

PHIL 371
Week 12: The Self

Please turn off and put away all electronics.

1

The Transcendental Self

The self is a supernatural entity (soul).

Plato

Kant

Plato, Aquinas, Kant.
 50% of Canadians, 80% of Americans.
 Problem: lack of evidence.
 Chimps?

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The Deflationary (No-) Self

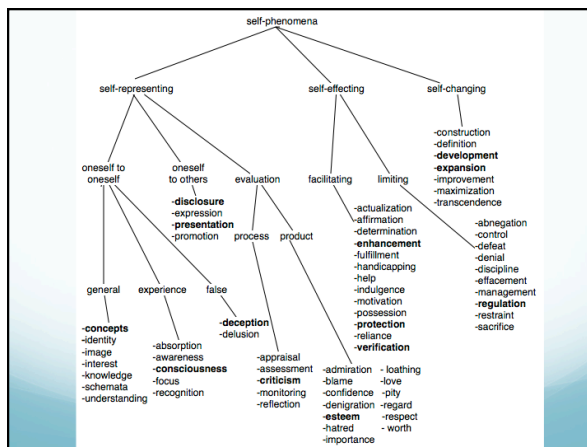
David Hume: The self is just a bundle of perceptions.

Hume

Dennett

Daniel Dennett: The self is a "center of narrative gravity".
 Thomas Metzinger: The self is a myth.
 Problem: The self is an important psychological concept.

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Multilevel Systems

A system (mechanism) consists of:

- Environment
- Parts
- Interconnections
- Changes



A multilevel system has mechanisms at several levels:

- <E₁, P₁, I₁, C₁>
- <E₂, P₂, I₂, C₂>, etc.

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The Multilevel Self

Social self: Parts are people.

Psychological self: Parts are mental representations.

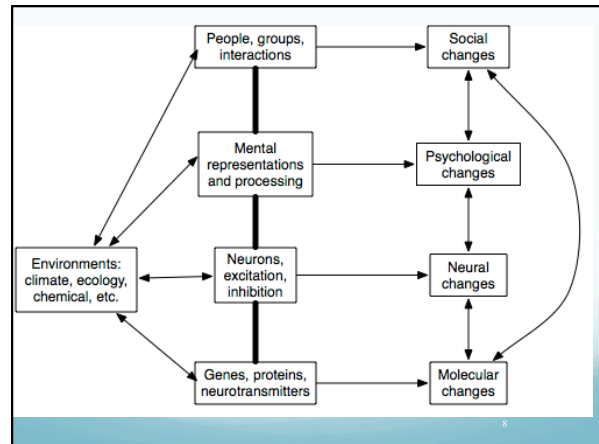
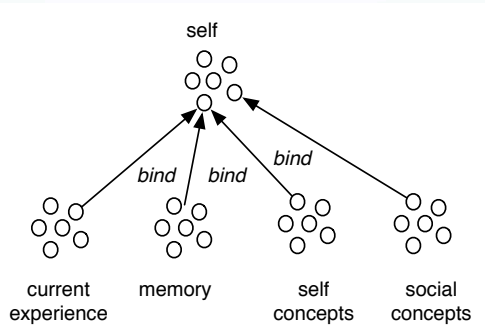
Neural self: Parts are neurons.

Molecular self: Parts are chemicals.

Note: these are not four selves, but all components of one complex system.

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Semantic Pointer for Self



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Emergence of the Self

Emergence: the whole has properties not found in its parts, because it results from interactions among the parts. E.g. neural representation

Emergence from emergence: the whole has properties resulting from interactions among parts that themselves have emergent properties. E.g. semantic pointers that bind neural representations.

Multilevel emergence: the whole has properties resulting from mechanisms at 3 or more levels. E.g. self, mental illness, teams, wars ...

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Discussion Questions

1. Is the human self an illusion, or a multilevel system?
2. Do chimps and dolphins have selves?

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How Facebook Assistant Works?

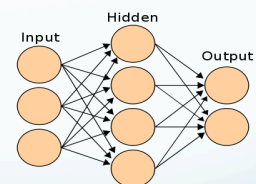
Representations: Images, text, advice.

Procedures: Deep learning to recognize images: extension of back-propagation.

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Deep Learning

1. Distributed neural networks
2. Improved version of back-propagation algorithms
3. More layers (6-12)
4. Applications: image recognition, voice recognition, etc.



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Deep Learning vs. Humans

1. Advantages of computer: fast learning, huge data bases
2. Advantages of humans: combine unsupervised and supervised learning; generation of new representations by recursive binding, e.g. “selfie stick”

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Discussion Questions

- Do you want Facebook giving you advice?
- How much should Facebook be allowed to learn about you?
- Could a robot have a self?

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How iCub Works

Representations: Sensors, variables, embodied cognition.

Procedures: Learning, moving, motor babbling.



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Does iCub have a self?

1. Neisser's 5 aspects of self: ecological (body), interpersonal, temporal, conceptual, private
2. iCub is claimed to have 3 of these:
 1. Ecological: builds an internal model of its body
 2. Temporal: store interactions with persons & objects
 3. Interpersonal: imitation learning system. Empathy?
3. Contrast Thagard & Wood 2015: 80 self-phenomena resulting from 4 levels of mechanisms

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