BASICS OF COGNITIVE SEMIOTICS

05 From CogSci to CogSem

ON THIS CLASS

- Topics for the second evaluation.
- Concepts, cont'd.
- A new paradigm for semiotics.

- Can we have an *experimental* semiotics?
- Is there any connection between the semiosphere and individual phenomenology?
- Does a cell have an Umwelt?
- How can we describe the Umwelt of a different species?
- What counts as a Peircean mental representation?
- How can we differentiate Peircean and Uexküllian phenomenology?
- Are mental phenomena semiotic?
- Is a Saussurean sign enough for a mental representation?
- Can a robot have an Umwelt?
- How could we describe a primary sign system in an organism without a central nervous system?

TOPICS FOR THE SECOND EVALUATION

These will be randomly assigned here: https://www.random.org/lists/ or https://keamk.com/aslwpp7p3w4cd94bfzocncsc

CONSCIOUSNESS, CONT'D

- It seems that for every model of cognition, there is no particular reason why consciousness should come with it (Chalmers 1996: 109).
- Can materialism be salvaged? Do the objections hold?
- One possible consequence of refuting materialism is returning to dualism.
- But dualism doesn't seem to hold, does it?

PHENOMENAL PROPERTIES

- One option we have here is endorsing property dualism, a type of dualism about what it means to have phenomenal experiences.
- Phenomenal properties would, theoretically, not depend on physical structures to be instantiated. Instead, they could be a basal, universal law.
- Remember Peirce's concept of the Mind as a gradual property.

OBJECTIONS TO PEIRCEAN MENTAL PROPERTIES AND PROPERTY DUALISM

- Panpsychism
- Intractability
- Moving the goalposts
- Randomness of sign relations

COMPUTATIONAL THEORY OF MIND

- If we decide we don't like this ontological juggling, one of the main materialist theories of the mind theorizes it as a computer.
- Briefly put, for the mind to be equated as a computer, we have to see it like this:
  - *Thoughts come in a logical form*
  - *Mental representations have a certain syntax*
  - *Mental processes are operations defined on that syntax and reliably truth-preserving* (Fodor 2000)

COMPUTATIONAL THEORY, CONT'D

- A CTM can be framed as an RTM:
  - *Propositional attitudes are relational*
  - *Among the relata are mental representations*
  - *Mental representations are symbols (syntactic and semantic)*
  - *They have their causal roles because of their syntax*
  - *Propositional attitudes come with the semantic properties of the mental representations (Chemero 2009)*

IS THE MIND A COMPUTER?

- The “language of thought” is the formal system of symbols and their combination that happens in cognition.
- How can the mind instantiate logical operations?
- Do we really need representations for cognition?

EMBODIED COGNITION

- An alternative to the CTM is found in theories of embodied cognition. These postulate that the mind is instantiated by the organism *within* its environment.
- *Eliminativist* theories of mind see no use for representations. Embodied cognition falls within this category.
- Some reasons to go this route are:
  - *Less work for the organism (no need to reconstruct the world)*
  - *No need for a centralized operation of mental processes*
  - *Giving priority to the actions of an organism in real time*

EMBODIED COGNITION, CONT'D

- Embodied cognition is pluralistic enough to have a variety of alternatives, some of which may even invoke representations to a limited degree.
- The *availability* of the world becomes central in a cognitive science that does not believe the story about representations is accurate (Noë 2009: 82).
- There is enough evidence to believe that "problem-solving load is spread out across brain, body, and (sometimes) world" (Clark 2012: 278)

TYING SEMIOTICS TO THE ALTERNATIVES

- As cognition can be studied in different, sometimes incompatible ways, we can approach both ends through semiotics.
- We have already seen a first possibility with Peircean semiotics as an RTM.
- But what role can semiotics play in this environment?

COGNITIVE THEORIES OF THE SIGN

- In one of the earlier proposals for a cognitive semiotics, Dadessio thinks semiotics is not doing enough to know *how* we get access signs (1995).
- Cognitive semiotics can use signs *qua* representations easily.
- Since a Peircean sign works well as a representation, it seems that cognitive semiotics could do a good job as an RTM with different terminology.
- But is there a need for that?

SEMIOTIC LANGUAGE OF THOUGHT

- The need for the semiotic approach is preserving the semantic aspect of what lies beyond the linguistic.
- Remember, once again, how Peirce saw thought as signs.
- There's two lines we can follow: limiting signs to only be thoughts or expanding thought to cover all we call signs.

SEMIOTIC EMBODIMENT

- Remember, however, Uexküll's work on the Umwelt.
- While we don't need to do away with Peirce, it seems that Umwelt theory works much better without the need for representations.
- However, we can also work Peirce into this framework by reframing signs as behavioral cues.
- Finding the origins of cognition in the organism-environment unit seems a viable scientific approach (Järvilehto 2009)

COGNITIVE SEMIOTICS AS PHENOMENOLOGY

- Perceptual meaning takes place through iconicity. Once again we get a Peircean glimpse of how signs work.
- Though partially embodied, this branch of CogSem focuses on the phenomenal differentiation of icons (Sonesson 2016).
- Phenomenological methodology would work as an interface between bodily experience, language, social life and objects in the world (Zlatev 2012).

COGNITIVE SEMIOTICS AS TERMINOLOGY

- Perhaps a different way to see CogSem is by using it as new terminological tools for what exists already out there in CogSci.
- The question is, how useful is semiotic terminology for CogSci?
- As semiotics cares about meaning preservation, if our approach in CogSci sees meaningfulness in cognition, then there is an argument to be made for CogSem as a conceptual framework.

THE REJECTION OF PSYCHOANALYSIS FOR THE STUDY OF ART

- Nativism, coupled with semiotic terminology, can give rise to a narrative picture of meaning-making (Buckland 2000).
- How could we actually apply this?
- In fact, is there any way traditional objects of semiotic studies can be analyzed through a CogSem approach?

REFERENCES

- Buckland, Warren 2000. *The Cognitive Semiotics of Film*. Cambridge: Cambridge University Press.
- Chalmers, David 1996. *The Conscious Mind: In Search of a Fundamental Theory*. Oxford: Oxford University Press.
- Clark, Andy 2012. Embodied, embedded, and extended cognition. In: K. Frankish and W. Ramsey, *The Cambridge Handbook of Cognitive Science*. Cambridge: Cambridge University Press, 275—291.
- Chemero, Anthony 2009. *Radical Embodied Cognitive Science*. Cambridge: The MIT Press.
- Dadessio, Thomas 1995. *On Minds and Symbols: The Relevance of Cognitive Science for Semiotics*. Berlin: Mouton de Gruyter.
- Fodor, Jerry 2000. *The Mind Doesn't Work That Way: The Scope and Limits of Computational Psychology*. Cambridge: The MIT Press.
- Järvilehto, Timo 2009. The Theory of the Organism-Environment System as a Basis of Experimental Work in Psychology. *Ecological Psychology* 21(2): 112—120.
- Noë, Alva 2009. *Out of Our Heads: Why You Are Not Your Brain and Other Lessons from the Biology of Consciousness*. New York: Hill and Wang.
- Sonesson, Göran 2016. The phenomenological semiotics of iconicity and pictoriality—including some replies to my critics. *Language and Semiotic Studies* 2(2): 1—73.
- Zlatev, Jordan 2012. Cognitive semiotics: An emerging field for the transdisciplinary study of meaning. *The Public Journal of Semiotics* 4(1).