

# L98: Introduction to Computational Semantics

## Lecture 13: Select Pragmatic Phenomena

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- (1) a. Some of the apples are red.  
b. Jane has three apples.  
c. Jane has apples or oranges

- ▷ not all are
- ▷ no more than three
- ▷ doesn't have both

## Lecture 13: Select Pragmatic Phenomena

1. What is pragmatics?
2. Speech Acts
3. Implicatures
4. Grice's Maxims

What is Pragmatics?

# Pragmatics

- One subdiscipline of Linguistics
- Same level as Morphology, Phonology, Syntax, Semantics, Discourse
- Concerns the transmission of meaning beyond what is explicitly said.
- Very little of what we share as knowledge is ever explicitly *said* in a conversation.
- All the rest is left unsaid when we speak, but must be somehow predictable.
- Otherwise, people would not be able to communicate.
- Explaining this area of linguistic communication is left to the discipline of *pragmatics*.

## From the film "Se7en" (David Fincher, 1995)



This is said at the end of the movie, after a lot of gruesome crimes and senseless slaughtering has happened. So, what is the movie character trying to say?

# Speech Acts

## John L. Austin (1962)

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Example:

**Locutionary act** (literal sentence “Is there any salt?”): question about the presence of salt.

**Illocutionary act** (intended request): could be reformulated as “please give me some salt” .

**Perlocutionary act** (the actual effect), might be to cause somebody to pass the salt.



# Illocutionary Acts

- **Locutionary act:**
  - Physical act of speaking
  - Composing a string of words conforming to grammar
  - Contextualise (Choose meaning; assign referents)
- **Perlocutionary act:** acts performed by language, but the elements which define the act are external to the locutionary act.
  - *persuading somebody to do the dishes*
  - Note: this act is not finished when the language act finishes, as it also requires the persuaded person to act and do the dishes.
  - angering, inciting, comforting, inspiring, insulting
- **Illocutionary act:** acts that are internal to the locutionary act.
  - *"I promise to buy you a ring."* (explicit illocutionary act)
  - Note: This act is finished the second the language act (speaking) finishes.
  - *"I'll be there."* (implicit illocutionary act; can be can be a promise, threat, warning)

# Speech Acts

Main illocutionary force of an utterance:

- Declaratives → Used to assert a proposition.
- Interrogatives → Used to inquire about the missing parts of propositions, or to elicit whether or not a proposition is true.
- Imperative → Used to direct or urge the addressee to do something.
- Exclamations → Used to express a psychological attitude to a fact.

## Speech Acts: Others

But each utterance can be used for different illocutionary purposes too:

- *“If you take another step, I will shoot. (And don’t move your hand, either).”*
- *“It is cold in here.”*
- *“Now where did I leave my wallet?”* (said when one is alone)

# Types of Speech Acts (Searle)

- **Assertives:** *state, suggest, boast, complain, claim, report, warn (that)*
- **Directives:** *order, command, request, beg, beseech, advice (to), warn (to), recommend, ask, ask (to)*
- **Commissives:** *promise, vow, offer, undertake, contract, threaten*
- **Expressives:** *thank, congratulate, apologise, condole, praise, blame, forgive, pardon*
- **Declaratives:** *resign, dismiss, divorce (in Islam), christen, name open (e.g., an exhibition), excommunicate, sentence (in court), consecrate, bid (at auction), declare (at cricket)*

# Performative verbs

A performative verb is a verb that explicitly conveys the type of speech act being performed.

- Performative verbs explicitly perform lexicalised illocutionary acts.
- They can be used in first person, present, with “hereby”:
  - *“I hereby apologise for my misbehaviour.”*
  - *“I hereby declare the bridge open.”*
  - *“I hereby undertake to carry out faithfully the duties of Royal Egg-Sexer.”*

# Explicit performative verbs

But please consider the truthconditions!

① *"I hereby state that I am innocent."*

② *"I am innocent."*

- Sentence 1 is true whether the speaker is innocent or not.
- Sentence 2 is not.

# Implicatures

# Implicatures

- Def (1) implicature: any aspect of meaning that are not explicitly conveyed in what is said, but that can nonetheless be inferred.
- Def (2) implicature: an implicit assumption about the world or background belief relating to an utterance whose truth is taken for granted in discourse.
- If it is
- *A: Has John cleared the table and washed the dishes?*  
*B: He has cleared the table.*



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- A: *Has John cleared the table and washed the dishes?*  
B: *He has cleared the table.*

Implicature: He has not washed the dishes.

## Let's try to negate or confirm the implicature

- Negating:

C: *That's not true* { *he hasn't cleared the table*  
*\*he has washed the dishes* }

- Confirming:

C: *You are right* { *he has cleared the table*  
*\*he hasn't washed the dishes* }

- We also cannot report the implicature as having been stated by B:

C: *\*B said that John hasn't washed the dishes.*

# Implicatures

- Implicatures are **objective** – people strongly feel that some intended meaning has been transmitted, and they agree about what that additional meaning is.
- There is no vagueness.
- The place where it's added to is the “shared understanding” between speaker and listener.

## Context-sensitivity of Implicatures

- A: *“Have you cleared the table and washed the dishes?”*  
B: *“I have cleared the table.”* → I have not washed the dishes.
- A: *“Am I in time for supper?”*  
B: *“I have cleared the table.”* → You are too late for supper.

# Implicatures have importance in daily life

- Because they enable us to communicate more efficiently.
- But they can also be used to “smuggle” non-challengeable information into a discourse.
- They can therefore be used against us if we are in a non-cooperative = adversarial discourse (e.g., during cross-examination by a hostile lawyer).
  - “*Did you decide to kill her before or after you entered the kitchen?*”
- Answering the statement does not help:
  - “*It was beforehand.*”
  - “*It was afterwards.*”
- There is only one way to react adequately to such questions:  
“*I don't subscribe to your assumptions.*” (set phrase)

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  - *Have you stopped eating meat?*

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**Presupposition:** You used to eat meat.
  - *If the notice had only said 'mine-field' in Welsh as well as in English, we would never have lost poor Llewellyn.*



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**Presupposition:** The notice didn't say 'mine-field' in Welsh.
  - *Have you talked to Hans?*  
**Presupposition:** Hans exists.

# Presuppositions and Discourse

- A presupposition of a sentence must normally be part of the common ground of the utterance context (the shared knowledge of the interlocutors) in order for the sentence to be felicitous.
- If not, presupposition accommodation takes place unless this leads to inconsistency. (“My wife is a dentist”, said to somebody who does not know that you have a wife.)

## Presupposition triggers

Many words and constructions are presupposition triggers, e.g.,

- *regret, realise, manage, forget, try* → X happened (+ sentiment/judgement towards X)
- *I don't get to see you* → I consider it a treat to see you
- *again, since X happened* → X happened before
- *Carol is a better linguist than Mary...* → both are linguists

# Presupposition vs Entailment

- Negation of utterance does not cancel its presuppositions:

## Presupposition – no cancellation

*She has stopped eating meat.*

**Presupposition:** She used to eat meat.

*She has **not** stopped eating meat.*

→ **Presupposition survives under negation.**

- This distinguishes it from entailment.

## Entailment – cancellation

*The president was killed.*

**Entailment:** The president is dead.

*The president was **not** killed.*

→ **Entailment does not survive under negation.**

In a sense, we can consider entailments as “part of what is said”.

# Cancellation

Implicatures are cancellable:

- (2) She has stopped eating meat, **but hey, now that I come to think of it, maybe she never ate it?**

Entailments aren't cancellable:

- (3) \*The president was killed, **but now that I come to think of it, he wasn't really dead.**

# Conversational Implicatures

- Another type of implicature is the conversational implicature.
- Conversational implicatures are not tied to particular lexical items.

Example: a couple are getting ready to go out for the evening.

Partner 1: How much longer will you be?

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What is implicated?

How else could it have been said?

# Scalar Implicature

- A statement is made involving some point on some scale
- Scalar implicature: the point on the scale is the most informative, strongest statement that the speaker could use.
- They have reasons not to use a higher point on the scale.

All examples from title page are scalar implicatures:

- (4) a. Some of the apples are red. ▷ not all are
- b. Jane has three apples. ▷ no more than three
- c. Jane has apples or oranges ▷ doesn't have both

Like all pragmatic inference, scalar implicature is also cancellable.

## Conventional or conversational?

- (5) a. *John didn't manage to walk as far as the crossroads.*  
b. *John didn't walk as far as the crossroads.*  
c. *John attempted to walk as far as the crossroads.*

- a) and b) are propositionally identical, and only differ in the lexical item *manage to*.
- a) implicates c), but b) does not implicate c)
- This means that the implicature b) is tied to the lexical item *manage to*.
- Therefore, c) is a presupposition or conventional implicature, and not a conversational implicature.

# Grice's Maxims

## Grice (1975), Cooperation Principle

- Make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.
- Can be subdivided into four maxims
  - Maxim of Quality
  - Maxim of Quantity
  - Maxim of Relevance
  - Maxim of Manner

## Grice, Maxim of Quality

- (a) Do not say what you believe to be false.
- (b) Do not make unsupported statements (i.e., those for which you lack adequate evidence).

## Grice, Maxim of Quantity

- (a) Make your contribution as informative as required for the current purposes of the exchange in which you are engaged.
- (b) Do not make your contribution more informative than is required.
  - A: *"What did you have for lunch today?"*
  - B: *"Food."*  
B: *"Beans on toast."*  
B: *"I had 87 warmed-up baked beans (although 8 of them were slightly crushed) in tomato-sauce, served on a slice of toast 12.7cm by 10.3cm, which had been unevenly toasted."*

# Grice, Maxim of Relevance

- Be relevant.
  - A: "Have you seen Mary today?"  
B: ? "I am breathing."
- More specific way of stating this maxim:  
*An utterance U is relevant to a speech situation to the extent that U can be interpreted as contributing to the conversational goals of S<sup>1</sup> or H.*
- Putting everything up to now together:  
*Make the strongest statement that can be relevantly made, justifiable by your evidence.*
- In this, "stronger statement" entails the weaker one (is more informative).
  - "John trapped a badger" is stronger than "Someone caught an animal".

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<sup>1</sup>S is the speaker; H is the listener or hearer



## Grice, Maxim of Manner

- (a) Avoid obscurity.
- (b) Avoid ambiguity.
- (c) Avoid unnecessary prolixity. (=verbosity)
- (d) Be orderly.

An example where (d) is violated:

(6) The lone rider rode off into the sunset and jumped on his horse.

# About the nature of Gricean Maxims

- They are not like grammatical rules → **Flouting**<sup>2</sup> them is possible, but it is read as a signal by H.
- They are not cultural norms like politeness → they are rational principles underlying communication in all cultures
- They are not necessarily about “being nice to each other” – they are hard, cold information delivery tools
- They are followed in all areas of cooperation, not just language.
- Example for this – workman asking “Please hand me a chisel”
  - Maxim of Quality – don’t hand over a saw.
  - Maxim of Quantity – don’t hand over two chisels.
  - Maxim of Relevance – don’t hand over a chisel when none has been requested or seems needed.
  - Maxim of Manner – don’t describe where the chisel is with a riddle.

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<sup>2</sup>Flouting means openly, clearly visibly breaking a rule.

## Grice, Example of Following the Maxims

- A (stranded motorist): *"I have run out of petrol."*
- B (passerby): *"There is a garage just round the corner."*
  
- A can assume that the garage is the kind that is selling petrol (not the kind where I store my car), and that it is open.
- Because we can by default assume that B is cooperative.
- If B knew that the garage advice was not suitable, and still said the above statement, then B would have broken the Relevance Maxim.

# Grice, Example of Following

Scalar implicature:

- A: "*How many children does Tom have?*"
- B: "*Four.* "
- A can assume that Tom has **exactly** four children:
  - If Tom had fewer (e.g. 2), B would have lied (broken the Quality Maxim).
  - If Tom had more (e.g., 6), B would not have lied, but would have said a less informative statement than the one she could have said (i.e., broken the Relevance Maxim).

## An Example from the UK citizenship test

### **FACT:**

$\frac{1}{3}$  of the UK population, and  $\frac{1}{2}$  of the UK population under 25 have experimented with drugs.

### **QUESTION:**

$\frac{1}{3}$  of the UK population under 25 have experimented with drugs.  $\left\{ \begin{array}{l} \text{true?} \\ \text{false?} \end{array} \right.$

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Have a pragmatist check your questions.

## Amusing fact about UK citizenship test

This is another one of the official questions:

The landscape of the UK is well-known for its beauty.  $\left\{ \begin{array}{l} \textit{true?} \\ \textit{false?} \end{array} \right.$



## Grice, Example of Flouting

- A: *"Where is the corkscrew?"*
- B: *"Either in the drawer, or fallen behind the piano. "*
- B knows that the information does not satisfy the speaker, but something is preventing B from saying more. They are making the strongest statement they can.
- To say more would violate the second Quality condition.
- (In other words: No relevant, true, stronger statement could be made.)

## Grice, Example of Flouting: Reference

- A recommendation letter: *“Ben Smith worked for me for 3 years. He always arrived at work on time. Best, Professor Miller.”*
- Violation of Maxim or Relevance – being on time is not relevant in a reference letter.
- If Prof. Miller is being cooperative, then this is the strongest true relevant statement she can write, *under the rules of a reference letter.*

## Grice, Example of Flouting: Reference Continued

- Because Prof. Miller worked with Ben Smith closely, she has evidence of his real performance.
- She could have written a stronger statement ( *“Ben Smith’s work record and accomplishments are excellent.”* ), but she didn’t.
- Because breaking the Maxim of Relevance is more allowable than breaking the Maxim of Quality.
- Therefore, more relevant information must have been held back because it must be negative.
- So we can “calculate” from this letter that Ben Smith’s work performance was bad.

## Which maxim is violated?

- *Boys will be boys.*
- *It can't have dissolved into thin air.*

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What are the implicatures?

## Which maxim is violated?

- Mother: *What did you do today?*
- Daughter: *I got up at 11, picked up my clothes, opened the bathroom door, got into the shower...* (with exaggerated patience, elaborates a long list of totally uninteresting details).

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Maxims of Manner and Relevance



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### Maxims of Manner and Relevance

- What is the daughter's implicature?

## Which maxim is violated?

- A: *I say, did you hear about Mary's...*
- B: *Yes, well, it rained nearly the whole time we were there.*

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### Maxim of Relevance

- What could have caused B to act this way?

## Which maxim is violated?

- A (child-minder): *I'll look after Samantha for you, don't worry. We'll have a lovely time, won't we, Sam?*
- B (father): *Great, but if you don't mind, don't offer her any post-drandal concoctions involving any super-cooled oxide of hydrogen. It usually gives rise to convulsive nausea.*

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Maxim of Manner

- Why could B have said this?

## Which maxim is violated?

- Sign on a machine: *In order to obtain a ticket, take up a position with the feet no more than 50cm from the base of the machine, bending slightly from the waist towards the machine. Take a 20p coin, holding it vertically between thumb and forefinger. Insert the coin carefully into the slot indicated, and release it when inserted more than halfway. The ticket will appear in the lower left-hand slot of the machine.*



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Maxim of Manner (prolixity) and Relevance.

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Maxim of Manner (prolixity) and Relevance.

- Why not simply say:  
*To obtain a ticket, insert a 20p coin into the machine.*
- However, if sign is observing the CP, maybe all information given is relevant. Maybe the situation is not normal. Maybe all hell will break loose if you do this wrong!

## Pre-lecture exercise

# Summary

- Speech acts can fulfill **illocutionary acts** explicitly or implicitly.
- Implicatures is an umbrella term for all meaning in language that is not explicitly conveyed in what is said, but that can nonetheless be inferred.
- **Presuppositions** are a special kind of implicature that are lexically triggered.
- Conversational implicatures can be calculated by **Gricean Maxims** (either while obeying or flouting them).

## Reading this time

- Cruse (2011), Meaning in Language, Chapter 20.1