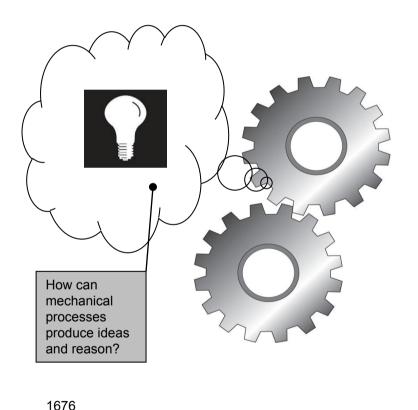
What's So Hard About It?

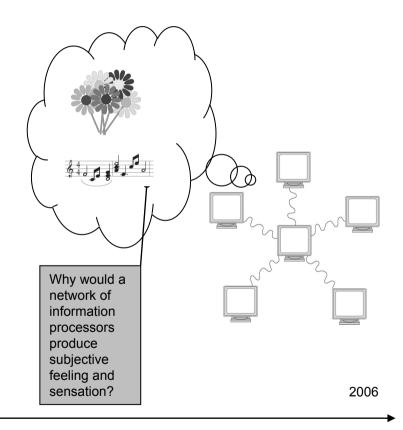
Descartes and his predecessors saw rationality and morality as the source of the mind-body problem...

...yet today we largely view the subjective quality of mental existence to be the source of the mind-body problem.

Enlightenment era mind-body problem



Modern mind-body problem

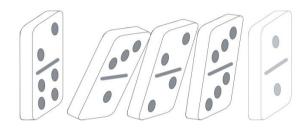


The mind-body problem – Our inability to reach philosophical or scientific consensus on an explanatorily transparent relation between the mind's character and contents and the physical body, rooted in subjectively apparent differences between the two.

Old and new ways of thinking about the physical

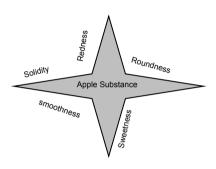
On the pre-scientific view matter passively obeyed mechanical laws...

Cartesian mechanics

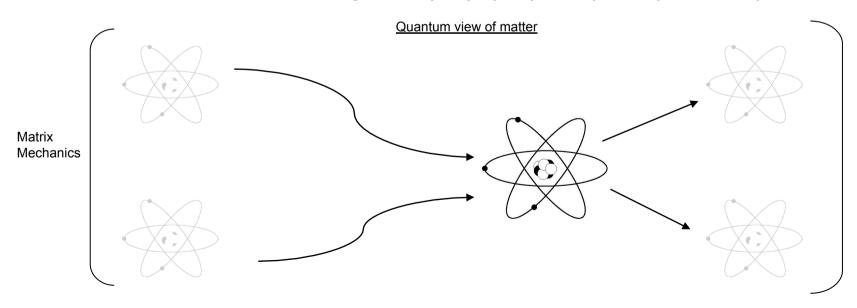


...as a substance in which qualities "inhered"...

Aristotelian metaphysics



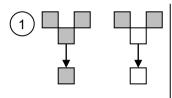
...while the modern view of matter is one of geometrically arrayed pure quantities prone to spontaneous, unpredictable action.



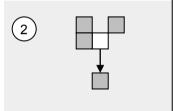
The Fallacy of Misplaced Concreteness

Bertrand Russell noted that quantity and structure are abstract ways of describing things...

Rules for the Game of Life



If a cell has exactly two "on" neighbors, it maintains its property, "on" or "off", in the next time step.



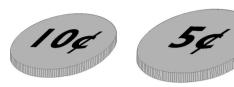
If a cell has exactly three "on" neighbors, it will be "on" in the next time step.



Otherwise, the cell will be "off" in the next time step.

... leaving open what that thing might be like intrinsically...

Implementations of the Game of Life

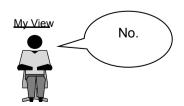


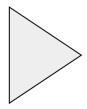


... leading to deep questions about the inner nature of reality.

Key Framing Question

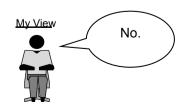
Is it coherent that there could be a pure Life world, with pure "on" and "off" properties about which there is nothing else to know?





Key Analogy

Is it coherent that there could be a pure physical world, with pure "spin", "charge", and "mass" properties about which there is nothing else to know?

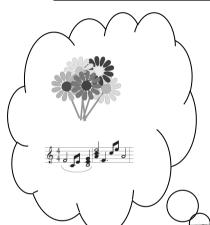


Liberal Naturalism

Perhaps the qualitative aspect of experience is somehow acquaintance with the intrinsic nature of matter...

...though this hypothesis requires answering several further questions.

Inside and outside views of the brain



One natural view is a "dual aspect" view in which experience gives us the "inside" view of matter's intrinsic nature, while our perception of the brain is a view of matter from the "outside" via its structure.

Problems for dual aspect views

- Why should the intrinsic properties of a physical system be experiential?
- Why should intrinsic content exist for a physical system above the microphysical level?
- Why should experience of intrinsic content form a unity of the kind we are acquainted with in consciousness?
- Why should phenomenal content, as the intrinsic content of the physical, correspond so closely to the information content of the physical?

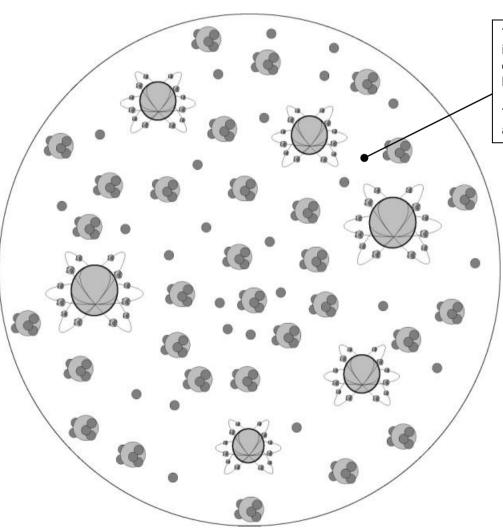
Liberal Naturalism

If our physical understanding of the world is of structure, what is it a structure of? It could directly be a structure of experiencing individuals.

Turn to Causality

A metaphysically rich view of nature holds that causality is the result of a deep internal connection between things.

Energy moving between things



The fundamental ability of different things in the world to constrain and influence one another is assumed by science but not explained.

This ability is causation. Theories of it are properly part of metaphysics.

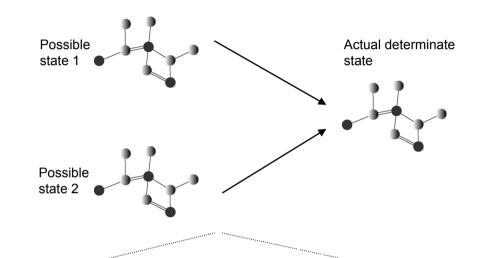
Interactings Meta-physicalized

The deep connection between things is a kind of receptive connection.

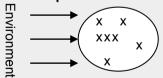
The determination problem

Why causality exists

Nature must create a determinate world from indeterminate potentials. Causal interaction is nature's answer to this determination problem.



Receptive Connections



Connective properties enabling individuals to receive constraint collectively with other individuals.

Effective Properties



Properties that contribute to constraints on the determinate states of a causal nexus.

Intrinsic Carriers











Properties not fully definable through their relations to other properties, and capable of behaving in the ways defined for elements within some natural law system.

Causal Laws

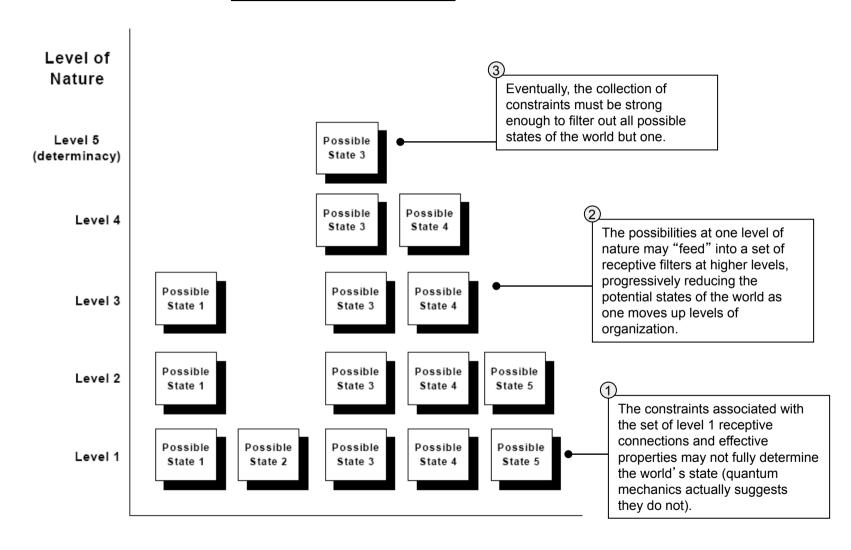


Laws governing the composition of members in a receptive connection.

A Hierarchy of Natural Individuals

Logically, receptive connections are just a series of possibility filters and could exist across levels of organization

Irreducible levels of natural individuals

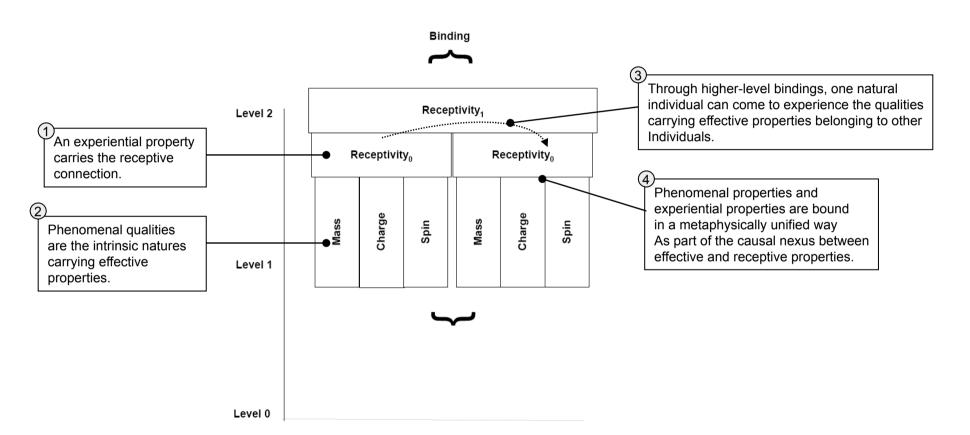


Possible states of the world

The Central Thesis

Something is a natural individual if, and only if, it is capable of experiencing phenomenal quality.

Receptive and effective intrinsic natures



Beyond Horse Betting: Real Answers

The Central Thesis enables us to deduce answers to the four open questions facing the Russellian view.

Problems for dual aspect views Liberal Naturalist answers Why should the intrinsic properties of a physical system An intrinsic experiential property is necessary to be experiential? carry causal receptivity. Why should intrinsic content exist for a physical system To solve the determination problem, nature contains above the microphysical level? irreducible receptive connections that laver effective constraints above the microphysical level. Why should experience of intrinsic content form a unity Intrinsic content is only experienced in the context of the kind we are acquainted with in consciousness? of a causal nexus, which is a unified reception of direct effective constraint between natural individuals. Effective properties passed between individuals Why should phenomenal content, as the intrinsic content are encapsulated at the level of nature where the of the physical, correspond so closely to the information corresponding causal nexus exists, and are thus content of the physical? informational in structure.