

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”



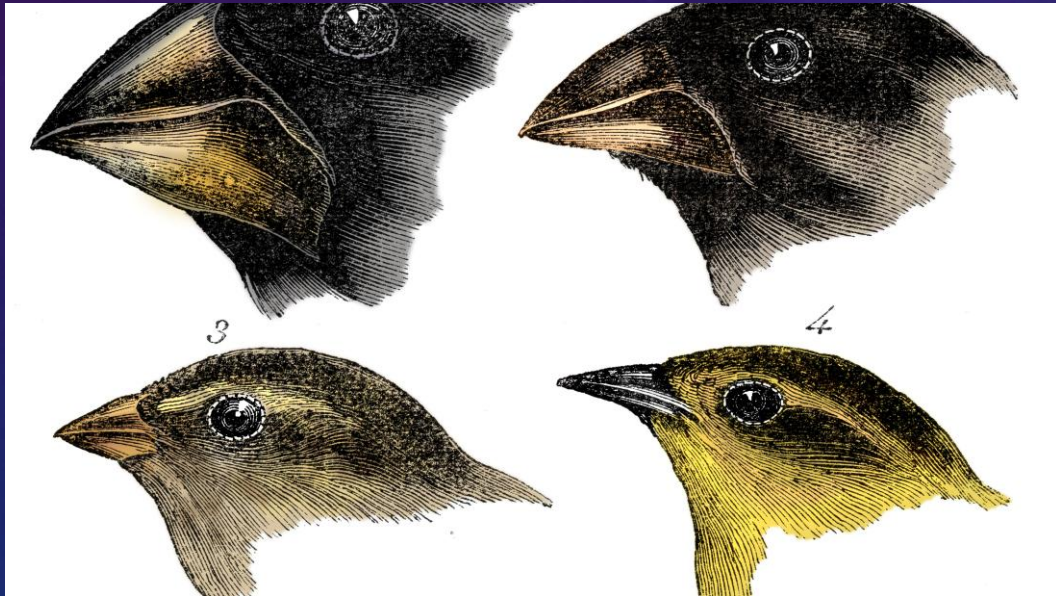
# MACRO AND MICRO EVOLUTION

- **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.



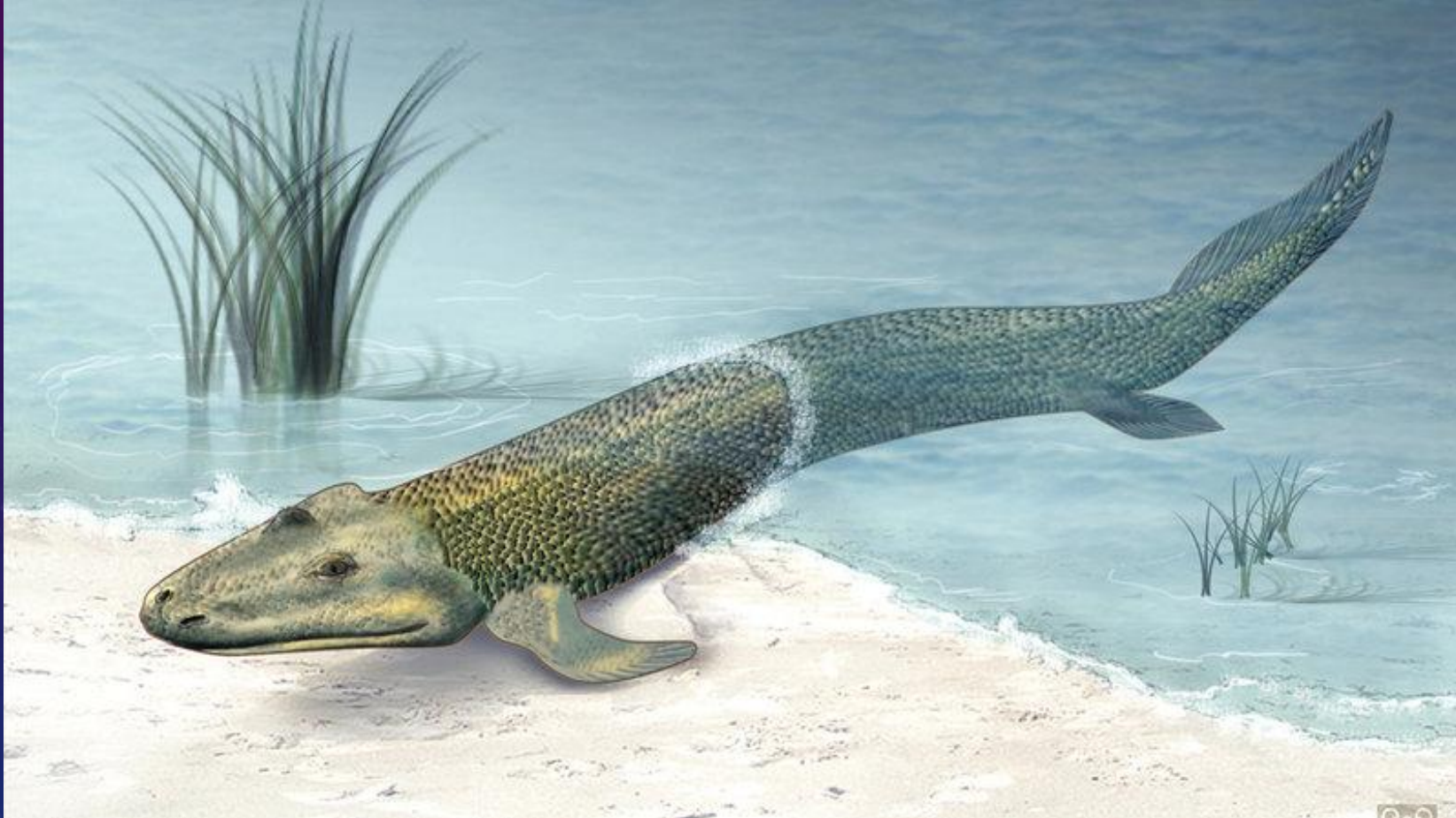
## Selective Breeding

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





# TIKTAALIK



# TIKTAALIK





# 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 is set against a dark blue background with faint, stylized circular patterns and dotted lines. It features three purple ovals. The top oval is centered and contains the text 'Communism: a classless and utopian society'. Below it is a grey, multi-pointed starburst shape. To the left of the starburst is a purple oval containing 'Capitalism; private property, bourgeoisie'. To the right of the starburst is a purple oval containing 'Workers (proletariat) rise up in revolution'. A thick purple arrow points upwards from the starburst towards the top oval.

Communism: a  
classless and  
utopian society

Capitalism; private  
property,  
bourgeoisie

Workers  
(proletariat) rise up  
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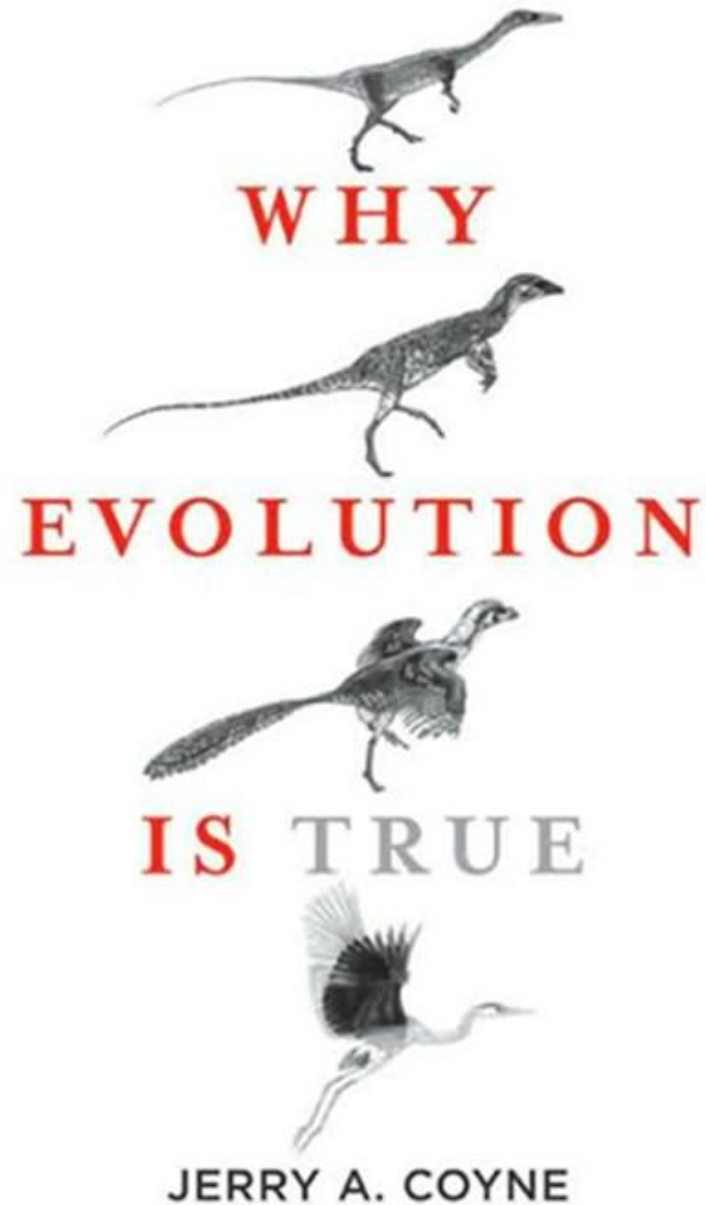
# CLOSED SYSTEMS AND EVOLUTION

## 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?