- Structure of reality built up through embodied interaction
 - Categories created based on perceptual capacities, needs/goals, etc.
 - Frames or cognitive domains are categories of categories--bundles of associated information

- New concepts may be understood partially in terms of existing
 - Schemas grow to include new objects
 which are not prototypes but close enough to
 get the same label
 - 1. axe for 'guitar'
 - 2. woman for females 18-25
 - Underlying conceptual shift

- Conceptual shift also in case of more complex frames
 - Frames don't always have labels
 - Associated entities have labels
 - Metaphor extending a frame to include another concept or frame

- Metaphor (Lakoff)
 - Understanding one concept in terms of another
 - Not just poetic
 - Language provides evidence for how our conceptual system is organized

- Argument is war
 - 1. Your claims are **indefensible**
 - 2. He attacked every weak point in my argument
 - You disagree? Okay, shoot!
 - Language used to talk about arguments is same as that used to talk about wars

- Characteristics of metaphor
 - Structure
 - Target domain what is actually being talked about
 - Source domain the domain used as a basis for understanding target
 - Ex. War is source domain for understanding argument in Argument is War metaphor

- Highlighting and Hiding
 - Source may highlight certain aspects of target, hid others
- Ex. Conduit metaphor
 - Ideas (or meanings) are objects
 - Linguistic expressions are containers
 - Communication is sending
 - 1. It's hard to get that idea across to him
 - 2. I gave you that idea
 - 3. It's difficult to put my ideas into words
 - 4. His words carry little meaning
 - 5. The meaning is right there in the words

- Conduit metaphor hides important aspects of meaning
 - Linguistic expressions are containers for meaning entails that words have meanings independent of contexts and speakers
 - 1. We need new alternative sources of energy
 - » President of Mobil Oil
 - » President of Friends of the Earth
 - 2. Please sit in the apple-juice seat
 - Ideas are objects entails boundedness
 - Classical vs. prototype theory of categorization

- Pervasive metaphors affect how we think about a concept
 - Time is money
 - 1. You're wasting my time.
 - 2. This gadget will save you hours.
 - 3. That flat tire cost me an hour.
 - 4. You don't use your time profitably.
 - In modern society strong association between time and money
 - Hourly wages, interest on loans, rent, hotel rates, etc.

- "corresponding to the fact that we act as if time is a valuable commodity, we conceive of time that way"
 - Time can be spent, wasted, budgeted, invested...

- Mapping is partial
 - A theory is a building
 - 1. They constructed this theory from the ground up.
 - The theory was torn down brick by brick by its opponents.
 - 3. His early results form the building blocks for his theory.
 - 4. His theory was ornate and needed buttressing.
 - 1. *This theory has no windows
 - 2. *The tenants of this theory are behind in their rent

- Types of metaphors
 - Structural
 - Orientational
 - Ontological

- Structural
 - Provide rich highly structured, clearly delineated source domain to structure target domain
 - Theory is a building
 - Argument is war
 - Anger is a heated fluid in a container
 - » He's boiling mad and about to burst

- Orientational
 - Organizes whole system of concepts with respect to one another.
 - Give spatial orientation to a concept
 - Happy is up; sad is down
 - Not arbitrary body/experientially based
 - Sadness --> drooping posture, mouth
 - Happiness --> erect posture, smile lifts mouth
 - Not necessarily universal or predictable

- Examples
 - Happy is up; sad is down
 - That boosted my spirits
 - I'm feeling down
 - I'm depressed
 - Conscious is up; unconscious is down
 - Wake up
 - He fell asleep
 - He's under hypnosis
 - Basis: waking state is standing/higher

Examples

Control/force is up; subject to control down

- I am on top of the situation
- He's at the height of his power.
- He is under my control
- He is low man on the totem pole
- Basis ???

Examples

Control/force is up; subject to control down

- I am on top of the situation
- He's at the height of his power.
- He is under my control
- He is low man on the totem pole
- Basis: physical size typically correlates with physical strength and victor in a fight is typically on top.

- Examples
 - Good is up; bad is down
 - Things are looking up.
 - We hit a peak last year, but it's been downhill ever since
 - He does high quality work.
 - Basis???

Examples

- Good is up; bad is down
 - Things are looking up.
 - We hit a peak last year, but it's been downhill ever since
 - He does high quality work.
 - Basis: Happiness, health, life, control --things that principally characterize what is good--are all up

Examples

- More is up; less is down
 - The number of cancer cases is going up/down
 - My income rose/fell last year.
 - He's underage
 - Turn the heat down.
 - Basis: If you add more of a substance or more physical objects to a container or pile, the level goes up

- Overall systematicity to orientational metaphors
 - Happy, health, alive, control are all up
 - Predominant metaphor for happiness is up
 - Minor metaphor: happy is wide
 - I'm feeling expansive
 - Bursting with happiness
 - Happy is up maximally coherent with related metaphors

- Same source domain can be employed to refer to different targets via different experiential bases
 - Happy is up
 - More is up
- Superficial incoherence as a result of different experiential bases for same metaphor
 - Unknown is up; known is down
 - Unfinished is down; finished is up

- Inflation/depression is increasing
- Interpretable because one More is Up is more dominant
- Stronger physical basis

- Ontological Metaphors
 - Ontological related to being/existence
 - A kind of metaphor whereby abstract, unwieldy or fuzzy concepts are viewed as objects with human scale and interaction potential
 - Inflation is lowering our standard of living
 - Buying land is the best way of dealing with inflation
 - Inflation makes me sick

- Some purposes of ontological metaphors
 - Referring
 - We are working towards peace
 - The honor of our country is at stake in this war.
 - Quantifying
 - It will take a lot of patience to finish this book.
 - You've got too much hostility
 - Identifying aspects
 - The ugly side of his personality comes out under pressure
 - I can't keep up with the pace of modern life

- Identifying causes
 - He did it out of anger
- Setting goals/motivating actions
 - He went to New York to seek fame and fortune
 - I'm changing my way of life so I can find true happiness

- Elaborated ontological metaphors
 - The mind is an entity
 - 1. The mind is a machine
 - We're still trying to grind out the solution to this equation.
 - The wheels are turning now
 - 2. The mind is a brittle object
 - Her ego is very fragile
 - He broke under cross-examination

- Container metaphors
 - Land areas
 - Geographical entities often fuzzily bounded
 - Woods, clearing, mountain range, California
 - We view as bounded containers
 - We went into the woods
 - There's gold in them thar hills

- Container metaphors
 - The visual field
 - The visual field
 - The ship is coming into view
 - He's out of sight now
 - Events, actions, states
 - Are you in the race Sunday?
 - Halfway into the race I ran out of energy

- Container metaphors
 - Events, actions, states
 - In washing the window, I splashed water all over the floor
 - How did Jerry get out of washing the windows?
 - How much window washing did you do?
 - I put a lot of energy into washing the windows
 - I get a lot of satisfaction out of washing windows.
 - He's in love
 - I'm slowly getting into shape