

The background is a gradient of dark blue and purple, speckled with small white dots. On the left side, there are several concentric circles and a large circular scale with degree markings from 140 to 260. Some of the circles have arrows indicating a clockwise direction. The overall aesthetic is scientific and technical.

BIOLOGY

LESSON 2: ATHEISTIC VIEW OF LIFE

SECULARISM AND BIOLOGY

- What is life?
- Life is an unplanned existence; a state of matter and a sort of animal

SECULARISM AND BIOLOGY

- How did life begin?
- “Man is a result of a purposeless and natural process that did not have him in mind.” - George Gaylord Simpson
- Macroevolution: adaptive changes lead one species to become an entirely different species

SECULAR DEFINITION OF EVOLUTION

- In essence, the modern theory of evolution is easy to grasp. It can be summarized in a single (albeit slightly long) sentence. Life on earth evolved gradually beginning with one primitive species- perhaps a self-replicating molecule- that lived more than 3.5 billion years ago; it then branched out over time, throwing off many new and diverse species; and the mechanism for most (but not all) evolutionary change is natural selection.

-Dr. Jerry Coyne

- “Why Evolution is True”

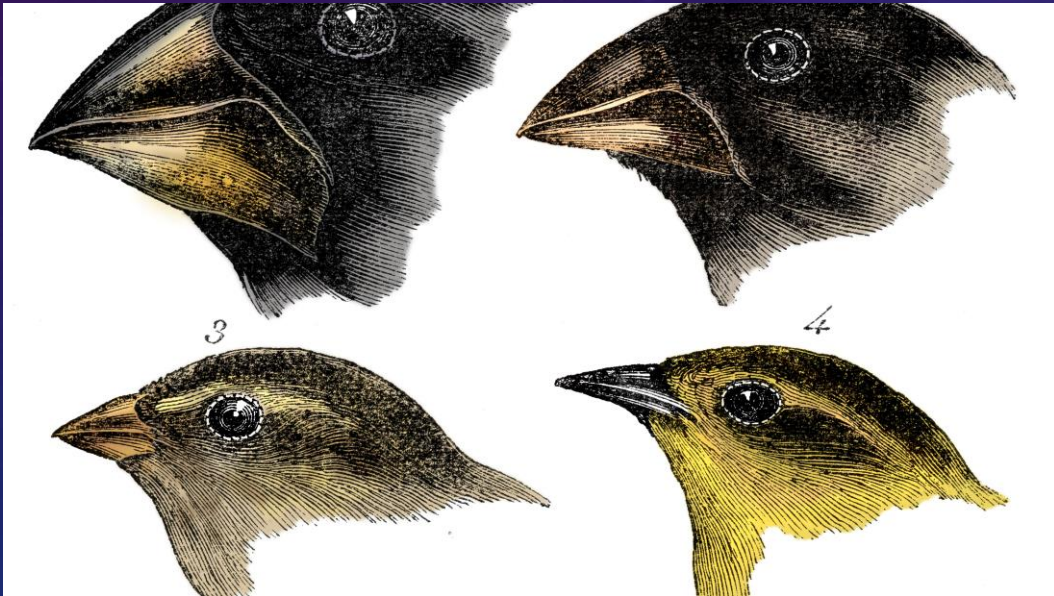
MACRO AND MICRO EVOLUTION

- **Microevolution:** living things incorporate small, adaptive changes over time.
- Secularists believe microevolution explains macro-evolution

ADAPTATION

Natural Selection

- Only those life forms best suited to survive and reproduce will tend to do so.



Selective Breeding

- A guided process in which one is artificially selecting a beneficial trait



ADAPTATION

- **Mutations:** the belief that new species arise from natural selection acting over vast periods of time on chance mutations in the DNA.
- **Punctuated equilibrium:** the belief that evolutionary changes occurred over relatively quick periods of time; the change happened so quickly to develop fossils.

MARXISM

- Karl Marx believed Darwin's evolutionary theory justified his views of human society.
- If biological life evolved upward, perhaps sociological life does as well.
- Dialectical materialism: the clash between the thesis (bourgeoisie) and the anti-thesis (proletariat) results in a synthesis (a radical new government)

The diagram illustrates the Marxist revolutionary process. At the bottom, two purple ovals represent the starting conditions: 'Capitalism; private property, bourgeoisie' on the left and 'Workers (proletariat) rise up in revolution' on the right. A dark grey starburst shape, representing a revolution, is positioned between these two ovals. A thick purple arrow points upwards from the starburst to a third purple oval at the top, which represents the final goal: 'Communism: a classless and utopian society'. The background is a dark blue gradient with faint, stylized circular patterns and lines, suggesting a complex or cyclical process.

Communism: a
classless and
utopian society

Capitalism; private
property,
bourgeoisie

Workers
(proletariat) rise up
in revolution

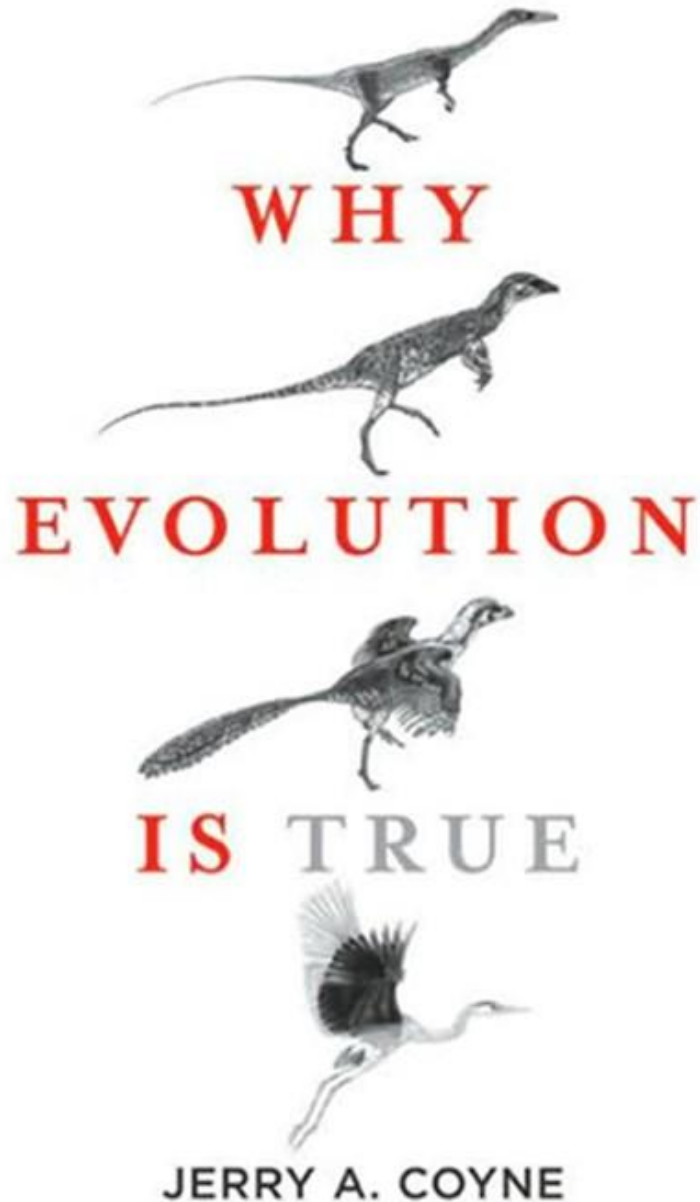
CLOSED SYSTEMS AND EVOLUTION

Secularism

- Believe in slow, gradual processes to produce new species through evolution

Marxism

- Believe in rapid, revolutionary processes in sociological evolution.



The jacket depicts a chronological sequence of fossils showing the evolution of birds. We do not know whether the actual line of descent included the first three species, but the origin of modern birds almost certainly involved a sequence very much like this one.

The illustrations are reconstructions by Jason Broughnam from fossil specimens.

Quote from the dust flap of "Why Evolution is True" by Jerry A. Coyne. Published by Penguin Group, 2009.

QUESTIONS SECULARISM CAN'T ANSWER:

- How did life begin?
- What brings meaning and purpose to life?
- How does one define life?