

# Biological theories of phenomenal properties

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1. Multiple realizability arguments.....	1
2. An argument from phenomenal externalism.....	2
3. Separation arguments.....	2

Biological theories of consciousness are theories which identify phenomenal properties with biological properties — typically, neural properties of some sort. Let's consider three arguments against such theories.

## 1. MULTIPLE REALIZABILITY ARGUMENTS

The classical argument (due to, among others, Putnam and Fodor) against such theories is the multiple realizability argument, which argues, in effect, that neural properties of this sort are never going to give us necessary conditions for the relevant phenomenal properties. The argument, then, is:

$$\forall N \forall P (N \text{ is a neural property} \ \& \ P \text{ is a phenomenal property} \ \diamond \exists x (Px \ \& \ \neg Nx))$$

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$$\forall N \forall P N \neq P$$

The premise is defended on the basis of the possibility of creatures which are made of, e.g., silicone, and have no neurons, and yet feel pain.

Some replies to this argument:

- We can relativize the relevant mental properties to types of organisms, and reduce these relativized mental properties. (Lewis)
- The argument faces a dilemma. On the one hand, apparent multiple realizations may not be: apparent quite different physical systems might still have physical properties in common. But on the other hand, if we really make the creatures different enough to guarantee that we have multiple realizations, should we really be so sure that each is instantiating the *same* mental property? (Shapiro and others)

Phenomenal properties seem like the best case for the multiple realizability argument, since we seem to have a ready test for sameness of phenomenal properties.

Complication: what if we deny Distinctness/Distinguishability? We then seem to lose our 'test.' Is it unprincipled to distinguish between indiscriminable phenomenal properties *without* an argument from the distinctness of the relevant representational properties?

## 2. AN ARGUMENT FROM PHENOMENAL EXTERNALISM

Suppose that externalism about perceptual content pushes us toward phenomenal externalism. This seems to entail the falsity of biological theories, since those theories are internalist.

Reply 1: back to the phenomenal properties!

Reply 2: even the friend of externalism about perceptual content + the thesis that phenomenal properties are identical to certain representational properties can be an internalist about phenomenal character. (Remember the ‘propositional function’ move.) So we would need an independent argument for phenomenal externalism — and its not clear where it is going to come from, if not from the truth of some functionalist theory.

## 3. SEPARATION ARGUMENTS

Pautz gives the following argument against biological theories:

- 1 Experience property  $R$  has externally-directed property  $P$  necessarily
- 2 No neural property  $N$  has externally-directed property  $P$  necessarily
- 3 Therefore  $R$  is not identical with any neural property  $N$

The ‘experience properties’ he’s talking about are what we have been calling phenomenal properties. Hence we’ve already seen that there is good reason to believe that (1) is true.

The main focus, then, should be on (2). Pautz defends (2) using cases like this:

*Case 3: the simple system.* Imagine that we excise all the neuroanatomy from an individual's brain except what is necessary for the tokening of  $N$ , where  $N$  is the (local or global) neural property that the identity theorist would identify  $R$  with. Now imagine that, in a world containing no sentient species, this simple system forms by chance. In this world,  $N$  has no evolutionary history and the system does not belong to the species *homo sapiens* or any other species. Therefore, in this world, it does not have the function of indicating round objects, and it does not play any functional role among the members of any species. Imagine that the physical facts of the case are the only facts..<sup>19</sup>

Should these convince the biological theorist?

Remember that the biological theorist does not have to identify the experience property with a 'very local' neural property which is only instantiated when the relevant experience property is.  $R$  can also include other neural properties which are instantiated even when the experience property isn't. Hence for something to instantiate  $N$ , it might have to be a lot like a brain. Given this, does Case 3 support (2)?

Pautz says that saying that the simple system does represent the world in just the same way as we represent it when we have the relevant experience property would be to adopt a "magical theory of intentionality", which left the relevant representational properties unexplained and mysterious. Is this convincing?

Pautz does suggest that if we go for a "big state" view according to which  $N$  contains comparatively global neural properties, we will face the problem that one will be able to instantiate the relevant experience property without being in state  $N$ . But this sounds a bit like the original multiple realizability argument, and it's not completely obvious why, if we're not convinced by that argument, we should be convinced here.