

Whitehead's revolt against the bifurcation of nature

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Whitehead's philosophy

- Whitehead's philosophy = the creative response to a profound sense of dissatisfaction with the oversights of inherited doctrines
- Inherited doctrines: Newton's scientific materialism & Hume's sensationalist empiricism
- Alternative doctrines: Maxwell's electromagnetism & philosopher-psychologists' radical empiricism

Whitehead's revolt

- against the bifurcation of nature into the world of science and that of intuition
- Pathology = the promotion of the speculative concepts of the natural sciences, as if they are the ultimate categories of explanation + the demotion of the deep intuitions of mankind, as if they are nothing but illusions
- Pathology = one of the root causes of today's global ecological crisis

Whitehead's cry & criterion

- “The sole appeal is to **intuition**”
- “Conformity to **intuitive experience**”

Hume's sensationalist empiricism

- Reduction of perception to sense perception
- Pure sense perception reveals a procession of sense data, but no process to render it intelligible
- All relatedness of nature (spatial, causal, ...) was demolished by Hume and conceived as the outcome of mere psychological association

Newton's scientific materialism

- Nature = succession of instants of spatial distribution of bits of matter
- Issue 1: the notion of durationless instants renders **unintelligible** the **equations of motion**
- Issue2: the notion of simply located bits of matter renders **unintelligible** the **law of gravitation**

Combining Hume & Newton

- we obtain: a field of perception devoid of any data for its own interpretation & a system of interpretation devoid of any reason for the concurrence of its factors
 - lack of discrimination & meaning
- ➔ The views of **Hume & Newton** are gravely defective. They **omit our intuitive modes of understanding.**

Maxwell's electromagnetism

- The whole **universe** = a field of force, **a field of incessant activity**
- Overcomes Newton's fallacy of simple location: "In a sense, everything is everywhere at all times"
- "The fundamental concepts are activity and **process** ... Modern physics is the study of the internal relations within a complex state of activity"

Anti-associationism: radical empiricism

- Even in visual perception, **we are directly aware of the causal efficacy of the body**
- More: all present experience discloses two sources of derivation: **body & soul** (= stream of experience)
- We (body & soul) are in the world, and the world is in us → **the relatedness of nature involves mutual immanence**
- For example: causal relatedness = each occasion presupposes the antecedent world as active in its own nature

Combining electromagnetism & radical empiricism

- brings together the conclusions of physical science and the habitual persuasions dominating mankind
- Whitehead overcomes the bifurcation of nature into the world of science and that of the deep intuitions of mankind
- Present challenge = update Whitehead's 20th century philosophy of nature in view of 21st century mathematics and physics