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COGNITIVE PRAGMATICS

Lecture 4

Relevance Theory as an Inferentialist Model

Recall basic tenets of Grice's model:

- **Sentence meaning** (= the conventional meaning of the sentence uttered by the speaker) is a vehicle for conveying the **speaker's meaning** (= what the speaker means in uttering this sentence);
- the speaker's meaning of an utterance:
 - is determined by the communicative intention with which it is produced,
 - and comprises two aspects: *what is said* and *what is implicated*.
- Verbal communication consists in forming and expressing (→ speaker) and recognizing (→ hearer) complex communicative intentions;
- primary meaning (→ what is said) is 'encoded';
secondary meaning (→ what is implicated) is inferentially determined;
→ maxim-driven inferential processes.

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- **primary meaning (→ what is said) is 'encoded';**
secondary meaning (→ what is implicated) is inferentially determined;
→ maxim-driven inferential processes.
- **The Gricean account of the semantics/pragmatics interface, i.e., the division of labour between semantics and pragmatics in utterance interpretation.**

GRICE:

structural/syntactic description of the sentence uttered by *S*



[SEMANTIC INTERPRETATION]



the conventional meaning of the sentence uttered by *S*



[WEAK PRAGMATIC INTERPRETATION]



the primary meaning of *S*'s utterance



[STRONG PRAGMATIC INTERPRETATION]



the secondary meaning of *S*'s utterance

Cinema

(1) A: How about going to the cinema tonight?

B: I have an exam tomorrow.

PM B HAS AN EXAM ON WEDNESDAY.

⇒ B CANNOT GO TO THE CINEMA ON TUESDAY EVENING.

Garage

(2) A: I'm out of petrol.

B: There is a garage round the corner.

PM THERE IS A GARAGE ROUND THE CORNER.

⇒ THE GARAGE IS OPEN AND HAS PETROL TO SELL.

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Housewarming Party

(3) A: Do we need more chairs?

B: Everybody is coming.

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⇒₁ YES, WE NEED MORE CHAIRS.

⇒₂ GO AND ARRANGE MORE CHAIRS.

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Housewarming Party

- (3) A: Do we need more chairs? | *unarticulated constituents*
B: Everybody is coming. | *linguistic underdeterminacy*
PM: EVERYBODY *WHO WAS INVITED* IS COMING *TO OUR PARTY*.
⇒₁ YES, WE NEED MORE CHAIRS.
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the secondary meaning of *S*'s utterance

[!] Given the phenomenon of *linguistic underdeterminacy*,
we can no longer maintain the Gricean division of interpretative labour.

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[!] Relevance Theory is designed to address this challenge;
it replaces *minimalism* and *literalism* with *contextualism*.

Literalism

The encoded meaning of the words uttered by the speaker is close to being fully propositional, so that only reference assignment is needed to determine what is said; the main role of inference in comprehension is to determine what is implicated.

Minimalism

The gap between the linguistically specified meaning of the words uttered and the primary meaning of the utterance is *minimal* (→ indexical reference fixing and disambiguation).

Contextualism

Like what is implicated, what is said is largely underdetermined by the linguistically specified meaning of the sentence uttered; pragmatic inference necessarily contributes to the determination of what is said.

Relevance Theory

Dan Sperber i Deirdre Wilson:

- 1986/1995 *Relevance*;
- 2002, *Pragmatics, Modularity and Mind-reading*;
- 2012, *Meaning and Relevance*.

Robyn Carston, 2002, *Thoughts and Utterances. The Pragmatics of Explicit Communication*.

Tim Wharton, 2003, *Natural Pragmatics and Natural Codes*.

Kate Scott, Billy Clark, and Robyn Carston (Eds.), 2019, *Relevance, Pragmatics and Interpretation*.

Relevance

Relevance is a property of a stimulus (an input to cognitive process).

The **relevance of an input** is a **positive function** of cognitive effects achieved by processing it and a **negative function** of the mental effort its processing requires.

In other words, the relevance of an input increases with the cognitive effects it yields and decreases with the mental effort required to process it.

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Cognitive Principle of Relevance

Human cognition tends to be geared to the maximisation of relevance.

Communicative Principle of Relevance

Every act of overt communication conveys a presumption of its own optimal relevance.

[?] Act of overt communication?

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Grice:

In uttering U , S means that p if and only if S intends:

(i_1) to get H to form a **belief** that p ,

(i_2) to get H to recognize (i_1),

(i_3) that the fulfilment of (i_2) function as H 's reason for his believing that p .

Successful act of communication updates the **common ground** between S and H .

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RT:

In uttering U , S conveys that p if and only if S intends:

(i_1) to make **manifest** or **more manifest** to H the assumption that p ,

(i_2) to make **manifest** to H that S has intention (i_1)

A is **manifest** to $S = S$ is **capable** of mentally representing and accepting A as true or probably true on the basis of perception, memory, testimony, or inference.

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Successful act of communication updates the **cognitive environment** of S and H : the set of assumptions that are mutually manifest to them.

Boozy Birthday Party

(!) He has been drinking!

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(LF) [A CERTAIN MAIL PERSON] HAS BEEN DRINKING.

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(E) PETER HAS BEEN DRINKING *ALCOHOL AT MARIA'S BIRTHDAY PARTY*.
PETER HAS BEEN DRINKING*.

⇒₁ PETER SHOULDN'T DRIVE!

⇒₂ TAKE HIS KEYS AWAY!

⇒₃ IF SOMEONE HAS BEEN DRINKING ALCOHOL, THEY SHOULDN'T DRIVE.

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[?] logical form // explicature // implicated premises and implicated conclusions

Logical form

- what is encoded,
- a structured sequence of concepts and procedures,
- fails to constitute a full proposition.

Explicature

- a proposition communicated by an utterance;
- results from developing the logical form encoded by the utterance
 - unarticulated constituents OR *ad hoc* concepts

Implicature

- a proposition communicated by an utterance, but not explicitly;
- implicated conclusions / implicated premises.

Housewarming Party

(3) A: Do we need more chairs?

B: Everybody is coming.

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LF EVERYBODY IS COMING.

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E EVERYBODY *WHO WAS INVITED* IS COMING *TO OUR PARTY*.

IC WE NEED MORE CHAIRS.

IP IF EVERYBODY *WHO WAS INVITED* IS COMING *TO OUR PARTY*,
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THEN WE NEED MORE CHAIRS.

→ *mutual adjustment mechanism*

parallel rather than sequential (linear) processing

deduction

Everybody who visited Catherin has a runny nose.

Rule

Peter visited Catherin.

Condition

Peter has a runny nose.

Result

abduction

Everybody who visited Catherin has a runny nose.

Rule

Peter has a runny nose.

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Peter visited Catherin.

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induction

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induction

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Peter has a runny nose.

Result

Everybody who visited Catherin has a runny nose.

Rule

Which one of these inferences is truth-preserving?

Housewarming Party

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[!] These components are *co-developed in parallel*, each constraining the others.

deduction: (IP & E) \rightarrow IC

abduction: (IP & IC) \rightarrow E

induction: (E & IC) \rightarrow IP

RT:

structural/syntactic description of the sentence uttered by *S*



[SEMANTIC INTERPRETATION]



Logical Form (LF)



[PRAGMATIC INTERPRETATION]

[→ mutual adjustment]



the explicature (E) of *S*'s utterance + its implicatures (IC & IP)

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structural/syntactic description of the sentence uttered by *S*

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the explicature (E) of *S*'s utterance + its implicatures (IC & IP)

two-system model // one-system model

The theory of *ad hoc* concepts:

- as an alternative to the model of *unarticulated constituents*,
- and its role in elaborating on the idea of *loose talk*.

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- JOHN TOOK OUT THE KEY AND *THEN* OPENED THE DOOR.
- JOHN TOOK THE KEY *FROM HIS POCKET* AND *THEN* OPENED THE DOOR.

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→ provision of unarticulated constituents

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X* — an ad hoc concept resulting from modifying the encoded concept X,
e.g., DRINK* resulting from narrowing (*i.e.*, strengthening) DRINK.

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The key problem of lexical pragmatics:

- How to account for the **context-sensitive** and **pragmatically modulated meanings** of words in actual use?

Atomic concept

- It is an encoded mental representation (= the linguistic meaning of a word).
- It is a “nod” in our memory which gives access to (= activates) three broad types of information:

Logical Entry

- represents the place occupied by the concept in a conceptual hierarchy, e.g., ... \subset TERRIER \subset **DOG** \subset MAMMAL \subset VERTEBRATE \subset ...

Encyclopaedic Entry

- **background knowledge** or **typical associations** as well as **idiosyncratic beliefs** stored in long-term memory, e.g., for **DOG**, this could include: *is often kept as a pet, barks, can be trained, comes in many breeds, etc.*

Lexical Entry

- how this concept is lexicalized in certain languages.

Narrowing (Strengthening)

(4) John took out the key and opened the door.

E₄ JOHN TOOK-OUT* THE-KEY* AND* OPENED* THE-DOOR*.

(5) A: I'm out of petrol.

B: There is a garage round the corner.

E₅ THERE IS A-GARAGE* ROUND THE-CORNER*.

Broadening (Loosening)

(6) Holland is flat.

E₆ HOLLAND IS FLAT*.

(7) The steak is raw.

E₇ THE-STEAK* IS RAW*.

(8) Sue ran to the bank.

E₈ SUE RAN* TO THE-BANK*.

Metaphors

(9) A: Can Peter calculate our project's budget?

B: He is a computer.

E_{9B} PETER IS A-COMPUTER*.

(10) A: Is it easy to become friends with Peter?

B: He is a computer.

E_{10B} PETER IS A-COMPUTER**.

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Relevance-guided comprehension heuristics

(a) Follow a path of least effort in constructing an interpretation of the utterance (in resolving ambiguities, in reference fixing, in going beyond linguistic meaning, in computing implicatures); in other words, consider interpretive hypotheses in order of decreasing accessibility.

(b) Stop when your expectations of relevance are satisfied.

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a. ... is a piece of office equipment. → LE

b. ... is good in making calculations. → EE

c. ... has no feelings. → EE

d. ... → EE

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- c. ... has no feelings. → ~~EE~~ LE
- d. ... → EE

Loose talk

Continuum of cases:

(4) John took out the key and opened the door.

“Literal” uses

...

(6) Holland is flat.

Approximation

...

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|------|---|-----------------------|
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| ... | | |
| (6) | Holland is flat. | <i>Approximation</i> |
| ... | | |
| (8) | Sue ran to the bank. | <i>Approximation</i> |
| ... | | |
| (10) | A: Is it easy to become friends with Peter?
B: He is a computer. | <i>Metaphor</i> |

Relevance Theory:

Despite its internal diversity, this class of communicative phenomena is homogeneous with respect to the cognitive process underlying their interpretation. Comprehending each of them involves constructing *ad hoc* concepts.