

**Phil 317: [handout #4]
Kim: *Philosophy of Mind*
Chapter 3**

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Professor JeeLoo Liu**

I. Mind-Brain Correlations

[The Mind-brain correlation thesis]: For each type *M* of mental event that occurs to an organism *o*, there exists a brain state of kind *B* (*M*'s "neural correlate" or "substate") such that *M* occurs to *o* at time *t* if and only if *B* occurs to *o* at *t*.

[Different explanations for the correlations between M and B]:

- ___ 1. one or two-directional causal relation (e.g. the low temperature causes the pond to freeze)
⇒ [Causal interactionism] (Descartes)
- ___ 2. parallel relation designed earlier (e.g. the clock-maker analogy)
⇒ [Prestablished harmony theory] (Leibniz)
- ___ 3. parallel relation arranged constantly by continued intervention of a causal agent (e.g. the little man analogy)
⇒ [Occasionalism] (Malebranche)
- ___ 4. covary relation based on a mutual base structure which is neither mental nor physical (e.g. the rise in temperature and the rise in pressure of a gas are both dependent on the motions of molecules that make up the gas)
⇒ [The double-aspect theory] (Spinoza)
- ___ 5. the base structure is simply the microphysical structure in the brain, mental phenomena (Ms) are the mere effects of brain activities (Bs)
⇒ [Epiphenomenalism] (T. H. Huxley)
- ___ 6. identity relation (e.g. the lightning = the electric discharge involving clouds and the earth)
⇒ [The psychophysical (mind/body) identity theory] (J.J.C. Smart)
- ___ 7. the correlation is a *brute fact* in the history of evolution and cannot be further explained
⇒ [Emergentism] (Samuel Alexander)

[Important Theories for Today]:

[A] Epiphenomenalism

___ The view that every mental event is caused by a physical event in the brain, but mental events have no causal power of their own.

⇒ ontological monism

[B] The Mind-brain identity theory

___ The view that mental states and events are nothing but the physical processes in the brain. [e.g. 'having a pain' and 'having one's C-fiber firing' are simply two terms that refer to the same phenomenon.]

[C] Emergentism

___ The view that when biological processes attain a certain level of complexity, a wholly new type of phenomenon such as consciousness emerges, and these emergent phenomena are not explainable in terms of the underlying physical/biological phenomena from which they emerge.

⇒ the explanatory gap

II. The Mind-brain identity theory

[Armstrong's Argument for the identity theory]:

- ___ 1. Our concept of pain = the concept of an internal state that is normally caused by tissue damage, and tissue damage typically causes such behaviors as winces and groans.
- ___ 2. There is a type of internal state (such as C-fiber firing) that is normally caused by tissue damage and that in turn typically causes winces and groans.
- ___ 3. Therefore, pain = that type of internal state such as C-fiber firing.

* Critique of the above argument?

[Different senses of 'identity']

- 1. identity means 'equality in magnitude or degree'
e.g. That angle is identical to this angle.
- 2. identity means 'being instances or tokens of the same type'
e.g. These two are identical chairs.
- 3. identity means 'one and the same' (numerical identity/strict identity)
e.g. That Bill is the Bill who wrote music reviews for *City*.
e.g. The morning star is (identical to) the evening star.
e.g. Samuel Clement is (identical to) Mark Twain.

e.g. Water is H₂O.

* Pain = C-fiber firing

___ 'identity' in the third sense?

* For pain and C-fiber firing to be *identical*, the identity must pass the following test:

___ [The indiscernibility of identicals]:

If X is identical with Y, X and Y share all their properties in common -- that is, for any property P, either both X and Y have P or both lack it.

Q: Does 'Pain = C-fiber firing' satisfy the indiscernibility criterion?

[Different senses of 'event']

1. Events = basic concrete particulars of this world, individuated by their spatial and temporal locations. An event can have different properties (in Kim's words, it falls under a kind) depending on our descriptions of the event.

e.g. my toothache ≠ your toothache

e.g. my toothache at time t_1 ≠ my toothache at time t_2

___ Under this sense of 'event,' to say that 'my pain is my C-fiber firing' is to say that there is an event, e , that has both the property of being a pain and the property of being a C-fiber firing.

2. Event = the exemplification (or instantiation) of a property by an object at a time. An event has the property by which it is singled out as the event in question.

___ Under this sense of 'event,' identity statement means:

The event of x's instantiating property P (have a pain) at time t
= the event of y's instantiating property Q at time t'

if and only if $x = y$

$P = Q$ [Q: What could this mean?]

$t = t'$

e.g. 'Pain = C-fiber firing' means whenever anyone has a pain, he must be having C-fiber firing; and vice versa.

[Token and Type identity theory]

[Note]: Tokens are individual particulars, types are a set of individual particulars grouped under a common property. Therefore, talk of 'event types' is equivalent to talk of 'properties of events.'

[Token identity theory]: Every event that falls under a mental-event kind also falls under a physical-event kind (or every event that has a mental property has also some physical property).

[Type identity theory]: Mental-event types are physical-event types; mental properties are physical properties.

[Note]: Type identity theory entails that there are systematic correlations between mental properties and physical properties, while token identity theory does not entail that.

*** Kim's criticism of token identity theory:**

___ **It is too weak to preserve a physicalist's (materialist's) position:**

Token physicalism can be true even if there is nothing remotely resembling a systematic relationship (dependence, correlation) between the mental and the physical. And a systematic property-to-property relationship between mentality and our bodily nature is of fundamental importance to a robust physicalist position.

___ **Under token identity theory, there could be another world just like ours in every physical detail except that mentality and consciousness are totally different, and there could be a molecule-for-molecule physical duplicate of you who is a zombie.**

[Q: Why?]

III. Objections to the Identity Theory

___ **Q: How do you defend the identity theory against these objections?**

[Objection 1]: An Epistemological Objection

I know that I am having pain, but I don't know that I am having my C-fiber firing. So, how could pain = C-fiber firing?

[Objection 2]: The Location Problem

Mental states can't be brain states because the latter, but not the former, have *locations in space* (in our brains).

[Objection 3]: Phenomenal Properties of Mental Events

(1) My pain has the properties of pounding, sharp sensations (as it appears to me), but my C-fiber firing does not have these properties. So, how could pain be C-fiber firing?

(2) The phenomenal properties my mental events have are "irreducibly psychic." They cannot be identified with any physical properties.

[Objection 4]: "Pain" as a "Rigid Designator"

According to type identity theory, the identity statement 'pain = C-fiber firing' is a contingent statement, established by empirical facts. A term is a rigid designator if it designates the same object or person in all possible worlds in which it exists (e.g. proper names). Pain is a rigid designator -- it designates whatever state that has the painfulness sensation. C-fiber firing is also a rigid designator. But (according to Kripke) identity between two rigid designators is necessary identity. Therefore, the type identity theory is false.

[Objection 5]: The Multiple Realization Argument

Mental states are multiply realizable: other biological structures can have them too. If pain = C-fiber firing, then anyone who does not have C-fiber firing cannot be in pain. But surely some creatures without C-fiber can have pain. Therefore, pain cannot be identified with C-fiber firing.