $\langle e_1, e_2, ... e_n \rangle$. The speaker $S$ has said $A(e_i)$. If $S$ was in a position to state that a stronger item on the scale holds - i.e. to assert $A(e_j)$ with $j < i$ - then he would violate the first maxim of Quantity if he asserted $A(e_i)$. Since assuming $S$ as cooperating and not violating a maxim, I assume $S$ of not being in the position to state that the stronger item $e_j$ on the scale holds.

Note:

- We defined: $j < i \Rightarrow A(e_i) +> \neg A(e_j)$
- But more concretely: $j < i \Rightarrow A(e_i) +> K

Strong inference: $j < i \Rightarrow A(e_i) +> K \neg A(e_j)$
- Weak inference: $j < i \Rightarrow A(e_i) +> \neg KA(e_j)$
Clausal Implicature: Definition

Clausal Implicature

If $S$ asserts a complex expression $B(p)$ that contains an embedded sequence $p$, but $B(p)$ neither entails nor presuppose $p$ and there an alternative expression $C(p)$ that contains $p$ such that it entails or presuppose $p$, then by asserting $B(p)$ rather than $C(p)$, $S$ implicates that he doesn’t know whether $p$ is true, he implicates $Pp \land P\neg p$. 
### Clausal Implicature: Examples

Examples:

<table>
<thead>
<tr>
<th>Stronger Form ( C )</th>
<th>Weaker form ( B )</th>
<th>Implicature of ( B )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C(p) ): 'A knows ( p )'</td>
<td>( B(p) ): 'A believes ( p )'</td>
<td>( Pp, P\neg p )</td>
</tr>
<tr>
<td>( C(p) ): 'A realizes ( p )'</td>
<td>( B(p) ): 'A thought ( p )'</td>
<td>( Pp, P\neg p )</td>
</tr>
<tr>
<td>( C(p) ): 'A revealed ( p )'</td>
<td>( B(p) ): 'A said that ( p )'</td>
<td>( Pp, P\neg p )</td>
</tr>
<tr>
<td>( C(p) ): 'necessarily ( p )'</td>
<td>( B(p) ): 'possibly ( p )'</td>
<td>( Pp, P\neg p )</td>
</tr>
<tr>
<td>( C(p, q) ): '( p ) and ( q )'</td>
<td>( B(p, q) ): '( p ) or ( q )'</td>
<td>( Pp, Pq, P\neg p, P\neg q )</td>
</tr>
<tr>
<td>( C(p, q) ): 'since ( p, q )'</td>
<td>( B(p, q) ): 'if ( p, q )'</td>
<td>( Pp, Pq, P\neg p, P\neg q )</td>
</tr>
</tbody>
</table>
Example

Example 1
A: The food is good, in fact it is excellent.

Example 2
A: *This guy if tall, in fact short.

What is the difference between these examples? What makes the difference?
'good' \(\rightarrow\) 'not excellent', but it can be canceled
'tall' \(\rightarrow\) 'not short', and cannot be canceled
Resume and Outlook

Resume

- The theory of scalar and clausal implicature helps to avoid the proliferation of hypothetical multiple meanings promoted by apparent ambiguities.
- The theory of scalar and clausal implicature can allow the semantics to maintain relatively simple logical analyses supplemented by implicature.

Outlook

- Understand the concept of two types of generalized quantity implicature: scalar and clausal implicature
- Homework: Read "Pragmatics" (Levinson 1983): Chapter 3.2.4 (pages 132 - 147) and answer 6 questions that guide you through the chapter