## BASICS OF COGNITIVE SEMIOTICS

04 ⇒ Concepts of Cognition

- > On the first eval. and thoughts on the next and final one.
- ▶ Some more Peirce and his theory of mind.
- ► An introduction to the concepts used in philosophy of mind.

#### IN THIS LECTURE

## FIRST EVAL, THOUGHTS FOR SECOND AND FINAL EVAL





## WHY DO WE KEEP TALKING ABOUT PEIRCE?

What's really the point of talking about signs in Peirce's sense?

- Perhaps a good way to introduce our next subject is by presenting what we know in the light of the philosophy of mind.
- ➤ What does it mean though to treat Peirce's semiotics as an RTM?
- ➤ In fact, can Peirce's semiotics be treated as a theory of mind altogether?

## PEIRCE'S SEMIOTICS AS A REPRESENTATIONAL THEORY OF MIND

▶ What would it mean to talk of semiotics as a theory of mind?

#### SEMIOTICS AS A THEORY OF MIND

"ALL THINKING IS DIALOGIC IN FORM... CONSEQUENTLY, ALL THINKING IS CONDUCTED IN SIGNS THAT ARE MAINLY OF THE SAME GENERAL STRUCTURE AS WORDS" (CP 6.338)

- ➤ Signs, in the form of triadic relations, can be taken as mental phenomena.
- Metaphysically speaking, in Peirce's thought mental properties are not an either/or phenomenon. Instead, they are gradual throughout the world.

AGAIN, SOME BACKGROUND

▶ What is a representation?

Broadly speaking, it's a "mental object with semantic properties" (Pitt 2018).

- ➤ Then, an RTM would be...
- Peirce becomes easier to frame then as such!

### AGAIN, PEIRCE'S SEMIOTICS AS AN RTM

- "[A] representation is constituted by a representation-bearer that represents some object (or has content), where this representing has significance for some interpreter" (Von Eckardt 2012: 30)
- ► If we translate this to Peircean terminology, we can go with the following:

Representation bearer: representamen

Represented object: object

Significance: interpretant

We start seeing how Peircean terminology actually paves a way to talk about mental phenomena, It's not clear, however, how far it can take us.

- Representations usually have some *content*. But how is this content determined in our minds? Remember sign types according to Peirce.
   These are the basics of an operative content determination, be it because of indexes, icons or symbols.
- Think of icons though. Icons are signs of similarity, but what does it mean for a mental representation to be similar to its object? What are the shared properties here?

#### CONTENT DETERMINATION

- Using Peirce as a platform, it's important for us to actually use a more developed and standard vocabulary about mental phenomena.
- Cognitive Science (and the philosophy of mind) gives us a bunch of tools we can use.
- In fact, *representation* is a technical term! Much of what we've talked about so far can be framed in more modern concepts.

#### THE PHILOSOPHY OF COGSCI



#### THE MIND

A while ago we mentioned Cartesian dualism. Do you remember what that meant?

- Going back to Cartesianism, there still seems to be something different between what counts as the physical and the mental.
- But how can the physical and the mental be connected in any way?
- ▶ If we want answers to that, we need to ask what really counts as mental phenomena altogether.

### WHAT COUNTS AS MENTAL PHENOMENA?

Where is the mind?

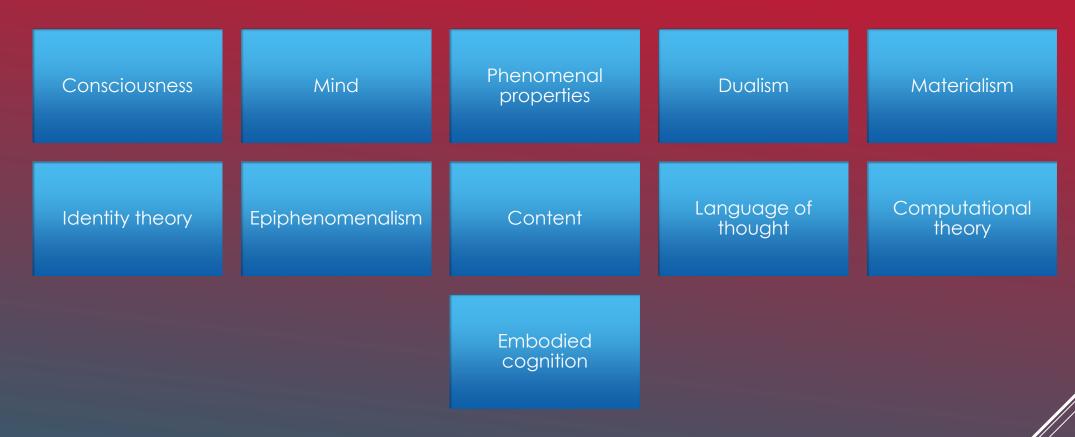
How does the physical interact with the mental?

How can we know there is a mind in someone else?

Does the physical necessitate the mental, and the other way round?

How do we identify selves?

# QUESTIONS TO POINT US IN THE RIGHT DIRECTION



IF WE WANT A SYSTEMATIC APPROACH TO THESE PROBLEMS, WE NEED TO UNDERSTAND THE SUBJECT WE'RE ADDRESSING. THAT BEING THE CASE, THERE'S A NUMBER OF CONCEPTS WE WILL GO THROUGH RELATED TO THE STUDY OF THE MIND.

- ➤ The concept of consciousness is a hard one to define. On the one hand, we seem to be so close to it, but on the other, how do you actually give a proper definition?
- One of the main characteristics of consciousness seems to be experience, but that's not a definition (Chalmers 1996: 1).
- In Nagel's terms, "an organism has conscious mental states if and only if there is something that it is like to *be* that organism something it is like *for* the organism" (1974: 436)

#### CONSCIOUSNESS

- In other words, "a mental state is conscious if it has a *qualitative feel*—an associated quality of experience" (Chalmers 1996: 2). This is what is usually referred to as *qualia*.
- On *qualia*: "Look at a glass of milk at sunset; *the way it looks to you*—the particular, personal, subjective visual quality of the glass of milk is the *quale* of your visual experience at the moment. The *way the milk tastes to you then* is another, gustatory *quale*, and *how it sounds to you* as you swallow is an auditory *quale*" (Dennett 1988: 42)
- One important problem is conflating consciousness with mind.
- A harder problem is the question of "how can conscious experiences [...] exist in a world that is entirely composed of physical particles" (Searle 2004: 4)
- The so-called hard problem of consciousness is that of giving a coherent explanation to the relationship between physical and mental states.

#### CONSCIOUSNESS, CONT'D

- Consciousness can't be all there is to mind. According to Fodor, the mental as we usually understand it conflates two different types of mental states: intentional mental states, like beliefs, desires and such; and conscious mental states, like sensations, feelings, etc. (Fodor 2000)
- If anything, we can say that there are phenomenal and psychological aspects to the mind, the first being the one we identify as consciousness, and the second one, as "the causal or explanatory basis for behavior" (Chalmers 1996: 9)
- > So, how can we define the mind, in a simple way?

MIND



> Remember when we asked "where is the mind"?

#### IDENTITY THEORY



- Among the theories to explain just what exactly the mind is, we have identity theory, or the view that the mind is the brain (Thagard 2010).
- What this means is that every mental process you have, every state and disposition has an equivalent brain state and they always go hand in hand.

#### IDENTITY THEORY

- ➤ Going back to some concepts we mentioned earlier, we need to acknowledge the philosophical chasm between people who hold the mind is the brain and people who don't (*lato sensu*).
- Dualism, as you remember from Descartes, is the view that the mental and the physical are separate (substances, one may say).
- Materialism is the view that the mental is only part of the physical, and there is no other realm to identify.

MATERIALISM VS. DUALISM

- ► How do we justify identity theory? When brain cells fire, signals are sent to specific areas of the brain dedicated to identifying a stimulus and to areas that are related to emotional experience, in a pattern that may result in recognition, or in the creation of a memory that can cause future recognition (Thagard 2010).
- Minds, in this view, are material objects.
- But you can have materialistic theories that don't identify the mind with the brain.

#### MATERIALISM AND IDENTITY THEORY

- ➤ Functionalism: Minds can be processes in many different physical systems.
- Embodied cognition: Minds are states of the whole body (and their environment) (Thagard 2010).
- ➤ The question is whether there is some potential compatibility between these, and whether materialism as a whole holds.

MATERIALISM VS. IDENTITY THEORY

- The problem we already mentioned, the connection between the physical and the phenomenal, is not easily solvable.
- Are all the positive facts of the world entailed by physical facts?
- > Are conscious experiences physical?

#### ISSUES WITH MATERIALISM

#### Chalmers offers the following argument:

- ➤ In our world there are conscious experiences.
- There is a logically possible world physically identical to ours, in which the positive facts about consciousness in our world do not hold.
- ► Therefore, facts about consciousness are further facts about our world, over and above the physical facts.
- ► Therefore, materialism is false. (Chalmers 1996: 121)

#### OBJECTIONS TO MATERIALISM

- ➤ One answer we may give, if we want to support a materialistic view of the mind, is that phenomenal experience is *epiphenomenal* to brain activity.
- So when your neurons fire, the fact that you feel something at all is not particularly important, but instead it just happens as a side-result of the neurons firing.
- ► In other words, they are *causally inert* (Searle 2004:30).
- But can qualia be meaningless like that?

#### EPIPHENOMENALISM

- Imagine a world that's identical to ours but in which there are no conscious experiences going on at all.
- In this world, you have a *zombie twin*, identical to you molecule for molecule, but without conscious experience.
- ➤ That's a *phenomenal zombie* (perhaps in contrast, a Hollywood zombie would be a *psychological zombie*) (Chalmers 1996: 93).
- ► Is this a coherent view for supporting an antimaterialistic view of the mental?



#### PHENOMENAL ZOMBIES

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