The Hard Problem of Consciousness

“[C]onsciousness is surprising. If all we knew about were the facts of physics, and even the facts about dynamics and information processing in complex systems, there would be no compelling reason to postulate the existence of conscious experience. If it were not for our direct evidence in the first-person case, the hypothesis would seem unwarranted; almost mystical, perhaps. Yet we know, directly, that there is conscious experience. The question is, how do we reconcile it with everything else we know?” (Chalmers 1996, 20)

1. Background: Philosophy of Mind, the Romantic Comedy

Prequel: Descartes

*The unfortunate initial hook-up between Mind and Body that we spend the rest of the movie trying to recover from*

* **Substance Dualism**
* Response to possible tension between growth of scientific investigation of the world and religious world view
* Problematic because it renders the mind / world (depending which side of the process you start on) *unreachable* (causally, explanatorily, epistemically…)

20th Century Research Program: How do we get the mind out of the box without breaking it in the process?

*The rest of the movie*

Stage One: Behaviourism

Gilbert Ryle, Daniel Dennett (?)

No need to posit or study internal psychological states. Psychology can instead be couched in terms of explanation at the level of behaviour in response to environmental stimulation.

Stage Two: Reductive Physicalism

One step further inwards: mental states and properties are identified with physical states and properties in a manner that leaves no work to be done by mental predicates.

Stage Three: Non-reductive Physicalism

A little less extreme: mental substances reduce to physical substances, but mental properties need not reduce to physical properties.

?Also Stage Two / Three: Functionalism

A state is a *mental* state not in virtue of some internal constitution of the subject but in virtue of playing a particular role in the system in question.

Subproblems / manifestations / redescriptions of the master problem:

* how can we integrate mental phenomena with a scientific world view?
* how do the mind and the body relate to one another?
* how can mental states cause physical events?
* what is the place of consciousness in a physical world?
* can we make a mind? How hard is it to do so?
* how can we learn about the mind? What routes of access are there to it?
* how is it possible for us to perceive and learn about the world?

Note: all of these are subplots or amusing supporting characters in the shadow of the Major Starting Screw-Up.

1. Consciousness and the Reductionist Project

* Key reductionist / physicalist claim: the mental *reduces* to the physical, in the same way other substances or properties “reduce” to physical substrates. (Water is nothing over and above H2O. Pain is nothing over and above C-fibres firing.)
* What do we mean by consciousness?

*“If you got to ask, you ain’t never gonna get to know”* Ned Block (quoting Armstrong (or was it Fats Waller?) about jazz)

Aka: Qualia (sing. quale), raw feels, what it’s like, phenomenal experience, subjective conscious experience…

Why does consciousness pose a particular problem for any kind of reductionist project?

1. Levine and the Explanatory Gap

Joseph Levine ‘Materialism and qualia: the explanatory gap’ *Pacific Philosophical Quarterly* 64 (1986) 356-61

* In general: we can understand the macroscopic properties objects have in terms of their microscopic structures (e.g. theory of kinetic energy). Once we understand the lower-level structure we understand *how* it can give rise to the higher-level structure.
* This is not the case with consciousness: we can understand the lower level structures of the brain and *still* be left asking *why* it gives rise to the qualia it does.
* Important claim: *no matter what we found out* there would always be an explanatory gap
* *Must* physicalism *explain* consciousness to be successful? What does that really involveCan we explain identity claims?

1. Chalmers and the Hard Problem of Consciousness

David Chalmers, *The Conscious Mind* 1996

David Chalmers “Facing Up to the Problem of Consciousness” *Journal of Consciousness Studies* 2 (3)200-219 (1995)

Chalmers 1996 *The Conscious Mind*

Easy problems of consciousness: Understanding our cognitive abilities to integrate information, categorize stimuli, react to the environment etc. etc.

* Why are these problems easy?

“In a way, the point is trivial. It is a *conceptual* fact about these phenomena that their explanation only involves the explanation of various functions, as the phenomena are *functionally definable.*”

The hard problem of consciousness

“Why is it that when our cognitive systems engage in visual and auditory information-processing, we have visual or auditory experience: the quality of deep blue, the sensation of middle C? How can we explain why there is something it is like to entertain a mental image, or to experience an emotion? It is widely agreed that experiences arise from a physical basis, but we have no good explanation of why and how it so arises. Why should physical processing give rise to a rich inner life at all? It seems objectively unreasonable that it should, and yet it does.” [p. 201]

“… the hard problem is hard precisely because it is not a problem about the performance of functions. The problem persists even when the performance of all the relevant functions is explained.” [p. 202]

“At the end of the day, the same criticism applies to *any* purely physical account of consciousness. For any physical process we specify there will be an unanswered question: Why should this process give rise to experience? Given any such process, it is conceptually coherent that it could be instantiated in the absence of experience. It follows that no mere account of the physical process will tell us why experience arises. The emergence of experience goes beyond what can be derived from physical theory.” [208]

* What are our criteria for success at solving the hard problem of consciousness?

1. Chalmers’ Zombie Argument

The Zombie argument targets the physicalist claim that the physical metaphysically determines the mental, either because mental phenomena are physical or because the mental necessarily supervenes upon the physical.

Supervenience: X supervenes on Y if there can be no change in X without a change in Y.

The mental supervenes on the physical if there can be no change in mental properties / facts without a corresponding change in physical properties / facts

Zombies are physically and functionally identical to us but lack any conscious experience at all.

1. It is conceivable that there are zombies
2. If it is conceivable that there are zombies, it is metaphysically possible that there are zombies
3. If it is metaphysically possible that there are zombies, then physicalism is false
4. So physicalism is false

Responses to the argument:

1. Premise 2: is conceivability a good guide to possibility?

* Chalmers has argued that the fact we can *imagine* creatures who are physical replicas of ourselves, but who lack conscious experience of any kind, reveals that that is a *conceptual possibility*.
  + In favour of this methodology: in other cases, it seems like metaphysical possibility does limit what we can imagine / conceive of. E.g. we can’t conceive that 2 +2 = 5, or that the internal angles of a triangle add up to 208 degrees.
  + Against this methodology: maybe we just don’t understand *enough* for our imagination to be an adequate guide to these cases

Churchland, Patricia (1996). The hornswoggle Problem. *Journal of Consciousness Studies* 3 (5-6) 402-8

“What exactly is the evidence that we could explain all the ‘easy’ phenomena and still not understand the neural mechanisms for consciousness? (Call this the ‘left-out’ hypothesis.) That someone can *imagine* the possibility is not *evidence* for the real possibility. It is only evidence that somebody or other *believes* it to be a possibility. That, on its own, is not especially interesting.” [p.403]

“Whether we can or cannot imagine a phenomenon being explained in a certain way is a psychological fact about us, not an objective fact about the nature of the phenomenon itself.” [p.407]

* Is the kind of possibility to which conceivability is a guide the same kind of metaphysical possibility the argument seeks to establish?
  + Conceivability is a guide to *a priori* possibility. Metaphysical possibility concerns what possible worlds exist.
  + It could be that something is conceivable, but not metaphysically possible, if there is no possible world which contains it.
  + E.g. it can seem as though one can conceive of a situation where water is not H2O, even though water is identical with H20, and since identity is a necessary relation, there can be no possible world in which they are not identical.
    - But are you *really* conceiving of a situation where water is not H2O, or where something that is *like* water in all relevant respects is not H2O? (See Kripke *Naming and Necessity*)*?*

1. Premise 1: can we really conceive of zombies?

Can we say the same about the zombie? Are you really imagining a physical and functional duplicate of yourself that lacks conscious states, or only something that *seems* like a physical and functional duplication of yourself… Where do we drive the wedge?