

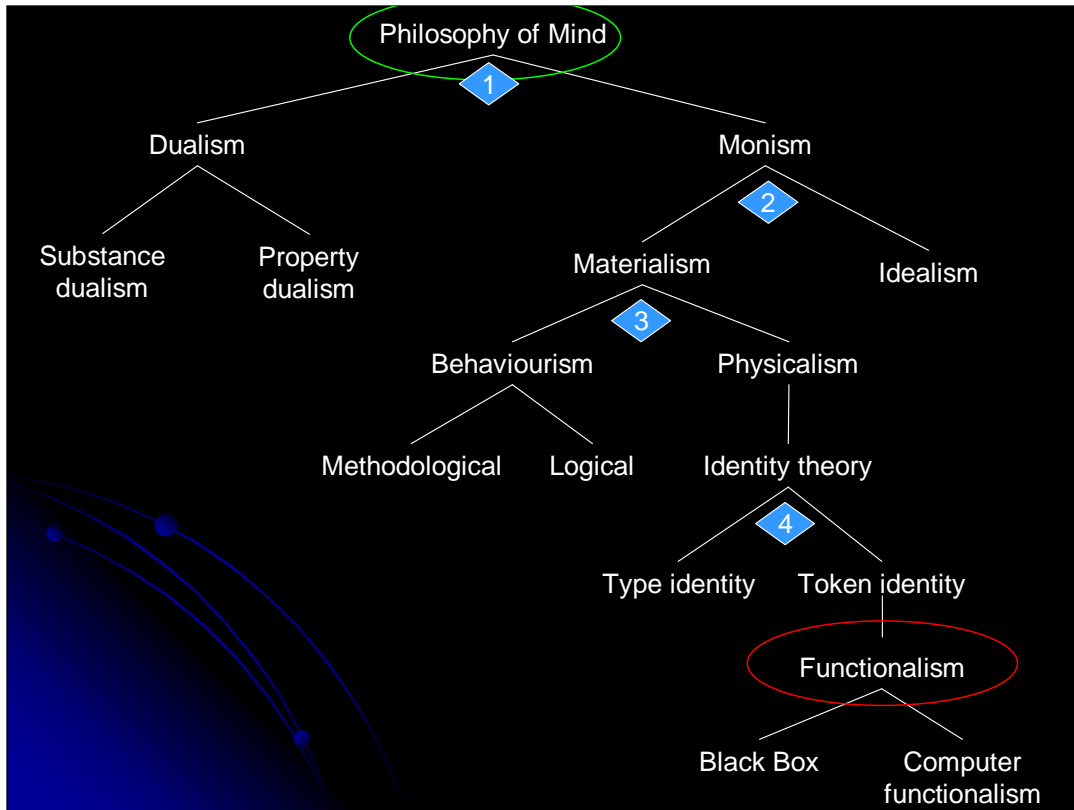
How to reach Functionalism in 4 choices (and 639 words)

- Pack your baggage – mine includes
 - Physics aka Natural Philosophy
 - Atheism (maybe Humanism) – I don't do God
 - Information Technology (& OO Programming)
 - Programming brain scanners
 - never visualised the mind
- Don't PANIC



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- Start by declaring my prejudices – you've probably gathered most of them already
- I did Physics (quite a long time ago) at Uni and I like the Natural Philosophy description because I'm big on Natural, we don't need supernatural or mysterious. But as Richard Dawkins would say that doesn't mean there isn't a lot to Wonder at.
- The IT bit is interesting and it seems to me there are very strong analogies between Object Oriented Programming and Philosophy of Mind
- CT scans really can distinguish between white matter and grey matter but the mind, or self, or consciousness never shows up
- OK Don't Panic – deep breath -



- This is a bit in-your-face, that's why I put Don't PANIC
- It's a diagram from John Searle's book. We could call it a Road Map to Functionalism
- Or a Binary Tree – at each branch we only have two options
- So in 4 steps we can get from Philosophy of Mind to Functionalism

Dualism or Monism?

- *There are two sorts of substance, mental and material (or physical). Descartes claimed further that each of us is a union, made up of a material substance – the body – and a mental substance – the mind.*
- *All that exists in the world are bits of matter in space-time and aggregate structures composed exclusively of bits of matter. There is nothing else in the spacetime world.*
- Dualism is intuitively attractive because we can all distinguish the mental from the physical by the well known properties of each (1st person ontology cf. 3rd person ontology). *Mental phenomena only exist insofar as they are experienced by some human or animal subject, some I. (Searle)*
- But the physical world is causally closed – we don't need any more deterministic laws – and we must show that mental phenomena can cause physical phenomena
- So mental phenomena must be physical phenomena (Davidson after Kant)
- Monism then - but dual aspects or descriptions when that is useful, from a mental perspective – or from a physical perspective. Give me pain over C Fibre firing every time.

- If it's in italics it's a verbatim quotation, else it's what I wrote myself
- First two bullets are lifted straight from Dimitris' lectures. We have to choose between Dualism – Descartes style or Monism – only one stuff
- Materialists (Physicalists) think they can show that everything is caused by something before it under strict deterministic laws (like Gravity and Newton's Laws of motion). There's no room for any non-physical causes – that would be 'over determination'.
- So mental phenomena must be physical phenomena and the strict deterministic laws are physical → there are no psycho-physical laws. - - Principle of the Anomalism of the Mental

Materialism or Idealism?

- If we accept there's only one kind of stuff – maybe it's all mental stuff – not material stuff
- To exist is to be perceived (Berkeley)...
- ... but everything is perceived by God
- You cannot be serious (*McEnroe*)
- Materialism then

- Bishop George Berkeley developed the Cartesian theatre external objects could not be perceived directly – only by introspection of the mind's eye so to speak. → immaterialism or subject idealism
- We can only know ideas or sensations of external objects, which only exist insofar as they are perceived.
- → leads to Solipsism?
- Dead as doornail for many decades

Behaviourism or Physicalism?

- Behaviourism was an attempt to introduce a 'scientific method' for psychology – objective 'measurements' instead of relying on subjective reports
- *According to Behaviourism, behaviour is constitutive of mentality; to have a mind just is to exhibit, or to have the propensity to exhibit, certain appropriate patterns of observable behaviour.*
- Remember Hempel, and Paul's toothache
 - a) *Paul weeps and makes gestures of such and such kinds.*
 - b) *At the question "What is the matter?" Paul utters the words, "I have a toothache".*
 - c) *Closer examination reveals a decayed tooth with exposed pulp.*
 - d) *Paul's blood pressure, digestive processes, the speed of his reactions, show such and such changes.*
 - e) *Such and such processes occur in Paul's central nervous system.*
- Behaviourism reduces to physicalism → Physicalism then

- At every objection Hempel just admits another item of 'Behaviour'

a. Weeping and gestures

b. Utters words – avowals, I have toothache → I am very happy (or sad, or frightened) ?

c. Close examination – how close ? Electromicroscope?

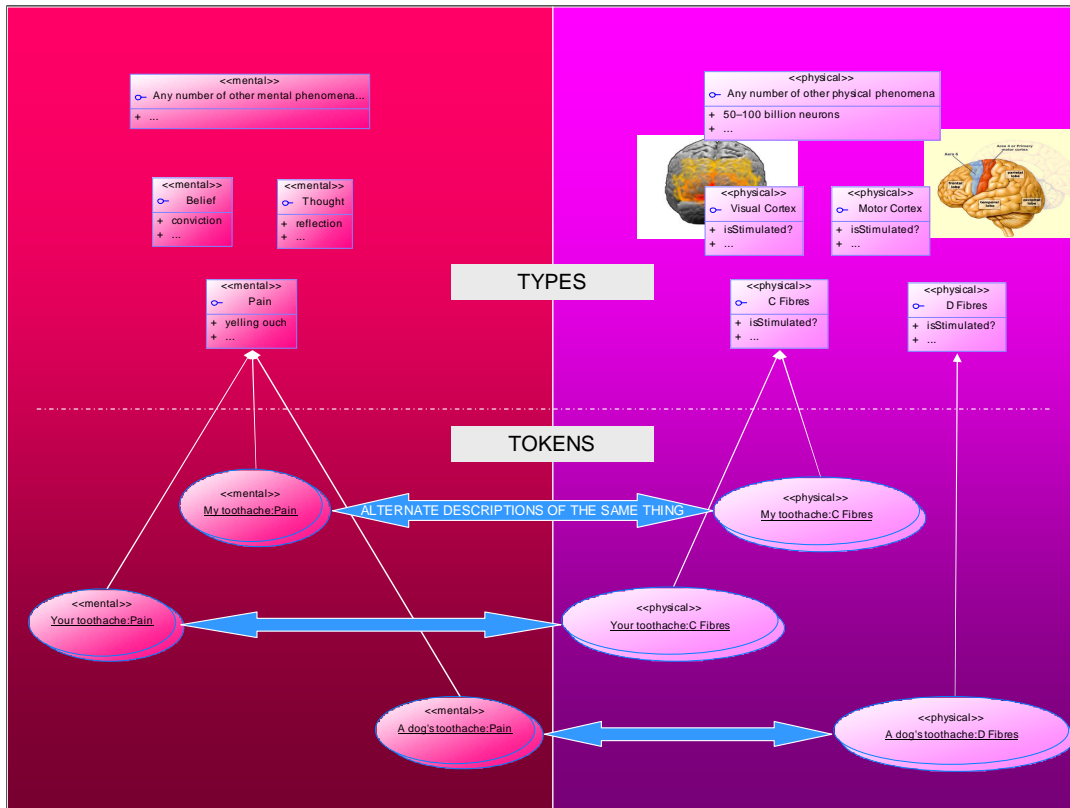
d. Blood pressure, digestion – objective publicly observable?

e. Central nervous system – looks like neurophysiological identity theory to me

Type Identity or Token Identity?

- *Type Physicalism: Every type of mental state is identical with some type of physical state (Searle)*
- *Token Physicalism: for every token of a certain type of mental state there is some token of some type of physical state or other with which that mental state token is identical (Searle)*
- Multiple realizability argues strongly against Type Physicalism – C-Fibre Stimulation can't be constitutive of every pain
- Token Identity then

- Big diagram to come but start with a few bullet points
- This definition of Type Physicalism is sloppy (Searle says) no type (or class) can be identical to another type because a type, per-se is not instantiated or realised. You can't really say fruit is a banana (although you might say a banana is fruit) – you should say a particular piece of fruit is a banana. But Type Physicalists would say every particular instance of pain is identical to a particular instance of C-Fibre Stimulation.
- The definition of Token Physicalism is much better – and it allows multiple realizability. Then we can have Pain without C-Fibres if necessary – hurts just as much with silicone pain makers.



- Diagram is divided into mental phenomena on left and physical phenomena on right. Remember we are well down the monist branch. These are just different perspectives on a material world.
- First show some things from a mental perspective – belief; thought, pain; others
- Then from a physical perspective – visual; motor; C-fibres; others
- These are TYPES – classes, universals, Forms, abstract, not realised or instantiated
- Then add a particular instance – like My Toothache – note ellipse shows an instance and the : suffix shows of what. The stack implies a new dimension, Time, because every instance has a lifetime – My Toothache changes.
- These are TOKENS and both flavours of identity theory says the mental token is identical to the physical one – they are alternate descriptions of the same thing
- We can show Your Toothache in the same way. Type Identity theory says that every instance of Pain is identical to an instance of C-Fibre stimulation
- Then how can a dog feel pain, he has no C-Fibres. Type Identity theory says, therefore dogs can't feel pain.
- But dogs have D-Fibres and Token Identity theory says that instances of D-Fibre stimulation can be identical to instances of pain in dogs
- Multiple realisability leads to token-identity theory

Functionalism

- Token Identity theory allows that a certain mental state could be realised by multiple physical states – then what characterises the mental state; what is the essence of pain?
- Not its neurophysiological properties but the response of the sufferer to certain external stimuli given certain internal dispositions.
- As expressed by ‘Ramsey sentences’ e.g.
There is an x such that the perception that it is raining causes x and that x together with the desire to stay dry causes umbrella carrying behaviour. (Searle)
[hint: x is belief]
- *A mental state is an internal state that serves as a causal intermediary between (a) causes, which consist of sensory inputs of a certain sort and mental states, and (b) effects, which consist of behavioural outputs (of a certain sort) and mental states.*
- This says nothing about qualia – what does it feel like to have toothache, see green, understand Cantonese, be conscious etc?
- My view is ‘Mind the Explanatory Gap’ – all qualia (tokens) must be identical to some (token) state of my body – i.e. all the material stuff inside my skin, including my brain and all its stored memories

- I would be prepared to leave it at that but token identity theory isn’t on the list of 4 targets
- If each particular pain could be realised in a different physical way, what is the essence of pain?
- Functionalism tries to answer this question in terms of how each mental phenomenon ‘functions’ – sensory inputs → behavioural outputs
- We seem to be going round in circles a bit (back to behaviourism?) but qualia remain a problem.
- I don’t know how the body’s material state amounts to qualia but I believe it must. That, for me, is the explanatory gap.