

The knowledge argument and the colour of ripe tomatoes

Sigfrid Lundberg

sigfrid@sigfrid-lundberg.se

<https://sigfrid-lundberg.se>

ABSTRACT

The

Introduction

Biology is, writes [Smart \(1959: 142\)](#) “*to physics as radio-engineering is to electromagnetism*) *except the occurrence of sensations seems to me to be frankly unbelievable.*” The effect such a statement have on biologists and biologically inclined philosophers could be easily foreseen. I think it is safe to assume that Smart was wilfully provocative. [Smart’s \(op cit.\)](#) and others’ works led to a “*wave of reductionist euphoria*” or that is how [Nagel \(1974: 435\)](#) puts it in his seminal paper *What is it like to be a bat*. Nagel discusses at length that chiropterology (the scientific study of bats) has to study *how it is like* how to see the world using echolocation.

Nagel was later joined by Jackson who wrote a series of papers, including *What Mary Didn’t know* ([Jackson 1986](#)). The argument furthered by the two is usually referred to as *the knowledge argument* [Ravenscroft \(2005: 171\)](#). Formalizing [Jackson \(1986: 291\)](#) a bit further, the argument could look roughly as follows:

- (A) Physicalism is the idea that the world is not only largely physical but **completely** physical. On this point [Jackson \(1986: 291, see his footnote 1\)](#) argues that if physicalism is true, and if you know everything expressible in a physical language, then you know **absolutely** everything.
- (B) Suppose that our world *W* is **not completely** physical. Then there is a possible world *W'* which is.
- (C) Since the world *W'* is completely physical, the difference between that world and our *W* must be facts that cannot be expressed in a physical language ([Jackson 1986](#)).

Now, please recall that what [Smart \(op cit.\)](#) regarded as **unbelievable were sensations** and that what [Nagel \(op cit.\)](#) regarded as essential was just sensations (and for understanding bats: echolocation). Jackson’s and Nagel’s works provoked a response by [Pereboom \(1994\)](#). Here I study the papers papers by Jackson and Pereboom. I first present Jackson’s view and then I turn to Pereboom and compare it with Jackson’s. Finally I add my own conclusions and make a brief comparison with [Ravenscroft \(2005: 172\)](#)

What Mary Didn't Know

Mary's black-and-white room is a thought experiment proposed by Jackson. He has discussed it in a number of essays. I will concentrate on [Jackson \(1986\)](#), even though it is not his first treatment of the problem.

Mary is an extremely gifted neuroscientist. Since birth she has been confined to a room furnished completely in black-and-white. She has spent her whole life there, studying physiology, cognition, physics, colour, optics etc, using black-and-white books, journals and TV set. If physicalism is true she knows absolutely everything there is to know that can be formulated in a physical language. Which is everything, simpliciter. If there is more to know, then physicalism is false. Or so claims [Jackson \(1986\)](#).

Eventually she is released from her confinement, and the questions are: What did she learn when she meets the real world? In particular, what did she say when she first saw a ripe red tomato?

Following [Jackson \(1986\)](#), this how Mary's black-and-white room narrative can be boiled down to an argument:

- (1) From (A): "Mary (before her release) knows everything physical there is to know about other people." ([Jackson 1986: 293](#)).
- (2) From (B): "Mary (before her release) does not know everything there is to know about other people (because she learns something about them on her release)." ([Jackson 1986: 293](#)).

Hence

- (3) From (C): "There are truths about other people (and herself) which escape the physicalist story." ([Jackson 1986: 293](#)).

Pereboom's analysis

bla bla bla

Before his attack on the knowledge argument, he presents how Mary's Room could be formalized. Quoting verbatim from [Pereboom \(1994: 318\)](#):

- (i) Mary (while in the room) knows everything physical there is to know about human beings.
- (ii) Mary (while in the room) does not know everything there is to know about the nature of human sensations and their properties.

Therefore

- (C) There is information about human sensations that is not physical, and thus human sensations are not completely physical.

The differences between Jackson's and Pereboom's first premises could hardly be larger. Jackson is focussing on that Mary knows everything that can be formulated in a **physical language** about **other human beings**, see (1). Pereboom is much more vague, see his premise (i). For him, Mary just knows everything physical about humans in general.

The difference between the consequents are different as well. Jackson's Mary realizes, upon her release, that there were important things she did not know about other people's perceptions. See (3). Pereboom's consequent (C) just concludes that there is information about

human sensations that are not completely physical.

I have problems with this, first because

Conclusions

Ravenscroft (2005: 172) reached a similar conclusion; by describing Mary's lack of knowledge as that she did not understand what other knew about red tomatoes, Ravenscroft evaded the objection to his argument described above.

References

- Jackson, Frank, 1986. What Mary Didn't know. *The Journal of Philosophy*, 83(5), 291–295. <https://doi.org/10.2307/2026143>
- Nagel, Thomas, 1974. What Is It Like to Be a Bat?. *The Philosophical Review*, 83(4), 435–450. <https://doi.org/10.2307/2183914>
- Pereboom, Derk, 1994. Bats, scientists, and the limitations of introspection. *Philosophy and phenomenological research*, 54(2), 315–329. <https://doi.org/10.2307/2108491>
- Ravenscroft, Ian, 2005. *Philosophy of mind: A beginner's Guide*, Oxford University Press
- Smart, John J. C., 1959. Sensations and Brain Processes. *The Philosophical Review*, 68(2), 141–156. <https://doi.org/10.2307/2182164>