

Phil 317: [handout #9]
Ned Block, *Troubles with Functionalism*

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§ The Goals:

- ___ **1. To charge functionalism with 'liberalism': it ascribes mental properties to things that do not in fact have them. [like behaviorism]**
- ___ **2. To charge functionalism with 'chauvinism': it withholds mental properties from systems that in fact have them. [like physicalism]**

§ Definition of 'Functionalism'

Functionalism: Each type of mental state is a state consisting of a disposition to act in certain ways and to have certain mental states, given certain sensory inputs and certain mental states.

Sensory inputs + having certain mental states



MENTAL STATE TYPE A



A certain disposition to act + having certain mental states

§ Functionalism against Behaviorism

- ___ 1. Functionalism replaces behaviorism's "sensory inputs" with "sensory inputs and mental states";
- ___ 2. Functionalism replaces behaviorism's "disposition to act" with "disposition to act and have certain mental states."
- ___ 3. Thus, functionalism individuates mental states partly in terms of causal relations to other mental states while behaviorism denies that mental states really exist.

§ Functionalism against the Identity Theory ('Physicalism' in Block's term.)

- ___ 1. It is impossible to have a nontrivial first-order physical property in common to all and only the possible physical realizations of a given Turing-machine state.
- ___ 2. Physicalism is a chauvinist theory: it unfairly excludes brainless creatures who nonetheless have minds.

§ Turing Machines

- 1. finite set of machine tables, inputs, and outputs: given any state and input, the table specifies an output and a next state.

2. The output: it prints a symbol on a tape, then moves the tape and brings a new symbol into the view of the input reader.
3. The tape must be infinite in one direction and movable in both directions.
4. probabilistic automaton: if the machine is in S_a and receives I_b , it has a probability p_1 of emitting O_1 ; p_2 of emitting O_2, \dots ; it also has a probability r_1 of going into S_1 , r_2 of going into S_2, \dots

§ Versions of Functionalism

[A] A Priori Functionalists: Smart, Armstrong, Lewis, Shoemaker

⇒ **Functional specification theory**

⇒ *Functionalism*

___ **They are the heirs of the logical behaviorists. They tend to regard functional analyses as analyses of the meanings of mental terms.**

___ Lewis and Armstrong argue from functionalism to the truth of physicalism because they have a "functional specification" version of functionalism. Pain is a functionally specified brain state, according to them.

___ Functionalists require externally observable classifications (e.g. inputs characterized in terms of objects present in the vicinity of the organism, outputs in terms of movements of body parts).

[B] Empirical Functionalists: Putnam, Fodor, Harman

⇒ **Functional-state identity theory**

⇒ *Psychofunctionalism*

___ **They tend to regard functional analyses as substantive scientific hypotheses.**

___ Putnam and Fodor argue from functionalism to the falsity of physicalism because they say they are functional states (or functional properties), and that mental states (or properties) are identical to these functional states. No functional state is likely to be a physical state.

___ Psychofunctionalists have the option to specify inputs and outputs in terms of internal parameters, e.g., signals in input and output neurons.

* **Basically, if functionalism is true, we must suppose that there is a psychological theory that applies to people and some animals that says what it is in virtue of which both the animals and the people have beliefs, desires, etc.**

* **Both Functionalism and Psychofunctionalism may require psychological theories of different degrees of generality or level of abstraction. Two creatures may be functionally equivalent relative to one level of abstractness of psychological theory, but not with respect to another.**

[Note]: Putnam's *Twin Earth*

⇒ **wide mental states — states whose truth conditions are partially determined by conditions in the external environment.**

⇒ narrow mental states — states whose truth conditions are determined solely by conditions within the individual person.

Block's claim:

___ I shall take functionalism to be doctrine about all "narrow" mental states.

§ [I] Block Against Functionalism

*** Functionalism:**

___ Any system that is *Functionally* equivalent to us would be mentally equivalent to us.

***Block's Counterexamples:**

1. homunculi-headed robots
2. Chinese-body functionalistic system

Q: Do you think Block's examples are conceivable (logically possible)?

⇓

Block's Chinese-Body Argument:

- ___ 1. If a theory would classify systems that lack mentality as having mentality, then it commits a form of liberalism.
- ___ 2. Functionalism would allow systems such as the Chinese-body system to be functionally equivalent to an individual.
- ___ 3. Therefore, functionalism commits liberalism.

⇓

Block's Absent Qualia Argument:

- ___ 1. Machine functionalism says that each mental state, including qualitative states, is identical to a machine-table state.
- ___ 2. But a homunculi-headed system cannot have a qualitative state even when it has the functionally equivalent machine-table state.
- ___ 3. Therefore, there is prima facie doubt that the qualitative state is identical to a machine-table state.
- ___ 4. Therefore, there is prima facie doubt that machine functionalism is true.

[Note]: "qualia"

___ quale (singular); qualia (plural) = qualitative state; phenomenal qualities; how it feels.

§ Block's Claims:

___ Our intuitions are in part controlled by the not unreasonable view that our mental states depend on our having the psychology and/or neurophysiology we have. So

something that differs markedly from us in both regards should not be assumed to have mentality just on the ground that it is Functionally equivalent to us.

___ Brain-headed systems (like us) have qualia; homunculi-headed systems only mimic us and there is prima facie doubt whether they can have qualia.

↓

Block's Homunculi-headed System Argument:

- ___ 1. Functionalism claims that all Functionally equivalent systems to us must have mentality since we do.
- ___ 2. But mentality depends crucially on psychological and/or neurological processes and structures.
- ___ 3. A homunculi-headed Functional simulation of us need not be psychologically or neurologically like us.
- ___ 4. Therefore, a homunculi-headed Functional simulation of us need not have mentality.
- ___ 5. Therefore, Functionalism is not justified.

§ [II] Block Against Psychofunctionalism

***Psychofunctionalism:**

___ Any system that is *Psychofunctionally* (as determined by the psychology appropriate to us) equivalent to us is mentally equivalent to us.

*** Block's Counterexample:**

- 1. Inverted spectrum twins

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Block's Inverted Spectrum Argument:

- ___ 1. Psychofunctionalism claims that all *Psychofunctionally* equivalent systems to us must have mentality since we do.
- ___ 2. But it is conceivable that two people who are identical according to the domain of present psychology (and hence are Psychofunctionally equivalent) nevertheless have inverted spectrum vision, and would thus have different qualia.
- ___ 3. Therefore, Psychofunctionally identical systems are not necessarily mentally identical.
- ___ 4. Therefore, Psychofunctionalism is false.

*** Block's second criticism:**

___ the problem of specifying the inputs and the outputs.

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Block's Chauvinism Argument:

- ___ 1. According to Psychofunctionalism, the inputs and the outputs of our functional states are specified in terms of neural activities.
- ___ 2. But this kind of specification denies mentality to creatures without nerves.

- ___ 3. It is not impossible that creatures without nerves can have mentality.
- ___ 4. Therefore, Psychofunctionalism commits a form of chauvinism.

§ Block's Conclusion

1. Functionalism is hopelessly liberal.
2. Psychofunctionalism is hopelessly chauvinistic.
3. Therefore, we are not justified in holding either of the forms of functionalism.

**Q: What kind of mental states can humans and other creatures possibly share?
Can there be a "universal psychology" that applies to all sentient beings?**