

# **FUNCTIONALISM**

# PRAGYANPARAMITA MOHAPATRA

DEPARTMENT OF PHILOSOPHY

UTKAL UNIVERSITY, BHUBANESWAR - 751004 INDIA

Email-id: pragyanparamita@utkaluniversity.ac.in

#### **Functionalism**

Functionalism is a theory about the nature of mental states. According to functionalism, mental states are identified by what they do rather than by what they are made of.

The main arguments for functionalism depend on showing that it is superior to its primary competitors: identity theory and behaviorism. Contrasted with behaviorism, functionalism retains the traditional idea that mental states are internal states of thinking creatures. Contrasted with identity theory, functionalism introduces the idea that mental states are multiply realized.

#### The Case for Functionalism

#### Functionalism against Behaviorism:

Many arguments for functionalism depend on the actuality or possibility of systems that have mental states but that are either physically or behaviorally distinct from human beings. These arguments are mainly negative arguments that aim to show that the alternatives to functionalism are unacceptable. For example, behaviorists famously held that psychological states are not internal states at all, whether physical or psychical. But, the argument goes, it is easy to imagine two creatures that are behaviorally indistinguishable and that differ in their mental states. This line of reasoning is one of a family of "perfect actor" or "doppelgänger" arguments, which are common fare in philosophy of mind:

P1. If behaviorism is true, it is not possible for there to be a perfect actor or doppelgänger who behaves just like me but has different mental states or none at all.

P2. But it is possible for there to be a perfect actor or doppelgänger who behaves just like me but has different mental states or none at all.

P3. Therefore, behaviorism is not true. (by modus tollers)

#### Functionalism against mind-brain identity theory:

The most famous arguments for functionalism are responses not to behaviorism but to the mind-brain identity theory. According to the identity theory, "sensations are brain processes". If mental state kinds are (identical to) kinds of brain states, then there is a one-to-one relation between mental state kinds and brain state kinds. Everything that has sensation S must have brain state B, and everything that has brain state B must have sensation S. Not only that, but this one-to-one correlation must not be accidental. It must be a law of nature, at least, and perhaps must hold with an even stronger sort of necessity.

The obvious implication is that the mindbrain identity theory is false. Other mammals, reptiles, and mollusks can experience pain, but they do not have brains like ours. It seems to follow that there is not a oneto-one relation between sensations and brain processes, but rather a one-to-many relation. Mental states, then, are not uniquely realized (as the identity theory requires); they are instead multiply realized.

### Example: Boat

Example: "A boat is a watercraft of any size designed to float [hydrostatic lift] or plane [hydrodynamic lift], to work or travel on water."

Anything designed to stay on top of water for the purpose of work or travel is a boat.











Functionalism says that what makes something a mental state is what it does, and it is fully compatible with the diverse brains of mammals, reptiles, and mollusks that they all have mental states because their different brains do the same things, that is, they function in the same ways. Functionalism is supported because it is a theory of mind that is compatible with the likely degree of multiple realization of mental states.

Functionalism: So what is the job (function) of mental states? For different mental states, the answer is different.

Example: Pain

For example, the job of pain seems to be (1) to register bodily damage and (2) to cause aversion to the source of the damage.

So the functionalist might say: <u>any state</u> (not just human brain states) that performs these jobs is a pain state

#### **Example: Beliefs and Desires**



#### **Comparison to Behaviorism**







Another pair of arguments for functionalism are what can be called the **Optimistic and Pessimistic** Arguments. The optimistic argument leans on the possibility of building artificial minds. The Optimistic Argument holds that even if no one ever discovers a creature that has mental states but differs from humans in its brain states, surely one could build such a thing. That is, the possibility of artificial intelligence seems to require the truth of something like functionalism. Functionalism views the mind very much as an engineer does: minds are mechanisms, and there is usually more than one way to build a mechanism.

The Pessimistic Argument claims that the alternatives to functionalism would leave people unable to know about and explain the mental states of one another, or of other creatures. If someone says, "I am in pain," or "I believe that it is sunny outside," one doesn't have to cut the speaker open and find out whether they have a human brain in order to know that they have a pain or a belief. One knows that because the speaker not only produce those noises (as the behaviorist might say), but because they have internal states that function in certain ways

# Functionalism and the six features of mental states

## 1. Some Mental states Are Caused by the World

- 1. Brain states are caused by states of the world.
- 2. Brain states are what (in humans) play the pain roles, and the belief roles, and the desire roles.
- 3. According to functionalism, whatever plays the pain role is pain, whatever plays the belief role is belief, etc.
- 4. Therefore, according to functionalism, some mental states are caused by states in the world

## 2. Some Mental states Cause Actions[A similar argument can be given here.]

- 3.SomeMentalstatesCauseOtherMSs(In Reason-Respecting Ways)[CTM]
- 4. Some Mental states are Conscious [Zombies and inverted spectra]
- 5. Some Mental states are Representational [Conceptual role semantics.]

## 6. Mental states are Correlated with Brain States

Since brain states realize the functional roles of mental states, it's not surprising that there's a close connection here.

BUT, functionalism does not require that the correlation between my brain states and my mental states is the same as the correlation between your brain states and mental states. But it is!

#### Searle's Chinese Room

John Searle's "<u>Chinese Room Argument</u> is aimed at computational versions of functionalism, particularly those that specify the relevant functions in terms of inputs and outputs without fixing the internal organization of the processes. Searle stipulates that "Strong AI" is the thesis that an appropriately programmed computer literally has mental states, and that its program thereby constitutes an explanation of its mental states and (following the functionalist inspiration) of human mental state. Searle then describes a scenario in which a system that carries out the program consists in some books and pieces of paper, a pencil, he himself—John Searle—all inside a room. People on the outside pass questions written in Chinese into the room. And Searle, by following the directions (the program) in the books, is able to produce answers to those questions. But Searle insists that he does not understand Chinese and has no beliefs about the questions and answers. After all, one may suppose with him, he doesn't even recognize that they are questions and answers written in Chinese, or any language at all for that matter. And he thinks it would be absurd to say that the room itself understands Chinese or has beliefs about the questions and answers. So, he concludes, the version of functionalism represented by Strong AI must be false. Having the right functions, at least when they are specified only by inputs and outputs, is not sufficient for having mental states.

#### Weak AI and Strong AI: Weak AI:-

This is known as narrow AI, which defines non-sentient computer intelligence or AI focused on one narrow task. Computers can simulate thinking and help us to learn about how humans think.

#### Strong AI:-

A hypothetical machine that exhibits behavior, at least as skillful and flexible as humans do and the research programme of such programme is known as strong AI. The appropriately programmed computer really is a mind. In the sense that computers given the right programmes can be literally said to understand. If that is the case, the machines will have the ability to reason, think and do well functions that a human is capable of doing.