

From Organicism to Mechanism and Halfway
Back

Michael Ruse, Florida State University

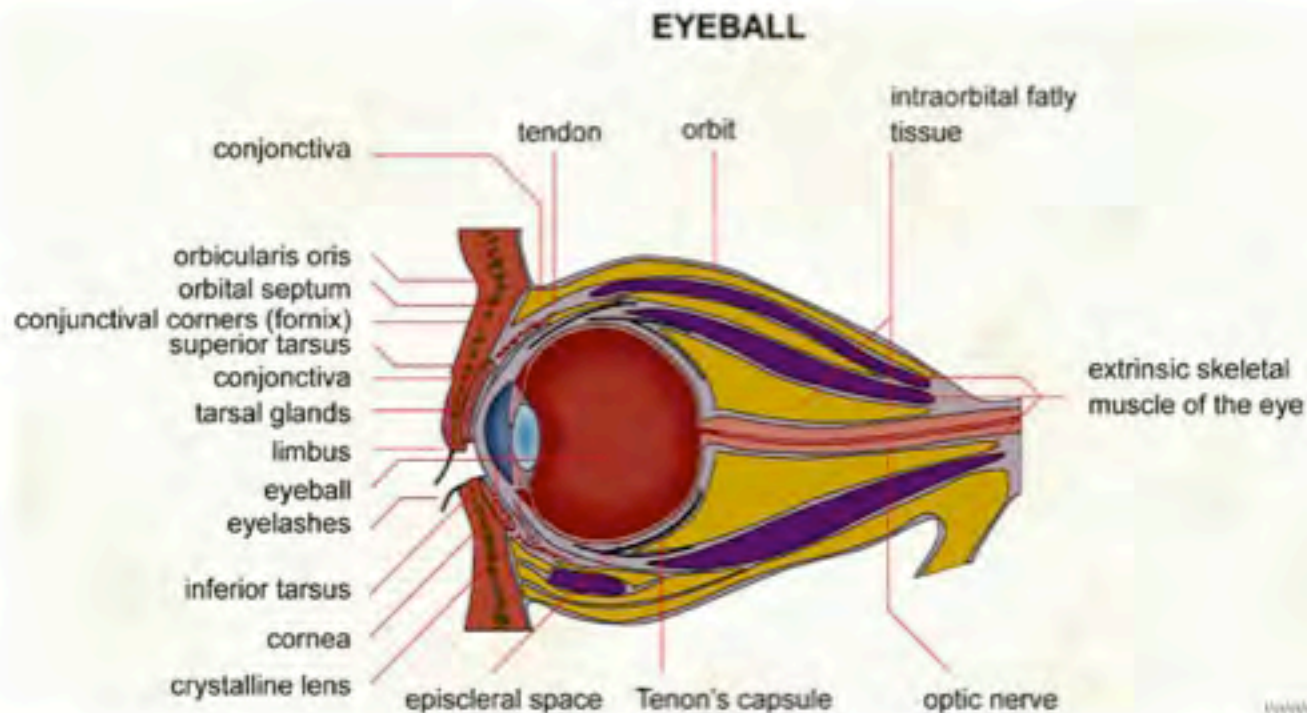
February 12, 2014

Embryo Physics Course

Plato (428-348) and Aristotle (384-322)



The Problem of Design



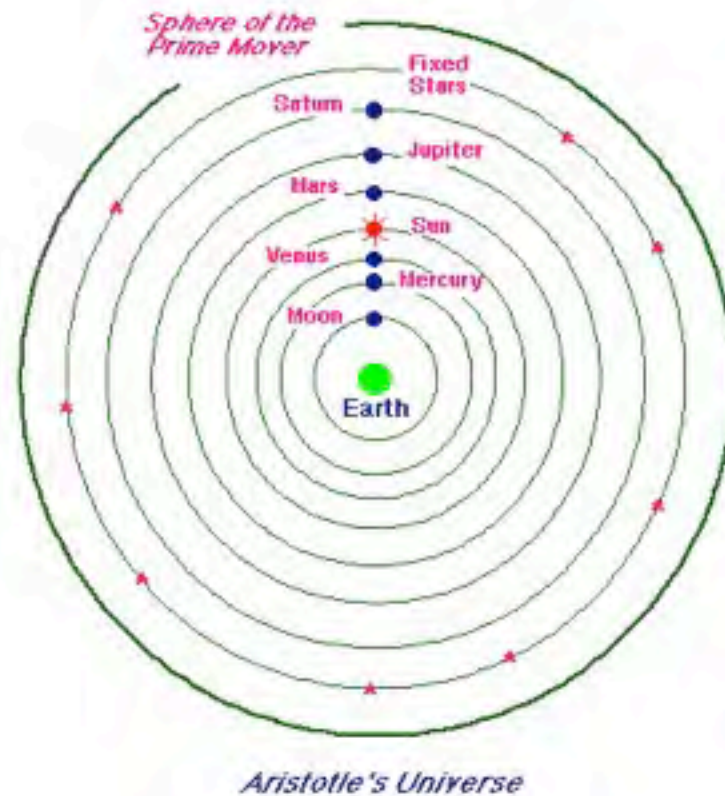
Murphy's Law: The bread always falls jammy side down



Nicolaus Copernicus (1473-1543)



Two-sphere universe (Eudoxus 408-355) Geocentrism



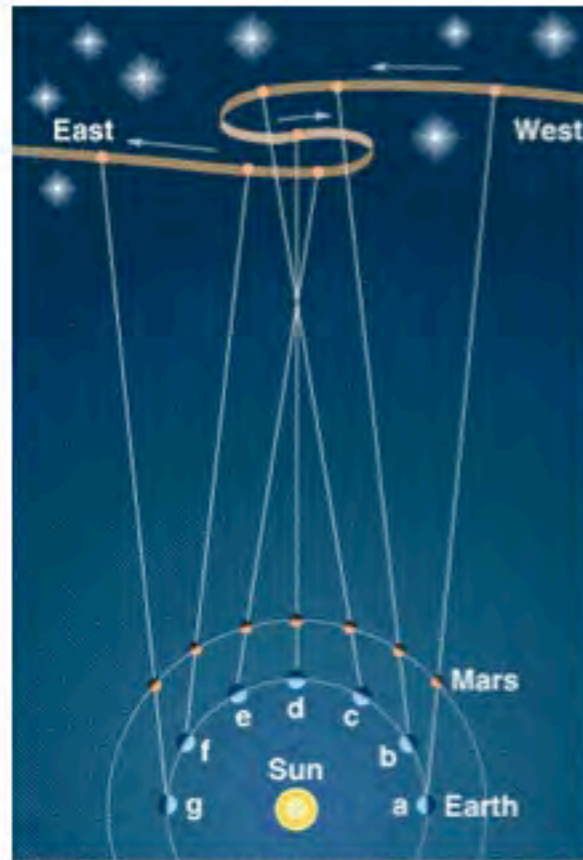
Copernican system (heliocentrism)

- Sun at centre (Aristarchus of Samos, 3rd Century B.C.; Nicholas of Cusa, 15th Century A.D.)
- Earth a Planet
- Universe very large (problem of stellar parallax)

Major Virtue

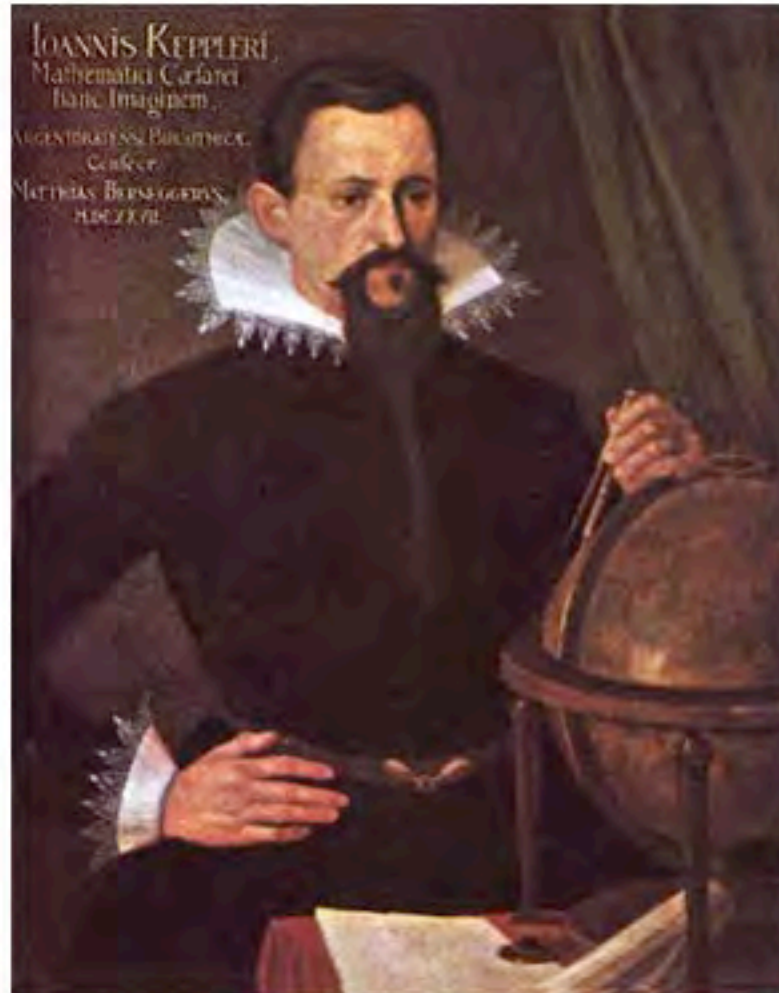
- Simplicity or elegance
- Retrogression of planets and distinction between inferior and superior comes straight out of heliocentric system

Retrogression of Planets

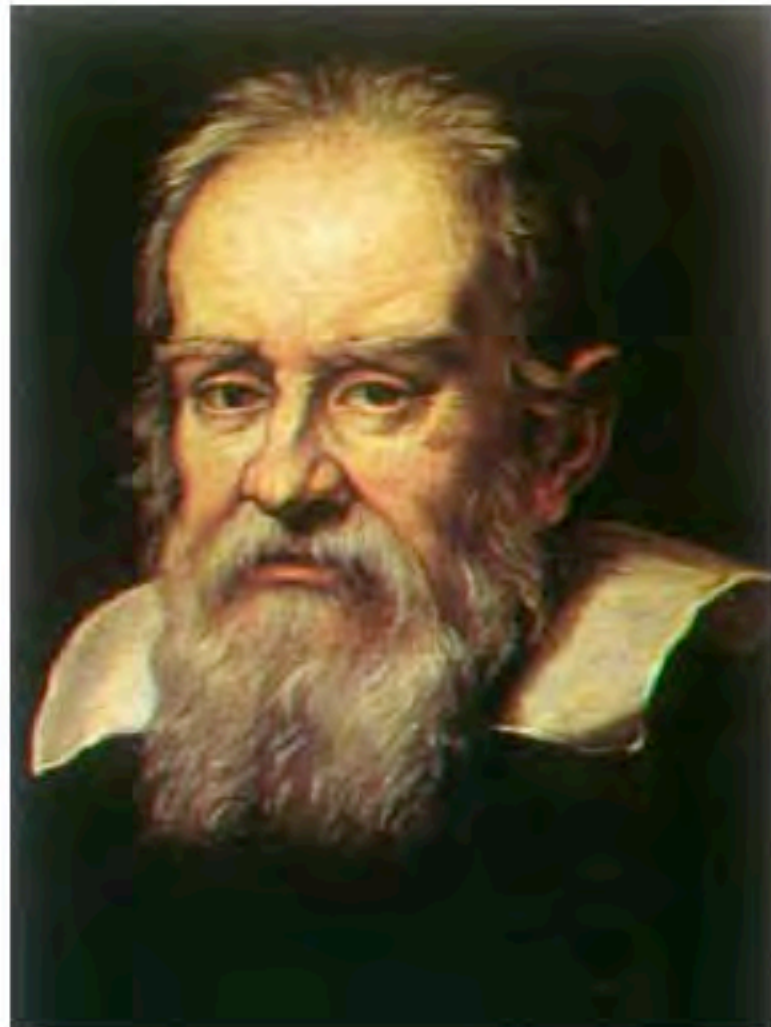


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Johannes Kepler (1571-1630)



Galileo Galilei (1564-1642)



René Descartes (1596-1650)



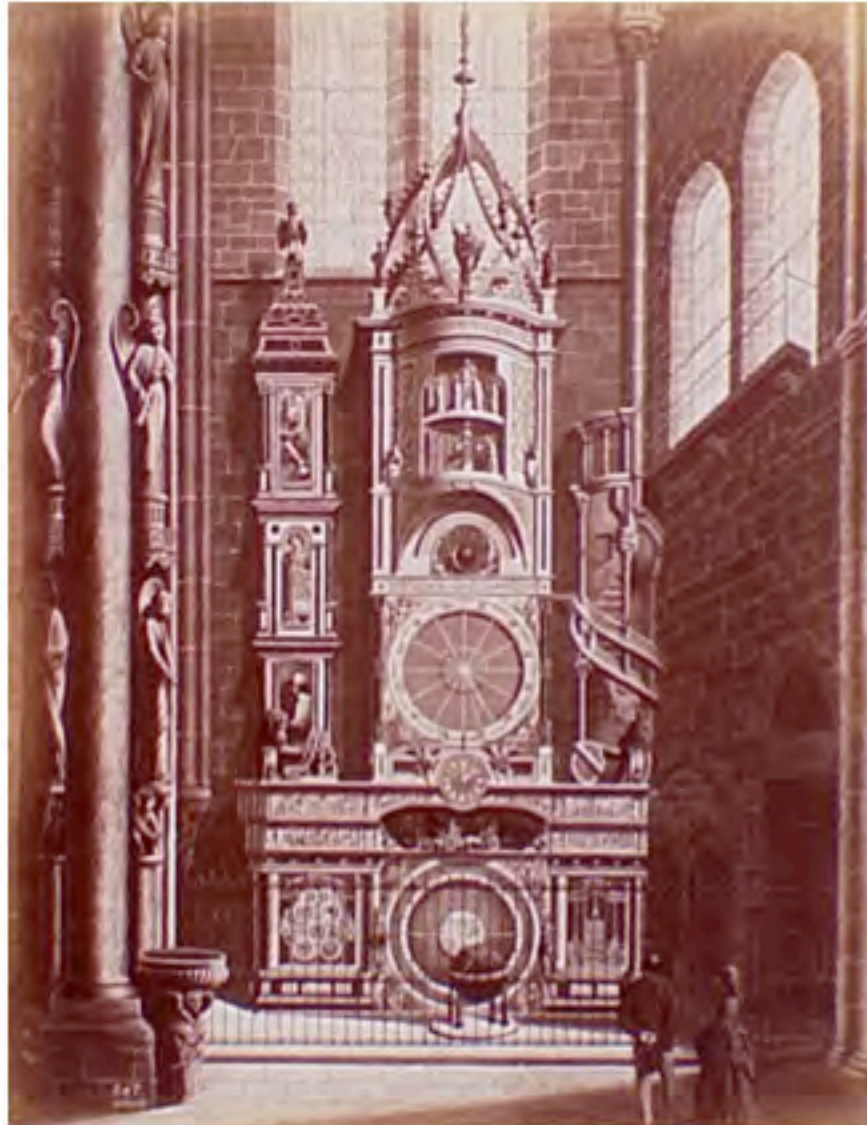
Isaac Newton (1643-1727)



World as Organism



World as Clock



Robert Boyle



Immanuel Kant (1724-1804)



Archdeacon William Paley 1743-1805



The eye



Charles Darwin 1809-1882

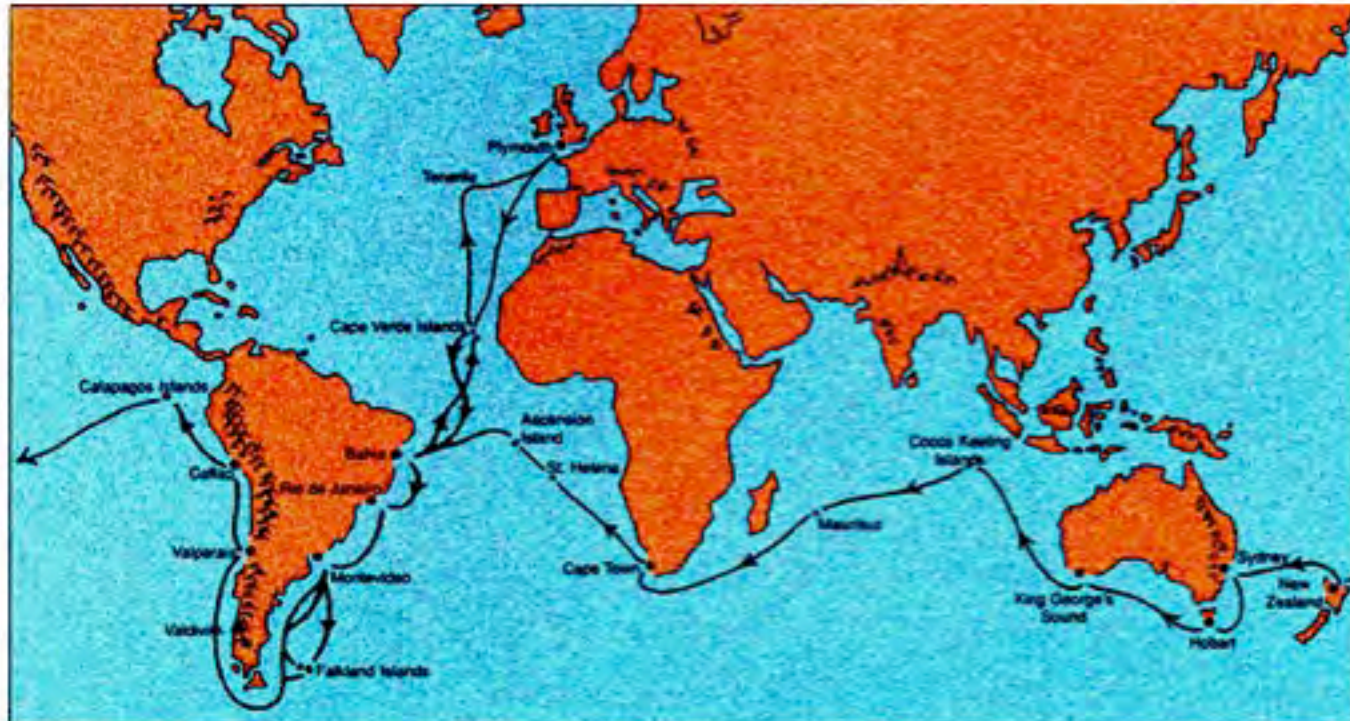


Christ's College, Cambridge





The voyage of HMS *Beagle* (1831-1836)

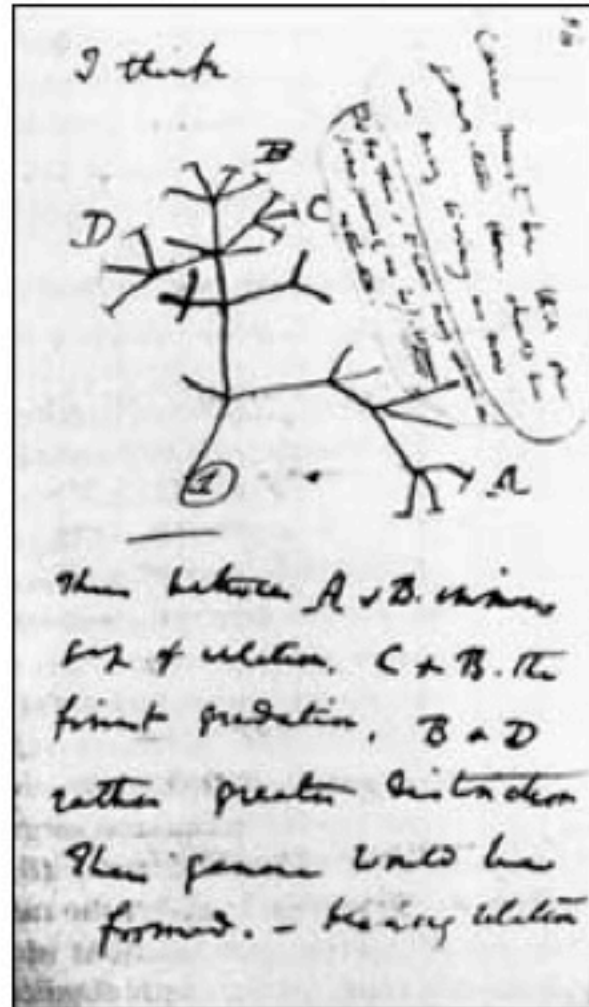


Galapagos Archipelago (*Daphne Major*)

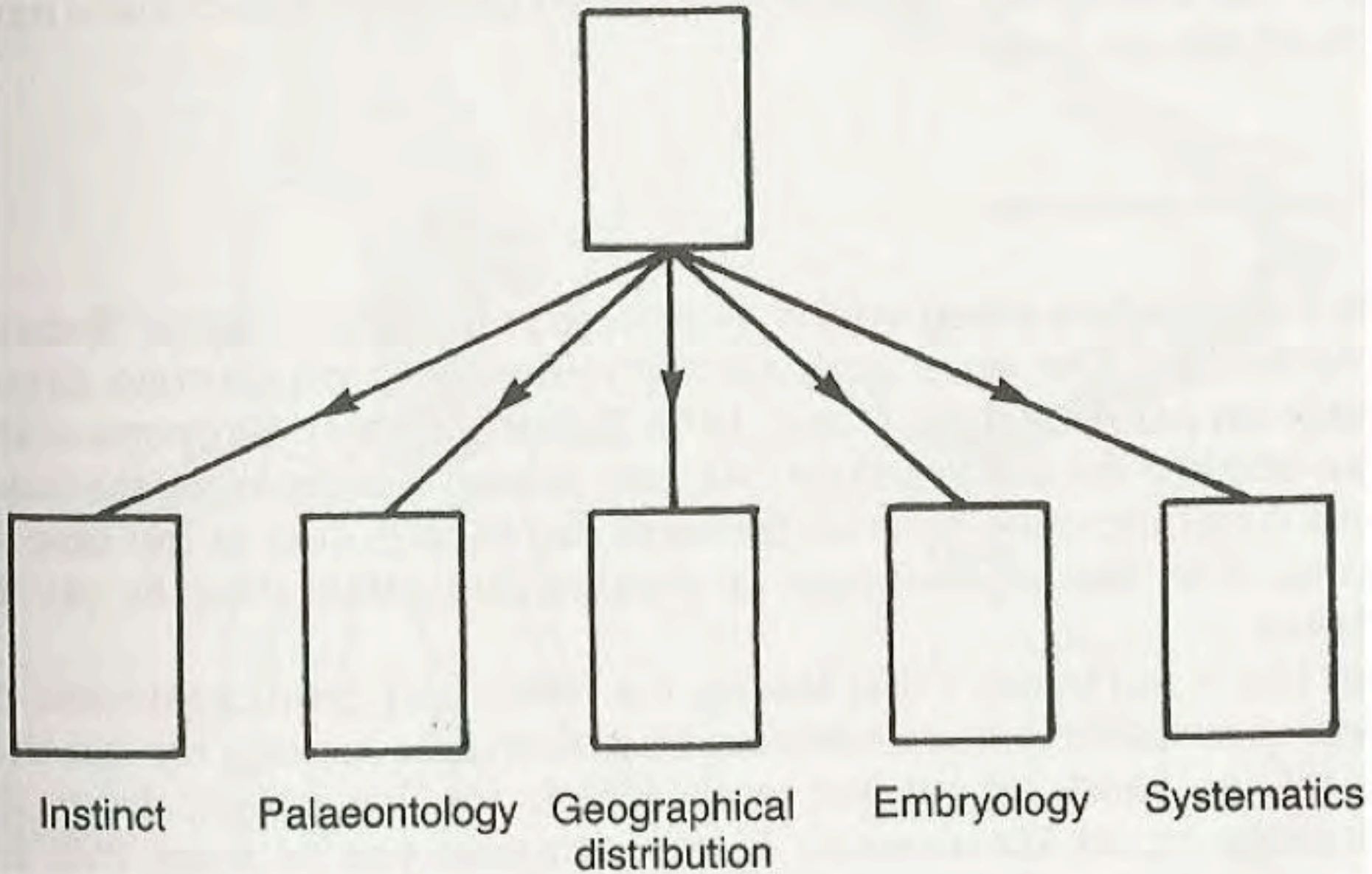




Darwin Notebook (1837)



Evolution
as fact



Instinct

Palaeontology

Geographical
distribution

Embryology

Systematics

"But with regard to the material world, we can at least go so far as this—we can perceive that events are brought about by isolated instantiations of Divine power, created in each particular case, but by the establishment of general laws."

W. SHAWWELL: *Evolutionary Treatise*.

"To conclude, therefore, let us turn out of a weak notion of solubility, or an ill-supplied understanding, think of solutions, that a man can reach too far or be too well studied in the book of God's words, or in the book of God's works; Aristotle or philosophy; but rather let him concentrate on studies progress or proficiencies in nature."

SHAWWELL: *Advertisement of Learning*.

London, University Press,
November, 1881.

THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

IN 1859

PRESERVATION OF FAVOURED RACES BY THE STRUGGLE
FOR LIFE.

BY CHARLES DARWIN, M.A.,

FELLOW OF THE ROYAL SOCIETY, FORMERLY COLLECTOR, ZOOLOGICAL SURVEY,
OFFICE OF THE SURVEY OF GREAT BRITAIN, AND OF THE SURVEY OF THE
ROYAL NAVY.

LONDON:
JOHN MURRAY, ALBEMARLE STREET,
1881.

Printed by G. & C. Hanbury, 10, Abchurch Lane, London, E.C. 4.

Richard Dawkins



RICHARD DAWKINS

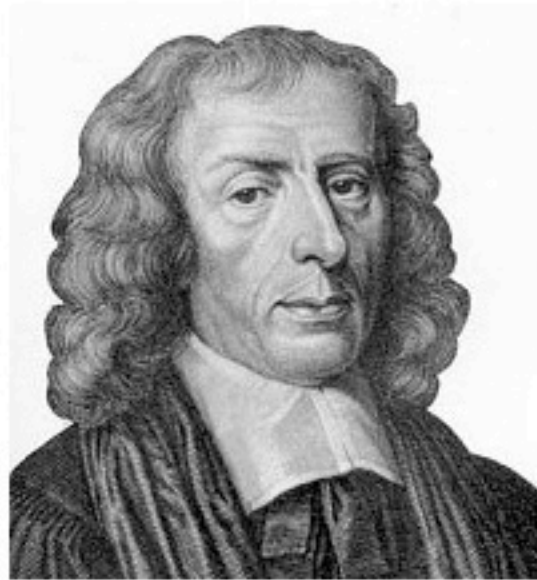
The Blind Watchmaker

Why the evidence of evolution reveals
a universe without design



BY THE AUTHOR OF *THE SELFISH GENE*

Henry More (Cambridge Platonist)



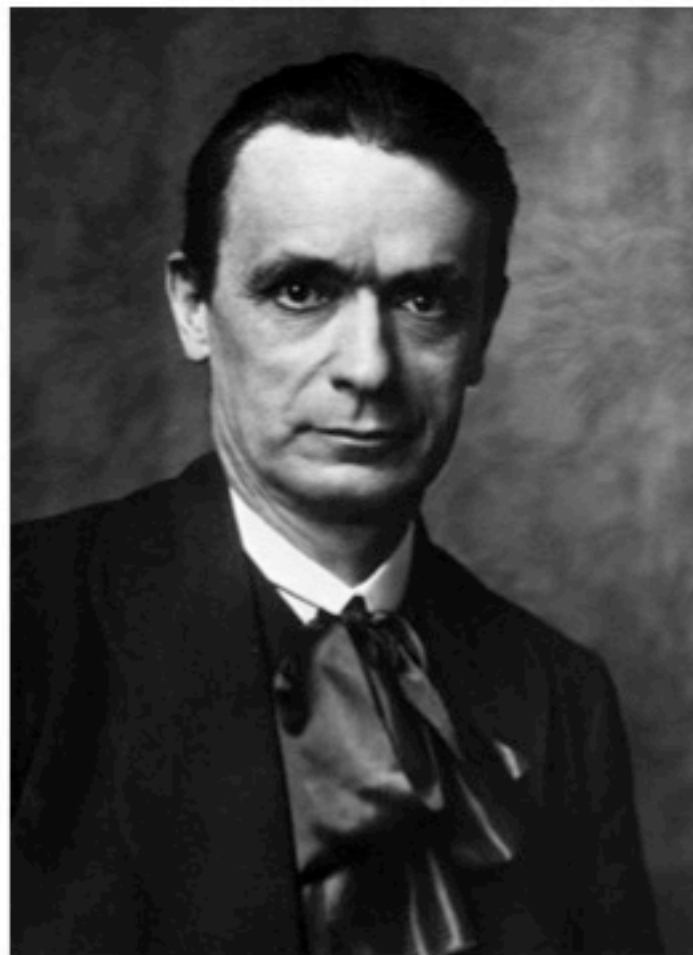
Friedrich Schelling



Hylozoism

- The world is an organism with a World Soul
- (term is due to Ralph Cudworth, a Cambridge Platonist)

Rudolf Steiner



Waldorf Education



Biodynamic Agriculture



Charles Sanders Peirce

- I was born and reared in the neighborhood of Concord, at the time [1839] when Emerson and... friends were disseminating the ideas that they had caught from Schelling, and Schelling from Plotinus

Henry David Thoreau (1817-1862)



Aldo Leopold



- Philosophy, then, suggests one reason why we can not destroy the earth with moral impunity; namely, that the “dead” earth is an organism possessing a certain kind and degree of life, which we intuitively respect as such.

Rachel Carson



Arne Naess



Deep Ecology

- I suspect that our thinking need not proceed from the notion of living being to that of the world, but we will conceive reality, or the world we live in, as alive in a wide, not easily defined, sense. There will then be no non-living beings to care for.

James Lovelock



Lynn (Sagan) Margulis



The World is an Organism! (September 1965)



