

# HUL243: Language and Communication

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*Topic: Context, Deixis & Inference*

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**NOTE:** This lecture is based majorly on Ch-7 from John Saeed's textbook on Semantics (2009)

# Layout of today's lecture:

- Role of context in interpretation
- Deixis
- Sub-types of Deixis
- Inference
- Recap of Entailment and Presupposition
- Implicatures and Grice's Maxims

The goal of this class is for you (and me) to better understand how we interpret meaning and what all tools go into this process (that we all are doing unconsciously at every moment in communication)

Speaker A: Am I looking fat in these jeans?

Speaker B: Indian wear suits you better.

What is a possible inference here that you all drew?

An impossible inference?

What about B's utterance in isolation?

- Speakers and hearers rely on context in constructing and interpreting the meaning of utterances
- Linguistic expressions (like proper names or definite noun phrases) – their usage presumes some background knowledge – maybe non-linguistic in nature – this knowledge plays a concrete role in how we understand utterances

Ex1: You are talking like Rangan Banerjee today.  
(Compare what this means to you v/s an SDA shop owner)

To completely understand ex1, one also needs to know who is being referred to by the pronoun ‘you’

Ex2: Imagine the same sentence written on a piece of paper and stuck to the main gate of LHC

- Contextual information plays a critical role in meaning interpretation
- Elements of language that are contextually bound are called Deictic elements (from the noun ‘Deixis’)

Semantics → the study of conventional, linguistic meaning

Pragmatics → the study of how we use this linguistic knowledge in context – the study of how hearers, have to combine semantic knowledge with other types of knowledge and make inferences in order to interpret a speaker's meaning

Deixis – one pragmatic aspect of meaning

# Deixis:

The deictic devices in a language commit a speaker to set up a frame of reference around herself.

Spatial Deixis

Discourse or Textual Deixis

Person Deixis

Social Deixis

# Spatial Deixis:

Every language carries an implicit division of the space around the current speaker, a division of time relative to the act of speaking, and, via pronouns, a shorthand naming system for the participants involved in the talk

English locative adverbs:

Ex: It is too hot here, let us go there.

English demonstrative:

Don't read those books, read these books.

English has a two-term opposition:  
Proximal (this/these) and Distal (that/those)

Languages can vary – Spanish has a three way contrast in terms of proximity to speaker

- *este* ‘close to speaker’
- *ese* ‘close to addressee’
- *aquel* ‘distant from both’

Languages encode not just divisions of space but also what information is obligatorily included

- Location of speaker
- Location of addressee
- vertical dimension

Diectic elements could also have information about movement towards or away from speaker

Ex: Come to IIT v/s Go to IIT

- languages vary in the type of semantic information that is obligatorily included in deictic terms. When semantic distinctions are obligatory in this way we will say that they are grammaticalized
- the obligatory ‘wired-in’ ways a language divides up space and time in its function words (like demonstratives and pronouns) or its morphology, and on the other hand, the ability which seems to exist in all languages to talk about any division of space and time by paraphrase

# Textual/ Discourse Deixis

Structuring of discourse and elements that implement a form of orientation within a discourse

Ex: At this point, we look back to what the author mentioned...

Spatial deixis terms can extend back to refer to time

Ex: That year was drier than this year.

→ This transference is often described as a metaphorical shift from the more concrete domain of physical space to the more abstract domain of time - Localism

# Person Deixis

Deictic system grammaticalizes the roles of participants: the current speaker, addressee(s) and others - information is grammaticalized by pronouns

Compare English Pronouns – what information and distinctions they encode – with Arabic pronouns (pg-196 of the Saeed book)

# Social Deixis

The pronoun systems of some languages also grammaticalize information about the social identities or relationships of the participants in the conversation.

- ‘familiar’ and ‘polite’ pronouns, e.g. *tu/vous* in French, *tu/usted* in Spanish, *du/Sie* in German
- What about Hindi *tu/tum/aap*?

→ we can see the effect of changing the relationship between the speaker and the third person on the form of sentence itself

So, Contextual Information is Important.

So is speaker and hearer's role and their shared understanding of how conversation proceeds. How so? Listen on...

# An Introduction to Implications

- Implication – an inferential relationship between two sentences or sets of sentences; it is a directional relation - where one sentence or a set ‘leads to’ another sentence or a set.

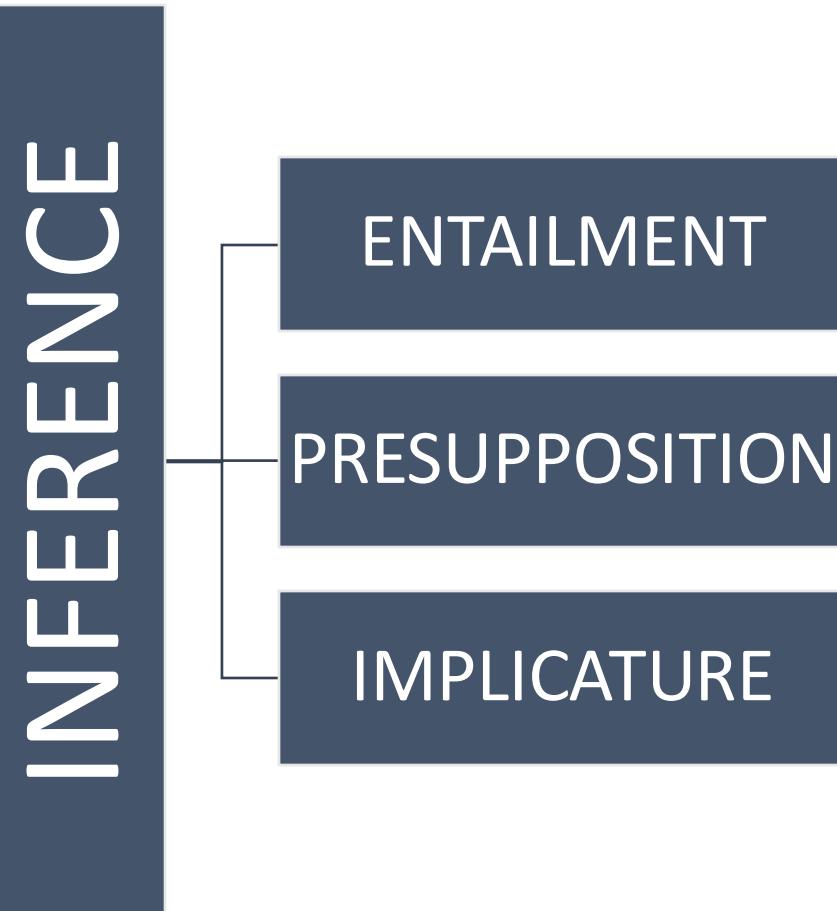
Example:-

Sentence 1: Jack doesn’t like John anymore.

Sentence 2: Jack used to like John at some point prior to the utterance time.

→ Sentence 1 implies sentence 2 or sentence 2 can be inferred from sentence 1

- Can be further classified based on what licenses them (informational content of a sentence or conversational expectations) or their contribution to the ongoing discourse
- If an implication can be traced to a particular lexical item or arises because of a particular syntactic construction, then that lexical item or construction is tagged as a ‘trigger’ for that inference. Example: lexical item ‘anymore’ triggers the inference from sentence 1 to sentence 2 above.



# Entailment

**Definition : sentence *A* entails sentence *B* if and only if whenever *A* is true, *B* has to be true too**

Example:-

*A*: After Ravi cooked his dinner, his flat-mate cleaned their kitchen.

*B*: Ravi cooked dinner.

→ In all possible worlds where sentence *A* is true , sentence *B* will be true too. Thus, *A* entails *B*.

Note 1: In semantics, a speaker *knows* the meaning of a sentence if he knows under what condition that sentence is true or not. He need not know whether a sentence is actually true or not , only the conditions under which it is true or not .

Example: I am a human being.

To *know* the meaning of this sentence, one needs to know the conditions under which this sentence will be true. If in a given world those conditions are met, then the sentence is true in that world. Otherwise false. Such conditions are *the truth-conditions* of a sentence.

Note 2: Entailment is **a strong implication relation** that is judged based on the truth-conditional content of sentence *A* (conditions under which sentence *A* is true)

# Test to check entailments

Defeasibility Test: ‘*A* and *not B*’ should be contradictory

Applying this test to the previous example:

*A*: After Ravi cooked his dinner, his flat-mate cleaned their kitchen.

*B*: Ravi cooked dinner.

*Not B*: It is not the case that Ravi cooked dinner.

‘*A* and *not B*’: # After Ravi cooked his dinner, his flat-mate cleaned their kitchen. It is not the case that Ravi cooked dinner.

→ In a world where sentence *A* is true, Ravi did cook dinner and his flat-mate did clean the kitchen. In a world where ‘*not B*’ is true, Ravi did not cook dinner. These two worlds are contradictory as the same condition is met in one and not in the other. Thus, the sentence (*A* and *not B*) is indeed contradictory confirming that whenever *A* is true, *B* has to be true too. This proves *A* entails *B* in the given example.

Let us try these out: Does (i) entail (ii) ? What about the reverse?

- (A) (i) Alex swims beautifully.  
(ii) Alex swims.
- (B) (i) Alex does not swim beautifully.  
(ii) Alex does not swim.
- (C) (i) Mary used to swim a mile daily.  
(ii) Mary no longer swims a mile daily

# Presupposition

**Definition: sentence  $A$  presupposes sentence  $B$  if  $A$  implies  $B$  and also if the truth of  $B$  is implied to be taken for granted as background for considering  $A$**

Example:

Sentence  $A$ : The class president has green hair.

Sentence  $B$ : There is a unique class president.

→  $A$  presupposes  $B$  as existence of a unique class president is taken for granted and assertion of sentence  $A$  is based over this background.

→ English definite article ‘the’ triggers this presupposition as definite descriptions license such existence and uniqueness implicatures.

- Projection Test: presuppositions project through a P-family of contexts (affirmative declarative, negative of declarative, interrogative, antecedent of conditional)
- $A$  presupposes  $B$  iff if not only  $A$  but also other members of P family imply (and assume as background)  $B$ .

Affirmative Declarative: The class president has green hair.

Negative Declarative: The class president does not have green hair.

Interrogative: Does the class president have green hair?

Antecedent of Conditional: If the class president has green hair, then she must be expressing a point via them.

Underlying presupposition: There is a unique class president.

Other examples:

(i) Speaker A: The present King of France is bald.

Negate it: # No, he isn't.

(ii) I regret that he did not come to class today.

(iii) Have some more tea.

(iv) Mary is in Delhi. # Jane is in Lucknow too.

(v) I am sorry I am late to class because my pet giraffe was sick.

(vi) I am sorry I am late to class because my pet dog was sick.

(vii) The monster under the bed has fangs.

# Implicature

- Definition: **sentence A implicates sentence B if we take B to be (part of what) the speaker of A meant by uttering that sentence.** Or generally, an implicature is an inference based not only on an utterance, but also on what the speaker is trying to convey.
- Weaker semantic inference relations as they can be defeated (or reinforced).

Example:

A: I used to take a walk on the ring road daily.

B: I no longer take a walk on the ring road daily.

→ sentence B is an implicature drawn from sentence A

Grice (1975, 1978) -discourse participants follow certain mutually known norms of conversation that govern permissible conversational moves. These were called Maxims of Conversation.

Maxim of Quality: try to make your contribution one that is true

Maxim of Quantity: make your contribution as informative as is required

Maxim of Relation: be relevant

Maxim of Manner: be perspicuous

Discourse participants typically adhere to a pragmatic principle called the Cooperative Principle - “make a conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of talk exchange in which one is engaged” (Simons 2012: 2)

- Implicatures – arise because of a shared presumption that discourse participants are cooperative and they adhere to the maxims of conversation. Violation of a maxim can lead to implicature generation. To flout a maxim is to choose not to follow that maxim in order to implicate something.
- Implicatures can be calculated (based on maxims of conversation), can be defeated and re-inforced.

Example:

Alex: Do you know how to change a tire?

Mary: I know how to call a tow truck.

Jane: Do these pants make me look fat?

Jack: You look great in a saree.

Think about how you inferred what you inferred in each case.

- Defeasibility Test: Since implicatures are defeasible, if  $A$  implicates  $B$  then ' $A$  and  $\neg B$ ' should not be contradictory (unlike entailments)

$A$ : I used to take a walk on the ring road daily.

$B$ : I no longer take a walk on the ring road daily

$\neg B$ : It is not the case that I no longer take a walk on the ring road daily = I take a walk on the ring road daily.

' $A$  and  $\neg B$ ': I used to take a walk on the ring road daily. In fact, I still take a walk on the ring road daily.

→ The pair of sentences for ' $A$  and  $\neg B$ ' are coherent and not contradictory. What was implied by first sentence is defeated , so much so that it can exist with the negation of that implication. By using additional linguistic information 'in fact' and 'still' , these weak semantic inferences are defeated.

- Redundancy Test: Since implicatures are reinforceable, if *A* implicates *B* then ‘*A* and *B*’ should not be redundant.

*A*: I used to take a walk on the ring road daily.

*B*: I no longer take a walk on the ring road daily

‘*A* and *B*’: I used to take a walk on the ring road daily. But I no longer take a walk on the ring road daily (because of Corona Virus).

→ The pair of sentences for ‘*A* and *B*’ are not redundant. What was implied by first sentence is re-inforced by sentence *B* and the linguistic connective ‘but’ along with an optional because-clause helps in doing so. This re-affirms that *A* implicates *B*.

# Conclusion

- Meaning is constructed and interpreted dynamically by the discourse participants not just based on the utterance content but also the contextual information
- Knowing what information gets conveyed by what you say and how you say it can help you package your content better
- What inference can be logically drawn from a particular statement is systematically rule-governed.