





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

research project 2015-2017

 UNIVERSITY OF  
CAMBRIDGE



John  
Templeton  
Foundation

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

# Seminar 4

1. Recap: emergence and physicalism
2. Different ideas of emergence
3. The relevance of physicalism for understanding the mind

# Recap 1: the definition of physicalism

- Supervenience alone does not define physicalism
- A comment on 'minimal physical duplicates'
- My claim: Physicalism = supervenience +  
ontological reduction OR explanatory reduction OR  
both

# 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)	<b>Emergence</b>

# Horgan's insight

- '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

# A challenge to physicalism

- If you reject explanatory and ontological reduction, then how do you distinguish your doctrine from emergence?
- But why should physicalists want to distinguish themselves from emergentists?

# The irrelevance of substance

- Not enough to say: 'I reject mental substance, and all its works and empty promises!'
- Emergence rejects this too
- Substance is not the issue



‘I’m drawing a line in the sand’



# Answer 1

- Because of mental causation
- How can there be causal influence from emergent mental phenomena to physical phenomena, if the physical world is causally closed?

# Answer 2

- If non-reductive physicalism just is emergence, then the link between the physical and the mental is brute, inexplicable and mysterious
- Non-reductive physicalism of this sort would imply that there is an **explanatory gap**

# Suggested reading

- Joseph Levine, 'Materialism and Qualia: the Explanatory Gap' *Pacific Phil Quarterly* 1983
- Brian McLaughlin, 'The Rise and Fall of British Emergentism' in Beckerman, Flohr and Kim (eds.) *Emergence or Reduction?* (de Gruyter 1992)
- Terence Horgan, 'From Supervenience to Superdupervenience' *Mind* 1993
- Tim Crane, 'Cosmic Hermeneutics and Emergence: the Challenge of the Explanatory Gap' in C. & G. Macdonald, *Emergence in Mind* (OUP 2010)

## 2. Kinds of emergence

- But what exactly is emergence?
- Last week we distinguished two kinds of emergence (see Searle, *The Rediscovery of the Mind*)

# Strong and weak emergence

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

# One key notion: novelty

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

# Weakly emergent properties

- Colours are novel; but there may be a physical explanation of why things have the colour they do
- So weakly emergent properties are compatible with physicalism



# Strongly emergent properties

- Strongly emergent properties are novel, but there is no explanation of why they emerge
- Are there any strongly emergent properties?

## C.D. Broad (1)

‘If the emergent theory of chemical compounds be true, mathematical archangel, gifted with the further power of perceiving the microscopic structure of atoms as easily as we can perceive haystacks, could not more predict the behaviour of silver or of chlorine or the properties of silver-chloride without having severed samples of those substances than we can at present. And could no more deduce the rest of the properties of a chemical element or compound from a selection of its properties than we can.’

*The Mind and its Place in Nature* p.71

## C.D. Broad (2)

‘No amount of knowledge about how the constituents of a living body behave in isolation or in other and non-living wholes might suffice to enable us to predict the characteristic behaviour of a living organism. This possibility is perfectly compatible with the view that the characteristic behaviour of a living body is completely determined by the nature and arrangement of the chemical compounds which compose it, in the sense that any whole which is composed of such compounds in such an arrangement will show vital behaviour and that nothing else will do so.’

*The Mind and its Place in Nature* pp.67-8

# Explain and predict?

- Doesn't this make the difference between emergence and reduction an epistemic one? But wasn't it meant to be a metaphysical difference?
- Note: 'grounding' as metaphysical explanation

# British Emergentists

- J.S. Mill, *A System of Logic* (London: Longmans 1875)
- Samuel Alexander, *Space, Time and Deity* (London: Macmillan 1920)
- C. Lloyd Morgan, *Emergent Evolution* (London: Williams and Norgate 1923)
- C.D. Broad, *The Mind and its Place in Nature* (London: Routledge and Kegan Paul 1923)

# Emergence and supervenience

- I am assuming here that emergentists accept supervenience; but some complications:
- Some actual emergentists reject supervenience
- Some accept nomologically necessary supervenience but not metaphysically necessary

### 3. The relevance of physicalism

1. How can we establish whether physicalism is true?
2. Even if we can establish it, what would this tell us about the mind?

*omnis caro foenum*





‘All flesh is grass’

