Semantics and Pragmatics

Meaning, Thought and Reality

Sense and Concepts

- **Sense:**

- Places a new level between the words and the world: a level of mental representation.

- Thus, a noun is said to gain its ability to denote because it is associated with something in the speaker/hearer's mind.

- Does everything we talk about exists in reality?

- It raises a question of what these mental representations are?

- One simple and very old idea is that these mental entities are images.

- The relationship between the image and the real world entity would be then one of resemblance.

- This theory runs into serious problems with common nouns.

- The variation in images that different speakers might have depending on their experience.

- For instance, the word 'triangle' many have a mental image of an equilateral triangle, another may have an image of scalene triangle.

- It is difficult to conceive of an image that combines the features shared by all triangles, just as to all cars or dogs.

- Images cannot be the whole story.

- A usual modification of the image theory is to hypothesize that the sense of some words, while mental, is not visual but a more abstract element.

- **Concept:**

- Concept might be able to contain the non-visual features.

- E.g. a definition of triangle, may include a 'three-sided polygon, classifiable by its angles or sides'.

- Describing some concepts might be simple and related to perceptual stimuli – e.g. SUN, WATER, etc.

- Other concepts may be complex, e.g. MARRIAGE or RETIREMENT which involve whole theories or cultural complexities.

- But the problem for many linguists is that psychologists are still involved in investigating what concepts might be like.

- Unless we have a good idea of what a concept is, we are left with rather empty definitions, e.g. 'the sense of the word 'dog' is the concept 'DOG'.

- Kempson (1997) makes an argument for denotational semantics and in favor of modelling sense in a formal, rather than psychological way.

Necessary and Sufficient Conditions

- Necessary and sufficient conditions – one traditional approach to describe concepts.

- This approach comes from thinking about concepts as follows:

- If we have a concept like WOMAN, it must contain the information necessary to decide when something in the world is a woman or not.

- How can this information be organized?

- Perhaps as a set of characteristics or attributes, i.e. X is a woman if and only L.

- Where L is a list of attributers, like:

- X is human;

- X is adult;

- X is a female etc.

- One can see these attributes as conditions: if something must have them to be a women, then they can be called necessary conditions.

- In addition, if we can find the right set, so that just that set is enough to define a woman, then they can be called sufficient conditions, i.e. the right amount of information for the concept.

- Thus, this theory views concepts as lists of bits of knowledge: the necessary and sufficient conditions for something to be an example of that concept.

- One major problem with this approach - it seems to assume that if speakers share same concepts, they will agree on the necessary and sufficient conditions.

- If something has them, it is an X; if not, not.

- Let us take an example of the noun 'zebra'.

- We might agree on some attributes: i) is an animal, ii) has four legs, iii) is striped, iv) is a herbivore, etc.

- The problem is: which of these is necessary?

- Obviously, the first; but the rest are more problematic.

- If we find in a herd of zebra one that is pure white and black, we might still call it a zebra.

- Or if by some birth defect, a three legged zebra comes into the world, it would still be a zebra.

Prototypes

- Eleanor Rosch and her co-workers - suggested the notion of prototypes.

- A model of concepts which views them as structured so that there are central or typical members of a category, such as BIRD or FURNITURE, but then a shading off into less typical or peripheral members.

- e.g. 'chair' is a more central member of the category FURNITURE than 'lamp'.

- Or 'sparrow' is more typical member of the category BIRD than 'penguin'.

- This approach seems to have been supported by Rosch's experimental evidence: speakers tend to agree more readily on typical members than on less typical members.

- These members come to mind more quickly.

- "What kind of bird are you, if you cannot fly", said the little bird to the duck. "What kind of bird are you, if you cannot swim", said the duck and dived (Prokofiér, Peter Wolf).

- This quote is the essence of the prototypical conception of the structures of categories.

- People create categories of things and assign the same names to things that are not exactly the same but similar.

- Rosch states that human categorization "should not be considered the arbitrary product of historical accident but rather the result of psychological principles of categorization" (1978, p.27).

- This means that human cognition is the primary element for any categorization process including linguistic categorization.

- Rosch argues that an object is assigned to a category through comparison with its prototype object rather than a set of criteria features.

- This prototype object consists of a mental entity in the human mind.

- The experiments show that prototype theory involves a psycholinguistic notion that aids human categorization.

- Prototypes provide some insight into the way we conceive of certain ideas/objects.

- Prototypes may help children learn the meanings of new words.

- Culturally and socially dependent.

- Prototypes can vary across populations.

- Many words have no clear mental images such as 'forget, things, without, concept'.

Linguistic Relativity

- The notion of linguistic relativity, associated with Edward Sapir and Benjamin Lee Whorf, is an idea that has spread far outside the fields of anthropology and linguistics, where it began.

- One reason perhaps is that it provides explanation for a common experience when dealing with different languages.

- Writers translating between languages have often remarked on the lack of fit between words in two languages e.g. color words might not have exactly the same range in different languages.

- The fact that language mirrors cultural differences followed to the work of Frabz Boas, an anthropologist.

- To him, people's thoughts are determined by the categories available to them in their language.

- Boas (1966) suggests that different languages, reflecting their speaker's cultural practices, might embody different conceptual classifications of the world.

- These observations open the debate about the relationship between language, culture and thought.

- To what extent does the particular language we speak determine the way that we think about the world?

- Sapir (1949) proposed that the particular language we speak conditions our conceptualization.

- Similarly, Whorf (1956) strengthened the idea of the link between language and thought into the notion he called linguistic relativity.

- Its basic premise is that the way we think about the world is determined by our culture and linguistic background.

- His observation is not restricted to word meaning; indeed, he believed that meanings derived from grammatical systems (e.g. notions of number and space in nouns or aspect and tense in verbs).

- Our own language predisposes us to see both reality and other languages through its own filter.

- This would have serious implications for the prospects of a universal semantic theory.

- It might mean that we could always, with some difficulty and inexactitude, translate from one language to another.

The Language of Thought Hypothesis

- The cognitive science (the interdisciplinary study of intelligence), rejected the idea of linguistic relativity.

- It is a typical response is to dismiss as a fallacy such a strict identification of thought and language.

- Two main types of arguments are used to support this view.

- First, there is evidence of thinking without language.

- Second, language underspecifies meaning.

- Pinker (1994) presents various kinds of evidence that thinking and language are not the same thing.

- Evidence of thought processes, such as remembering and reasoning, which have been identified in psychological studies of human babies and of primates.

- Both provided examples of creatures without language.

- Artists and scientists also claim that their creativity sometimes derives from ideas which are non-linguistic images.

- Such evidences argue that cognitive processes do not employ a spoken language such as English or Arabic but may use a separate computational system in the mind: a language of thought.

- Second argument – that language underspecifies meaning – emerges from the characteristic view of the communication of meaning in semantics and pragmatics.

- Meaning is richer than language in communication process.

- These different types of arguments are often taken in cognitive science, to support the view that we think in a language of thought, sometimes called 'Mentalese'.

- When we want to speak, we translate from Mentalese into our spoken language, be it Punjuabi or Russian.

- One natural extension of this view is the proposal that everybody's Mentalese is roughly the same; that is, that the language of though is universal.

- Thus, human beings have essentially the same cognitive architecture and mental processes, even though they speak different languages.