

# Consciousness #3



# **NEW DIRECTIONS IN THE STUDY OF THE MIND**

research project 2015-2017



UNIVERSITY OF  
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[newdirectionsproject.com](http://newdirectionsproject.com)

# Seminar 3

1. Recap: reduction and reductionism
2. Reductive and non-reductive physicalism
3. Emergence

# Reminder: reduction

- Two notions of reduction
- **Ontological reduction - the ‘reduction’ of entities**
- **Explanatory reduction - the ‘reduction’ of theories**

## (i) Ontological reduction

- Identifying the entities of one domain with a subclass of entities of another
- So ontological reduction involves identity claims:  
each A is a B
- But the relation between the domains is not symmetrical: As reduce to Bs but not vice versa

## (ii) Explanatory reduction

- A relation between theories
- One theory explains why another is true
- NB relation to 'grounding'

# Two claims from last week

1. Much of the talk about reduction in the philosophy of science is about explanatory reduction
2. If explanation is an advance in knowledge, then explanatory reduction must be a Good Thing

## 2. Reductive and non-reductive physicalism

- Must physicalism be reductive?
- Some say no
- What does the supervenience thesis imply about this?



# Two kinds of reductive physicalism

- (1) Ontologically reductive physicalism
- (2) Explanatorily reductive physicalism

# Two kinds of non-reductive physicalism

- (1) Ontologically non-reductive physicalism
- (2) Explanatorily non-reductive physicalism

# Is there an ontological reduction of the mental?

		Yes	No
Is there an explanatory reduction of the mental?	Yes	e.g. Functionalism with identity theory (David Lewis)	e.g. Functionalism without identity theory (e.g. Hilary Putnam)
	No	e.g. Anomalous monism (Donald Davidson)	?

Can a physicalist say no to both?

That is: no ontological reduction

But no explanatory reduction either

If so, what makes them a physicalist?

## Supervenience?



# But supervenience is too weak

- As we saw, it is compatible with various forms of dualism, as well as emergence
- Supervenience is **necessary** but not **sufficient** for physicalism



# What about substance?

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‘I don’t believe in any spooky mental stuff! I only believe in physical stuff!’

‘None of that stuff Descartes talked about!’



# The irrelevance of stuff and (Cartesian) substance

- But we did not talk about stuff when trying to define physicalism
- Physics does not talk about physical ‘stuff’
- In any case, Cartesian substance is not stuff
- And there is no obligation to formulate the mind-body debate in terms of Cartesian substance, in any case



# Is 'property dualism' the real issue?

- Should physicalists reject property dualism?
- But anyone who denies that all properties are physical accepts that there are (at least) two kinds of property
- Property dualism in a stronger sense: mental properties that do not supervene on physical (cf. Chalmers, *The Conscious Mind*)

# So what is physicalism, then?

- Supervenience + ...?
- My proposal: **supervenience + reduction**
- Either explanatory reduction or ontological reduction or both

# Alternatives to physicalism

- ‘A physicalist position should surely assert, contrary to emergentism ... that any metaphysically basic facts or laws—any unexplained explainers, so to speak—are facts or laws within physics itself’

Terence Horgan ‘From Supervenience to Superdupervenience’ *Mind* 1993

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### 3. Emergence

- Reduction is typically contrasted with emergence
- Physicalism is also contrasted with emergence
- What is emergence?

# Kim on emergence

- ‘According to emergentism, higher-level properties, notably consciousness and other mental properties, emerge when, and only when, an appropriate set of lower-level ‘basal conditions’ are present and this means that the occurrence of the higher properties is determined by, and dependent on, the instantiation of appropriate lower-level properties and relations. In spite of this, emergent properties were held to be ‘genuinely novel’ characteristics irreducible to the lower-level processes from which they emerge. Clearly, then, the concept of emergence combines the three components of supervenience, namely, property co-variance, dependence and non-reducibility. In fact, emergentism can be regarded as the first systematic formulation of non-reductive physicalism. (Jaegwon Kim 1995: 576-7)

# The key notion: novelty

- Some properties of complex objects are ‘novel’: properties of wholes which are not properties of their parts

# Strong and weak emergence

- Weak emergence: novelty with an explanation
- Strong emergence: novelty without an explanation