

Concept of Evolution

Definition

Change with respect to time is called Evolution.

Evolution can be said to be the development of an entity in the course of time, through gradual sequence of changes from simple to complex state.

Narrow Definition →

Change in genetic composition of a population in generation to generation.

Descent with modification. (Darwin)

Zimmermann (1953)

Evolution is the transformation of the form and mode of existence of an organism such a manner that the descendants differ from ancestors.

ORGANIC EVOLUTION → Plants and Animals.

↓
According to this Earth is Evolved not Created.

• Phenomenon of Continental Drift.

DIFFERENT THOUGHTS

- Special Creation
- Spontaneous Generation
- Cosmozoans
- Biochemical Evolution

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Role of Scientists

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Aristotle

- First to give "CONCEPT OF EVOLUTION"
- Scala Naturae (Ladder of Nature)
- Every step of ladder is specific for specific specie.

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Cuvier

(1769–1832)

- Theory of Catastrophism (Destruction at large scale)
- Dinosaurs → Dead
- Earth's History by Catastrophism
- Science of Palaeontology

Louis Agassiz

(1807–1873)

- New Creation after Each Catastrophism.

Suarez
(1548 – 1613)

→ Special Creation

Carlos Linnaeus
(1707 – 1778)

→ Special creation + Taxonomy (Classification of organisms)
• Binomial Nomenclature

James Hutton
(1726 – 1797)

→ Uniformitarianism (Time of Evolution)

Charles Lyell
(1797 – 1875)

→ Uniformitarianism + Principles of Geology
• Contemplated forces of wind, water, Earthquake, and volcanism as agents of layered patterned.

Malthus
(1766 – 1834)

→ Essay on "Principles of Population"

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Charles Darwin
(1809 – 1882)

→ Descent with modification + Origin of species
• Voyage of Beagle
Natural Selection

A.R. Wallace
(1823 – 1913)

→ Sent his theory to Darwin

Theories of Evolution

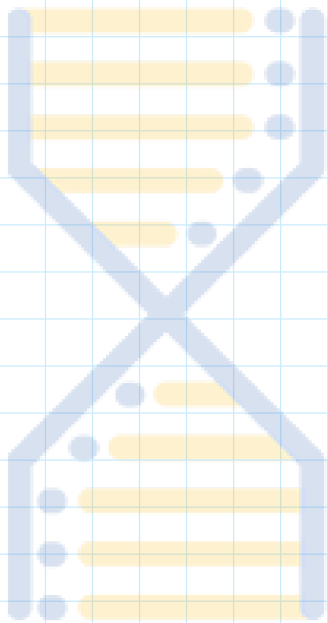
"EVOLUTION"

EVOLUTIONIST



Natural Selection
(Fittest Organism)

- Earth/Universe → Big Bang Theory (3.5 Billion)
- Earth Age → 5 Billion years
- Prokaryotes → Eukaryotes (1.9 – 2.1 Billion) years



"SPECIAL CREATION"

Saurez
C. Linnaeus

CREATIONIST



Divine Creations

- Supernatural Events
- Everything in universe is created in 6 days.
- Man 6th day.

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