Embodied meaning and spatial experience

Lecture 2
Our knowledge of the world is indirect because it is constrained by how we experience it

• Our experience of the world is always mediated via our uniquely human perceptual system, physiology and neural architecture

• E.g. gravity for a bird and a human - presumably very different, but equally 'real'
The real world provides the raw substrate for our sensory perceptions and the conceptualizations which arise from them.

- humanly perceived experience is fundamental to human cognition
- determined by the nature of the bodies we have
- \( \Rightarrow \) experience is embodied
Meaning itself is embodied

the concept of CONTAINMENT

- the surrounding LM will often offer physical protection from outside forces
- hide the TR from outside view
the spatial particle \textbf{in} codes the concept of CONTAINMENT

- I awoke in my bedroom
- I went to the cupboard in the kitchen
- I found the box of cereal in the cupboard
- I read it in the newspaper
- Anne Frank lived in perilous times
- Will is in love

not limited to English
Spatial scenes

• we segment our perceptions of the world into spatial scenes

• these spatial scenes result from entities in the world - which exist independently of human beings

• perceived, then analysed and understood in ways which are wholly dependent upon the kind of neural architecture of the human brain, the particularities of the human body and the way these bodies interact with the world
My cup is on the table.

- contact
- functionally - support
- gravity
- prevents a cup from falling
- an understanding of the physical properties of the entities involved (e.g. size, materials they are made of, etc.)
the earliest formative experiences humans undergo

- battling with gravity to remain upright
- discovery of force dynamics (e.g. we can cause sth to move away from us when we push it and towards us when we pull it)
Polysemous lexemes, such as English spatial particles, form semantic polysemy networks. Polysemy networks form as a result of speakers perceiving communicatively useful connections between a non-primary use and the primary sense.
• Its distinct senses did not just accidentally arise because, for instance, speakers could not think of another phonological string with which to label the distinct concept.

• Speakers must have found something in the basic spatio-physical configuration of over which connected to the concept of, say, 'completion' (e.g. The movie is over [=complete]).
Experiential correlation
Joseph Grady (1997a, 1999)

A consequence of the nature of interaction between humans and their environment is that certain kinds of experiences are frequently correlated (e.g. vertical elevation of a physical entity and an increase in the quantity of the entity)
The notion of two distinct experiences being correlated is an important one, as it leads to two distinct concepts becoming linked at the conceptual level.

- Prices have gone up recently.
- The stock market is rising.
- She's just got her highest test score of the semester.
- The population size is on the way up.
another example of experiential correlation - the experiences of **knowing** and **seeing**

- I see what you mean.
- I see what you're trying to say.
- Now I see! [= understand]
- Your **vision** is just what our company needs.

**Seeing**, **sight** and **vision** are conventionally interpreted as representing knowledge and understanding.
To sum up

Meaning derives from the complex interaction between real-world experience and conceptual processes which create and organize this experience in meaningful ways

=> in this sense meaning is embodied