COGNITIVE LINGUISTICS AND MEANING
Cognitive linguistics as a part of cognitive science

- 1987. official beginning of cognitive l.

George Lakoff: “Women, Fire And Dangerous Things”  
(c. semantics)

Rod Langacker: “Foundations of Cognitive Grammar”  
(c. grammar)

cognitive linguistics- very broad framework of l., radically different from traditional linguistics; part of cognitive science

cognitive science- conference at MIT on 11 September 1956
MIT Conference

- 3 major papers:
  1. Newell & Simon (mathematicians)
  2. Chomsky (linguist)
  3. George Armstrong Miller (psychologist)

1957. Chomsky’s dominion; from 1970 reaction against TG’s inability to resolve the problem of m.

Berkley: W. Chafe, G. Lakoff, R. Langacker and C. Fillmore, E. Rosch, L. Zadeh
• 3 basic fields in c. science: humanities, biomedicine, technical sciences
• Gardner’s diagram of the components of cognitive science
• Linguistics—for a long time considered “necessary evil”, but nowadays very much appreciated (neuroscientists cannot analyze afasia without linguistics); with direct connections to all other c. sciences
Traditional approach vs cognitive science

- What is reason? How is our conceptual system organized? How do we create meaning?
- **traditional approach**: reason is abstract; ability to think is abstract and concepts transcendental (not limited by physical boundaries of any organism)
- **modern approach**: reason has a bodily basis; meaning is what is meaningful to man as a thinking being
- both approaches consider *categorization* as the basic way in which we experience reality and construct meaning
Introduction to categorization

- **traditional a.**: categories are determined only by features all members of a c. Share; determined independently of man; metaphor and metonymy not included in the nature of categories

- **cognitive a.**: our bodily experience is the basic way in which we construct categories
• Australian a.l. dyrbal has a category “balan”: women, fire, dangerous things, small birds

• From Aristotle to Wittgenstein categories considered ‘abstract containers’ with entities either a part or not part of the category

• Rosch: if c. is determined only by features shared by all its members, no member can be a better example of a category
Ludwig Wittgenstein

- **family resemblances**: members of a c. related without having any feature in common (“games”), members are similar, but without a single set of f. common to all

- **membership gradience**: some c. have membership gradience and no clear boundaries (artificial, e.g. video games)

- **centrality gradience**: members of a category can be more or less central (whole numbers in the category of numbers)
J.L. Austin

• polysemy as a form of categorization: related meanings of words form categories and related m. bear family resemblance

• e.g. ‘healthy’: primary (nuclear) m. in applying the adj to the human body; ‘healthy complexion’, ‘healthy workout’ - result of a healthy body
Lofti Zadeh

- **fuzzy set theory**: some c. don’t have membership gradience, others do
- ‘Senator of the USA’-fixed, no gradience
- ‘rich people’, ‘tall people’- have membership gradience
- classical theory-either inside the c. (membership value 1) or outside it (membership value 0)
- in fuzzy set theory- values between 0 and 1
Berlin & Kay: “Basic Color Terms”

- not all languages make the lexical distinction between 11 color terms as does English (although all humans are capable of conceptual distinction)
- Some have color terms which are unions (one lexeme to cover e.g. red, orange, yellow)
- hierarchy: black-white / red / yellow-blue-green / brown / purple-pink-orange-gray
- categories of color have **focal members** (focal red is the best example of red)
- colors do not exist independently of human beings
Brown & Berlin

- **basic-level categorization**: On a basic level, children learn categories and names of objects.
- Neither the most general nor the most specific, but "natural"; higher and lower levels are products of imagination.
- Categories of plants and animals: basic level is the level of species (vs gender and subspecies).
- Easier to remember, simpler lexemes at this level, culturally more important.
George Lakoff: “Women, Fire And Dangerous Things”

- concept ‘mother’
- classical theory: m. of mother defined as: woman who gave birth, but doesn’t correspond to reality; prototype in the USA: woman who raises the child
- ‘mother’-concept whose meaning is based on a complex model which combines these simple c. models: birth m., genetic m., nurturance m., marital m., genealogical m.
Lakoff & Zadeh:”Hedges”

• high frequency of expressions: *a sort of, a kind of*; call them **hedges**

• high frequency-great importance in categorization, help us say that an entity is not a prototypical member of a category