

Phil 317: [handout #10]
Kim: *Philosophy of Mind*
Chapter 5

Mind As A Causal Structure: Causal-Theoretical Functionalism

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§ Causal-Theoretical Functionalism:

- ___ **1. A mental state can be characterized in terms of the input-output relations it mediates, where the inputs and outputs may include other mental states as well as sensory stimuli and physical behaviors.**
- ___ **2. This input-output relationship is a causal relation, not just a logical relationship specified by a Turing machine table.**
- ___ **3. Individual mental properties are defined in terms of the entire network of causal relations involving all psychological states (mental holism).**

§ The Ramsey-Lewis Method

We need a few steps:

1. We have a basic psychological theory, T, which defines each mental expression such as 'having a pain.'
2. We existentially generalize (namely, to add an expression "There exists states M_1 , M_2 , and M_3 ... such that...") over each mental expression occurring in T \Rightarrow We generate T_R . In T_R , we explain the connections among different mental states by appealing to their corresponding physical/behavioral events.
3. In T_R , there is no longer any psychological expression. All psychological expressions are now defined over physical/behavioral expressions.
4. In this way, we avoid giving circular definitions to psychological expressions.

§ The Choice of an Underlying Psychological Theory

- * If the underlying theory T is false, all mental concepts defined on the basis of T by the Ramsey-Lewis method are likely to have empty extensions.

1. Commonsense Psychology (Folk Psychology)

___ **beliefs, desires \Rightarrow actions**

e.g. In general, our *wants* and *desires* prompt us to take certain *actions* if we *believe* that such actions can lead to the satisfaction of our wants and desires.

2. Scientific Psychology

___ **Using causal/nomological relations to define mental concepts.**

___ **Psychological explanations must be generalizable.**

Q: Which scientific theory is the right one to use?

Q: What are the advantages and disadvantages in choosing either of the two theories?

§ Major Criticisms of Functionalism

1. The problems of qualia: Functionalism seems to miss the qualitative aspects of our sensory experiences.

[A] the absent qualia problem:

[The Argument from absent qualia]

1. We can imagine a system, like an electromechanical robot, that is functionally -- in terms of inputs and outputs -- equivalent to us but to which we have no good reason to attribute any qualitative experiences.
2. If absent qualia are possible in functionally equivalent systems, then qualia are not captured by functional definitions.
3. Therefore, functionalism cannot be an account of all psychological states and properties.

[B] the inverted qualia problem:

[The Argument from inverted qualia]

1. We can imagine two systems that are cross-wired such that they are functionally equivalent, but one experiences pains while the other experiences itches.
2. If inverted qualia are possible in functionally equivalent systems, then qualia are not captured by functional definitions.
3. Therefore, functionalism cannot be an account of all psychological states and properties.

2. The problem of disjunctive properties: To be a science, psychology must be able to formulate laws. But laws must be established among first-order properties, not second-order properties formed by disjunctions.

e.g. the examples of 'catching a cold' and 'getting polio'

[The argument from disjunctive properties]

1. Under functionalism, mental property M is the property of having a property with causal specification H.
2. But there are indefinitely many physical properties (Q_1, Q_2, \dots, Q_n) that would meet the causal specification H.
3. M would thus be identified with the disjunctive property of having Q_1 or Q_2 or Q_3, \dots
4. But disjunctions of properties are not nomological properties (properties in terms of which laws and causal explanations can be formulated).
5. Therefore, under functionalism, psychology cannot be viewed as a science with laws.

3. The problem of multiple realization of inputs and outputs: When we go from one species to another, "the same causal role" only means similarities of causal structures, not sameness of causal powers. Thus, it could be the case that although there exists superficial similarity, human psychology and Martian psychology are vastly different.

Conclusion: The multiple realization of psychological properties implies that psychology itself is multiply realized. It is highly dubious that one can both insist on an autonomous psychology and want it to generate causal laws and causal explanations valid for all psychological systems.