Two Conceptions

Two very different ways of understanding ourselves…

- As Minds:
  - self-aware, conscious, intelligent, creative, rational
  - believers, knowers, desirers, purposeful actors
  - our nature somehow transcends material existence

- As Material Creatures:
  - physical bodies and brains
  - pain, pleasure, illness, disease, injury
  - brain damage, mental illness, intoxication, addiction
  - evolutionary theory, biochemistry, neuroscience
  - artificial intelligence

I. The Ontological Problem

The Ontological Problem:

How does our folk psychological conception of ourselves fit with our conception of ourselves as physical, chemical, neurological, biological systems (bodies/brains)?

What is the real nature of mental states and processes; in what medium do they take place and how are they related to the physical world?

What is the relation between Folk Psychology and Neurology?

Humanity, Free-Will, Immortality, Spirituality, Rationality, Consciousness?

Ontology, a branch of metaphysics, is the study of what kinds of things there are—what the basic stuff of the universe is

A. Dualism

Dualism:

The general range of views which hold that Mind and Matter comprise two distinct fundamental ontological categories, either:

- two kinds of substance, or
- two kinds of properties of one substance

1. Property Dualism

Property Dualism:

Only Material substance exists

All Matter exhibits Material properties

Some arrangements of Matter also exhibit Mental properties
a. Interactionism
   Property Interactionism:

   Certain complex arrangements of Matter (e.g., brains) exhibit (or cause) mental properties
   - Mental properties have causal power
   - Mental properties are Irreducible to physical properties and are either
     - Emergent, or
     - Elemental

   (1) Emergent

   (2) Elemental

b. Epiphenomenalism
   Epiphenomenalism:

   Certain complex arrangements of Matter (e.g., brains) exhibit (or cause) mental properties
   - Mental properties have no causal power
   - Mental properties are Irreducible to physical properties and are either
     - Emergent, or
     - Elemental

   (1) Emergent

   (2) Elemental

2. Substance Dualism
   Substance Dualism:

   Matter and Mind exist as two fundamentally distinct substances

a. Cartesian Dualism
   Cartesian Dualism:

   Held by Descartes (1596-1650), among others

   Mind and Matter are essentially distinct, separable substances
   -- Matter is spatially extended and subject to natural law, whereas
   -- Mind is neither spatial nor law governed, but guided by Reason

   (1) Interactionism
   Descartes (1596-1650)
• Mind somehow interacts with Matter
• Never adequately explains

(2) **Pre-established Harmony**
Leibniz (1646-1716)

• Mind and Matter do not interact
• They run in parallel
• An arrangement set up by God at beginning of Universe
• Produces the illusion of interaction

(3) **Occasionalism**
Malebranche (1638-1715)

• Mind and Matter do not interact
• God intervenes at every relevant moment
• Produces the illusion of interaction

**b. Popular Dualism**

**Popular Dualism:**

Mind is spatially extended, but ethereal, matter or energy, difficult to detect and not yet fully understood by science

Our science must undergo a revolution

Appears to avoid Interaction Problem

Fits with popular conception of soul/mind as a ghost in the machine

3.

4. **Irreducibility Arguments**

No matter how complex, a purely physical system (e.g., a robot, computer, or animal) could never…

• Meaningfully use language or other symbol system
  —have intentional mental states

• Engage in genuine general reasoning
  —as opposed to being extremely good at a particular kind of
problem (e.g., chess computer, squirrels)
—where general reasoning ability includes Pure Reason such as
logic, geometry, mathematics, moral reasoning

• Have subjective experience
—e.g., experience the taste of a lemon, a surge of joy or anger,
know what it’s like to see red or feel pain

So, the capacities of Mind cannot be reduced to physical nature, hence Mind is a
distinct kind of thing (a different substance or property) from brain and body, or
anything physical

a. Problems for Irreducibility
No matter how complex, a purely physical system (e.g., a robot, computer, or
animal) could never...

• Meaningfully use language or other symbol system/have intentional states
  —Computer languages
  —Recent linguistics—language use founded on physical and computational
  principles

• Engage in genuine general reasoning
  —“General reasoning” as conglomeration of specialized capacities
  —Overestimates human ability
  —Underestimates “machine” ability

• Have subjective experience
  —Neurology and AI making progress...?

•Physical explanation forthcoming...?

•Irreducibility arguments = inconceivability arguments = poverty of the
imagination arguments

•Though not conclusive, the force of these objections is to undermine the
inconceivability of a purely physical system exhibiting the relevant capacities

5. Introspection Arguments
When I “look in” to the contents of my consciousness (my mental states), I find them to
be...

• Non-spatial, non-neural, non-physical
• Immediately known to me with certainty, unlike the physical
  world around me
• Independent of my brain and body—i.e., I can imagine my Mind existing without my brain or body

So, my Mind is a distinct kind of thing (a different substance) from my brain and body, or anything physical

a. Problems for Introspection

   When I “look in” to the contents of my consciousness (my mental states), I find them to be…

   • Non-spatial, non-neural, non-physical
   • Immediately known to me with certainty, unlike the physical world around me
   • Both overestimate certainty/reliability of introspection
     —Like extrospection, introspection fallible, subject to distortion, theory-bound
     —Unconscious effects, expectation effects, physiological effects, theoretical bias in introspection
   • Both commit the Intentional Fallacy
     —Not knowing a thing under a certain description does not imply the description is false

   • Independent of my brain and body—i.e., I can imagine my Mind existing without my brain or body
   • Supports the conceptual possibility of distinctness, but does not show that they actually are distinct and separable—i.e., it is controversial whether the logical distinctness of Mind and body implies their ontological distinctness

6. Problems for Dualism

   a. Interaction Problem
   b. Explanatory Impotence
   c. Emergent, Irreducible, Elemental
   d. Lack of Simplicity
   e. Neural Dependence of All Known Mental Phenomena
   f. Evolutionary History

B. Monism

   Monism:

   The general range of views which hold that there is only one fundamental ontological category which somehow incorporates both Mind and Matter
1. Idealism
2. "Third" Substance
3. Materialism
   a. Non-Reductive
      (1) Anomalous Monism
      • Every mental event token is a physical event token
      • There are physical laws
      • There are no psychological laws (no laws of FP or scientific psychology)
      • So the psychological concepts/types cannot be reduced to physical concepts/types
      • Some argue this results in eliminative materialism

   (2) Functionalism
   • FP mental states exist, and every (token) mental state is a (token) physical state, however
      — FP not reducible to physical states—non-reductive materialism
      — Mental states are computational/causal states of a system
   • The nature of a mental state is determined by its computational and/or causal relation to:
      — environmental stimuli
      — other mental states
      — behavioral outputs
   • Computational/causal roles may be differently realized in the same brain at different times or differently realized in different brains/physiology (including different species)
   • Different from behaviorism—different from identity theory
   • In various forms, this is currently the most widely held view
   • Hilary Putnam (b. 1926), Jerry Fodor (b. 1935)

   (a) Computational
   (b) Teleological
   (c) Homuncational
   (d) Micro
(3) **Eliminative Materialism**

- Minds, as we understand them, do not exist

- FP is radically false

- So mental states are not reducible to physical states—non-reductive materialism

- FP and its concepts—belief, desire, sensation, pain, etc.—will ultimately be eliminated and replaced by a mature neuroscience and concepts thereof

- A richer and more penetrating understanding of the structure and nature of our cognitive/representational capacities is expected

- A radical change in humanity’s understanding of itself is forthcoming

- A new epistemology of science and introspection is promised

- Paul M. Churchland (b. 1942) Patricia S. Churchland (b. 1943)

b. **Reductive**

(1) **Ontological Behaviorism**

**Logical or Semantic Behaviorism:**

- Terms of FP refer not to mental states, events, or properties, but to behaviors and dispositions to behave

- Talk of mental states/properties is to be redefined in terms of complex input-output relations physically described

- Consistent with both dualism and materialism

- Avoids the ontological problem by not committing

**Ontological Behaviorism:**

- As above, but strengthened by the explicit denial of the existence of mental states

**Methodological Behaviorism:**

- The view that any new terms in theoretical psychology be operationally defined in terms of publicly observable circumstances and behaviors

- A methodological position which does not bear directly on ontological issues

(2) **Identity Theory**

*Sometimes called Reductionism or Reductive Materialism*
• The Mind just is the brain

• The mental states of FP exist, and every mental state (type) is identical to a brain state (type)
  — E.g., pain = c-fiber firing, belief that P = such- and-such neural state

• FP will ultimately be reduced (with perhaps minor modification) to neuroscience

• Any FP claim is in principle derivable from the more complex and encompassing claims of neuroscience
  — FP is shown to be a sub-theory of neurology
  — FP both scientifically legitimate and dispensable
  — Both the scientist (most of the time) and lay person (all of the time) will continue
to use FP (since it is legitimate and more familiar/convenient)
  — But Neuroscience will give us greater insight into Mind/FP

• Simplest of the materialisms

• J.J.C. Smart (b. 1920), U.T. Place (b. 1924)

c. Brain

4. Arguments

a. Explanatory Power

b. Simplicity

c. Neural Dependence of All Known Mental Phenomena

d. Evolutionary History

e. for Functionalism
  • Conception of intelligence as a complex computational economy of internal states mediating inputs and outputs
  • Turing Machine—abstract conception of computer—can reproduce any computable function
  • Find “program” for human psychology, or, “program” for a particular person’s psychology
  • Multiple Realizability
    — The same mental state can be had by physiologically/neurologically
different creatures
— Computational/causal role essential, not the idiosyncratic physical realization

f. for Eliminative Materialism
(1) Explanatory, predictive, manipulative failure/stagnation of FP with regard to:
   • Normal brain/cognitive functions:
     — learning*, theory development and change, sleep, memory, creativity, motor coordination,
     differences in intelligence
   • Abnormal brain/cognitive functions:
     — mental illness, brain damage, intoxication/psychopharmacological effects

(2) FP’s History of Retreat
   • Every other folk theory has been replaced
   • Many domains once explained in FP terms have yielded to physical explanation

(3) FP not significantly advanced in 3-4 millennia
(4) FP shows little hope of integration into overall physical theory
(5) Previous points add up to a history of Stagnation, Retreat, Lack of Promise for FP

So, FP will be discovered to be false and will eventually be replaced by a new human self-conception based in a matured neuroscience

5. Problems
   a. “Hard” Problem of Consciousness
   b. Promise yet to be fulfilled
   c. Multiplicity of Theories

Folk Psychology
FP for short
• A folk theory consisting mainly of two parts:
  — propositional attitude ascription—belief-desire-action psychology
  — a common introspective vocabulary for the qualitative aspects of subjective mental states (qualia) such as sensations and emotions
• Common-sense understanding of our mental lives and outward behavior—allows prediction and explanation
• Ground of interpersonal commerce
• The starting point of most philosophical thought and scientific psychology