Theories of Language Comprehension: India and Beyond

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Miscellaneous Concepts

Non-Literal Language

- Introduction
- Knowledge of:
- (i) Speaker's Intention
- (ii) Topic of the conversation
- (iii) Common Ground
- (iv) Audience Design

- Intended Meaning Vs. Pragmatic Inferences
- Processing of Metaphors, Metonyms, Idioms...
- Conversation Analysis
- (i) Self Repair
- (ii) Code Switching
- (iii) Egocentric Production
- (iv) Perspective Taking

Pragmatics: the study of principles that govern the use of language while having conversations. Sometimes, also known as 'Communicative Competence' (as against 'Linguistic Competence').

"Figurative language has traditionally been considered derivative from and more complex than ostensibly straightforward literal language."

SAM GLUCKSBERG

J. L. Austin (1962) and John Searle (1969) (philosophers of language) produced a great deal of the framework upon which the study of pragmatics is based.

Austin and Searle characterized a conversation as a series of speech acts, consisting of:

- (i) a particular linguistic form = 'locution',
- (ii) an intended function = 'illocutionary force', and
- (iii) an effect on the interlocutor = 'perlocutionary force'.

These distinctions help us understand the use of non-literal language.

People often use language when the intended meaning is very different than the basic meaning.

Indirect request:

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'My pen is not working.' (= Lend me your pen!)
'Can you open the door?' (= Open the door!)
'Would you pass the salt?' (= Pass the salt!)
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> Idioms:

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'Dave kicked the bucket.' (= died)
'Kathy spilled the beans.' (= reveal a secret unintentionally)
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Metaphors/ Frozen Metaphors:

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'Susan flew down the street on her bicycle.' (= go/arrive quickly)
'That class was a sleeping pill.' (= boring)
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People often use language when the intended meaning is very different than the basic meaning.

> Irony and Sarcasm:

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'The food is so delicious, I already feel full.' (after a bad meal)
'Now, that was interesting!' (after some boring event)
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> Metonyms:

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'I read Dickens.' (= his works) [Producer-for-Product]

'The students protested after Kashmir.' (= event in Kashmir) [Place-for-Event]

'I talked to the Convent yesterday.' (= school) [Place-for-Institution]

'Saddam Hussain invaded Kuwait.' (= his men attacked a place/ people) [Controller-for-Controlled]
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Non-Literal Language Processing

Understanding Conversations:

Extra-linguistic cues

"Conversation may be less like a carefully choreographed ballet, and more like guerrilla warfare..."

To understand any conversation, a reader or a hearer uses any or all of the following extra-linguistic cues:

- Prosody
- Backchannel signals (body language, hand gestures, facial expressions, head-nodding, eye-rolling, etc.)
- Context and topic of the conversation
- ☐ Interlocutor's attitudes, intentions, and personalities
- ☐ Constant awareness of hearer's state of knowledge (active listening)

Based on these cues, a speaker takes turn in speaking. If he recognizes the failure in comprehension, he self-repairs his speech by reformulating the message.

Non-Literal Language Processing

Common Ground = shared and mutually recognized knowledge between participants in the

conversation

Non-literal language processing involves:

- computing the literal meaning of a given expression; and
- checking that literal meaning against the requirements imposed by Gricean maxims.

Gricean Maxim of Conversation:

Philosopher Herbert Paul Grice (1975) has given four cooperative principles followed in any conversation:

- Maxim of Quality: Utterances should be literally true. A person should tell the truth. [Speak truth.]
- 2) Maxim of Quantity: Utterances should provide new information. A person should not provide the same, repeated information which is in the *Common Ground*. Once a person figures out the thrust of the argument, they get annoyed by the repetitive information. [Speak new.]
- 3) Maxim of Manner: Utterances should be clear, unambiguous and sensible. A person should convey information as plainly and directly as possible, so that the utterance does not have multiple possible interpretations. [Speak clearly.]
- Maxim of Relation/ Relevance: Utterances should contribute to or continue the current topic of discussion, unless a person explicitly introduces a new topic. [Stick to the topic.]

Non-Literal Language Processing

Standard Pragmatic View of Non-Literal Language Processing:

- A reader first computes the Literal meaning and considers it as an intended meaning temporarily.
- 2. He attempts to integrate this meaning with the linguistic and social context.
- 3. If the literal meaning is deficient in some way, then he will engage in further pragmatic inferencing and non-literal interpretation in favor of more sensible interpretation. Here, the earlier interpretation is discarded.

The reanalysis process involves alternative meaning, rather than alternative syntactic structures.

Non-Literal Language Processing: Idioms

An utterance could be considered deficient if its literal meaning is, "grammatically deviant, semantically anomalous, explicitly or implicitly self-contradictory, conceptually absurd, nonsensical...

Pragmatically inappropriate, obviously false, or so obviously true that no one would have reason to utter [it]."

- Stern (2000)

Standard Pragmatic View of Non-Literal Language Processing:

Grammatically deviant: 'Can you fetch me a beer?' Vs. 'Can you run a mile?'

Semantically anomalous: 'This man is an animal.' (= he behaves in an unpredictable or uncivilized manner.)

Explicitly self-contradictory: 'Let me say it again: I never repeat myself.' 'Deep down, you are too shallow.' 'I don't make predictions, and I never will.' 'I have always been a liar.'

Implicitly self-contradictory: 'Nobody goes to the restaurant because it's too crowded.' 'The restaurant opens at 5pm and starts serving at 3pm.' 'I am a vegetarian, but I eat fish.'

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Standard Pragmatic View of Non-Literal Language Processing:

Conceptually absurd: 'Yes, eat more of that pizza, it'll help you lose your weight!', 'Colourless green ideas sleep furiously.'

Nonsensical: 'and then the chicken killed the lion....', 'I saw the water walking over the bridge.'

Pragmatically inappropriate:, 'The food is delicious' (during a funeral meeting), 'You hit me with a Veena? No I didn't! It's a Tambora!'

Obviously false: 'John is a real tiger.'

So obviously true that no one would have reason to utter it: 'Sure, that blind person cannot see!'

Non-Literal Language Processing: Idioms

"Metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature."

LAKOFF AND JOHNSON

"Metaphors are necessary and not just nice." -

ANDREW ORTONY

Metaphor Processing:

- Comparison School of Thought: People interpret metaphors by mentally converting them to similes.
 - 1. Similes have an extra word: 'such as', 'like'...
 - 2. Similes are generally reversible (Baseball is like cricket), but metaphors are not. (Baseball is my life.)
 - 3. Metaphoric expressions take longer to process than similes.
- 2. Conceptual Mapping Hypothesis:
 - 1. It minimizes the distinction between metaphoric and literal language. Because, it views metaphors as ubiquitous feature of language, and not special.
 - 2. Much of our understanding of language is based on discovering or highlighting/ mapping links between different domains.
 - 3. Ex: 'When the old man died, the inheritance went to John. He was all at sea.'

Non-Literal Language Processing: Idioms

Metonymy or metonymic expressions occur when a word that normally refers to one thing is used to refer to something else that bears a relationship to that word.

Metonymy Processing:

- A reader either applies a 'literal meaning first' strategy or 'metonymic meaning first' strategy.
- If a metonymic words are polysemous (ex: Dickens, Vietnam), they are harder to process.
- 3. Unfamiliar metonymic expressions attract more eyefixations than the familiar ones. (ex: attacked Vietnam vs. during Finland)
- 4. The Underspecification Hypothesis: Underspecification means, rather than activating a detailed sense of a word (such as *Dickens*), a reader initially activates a wide field of concepts associated with *Dickens* and then narrow it down to the required interpretation. Hence, familiar literal and metonymic expressions are processed equally quickly.

Non-Literal Language Processing: Idioms

Idioms:

Expressions that use ordinary words having conventional meaning. Putting together in a phrase, they convey much more meaning.

Idiom Processing:

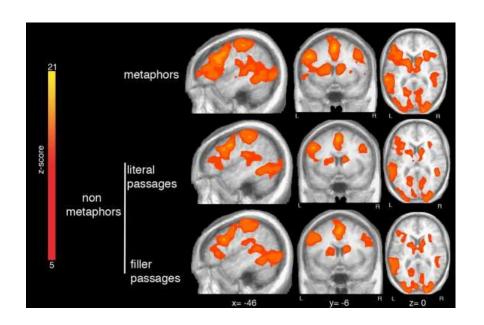
- Classical View of Idiom Comprehension: Idioms are analyzed and interpreted as wholes (Chomsky, 1980).
- 2. Idiom Decomposition Account: Idiom interpretation depends upon its specific details. Ex: The time taken to process *Non-decomposable idioms* ('spill the beans') is more than *Decomposable Idioms* ('Fasten your lips') is different. Because readers process individual words, assign them individual meanings, and then interpret them as a whole.
- 3. Configuration Hypothesis: Idioms are mentally represented as configurations of lexical items without any separate representation in the lexicon. There is no prestored phrase-length item in the memory. Words are processed in a normal way until a reader receives the information that the phrase can be recognized as a familiar configuration of words.

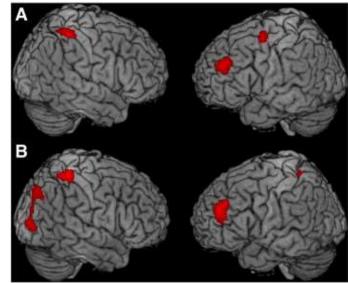
Non-Literal Language Processing: Some More Experimental Evidence

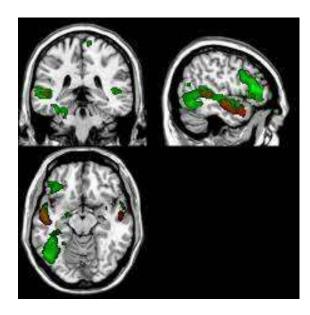
- 1. Non-literal meanings are computed as fast as literal meanings. (Ray Gibbs, 1983)
- 2. Both literal and metaphoric expressions took similar amount of time to paraphrase. (Harris, 1976)
- 3. Literal statements and metaphoric statements are recognized with the same speed. (Smith, 1984)
- Text having metaphoric expressions are remembered better than the literal texts. (Albritton, 1995)

Non-Literal Language Processing: Some More Experimental Evidence

Neurophysiological (ERP) and neuroimaging (fMRI, PET) experiments show that different networks of brain areas respond differently to literal and non-literal language.







Key Takeaway:

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Reading Material: