Levine, “Materialism and Qualia: The Explanatory Gap”

1. The Explanatory Gap

Levine’s position is similar to Nagel’s (and different from Kripke’s): physicalism is (or may well be) true, but we can’t understand how it’s true.

Levine transforms Kripke’s argument from a metaphysical one into an epistemological one.

According to Levine, psychophysical identities (e.g. pain = c-fibers firing) are “gappy”, unlike others (e.g. heat = mean kinetic energy).

What does this mean exactly?

2. Remember Kripke

(1) Heat = motion of molecules
(2) Pain = c-fibers firing

Kripke: There is a felt contingency about (1) and (2). But, the felt contingency can be explained away in (1) but not in (2).

How so?

Suppose that Clare claims that she can imagine a possible world in which heat is not a motion of molecules. According to Kripke, we can “disabuse” Clare of this notion by explaining to her that what she is imagining is not heat without the motion of molecules. Rather, what Clare is imagining is a world in which something other than the motion of molecules affects our senses in the way that heat in fact does.

Now suppose that Clare claims that she can imagine a possible world in which a phenomenon is experienced as pain but in which there are no C-fibers firing. According to Kripke, we cannot “disabuse” Clare of this notion by explaining to her that what she is imagining is not pain without c-fibers firing. That is, we cannot say that what Clare is imagining is a world in which something other than c-fibers causes the experience of pain. The experience of pain is pain!

That is, there is no distinction between the way a phenomenon appears to us and the phenomenon itself. This is one way that (1) and (2) are different.

3. Now Levine:

Statement (1) is fully explanatory with nothing crucial left out. Statement (2) is not fully explanatory. This is what explains the apparent contingency of (2).

What does he mean?

Consider (1'): The phenomenon we experience through the sensations of warmth and cold, which is responsible for the expansion and contraction of mercury in thermometers, which causes some gases to rise and others to sink, etc., is....

(This is a statement of the causal role of heat.)

Once we fill in the .... In (1') we have a full explanation of heat. Once we understand how this causal role is carried out, there is nothing more we need to understand.

Now consider (2'): The phenomenon we experience through sensations of pain, which is responsible for warning us of damage, causes us to avoid situations we believe will result in it, etc., is....
Is the following true? Once we fill in the ... In \( (2') \) we have a full explanation of pain. Once we understand how this causal role is carried out, there is nothing more we need to understand.

Levine says ‘no’. The connection between the “phenomenal properties” of pain and the ... (c-fibers, say) is left mysterious.

According to Levine it is the “non-intelligibility” of this connection between pain and c-fibers firing that enable us to think (at least) that we are prying them apart in the Kripke case.

“[W]ithout this explanatory gap filled in, facts about the kind or existence of phenomenal experiences of pain in creatures physically (or functionally) different from us become impossible to determine. This, in turn, entails that the truth or falsity of \((2)\), while perhaps metaphysically factual, is nevertheless epistemologically inaccessible. This seems to be a very undesirable consequence of materialism [physicalism]”. (359)