



Lexical Meaning in Cognitive Linguistics: From Classical Semantics to Conceptual Metaphor to Conceptual Blending

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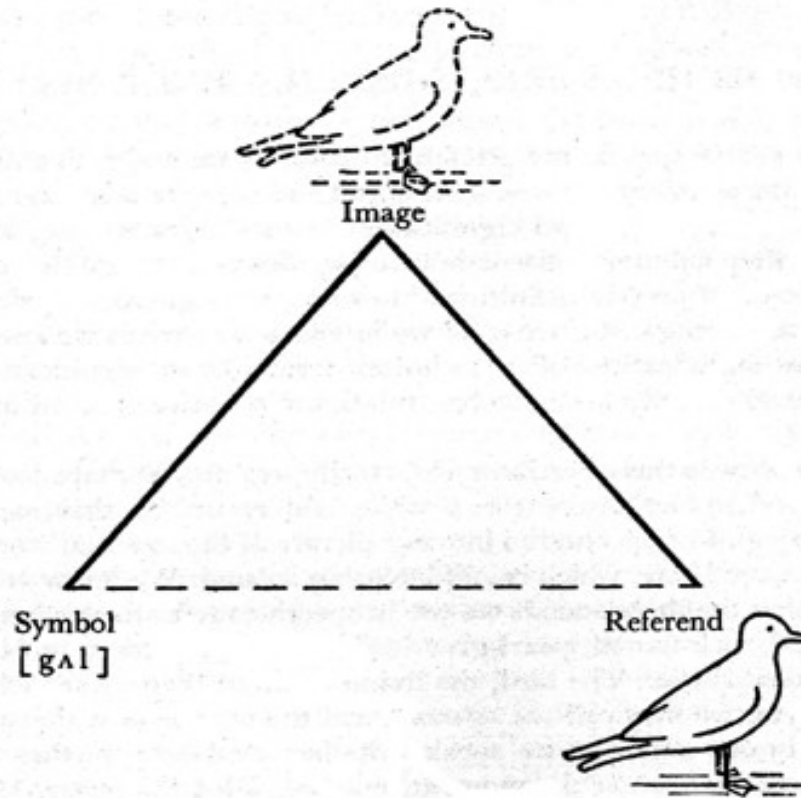
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The Semantic Problem

- Why is a chair a chair?
- 'The chairness' of a chair, inherent to the object?
- A necessary, direct link between the word and the object (Plato)?
- An intermediary?



The Semantic Triangle



- Ogden and Richards (1921) *The Meaning of Meaning*

Anglo-American semantics today

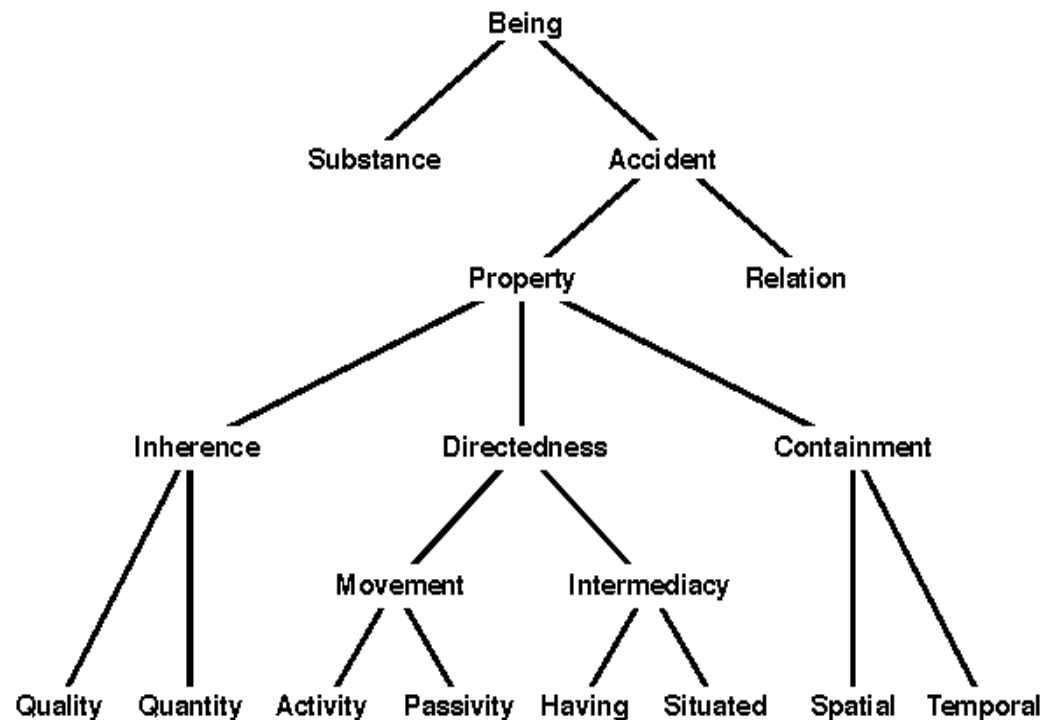
- Smith and Medin (1981)¹ Three approaches to categorization – hold today, too:
 - Atomistic
(tree = a WOODY PERENIAL PLANT...)
 - Probabilistic
(tree = +SOLID, +NATURAL, +ANIMATE, -MOVING,...)
 - Exemplar
(the “prototypical” tree = ROOT, TRUNK, CROWN)

Atomistic attempts (ca. 1960-1975)

- Necessary and sufficient conditions
- “A chair is a four-legged object used for sitting”
- Further break down into elements
- “A leg is a...” “An object is a...” “Sitting is...”
- Further break down...
- Until you reach the level of *ultimate categories*

Categories

- Aristotle: “fundamental proto-concepts”
- Analysis:
- Kill = cause to become (neg) alive
- 'causation' and 'becoming' prior to 'killing'; 'alive' prior to 'dead'...
- In search of a 'deep structure' of meaning (not syntax!). A big clash with Chomsky 1968-1972.
- **The generative semanticists**
- **The Linguistics Wars**



How about these?



Or these?



Or these?



Are there actually 'primitives of meaning'?

If there are, then there must be an “ultimate causation”, i.e. meanings must be reducible to atomic elements...



Are they..?

Not the mention
the notorious
problem of context



Which brings us here...



The collapse of generative semantics

- Chomskian semanticists switch to studies of “sentence meaning” and – in most approaches – give up on lexical semantics altogether!
- Lakoff retires... for five or so years...

Why Women are evil!

$$\text{Women} = \text{Time} \times \text{Money}$$

Everybody knows that:

$$\text{Time} = \text{Money}$$



$$\text{Women} = \text{Money} \times \text{Money} = [\text{Money}]^2$$

We know that money is the root of all evil:

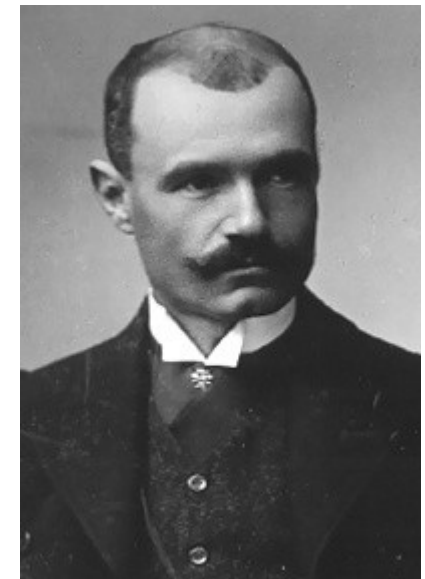
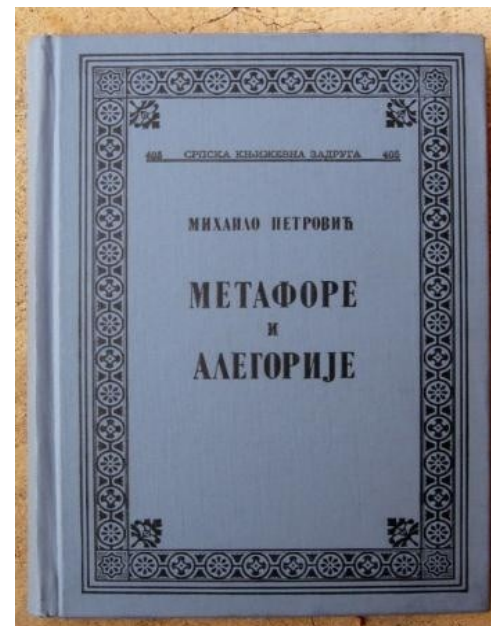
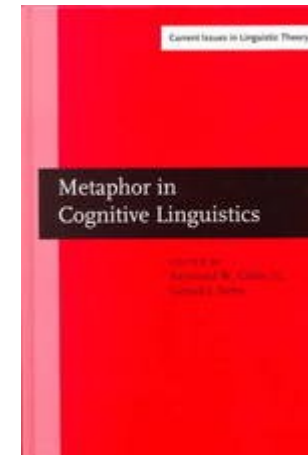
$$\text{Money} = \sqrt{\text{Evil}}$$



$$\text{Women} = [\sqrt{\text{Evil}}]^2 \Rightarrow \text{Women} = \text{Evil}$$

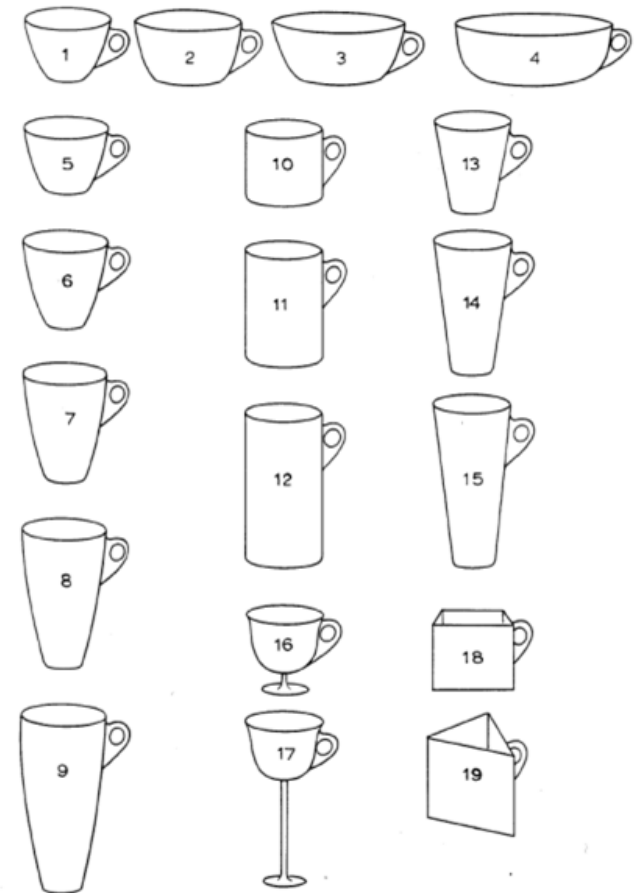
The exemplar approach...

- Alternative approaches to categorization:
- Wittgenstein, ca. 1953 – **family resemblance**
- Rosch, ca. 1975 - **prototypes**
- Lakoff 1987 – **ICMs** : relatively stable representations equivalent to *theories* about the world (*Is the Pope a bachelor* – ICMs 'marriage' and 'Catholicism')
- (new at the time? Not really... Kant, Blumenberg, Weinrich, Merlau Ponty, Mika Petrovic Alas)



Concepts are all but clearly defined!

- Eleanor Rosch (1975)
- William Labov (1973)



**Also: categories (and centrality effects) may expand BEYOND JUST ONE DOMAIN!
... Which gives rise to the phenomenon of CONCEPTUAL METAPHOR.**

How did metaphor fit in?

- The classical view
- Literal and metaphorical meaning
- “Oh, Hamlet, thou has cleft my heart in twain”
- “Love is not love... [...] if it bends with a remover to remove...”
- Rhetoric. Master trope. Reduced comparison.



Literal and figurative language

- Problems with this view (compositionality, truth conditions, literal meaning comes first, everything else – if present at all – follows)
- Evans and Greene Ch 9.1 – distinctions hardly hold (after Gibbs, 1994)
- *Conventional literality vs. poetic usage* (but: Things are *going smoothly*, He is *in* a state of shock)
- *Non metaphorical vs. metaphorical use* (Achilles is brave – OK, but try talking about *time* or *music* without using a metaphor)
- *Truth-conditionality* (but many lg expressions are not propositions – e.g. *Could you help me, please?*, *I name this sheep Elizabeth*)

CMT – The notorious intro example

- a. Look *how far we've come*.
- b. We're at *a crossroads*.
- c. We'll just have to *go our separate ways*.
- d. We can't *turn back* now.
- e. I don't think this relationship is *going anywhere*.
- f. *Where* are we?
- g. We're *stuck*.
- h. It's been *a long, bumpy road*.
- i. This relationship is *a dead-end street*.
- j. We're just *spinning our wheels*.



And the 'cross-domain mappings'

Source: JOURNEY → Target: LOVE

TRAVELLERS → LOVERS

VEHICLE → LOVE RELATIONSHIP

JOURNEY → EVENTS IN THE RELATIONSHIP

DISTANCE COVERED → PROGRESS MADE

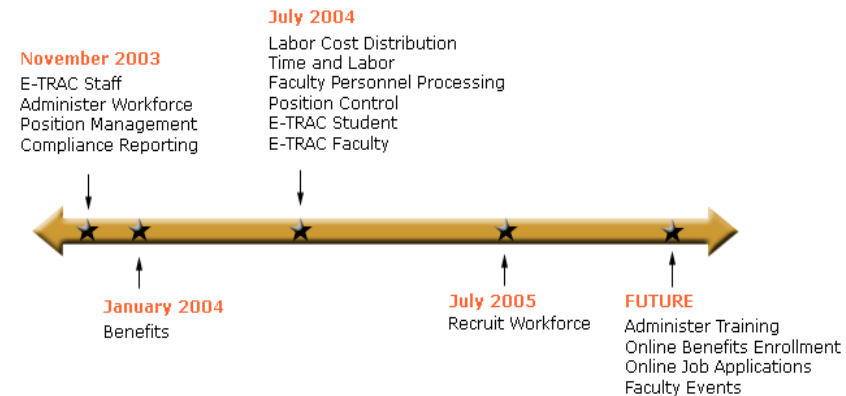
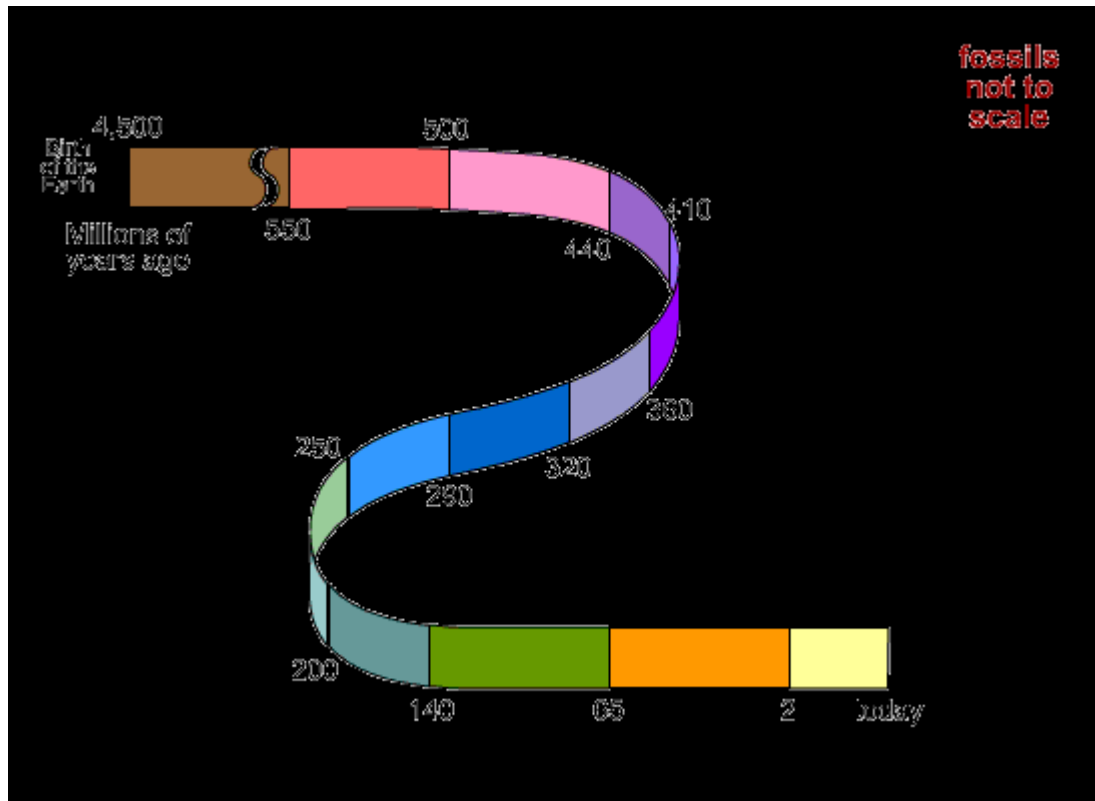
OBSTACLES ENCOUNTERED → DIFFICULTIES EXPERIENCED

DECISIONS ABOUT DIRECTION → CHOICES ABOUT WHAT TO
DO

DESTINATION OF THE JOURNEY → GOALS OF THE
RELATIONSHIP

Any other examples?

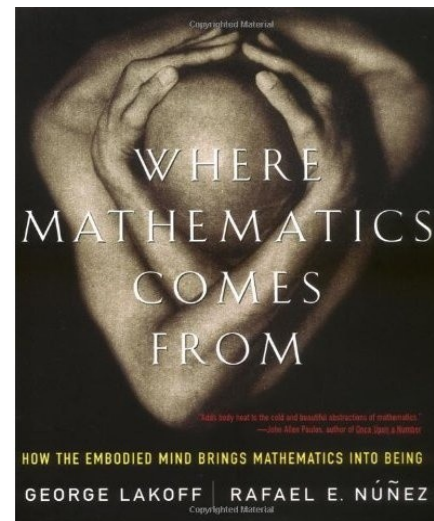
- SPACE is TIME (“a protoconceptual metaphor”)
- How do we understand TIME?



English prepositions!

Numbers...

- Why don't I have any problems understanding this:
- **16**
- But I do have problems with this:
- 1000101101 or this:
- $2AF3 = 10,995$



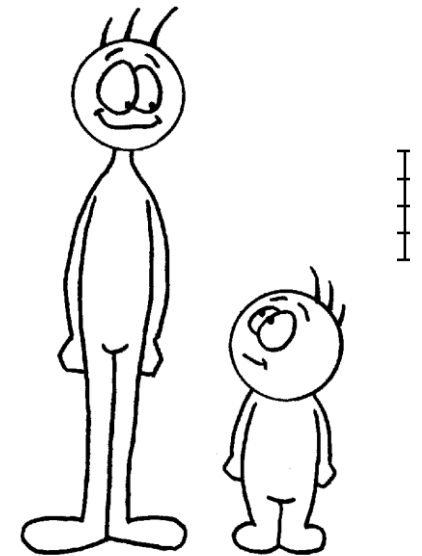
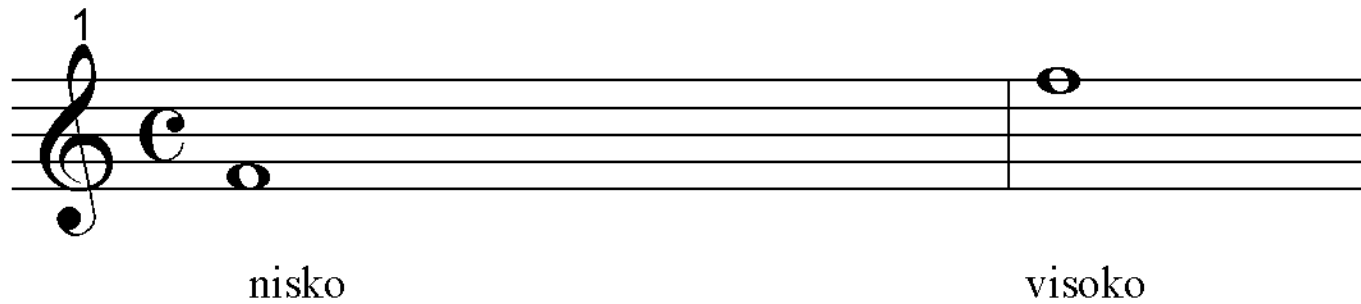
My favorite...

- The musical system is abstract
- The only way to approach it is to use a metaphor
- Are pitches really UP and DOWN
- Do they actually MOVE?
- What runs through the musical FLOW?
- Does music 'INVOKE' EMOTIONS?
- What indeed is LIGHT in the sound of the trumpet and DARK in that of the viola? etc.



The simplest example

- PITCHES are LOCATED IN THE VERTICAL SPACE



Common mappings

“PITCHES ARE HEIGHTS”

SOURCE DOMAIN

Series of dots along the line

Low position

High position

Vertical axis, proportion of lines

Change of position along the line



=

=

=

=

=

Low and high

TARGET DOMAIN

Music

Low frequency

High frequency

Key

Change of frequency

“PITCHES ARE SIZES”

SOURCE DOMAIN

Spectrum of sizes

Smaller object

Bigger object

Sphere, geometrical proportion

Expansion of the sphere



=

=

=

=

=

Small and big

TARGET DOMAIN

Music

Low frequency

High frequency

Key

Change of frequency

“PITCHES ARE THICKNESSES”

SOURCE DOMAIN

Spectrum of thicknesses

Thicker object

Thinner object

Horizontal axis, width proportion

Expansion of the axis



=

=

=

=

=

Thick and thin

TARGET DOMAIN

Music

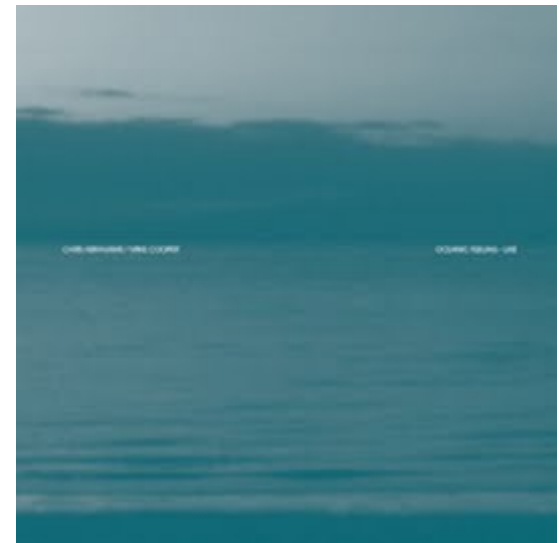
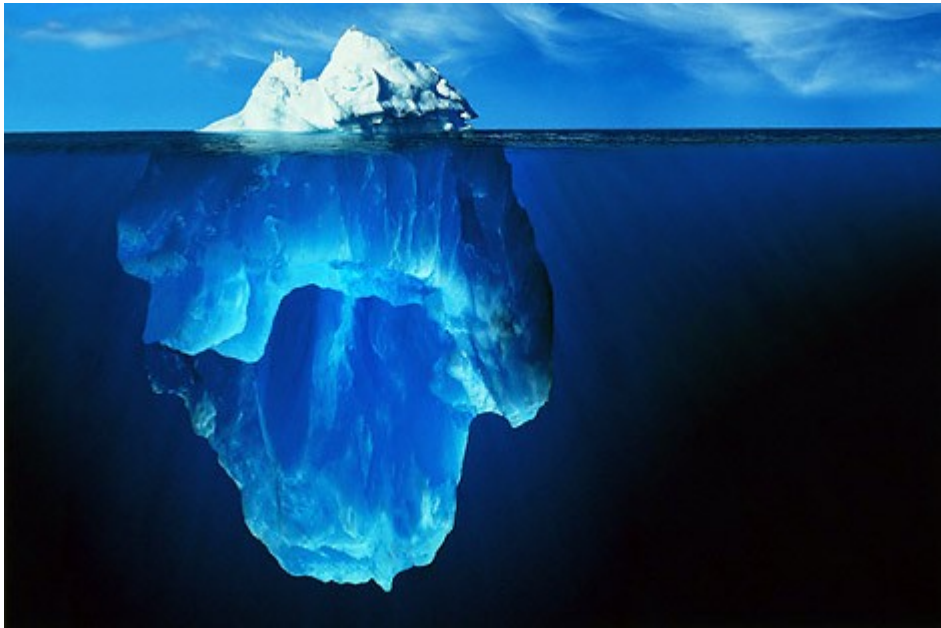
Lower frequency

Higher frequency

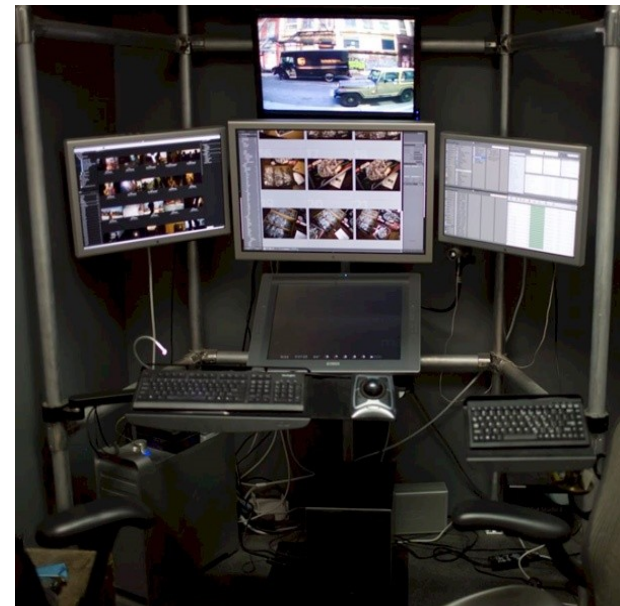
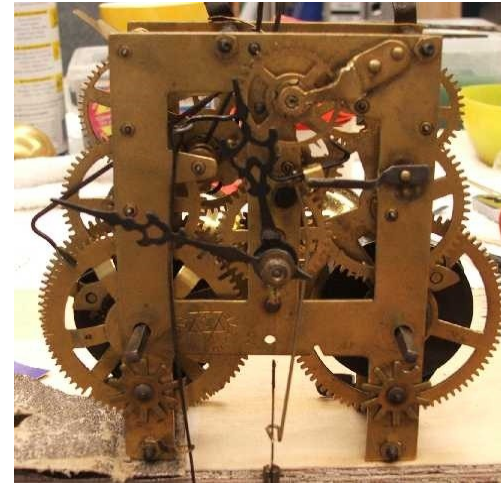
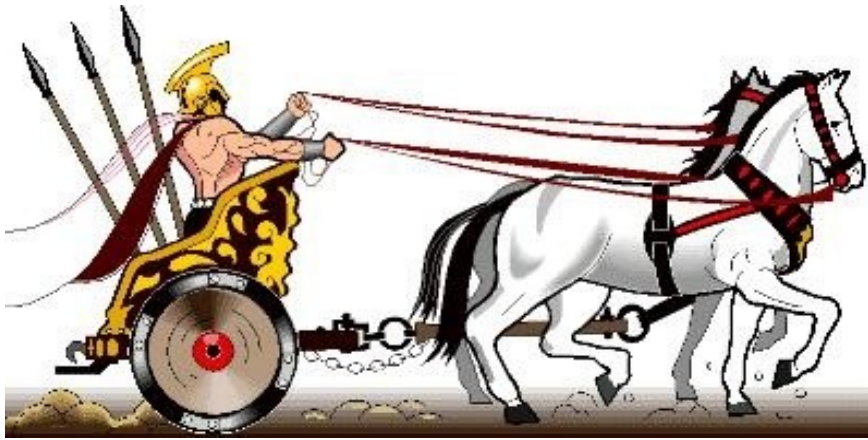
Key

Change of frequency

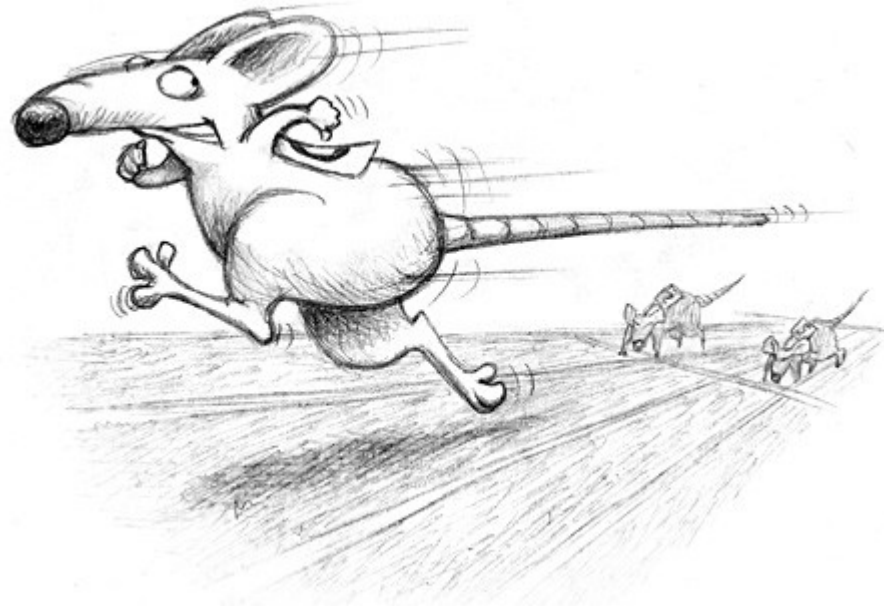
Ultimately... in psychology



Ultimately... in cognitive science



Any other interesting concepts that 'have to' be thought of in metaphorical terms?



CMT – Theoretical principles

“Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (Lakoff and Johnson, 1980: 3).

Thought vs. language

Source and target domains

Mapping

Selectivity



CMT - principles

- *Unidirectionality*

(even: PEOPLE are MACHINES vs. MACHINES are PEOPLE, Lakoff and Turner, 1989)

- *Motivation – source and target*: Kovecses, 2002
- **Source**: body, health and illness, plants and animals, buildings and construction, machines and tools, games and sport, money and economic transactions, cooking and food
- **Target**: emotion, desire, morality, thought, society, nation, politics, time, life and death, religions, events and actions

Life is a Journey – Event Structure Metaphor

Table 9.2 The event structure metaphor

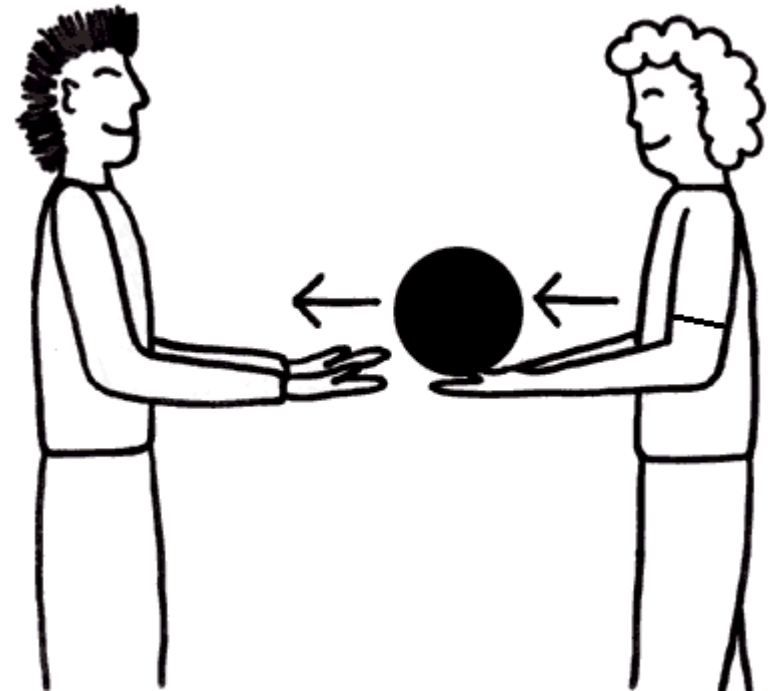
Metaphor:	STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE)
Example:	<i>John is in love</i>
Metaphor:	CHANGE IS MOTION (FROM ONE LOCATION TO ANOTHER)
Example:	<i>Things went from bad to worse</i>
Metaphor:	CAUSES ARE FORCES
Example:	<i>Her argument forced me to change my mind</i>
Metaphor:	ACTIONS ARE SELF-PROPELLED MOVEMENTS
Example:	<i>We are moving forward with the new project</i>
Metaphor:	PURPOSES ARE DESTINATIONS
Example:	<i>We've finally reached the end of the project</i>
Metaphor:	MEANS ARE PATHS (TO DESTINATIONS)
Example:	<i>We completed the project via an unconventional route</i>
Metaphor:	DIFFICULTIES ARE IMPEDIMENTS TO MOTION
Example:	<i>It's been uphill all the way on this project</i>
Metaphor:	EVENTS ARE MOVING OBJECTS
Example:	<i>Things are going smoothly in the operating theatre</i>
Metaphor:	LONG-TERM PURPOSEFUL ACTIVITIES ARE JOURNEYS
Example:	<i>The government is without direction</i>

CMT - principles

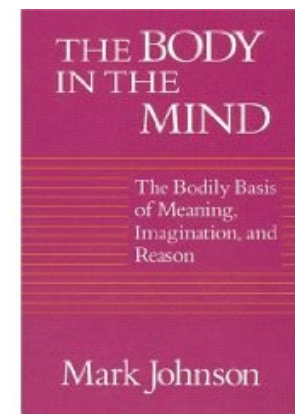
- *Metaphorical entailments*: the potential of metaphorical expressions (in the language) to “break away” from the mappings
- Eg. Metaphor: THEORIES are BUILDINGS
- *Linguistic realization*: Your theory is well structured.
- *Entailment*: The hypothesis holds.
- *Yet, also constraints*: just any metaphorical entailment (or enrichment) is not possible. Eg. *We are in the cellar of your theory.
- **The invariance principle** (Lakoff, 1993) – only those portions of the source can be mapped which do not conflict with the *schematic* structure of the target.

CMT - principles

- ***Invariance***
- She gave him a book. (source language)
- Based on the metaphor CAUSATION IS TRANSFER we get:
- (a) She gave him a kiss.
- (b) She gave him a headache.
- ... (a) *and he still has it (?)
- ... (b) and he still has it.
- Only (b) is metaphorical...
- ... because the image-schematic structure remains.



CMT - principles



- □ **Image schemas**
- □ Elaborating on Kant: Mark Johnson (1987): *The Body in the Mind*
- □ *A schema is a recurrent pattern, shape, and regularity in [conceptual activities]. [...] I conceive schemas as structures for organizing our experience and comprehension (p. 29)*
- □ They originate from early bodily interactions.
- □ They are visually represented for theoretical purposes, but **are not** equal to rich images.
- □ Rather, they are “preconceptual”, i.e. their cognitive reality is postulated on a level between neuronal activity and mental representation.
- □ Likewise, they are “analogue”, i.e. not reducible to a set of formally computable relations.
- □ Finally, they are *systematic* and tend to be *universal*.

Some typical image schemas

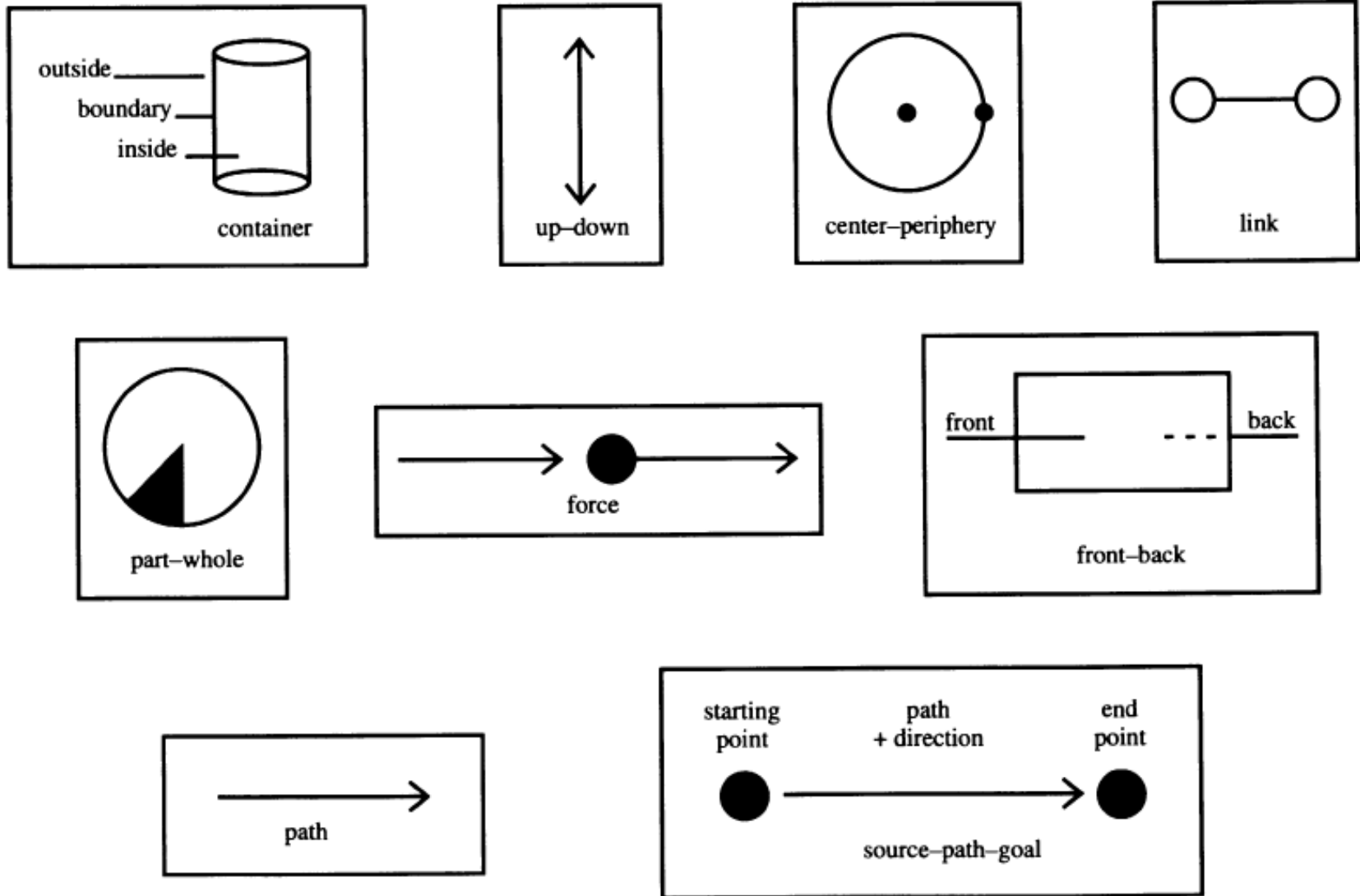
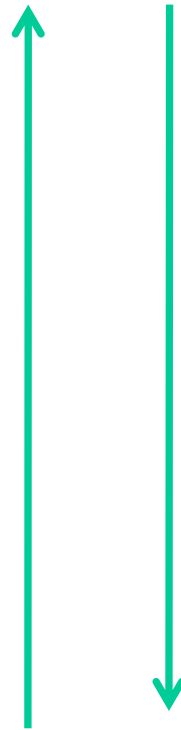


Figure 1: Diagrams of Image Schemes

VERTICALITY

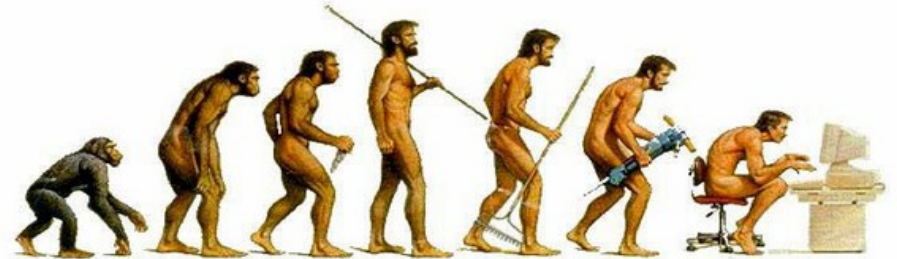
- Image schema



PATH

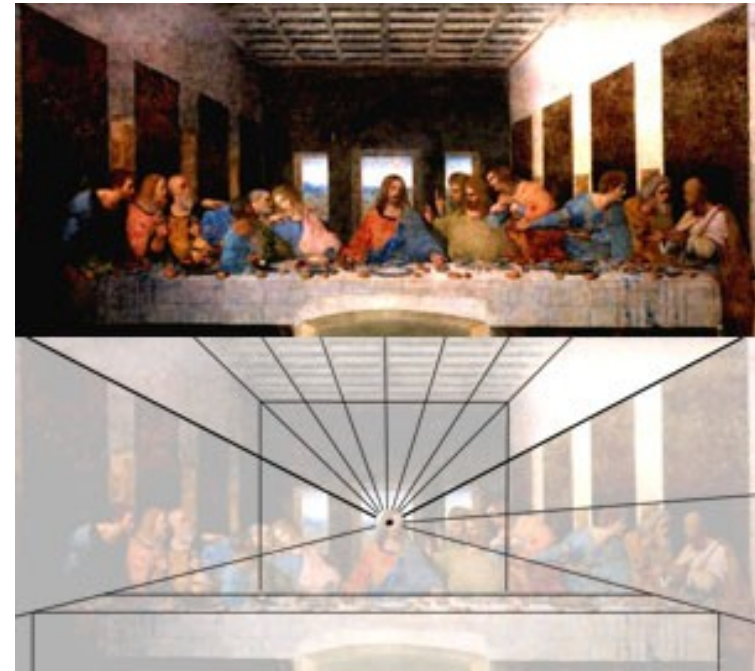
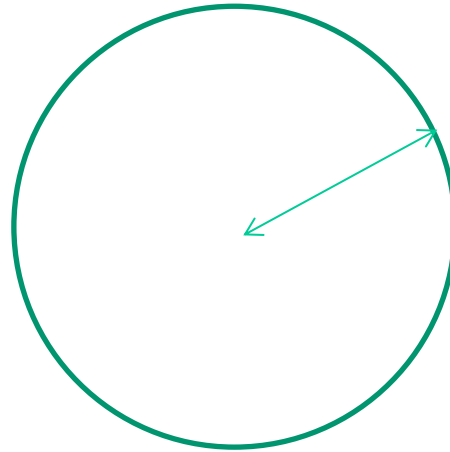


- Image schema



CENTER-PERIPHERY

- Image schema



Conflation theory (C. Johnson, 1997)

- From sensorimotor to subjective experience
- WARM is CLOSE
- (1) Conflation
- (2) Differentiation
- (3) Metaphorization

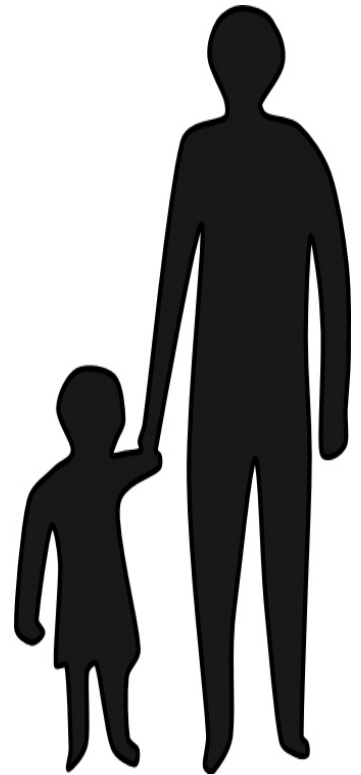


Primary Metaphor Theory (Grady, 1997)

- Pretty much an eclectic approach!
- Primary and complex metaphors (atomism)
- Cross-domain mappings remain (CMT)
- Conflation gives rise to primary metaphors (C. Johnson)
- Complex metaphors are built by means of conceptual blending (Fauconnier and Turner)

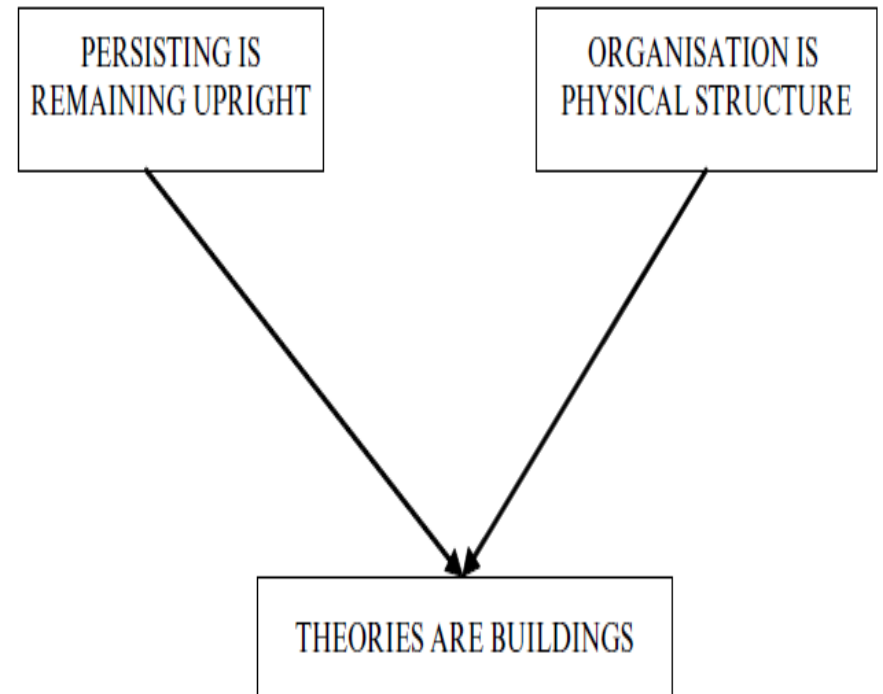
Primary Metaphor Theory

- Rejects the 'concrete to abstract thesis'
- Instead: 'physical experience to subjective experience'
- SIZE is IMPORTANCE: "We've got a big week coming up next month."
- QUANTITY is ELEVATION: "The price has gone up."
- SEEING is UNDERSTANDING: "I see."
- Possible origins?
- Subjective experiences restored: there must be an *experiential correlation between the source and target in primary metaphors*



Complex metaphors

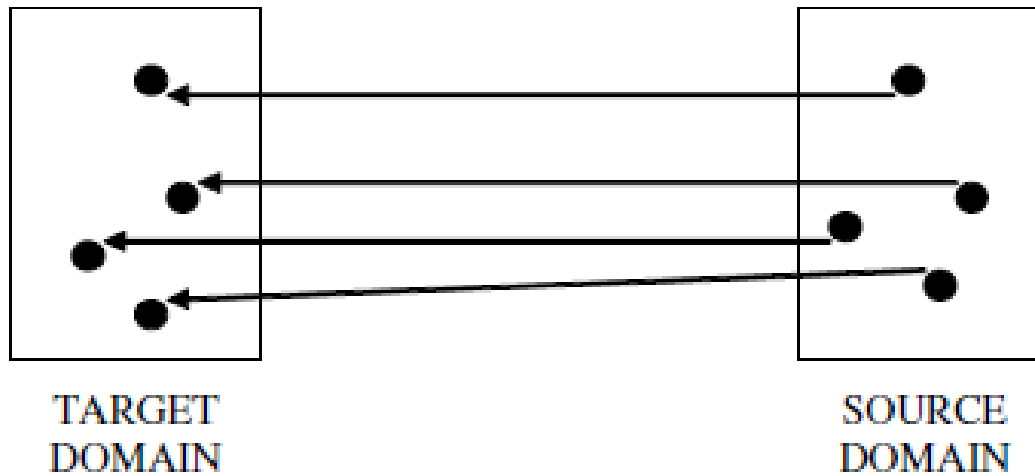
- THEORIES are BUILDINGS
- Can't be primary:
- not likely universal or cross-linguistic;
- poverty of mapping (*“the windows of his theory”?);
- lack of clear experiential basis.



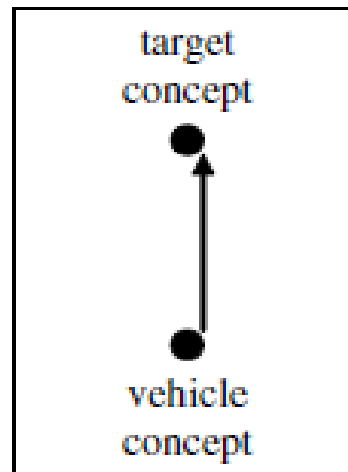
Conceptual Metonymy

- Or: “The ham sandwich wants some more coffee”.
- Referential
- Contiguous (direct, experiential relation between the two entities)
- Contingent on the context (not pre-conceptual like metaphor)
- Both the metonymic expression and what it stands for are in THE SAME ICM (Lakoff and Turner, 1989), one is “highlighted





Conceptual metaphor (compound): cross-domain mapping between source and target



Conceptual metonymy: mapping within a single domain between a vehicle concept and a target concept

In sum

CMT: ANGER is a HOT FLUID IN A CONTAINER (Lakoff and Kovecses, 1989)

- The physical container → the angry person's body
- The top of the container → the person's rational self
- The hot fluid inside of the container → the anger
- The degree of fluid heat → the intensity of the anger
- The cause of increase of fluid heat → the cause of anger

That simple?



Jesse Lefkowitz

Alternatively...

Source Domain:

(Input-1)

Hot fluid in a container



Target Domain:

(Input-2)

Angry person



The Blend



Running the Blend

I could see smoke coming out of his ears...

...I thought his hat would catch fire!