# Einführung in Pragmatik und Diskurs

## Implicatures

Ivana Kruijff-Korbayová
*korbay@coli.uni-sb.de*
*http://www.coli.uni-saarland.de/courses/pd/*

Summer Semester 2005

---

## Conversational Implicatures

Lecture Plan:

- What is said vs. what is implicated

- Cooperative principle and conversational maxims

- Conversational implicatures arising from observing or floating the maxims

Basic reading:

- Levinson 1983, Chapter 3
- Davis 1991, Chapter 5

---

(1)  Advertisement for tea: poster with text
*It's the taste.*
Wegen dem Geschmack.

(2)  A: *Why didn't you eat your lunch?*
B: *It's the taste.*
A: Warum isst du dein Mittagsessen nicht?
B: Wegen dem Geschmack.

---

## Grice's Theory of Meaning

(Grice 1957)

Communication is a complex kind of intention that is achieved or satisfied just by being recognized.

- $S$ has a *communicative intention*, i.e. an intention to cause some effect $Z$ in $H$ (e.g., that $H$ thinks/believes/does something)

- communication is successful iff $H$ recognizes this communicative intention, i.e., if it becomes *mutual knowledge* between $S$ and $H$.

$\Rightarrow$ **not all** inferences that can be drawn from what is said and all the knowledge of the world that a participant has, are part of its meaning. Only those intended by the speaker are. This is because communication involves *intention* and *agency*.

# Communicative Intention

*S meant Z by uttering U iff S intended:*

*(i) U to cause some effect Z in H.*
*(ii) (i) to be achieved simply by H recognizing that intention.*

*S=Speaker, H=Hearer, U=Utterance, Z=some belief or volition invoked in H*

- How does $H$ recognize $S$'s comm. intention?
  - Not only by knowledge of some convention, because $U$ means $Z$ by fact that $S$ **wants** $U$ **to mean** $Z$
  - By taking into account not only meaning of $U$ but also the mechanisms which may cause a divergence between (literal) meaning of $U$ and what is communicated by $U$ in a particular context.

# Communicative Content

Broad understanding of *meaning* includes:

- *natural meaning* (also: literal meaning, sentence meaning, conventional content, what is said)

- *non-natural meaning* (also: meaning-nn, speaker meaning, ironic, metaphoric and implicit or indirect communicative content)

Grice also explains discrepancies between sentence meaning and speaker meaning, e.g. *Linguistics is fascinating.* can mean *Linguistics is deadly boring.*

The inferences that are **intended by the speaker** are called **implicatures** by Grice. Grice distinguishes

- conventional implicatures
- conversational implicatures

# Grice's theory of conversational implicatures

- Lecture 1967; Publications 1975, 1978

- Theory about how people **use** language.

- Basic claim: there is a set of guidelines for **effective and rational use of language**

- Guidelines =
  A general **cooperative principle** +
  Four **maxims of conversation**.

# The Cooperative Principle

Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.

**Das Kooperationsprinzip** Gestalte deinen Beitrag zur Konversation so, wie es die gegenwärtig akzeptierte Zweckbestimmung und Ausrichtung des Gesprächs, an dem du teilnimmst, erfordert.

# The Cooperative Principle
# Conversational Maxims

**Conversational maxims** are postulates that further define the cooperative principle:

1. **Quality:** Try to make your contribution one that is true, specifically:
   (i) do not say what you believe to be false
   (ii) do not say that for which you lack evidence

2. **Quantity:**
   (i) Make your contribution as informative as is required for the current purposes of the exchange
   (ii) Do not make your contribution more informative than is required.

3. **Relevance:** Make your contribution relevant

4. **Manner:** Be perspicuous, specifically:
   (i) avoid obscurity
   (ii) avoid ambiguity
   (iii) be brief (avoid prolixity)
   (iv) be orderly

# Kooperationsprinzip
# Konversationsmaxime

Richtlinien für den effizienten und wirkungsvollen Sprachgebrauch, als Grundlage jeden Gesprächs.

1. **Qualitätsmaxime:** Versuche, deinen Beitrag wahr zu gestalten, genauer:
   (i) Sage nichts, was du für falsch hälst.
   (ii) Sage nichts, wofür du keinen Beweis hast.

2. **Quantitätsmaxime:**
   (i) Gestalte deinen Beitrag so informativ wie für die gegenwärtige Zweckbestimmung des Gesprächs nötig.
   (ii) Gestalte deinen Beitrag nicht mehr informativ als nötig.

3. **Relationsmaxime:** Mache deine Beiträge relevant.

4. **Maxime der Art und Weise:** Sei klar, genauer:
   (i) Vermeide Obskurität (Unklarheit)
   (ii) Vermeide Ambiguität (Mehrdeutigkeit)
   (iii) Fasse dich kurz (vermeide Prolixität)
   (iv) Sei methodisch (ordentlich)

# Conversational Implicatures

The Maxims generate inferences beyond the semantic content of utterances, which are made on the basis of utterance content and assumptions about cooperative nature of conversation.

Conversational implicatures (CIs) are inferences that are derived from (or: rely on)

i. **adherence** to the maxims = **standard** CIs
(Beobachtung von Maxime)

ii. **flouting** or exploiting the maxims
(Mißachtung von Maxime)

Conversational implicatures arise

- only in specific contexts = **particularized** CIs

- without any particular context or scenario being necessary = **generalized** CIs

# Conversational Implicatures

(3) A: *Where's Bill?*
    B: *There's a yellow VW outside Sue's house.*

(4) A: *Wo ist Willi?*
    B: *Vor Susannes Haus steht ein gelber VW.*

(5) A: *Wo ist Willi?*
    B: *Willi ist bei Susanne.*
    B': *Willi ist nicht bei Susanne.*

## Full Cooperation All the Time?

(6) A: *Where's Bill?*
B: *There's a yellow VW outside Sue's house.*

(7) A: *Wo ist Willi?*
B: *Vor Susannes Haus steht ein gelber VW.*

- An utterance may apparently violate maxims

- But Hearer (H) assumes Speaker (S) is being cooperative at some **deeper level**.

- H interprets what's said as conforming in some way (i.e. through the inferences called implicatures) to the maxims.

# Examples of conversational implicatures arising from observing or floating the maxims

## Generation of implicatures from the Maxims

- If maxims can be assumed by $H$ to be **observed** by $S$ but $S$ relies on $H$ to amplify what's said by inference, the inferences drawn are called **standard CIs**.

(8) A: *I am out of petrol.*
B: *There's a garage just around the corner.*
SCI: A may obtain petrol at the garage just around the corner.

(9) A: (zu einem Passanten): *Mir ist gerade das Benzin ausgegangen.*
B: *Oh, da vorne um die Ecke ist eine Garage.*
SCI: A may obtain petrol at the garage just around the corner.

## Generation of implicatures from the Maxims

- If $S$ **flouts** the maxims **in an obvious and deliberate way**, $H$ still assumes cooperation and draws the inferences needed to explain this violation. These are **non-standard CIs**. Many traditional figures of speech e.g. metaphor, irony, rhetorical questions arise in this way.

(10) A: *Let's get the kids something.*
B: *Ok, but I veto I.C.E. C.R.E.A.M.*

(11) A: *Lassen uns was für die Kinder kaufen.*
B: *Ja, aber keine E.I.S.*
Spelling words violates the maxim of Manner.
NSCI: B does not want ice-creams mentioned directly in front of the children.

# 1. Maxim of Quality: Observing

(12) *John has two PhDs.*

(13) *Peter hat zwei Doktortitel.*

SCI: $S$ believes John has two PhDs and has adequate evidence for it.

(14) ??*Peter hat zwei Doktortitel, aber das glaube ich nicht.*

(15) *Does your farm contain 400 acres?*

(16) *Hat Ihr Hof 400 Hektar?*

SCI: $S$ doesn't know whether it has and wants to know whether it has.
(And, $S$ believes $H$ does know.)

(17) ??*Ich weiss, wie groß Ihr Hof ist. Hat Ihr Hof 400 Hektar?*

# 1. Maxim of Quality: Flouting MQual

An utterance that is blatantly false violates MQual. Assuming Cooperation, an inference is drawn to establish implicit meaning of utterance in context.

(18) *Ich bin ein Berliner.*

(19) Said by a woman: *I am a man.*

(20) *I really like your haircut.*

Violation of MQual often leads to **metaphor** or **irony**. If cooperation not assumed, these would not work.

# 1. Maxim of Quality: Flouting MQual

**Irony**:

(21) *I really like your haircut.*

(22) A: *What if the Russians blockade the Gulf and all the oil?*

B: *Ah but Britain (surely) rules the sea!*

NSCI: Britain does not rule the sea and therefore cannot do anything against it.

(23) *A: Tehran is in Turkey isn't it teacher?*

*B: And London's in Armenia I suppose!*

(a patent falsehood)
NSCI: A's utterance is absurdly incorrect

(24) A: *Was geschieht, wenn Russland den Golf und das gesamte Öl blockiert?*

B: *Keine Sorge, Großbritannien beherrscht die Meere!*

(25) A: *Teheran liegt in der Türkei, Herr Lehrer*

B: *Und London liegt in Armenien, stimmt's?*

**Metaphor**:

(26) *Queen Victoria was made of iron.*

(27) *Königin Victoria war aus Stahl.*

(a category falsehood)
NSCI: Queen Victoria had some properties typical of iron.

(28) *The conference trade literally helped turn Brighton around.*

## 2. Maxim of Quantity: Observing MQuant

(29) *Nigel has four children.*
SCI: $S$ believes Nigel has no more than four children.

(30) *The flag is white.*
SCI: $S$ believes the flag is wholly white.

(31) *Hanna hat vierzehn Kinder.*
SCI: $S$ believes Hanna has no more than fourteen children.

(32) *Die Fahne ist weiß*
SCI: $S$ believes the flag is entirely white.

(33) A: Wie ist es Harald gestern vor Gericht ergangen?
B: Oh, er hat eine Geldstrafe bekommen
$S$ believes Harald did not get a more severe punishment than a fine.

## 2. Maxim of Quantity: Flouting MQuant

**Tautologies**

(34) *War is war.*

(35) *Krieg ist Krieg.*
NSCI: e.g., Terrible things happen in war, that's its nature and it's no good complaining.

(36) *Either Peter will come, or he won't.*

(37) *Entweder kommt Peter oder nicht.*

(38) *If Peter comes, he comes.*

(39) *Wenn Peter kommt, dann kommt er.*
NCSI: e.g., $S$ does not know whether Peter will come or not, and there is no reason to worry about it; just wait and see.

(40) *Wenn er es tut, dann tut er es.*

Tautologies can have communicative import. These utterances all have 'dismissive' impact. What exactly is predicted depends on the context, and it remains unclear how exactly to determine the inferences.

## 2. Maxim of Quantity: Flouting MQuant

(41) *I am here now.*
Literal meaning always true. In what way this utterance is informative depends on context. (cf. Relevance Maxim)

(42) *Are you here Peter?*
Answer to the literal meaning of the question always known (assuming visibility etc.). What $S$ actually seeks depends on context. (cf. Relevance Maxim)

(43) A: *Some politicians are corrupt.*
B: *Are there any politicians who are not?*
A question to which answer is known already (it's the implicature arising from A's utterance). Here, result is irony.

(44) A: *How did UM do yesterday?*
B: *They won.*
When winning was expected of UM, the answer does not provide any new information. NCSI: There is no more worth mentioning about UM's performance.

## 3. Maxim of Relevance: Observing MRel

(45) *Pass the salt.*
SCI: (Relevance to current interaction) $S$ wants $H$ to pass the salt now.

(46) *Gib mir das Salz.*
SCI: (Relevance to current interaction) $+>$ Gib mir das Salz jetzt

(47) A: *Can you tell me the time?*
B: *Well, the milkman has come.*

(48) A: *Kannst du mir sagen, wie spät es ist?*
B: *Nun, der Milchmann war da.*
SCI: B cannot provide the full information required, but believes his utterance will provide A with the means of deriving a partial answer, i.e., the time is at least after the time when the milkman usually comes.

(49) *I am here now.*

(50) *Are you here Peter?*

(51) *Ich bin hier jetzt.*

(52) *Bist du hier, Peter?*

The interpretation of "here" and "now" depends on what is relevant in the current interaction.

---

# 3. Maxim of Relevance: Flouting MRel

(53) A: *I do think Mrs. Jenkins is an old windbag, don't you?*

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

NSCI: B does not want to talk about it (i.e., wants to change subject). E.g., Mrs. J. is standing behind them.

 (53) A: *Frau Müller ist doch wirklich eine alte Klatschtante, findest du nicht?*

  B: *Ja, für März ist das Wetter wirklich herrlich.*

  NSCI: B does not want to talk about it (i.e., wants to change subject). E.g., Mrs. J. is standing nearby.

 (54) Paul: *He, Tina, wollen wir mit Murmeln spielen?*

  Mutter: *Was machen denn deine Hausaufgaben, Paul?*

  NCSI: If your haven't done your homework yet, don't even think

---

about playing games.

(55) (In a theater play:) *He is from Barcelona.*

Literal meaning not relevant in given context. Uttered to convey that the person is stupid.

---

# 4. Maxim of Manner: Observing MMan

Order:

(56) *Al went to the store and bought whisky.*

(57) *Alfred ging in den Laden und kaufte Whisky.*

SCI: (Be orderly: Linear ordering reflects temporal ordering.)
$S$ believes Al first went to the store and then he bought whisky.

(58) *Pete yelled at his boss and got fired.*

SCI: (Be orderly and relevant):
$S$ believes Pete yelled at his boss and as a reaction he got fired.

(59) *Pete got fired and yelled at his boss.*

SCI: (Be orderly and relevant):
$S$ believes Pete got fired and then as a reaction he yelled at his boss.

# 4. Maxim of Manner: Flouting MMan

Brevity:

(60) *Miss Singer produced a series of sounds corresponding closely to the score of an aria from Rigoletto.*

(61) *Fräulein Sänger sang eine Arie aus* Rigoletto.

(61′) *Fräulein Sänger brachte eine Reihe von Tönen hervor, die den Noten einer Arie aus* Rigoletto *verdächtig nahe kamen.*

NCSI: Miss S.'s performance was not a singing performance (was bad).

(62) *The campaign group called the Freedom Association.* (BBC)

NCSI triggered by "called": the name is not appropriate for the group's activities

Markedness:

(63) Advertisement:

*Radion removes dirt* AND *odours.*

---

NCSI triggered by marked placement os stress on "and": there is something special about the detergent removing both dirt and odours, and this is what distinguishes it.

---

# Hedging the Maxims

(verhindern/verhüten oder ausweichen der Maxime)

(64) *Smoking damages your health.*

(65) *They say smoking damages your health.* (Quality)

(66) *All I know is that smoking damages your health.* (Quantity)

(67) *If you want to hear something, smoking damages your health.* (Relevance)

(68) *Last but not least, smoking damages your health.* (Manner)

One the other hand, the maxims can be **intensified**:

(69) *Smoking damages your health for sure.* (Quality)

(70) *Smoking damages your health and that's all there is to it.* (Quantity)

(71) *The point is that smoking damages your health.* (Relevance)

(72) *Put plainly, smoking damages your health.* (Manner)

---

# Defining conversational implicature

# CI Definition

By uttering $p$, S **conversationally implicates** $q$ if:

(i) S is presumed to observe the cooperative principle

(ii) In order to maintain this assumption it must be supposed that S thinks $q$

(iii) S thinks that H can work out that to preserve the assumption in (i), $q$ is required.

**To be able to calculate the implicature** $q$, H must know

(i) the conventional content of $p$

(ii) the co-operative principle and its maxims

(iii) the context of $p$

(iv) certain bits of background information

(v) that (i)-(iv) are mutual knowledge shared by S and H.

# Properties of Conversational Implicatures

Conversational implicatures are:

- defeasible (aufhebbar; streichbar)

- calculable (kalkulierbar; rekonstruierbar)

- non-conventional (nicht konvenzionel, kontext-abhängig)

- non-detachable (nicht abtrennbar)

# Defeasibility

*An inference is defeasible if it is possible to cancel it by adding new premises to the original ones.*

(73)   *Peter hat drei Kühe.*
SCI: Peter hat nur drei Kühe und nicht mehr.

- Die SCI kann *suspendiert (suspended)* werden:

(74)   A: *Hat Peter wirklich die geforderte Anzahl von Kühen?*
B: *Oh ja, er hat drei Kühe.*

(75)   *Peter hat drei Kühe, wenn nicht mehr.*

(76)   *Peter hat drei Kühe und vielleicht noch mehr.*

- Die SCI kann *verweigert (denied)* werden:

(77)   *Peter hat drei Kühe, ja sogar zehn.*

# Defeasibility

- Logische Schlussfolgerungen sind nicht aufhebbar:

(78)   *Peter hat drei Kühe.*
Logische Schlussfolgerungen (entailments):
(i) Peter hat eine Kuh.
(ii) Peter hat zwei Kühe.

(79)   ?*Peter hat drei Kühe, wenn nicht 2.*

(80)   *\*Peter hat drei Kühe, ja sogar keine.*

(81)   *\*Peter hat drei Kühe und vielleicht keine.*

- Deductive inferences are non-defeasible.

(82)   i. Wenn Sokrates ein Mensch ist, ist er sterblich
    ii. Sokrates ist ein Mensch

    iii. Sokrates ist sterblich

- Inductive inferences are defeasible

(83)    i.   Ich habe 1001 Möhren ausgegraben
     ii.   Jede der 1001 Möhren ist orange

     iii.   Alle Möhren sind orange

(84)    i.   Ich habe 1001 Möhren ausgegraben
     ii.   Jede der 1001 Möhren ist orange
     iii.   Die 1002. Möhren ist grün

     iv.   *Ungültig*: Alle Möhren sind orange

---

- Abductive inferences are also defeasible:

(85)    i.   Wenn es regnete, ist die Straße nass.
     ii.   Die Straß ist nass.

     iii.   Es regnete.

(86)    i.   Wenn es regnete, ist die Straße nass.
     ii.   Die Straße ist nass.
     iii.   Die Straße war gerade gewascht werden.

     iv.   *Ungültig*: Es regnete.

(87)    i.   Tweety ist ein Vögel.

     ii.   Tweety kann fliegen.

(88)    i.   Tweety ist ein Penguin.

     ii.   Tweety kann nicht fliegen.

---

# Non-Detachability

*An inference is non-detachable if it is attached to the semantic content of what is said rather than to its linguistic form.*

i.e., the same conversational implicatures hold for synonymous expressions e.g. the ironic interpretation of:

(89)    a.   *Peter is a genius.*
        *(Peter ist ein Genie.)*
     b.   *Peter is a big brain.*
     c.   *Peter is an exceptionally clever human being.*
        NCSI: John is an idiot.
        (Peter ist ein Idiot)

- **Exceptions:** implicatures arising under the maxim of manner (which are linked to the *form* of the utterance).

- Non-detachability distinguishes *conversational implicatures* from *conventional implicatures* and *presuppositions.*

---

# Calculability

*Conversational implicatures are calculable in that it is possible to construct an argument of the type described above, showing how from (i) the literal meaning of the utterance and (ii) the cooperative principle and (iii) the maxims, it follows that the hearer would make the inference in question to preserve the assumption of cooperation.*

**Calculating a CI:** S implicates $q$ if:

(i)   S says $p$

(ii)   There is no reason to think that S is not observing the cooperative principle

(iii)   In order for S to say that $p$ and be indeed observing the cooperative principle, S must think that $q$

(iv)   S must know that it is mutual knowledge that $q$ must be supposed if $S$ is taken to be cooperative

(v)   S has done nothing to stop me think that $q$

# Non-Conventionality

*Conversational implicatures are non-conventional in that they are not part of the conventional meaning of an utterance.*

This is because:

- CIs are defeasible (truth-conditional meaning isn't).
- The literal meaning of an utterance needs to be known before its CIs can be computed
- An utterance can be true while its CI is false (if CIs were part of the conventional meaning the utterance would then be seen as false).

  (90)  *John has 400 acres of farmland.*
        SCI: John has no more than 400 acres.

  If John in fact has 800 acres, the SCI is false. But the utterance is true, and is an appropriate answer to, e.g., *Does John qualify for the farming subsidy?* where the limit for getting the subsidy is 400 acres (relevance, quantity).

- The same utterance might give rise to different CIs depending on its context.

---

# Summary

- We've seen at an intuitive level that one main attraction of conversational implicatures is that they elegantly capture the fact that the same expression can have different meanings in different contexts
- To demonstrate the benefits of conversational implicatures for semantics, we need to express more rigorously how the maxims work, i.e., how are the CIs processed (either when producing or when interpreting utterances).
- We will look at two specific cases of generalised quantity CIs in more detail namely, **clausal** and **scalar** CIs (Gazdar 1979) and show how they help simplify the task of semantics.

---

# Classifying Implicatures

Conversational implicatures (CIs):

i. **standard** CIs: **adherence** to the maxims
ii. **non-standard** CIs: **flouting** or exploiting them

i. **particularized** CIs: only in specific contexts

  (91)  *A: What happened to the meat?*
        *B: The dog is looking very happy.*
        **PCI:** Perhaps the dog has eaten the meat.

ii. **generalized** CIs: in any context

  (92)  *I walked into a house.*
        **GCI:** The house was not my house.

Using the expression *an N* implicates that the mentioned *N* is not closely related to the speaker.

---

# Generalized vs. Particularized CIs

- Most of the flouting of maxims are particularized (e.g. irony requires particular background assumption to rule out the literal interpretation).
- However, metaphors and tautologies often convey what they convey in a context-independent way i.e. through GCI
- All implicatures that arise from observing Relevance are particularized (i.e. relative to a certain context).
- GCI that are derived from following the maxims are the most difficult to distinguish from the semantic content of linguistic expressions (because routinely associated with the relevant expressions in all ordinary contexts).
- We now will look at two specific cases of generalized **quantity** CIs in more detail namely, **clausal** and **scalar** CIs (Horn 1972, 1973; Gazdar 1979).

# Scalar

# Generalized Conversational Implicatures

---

# Scalar Quantity GCIs

(93)  *Some of the boys went to the party.*
      **SQGCI:** Not all of the boys went to the party.

## Intuitive explanation

(1) **All** *of the boys went to the party*
$\models$ (2) **Some** *of the boys went to the party*
Since a stronger form is available, therefore by Quantity Maxim: (2) implicates $\neg(1)$

## Formal explanation

A **Scale** is the ordering through logical entailment of a set of linguistic expressions, e.g.
$\langle e_1, e_2, \ldots e_n \rangle$ where $e_1 \models e_2 \models \ldots \models e_n$

**Scalar Implicature:** Use of a weaker (entailed) form relative to a scale implicates the negation of stronger forms in that scale e.g.

$$A(e_2) \text{ implicates } \neg A(e_1)$$

---

# Restriction on Scalar GCIs

**A scalar QGCI only arises if the expression that gives rise to it is entailed by any complex sentence of which it is part.**

(94)  *Some of the boys went to the party.*
      **SQGCI:** Not all of the boys went to the party.

But:

(95)  *John says that some of the boys went to the party.*

Does not have that implicature.

Because *Some of the boys went to the party* is not entailed by *John says that some of the boys went to the party.*

---

# More Linguistic Scales (Horn)

$\langle$ *all, most, many, some, few* $\rangle$

$\langle$ *none, not all* $\rangle$

$\langle$ *n, . . . , 5, 4, 3, 2, 1* $\rangle$

$\langle$ *and, or* $\rangle$

$\langle$ *excellent, good* $\rangle$

$\langle$ *hot, warm* $\rangle$

$\langle$ *necessarily p, p, possibly p* $\rangle$

$\langle$ *certain that p, probable that p, possible that p* $\rangle$

$\langle$ *always, often, sometimes* $\rangle$

$\langle$ *must, should, may* $\rangle$

$\langle$ *succeed in Ving, try to V, want to V* $\rangle$

$\langle$ *adore, love, like* $\rangle$

**To be continued . . .**