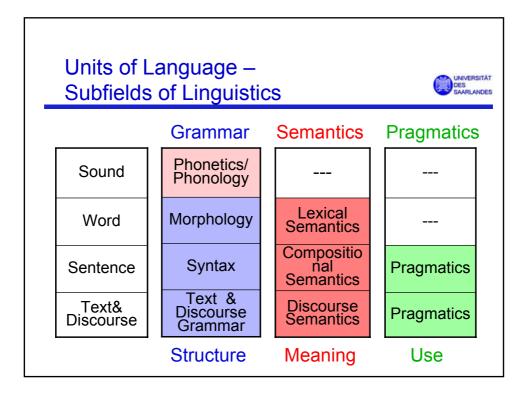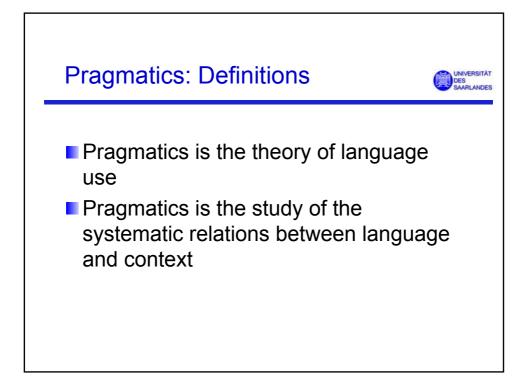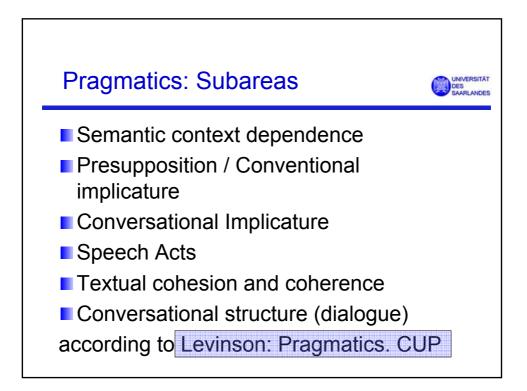# LST Prep Course: Pragmatics

Manfred Pinkal

Universität des Saarlandes

11-10-2006

In the Conversational Implicature Part, the slides use material from
Ivana Kruijff-Korbayova's course

Units of Language – Subfields of Linguistics

	Grammar	Semantics	Pragmatics
Sound	Phonetics/ Phonology	---	---
Word	Morphology	Lexical Semantics	---
Sentence	Syntax	Compositional Semantics	Pragmatics
Text& Discourse	Text & Discourse Grammar	Discourse Semantics	Pragmatics
	Structure	Meaning	Use

Pragmatics: Definitions

- Pragmatics is the theory of language use
- Pragmatics is the study of the systematic relations between language and context

Pragmatics: Subareas

- Semantic context dependence
- Presupposition / Conventional implicature
- Conversational Implicature
- Speech Acts
- Textual cohesion and coherence
- Conversational structure (dialogue)

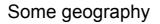according to Levinson: Pragmatics. CUP
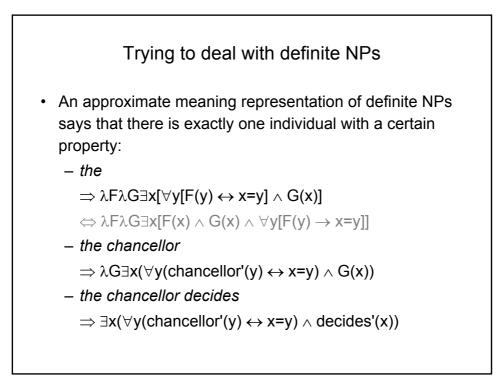
Some elementary number theory

- Theorem:
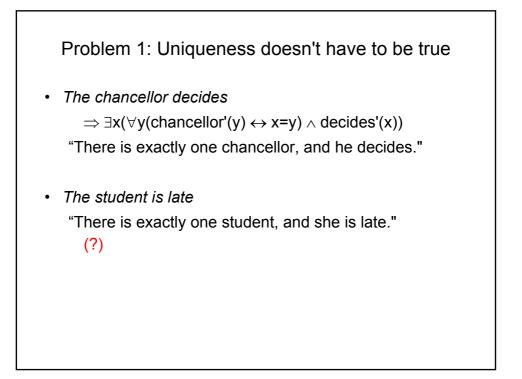 The set of prime numbers is infinite, i.e. for every prime number p, there exists another prime number q > p.

- True or false?
  The greatest prime number is odd.

- True or false?
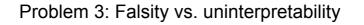 *The greatest prime number is not odd.*

Some geography

- True or false?
  The king of Buganda is 42.

- True or false?
  If Buganda has a king, then he was born in the 20th century.

- Does Buganda have a king?

Trying to deal with definite NPs

- An approximate meaning representation of definite NPs says that there is exactly one individual with a certain property:
  - *the*
    $\Rightarrow \lambda F \lambda G \exists x [\forall y [F(y) \leftrightarrow x=y] \wedge G(x)]$
    $\Leftrightarrow \lambda F \lambda G \exists x [F(x) \wedge G(x) \wedge \forall y [F(y) \rightarrow x=y]]$
  - *the chancellor*
    $\Rightarrow \lambda G \exists x (\forall y (chancellor'(y) \leftrightarrow x=y) \wedge G(x))$
  - *the chancellor decides*
    $\Rightarrow \exists x (\forall y (chancellor'(y) \leftrightarrow x=y) \wedge decides'(x))$

Problem 1: Uniqueness doesn't have to be true

- *The chancellor decides*
    $\Rightarrow \exists x (\forall y (chancellor'(y) \leftrightarrow x=y) \wedge decides'(x))$
    "There is exactly one chancellor, and he decides."

- *The student is late*
    "There is exactly one student, and she is late."
    (?)

Problem 2: Interaction with negation

- *The chancellor doesn't decide*
  $\Rightarrow \neg\exists x(\forall y(\text{chancellor'}(y) \leftrightarrow x=y) \land \text{decides'}(x))$
  "Either there is no chancellor, or more than one, or there is exactly one chancellor and he doesn't decide."

- A correct representation for the sentence:
  $\exists x(\forall y(\text{chancellor'}(y) \leftrightarrow x=y) \land \neg\text{decides'}(x))$
  "There is exactly one chancellor, and he doesn't decide."

Problem 3: Falsity vs. uninterpretability

- *The greatest prime number is odd.*
  $\Rightarrow \exists x(\forall y(\text{g-p-n'}(y) \leftrightarrow x=y) \land \text{odd'}(x))$

- The formula is false, because it claims that there is a greatest prime number.
- But the sentence is not true or false: It just doesn't make sense. ("What do you mean -- greatest prime number?")

Presuppositions

- A sentence (with a definite NP) contains meaning information of two different types: the presupposition and the assertion.
  - Presupposition: the requirements that the context must satisfy so the utterance can be interpreted at all.
  - Assertion: the claims that are made, based on the context.

  $\exists x(\forall y(\text{chancellor'}(y) \leftrightarrow x=y) \wedge \text{decides'}(x))$

  "There is exactly one chancellor, and he decides."

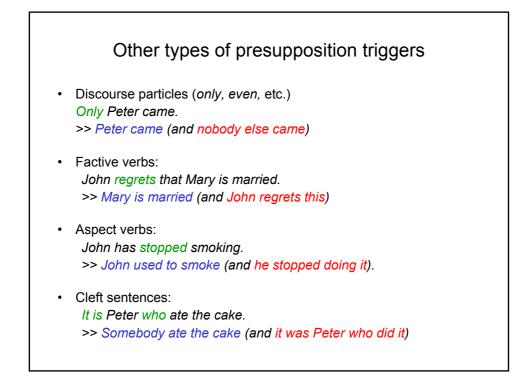---

Presupposition and negation
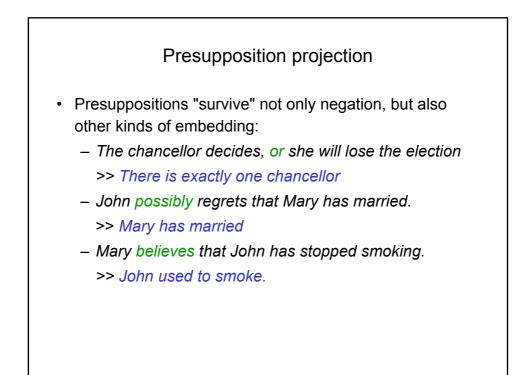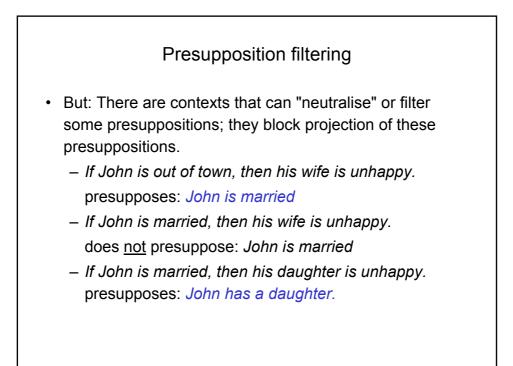
- Negation only applies to the assertion.
- The presupposition isn't negated. It is *projected* upwards, outside of the usual rules of semantic composition.

  $\exists x(\forall y(\text{chancellor'}(y) \leftrightarrow x=y) \wedge \neg \text{decides'}(x))$

  "There is exactly one chancellor, and she doesn't decide."

- Such a "survival" of negation is the standard test for presuppositions.

Other types of presupposition triggers

- Discourse particles (*only, even,* etc.)
  Only Peter came.
  >> *Peter came (and nobody else came)*

- Factive verbs:
  John regrets that Mary is married.
  >> *Mary is married (and John regrets this)*

- Aspect verbs:
  John has stopped smoking.
  >> *John used to smoke (and he stopped doing it).*

- Cleft sentences:
  It is Peter who ate the cake.
  >> *Somebody ate the cake (and it was Peter who did it)*

Presupposition projection

- Presuppositions "survive" not only negation, but also other kinds of embedding:
  - *The chancellor decides, or she will lose the election*
    >> *There is exactly one chancellor*
  - *John possibly regrets that Mary has married.*
    >> *Mary has married*
  - *Mary believes that John has stopped smoking.*
    >> *John used to smoke.*

Presupposition filtering

- But: There are contexts that can "neutralise" or filter some presuppositions; they block projection of these presuppositions.
  - *If John is out of town, then his wife is unhappy.*
    presupposes: *John is married*
  - *If John is married, then his wife is unhappy.*
    does <u>not</u> presuppose: *John is married*
  - *If John is married, then his daughter is unhappy.*
    presupposes: *John has a daughter.*

Presupposition cancellation

- Presupposition can also be overwritten or *cancelled* by explicitly claiming that they are false:
  - *John doesn't regret that Mary is married. This is because Mary isn't married.*
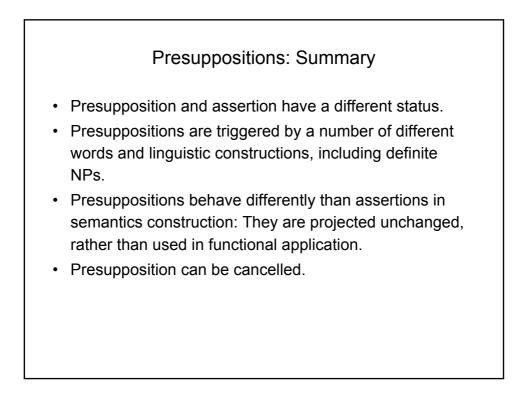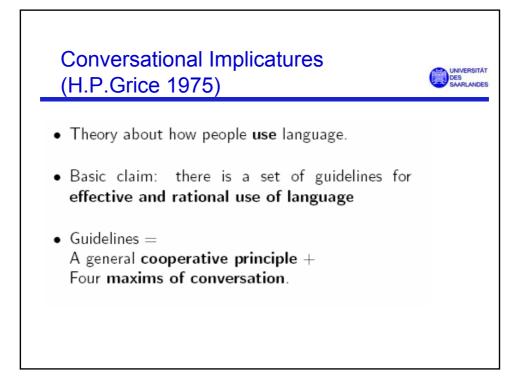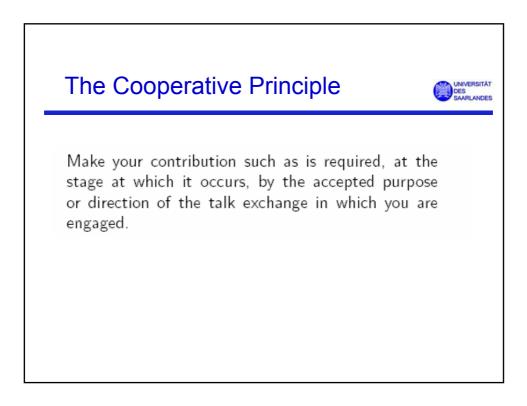 - *It is not true that the king of France is bald. France is a republic.*

Other types of presupposition triggers

- Discourse particles (*only, even,* etc.)
  Only Peter came.
  >> *Peter came (and nobody else came)*

- Factive verbs:
  John regrets that Mary is married.
  >> *Mary is married (and John regrets this)*

- Aspect verbs:
  John has stopped smoking.
  >> *John used to smoke (and he stopped doing it).*

- Cleft sentences:
  It is Peter who ate the cake.
  >> *Somebody ate the cake (and it was Peter who did it)*

Presuppositions: Summary

- Presupposition and assertion have a different status.
- Presuppositions are triggered by a number of different words and linguistic constructions, including definite NPs.
- Presuppositions behave differently than assertions in semantics construction: They are projected unchanged, rather than used in functional application.
- Presupposition can be cancelled.

Conversational Implicatures (H.P.Grice 1975)

- 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.

Conversational Maximes

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.

Conversational Maximes

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

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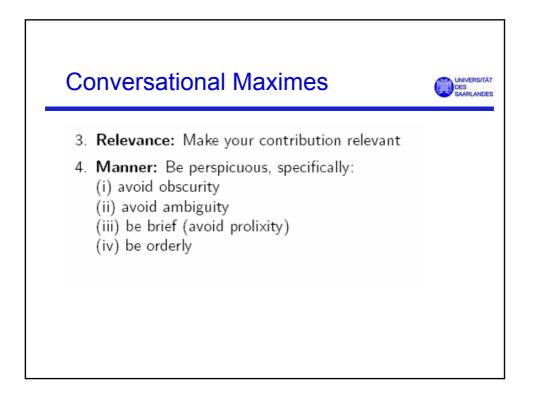   (iv) be orderly

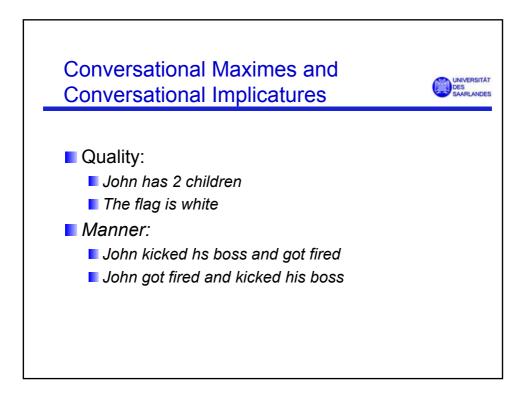# Conversational Maximes and Conversational Implicatures

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.

Relevance:

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

A: *I am out of petrol.*
B: *There's a garage just around the corner.*

Conversational Maximes and Conversational Implicatures

- Quality:
  - *John has 2 children*
  - *The flag is white*
- *Manner:*
  - *John kicked hs boss and got fired*
  - *John got fired and kicked his boss*

Flouted Maximes and Conversational Implicatures
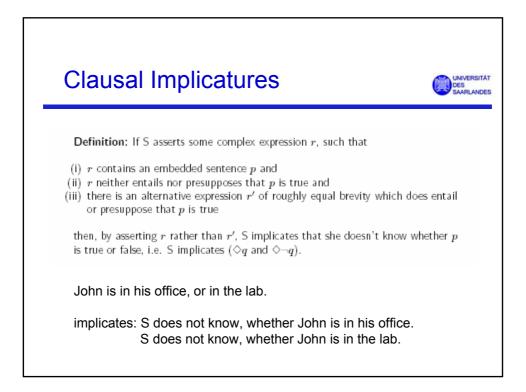
Irony: *What a great weather!*

Metaphor: *This lady is made of iron.*

Scalar Implicatures

(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 $\neg(1)$

Scales: Examples

$\langle$ 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 $\rangle$

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

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

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

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

Clausal Implicatures

Definition: If S asserts some complex expression r, such that

(i) r contains an embedded sentence p and
(ii) r neither entails nor presupposes that p is true and
(iii) there is an alternative expression r' of roughly equal brevity which does entail or presuppose that p is true

then, by asserting r rather than r', S implicates that she doesn't know whether p is true or false, i.e. S implicates ($\Diamond q$ and $\Diamond \neg q$).

John is in his office, or in the lab.

implicates: S does not know, whether John is in his office.
S does not know, whether John is in the lab.

Conversational Implicature and Presupposition

Both CIs and presuppositions can be cancelled (are defeasible).

- Presuppositions are associated with certain kinds of expressions.
- Conversational implicatures follow from general properties of utterances.