

Notes on Nagel's *Mind and Cosmos*

Nagel's *Principle of Sufficient Reason*: The world is intelligible.

Explanatory goals: Science must make all phenomena, both physical and mental, intelligible and explain why it is necessary.

Nagel's Positive Program:

1. *Monism*: mental and physical states are probably the same entities that possess fundamentally different properties, namely mental and physical properties, and these properties are necessarily related.
2. *Evolution*. Mental and physical properties evolved together over time, throughout history.
3. *Panpsychism*. All entities through history have had the mental and physical properties that allow them to evolve into conscious creatures.
4. *Teleology*. Physical laws are indeterministic. To explain the emergence of life, its increasing complexity, the existence of consciousness and its mental qualities (especial qualia, concept formation and knowledge of universal truths that go beyond experience and our knowledge of objective moral facts), physical science needs to be supplemented by necessary and general teleological laws compatible with physical indeterminism.
5. *Moral Realism*. There are objective moral truths.
6. *Atheism*. Nagel holds that theistic explanations are *ad hoc* and do not provide the sort of general teleological laws needed to explain the character and necessity of mental phenomena.

The (Materialistic) Naturalistic Paradigm:

1. Mental phenomena consist of qualia (sensations, pleasure, pain, proprioceptive sensations), self-consciousness, concepts and inner speech, functional states (desire, belief, reasoning), the sense of self, memory.
2. Mental phenomena may be reduced to neuro-science and cognitive psychology, which can be reduced to biology including evolution, which can be reduced to chemistry, which can be reduced to physics including cosmology.

The Naturalist Paradigm cannot explain:

1. Consciousness, especially qualia (e.g. "What it is like to experience seeing red").
2. The beginning and increasing complexity of life on earth.
3. Thought and reasoning:
 - *Abstraction*: the formation of concepts that include more than what we sense.
 - *Induction*: our knowledge of objective general truths that go beyond the evidence our personal experience, including the laws of math and logic.
 - *Logic (Deduction)*: our knowledge of the validity of logical arguments.
4. Values (*moral realism*: there are objectively true moral laws). *Ethical non-cognitivists*, like David Hume, who claim that a moral proposition describes emotional attitudes, fail to provide the global evolutionary teleological laws necessary to explain the properties and evolution of mental phenomena, especially our ability to recognize objective moral truth.

Reductionism. Nagel rejects various reductionist approaches that attempt to reduce mental phenomena to physical brain states:

1. *Behaviorism* (The only phenomena that can be explained are physically observable). He rejects behaviorism because it just sets the mental apart as non-explicable or non-existent.
2. *Mind-Brain Identity Theory* (a mental state is identical to a material brain state). He claims that $a=b$ if and only if either $a=b$ is a truth of definition or there is some property of a and b that explains why they are identical. Mind brain identity is not true by definition, and the naturalistic paradigm has no property that explains their identity – “the explanatory gap.”
3. *Functionalist & “Causal” Behaviorism* (Brain state cause – but are not identical to – mental states, including functional mental states). Nagel rejects these because they do not explain the existence of mental phenomenal experience (qualia) or self-consciousness. It is impossible, Nagel claims, to causally explain self-conscious entities in terms of non-self-conscious entities.
4. *Eliminative Materialism* (mental states do not exist). Nagel rejects these because they deny the existence of conscious experience.
5. *Epiphenomenalism* (mental states accidentally accompany physical states, but science need only explain what is essential, namely the physical states). Nagel rejects this view because it does not explain how mental states are caused or why they are the way they are.
6. [*State-State Correlation, Supervenience*. There is a 1-1 correlation between mental concepts in functional mental laws and physical concepts in the laws of brain science. Nagel does not address this theory, but he would probably say it does not explain what qualia are or how they arise either at a time or throughout history.]