

Creation and Intelligent Design



Week 10

Darwinian Evolution

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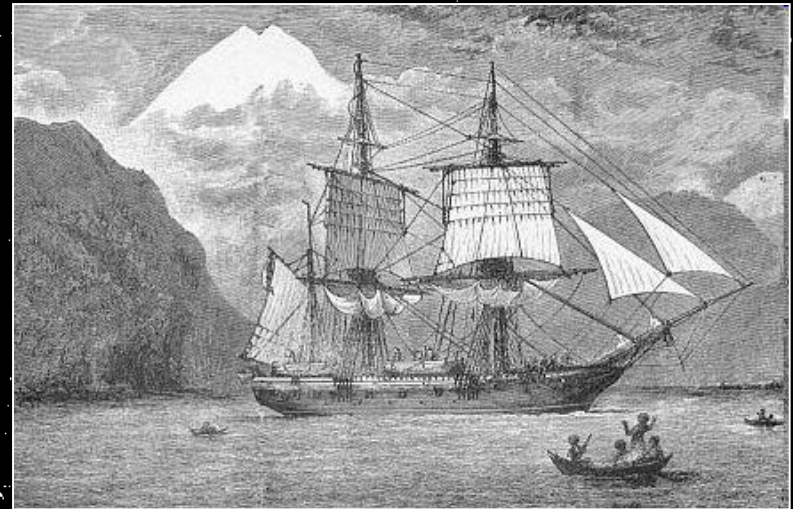
Fast Facts

- Charles Darwin—British **Naturalist**, born in Shrewsbury, England, 1809
- Mother died when he was eight. Father was a **physician**. Grandfather was a **naturalist**.
- Left home at 16 to study medicine at **Edinburgh** University. Repelled at the sight of surgery without anesthesia!
- Dropped out of Edinburgh. Later attended **Cambridge** to become a **clergyman** in the Church of England (he did not attend seminary)



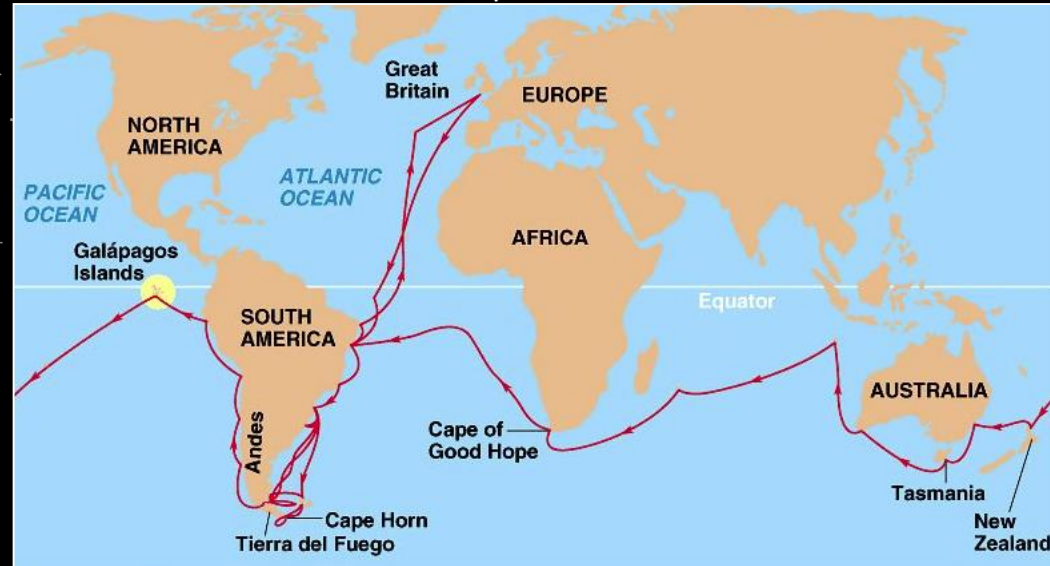
Fast Facts (cont)

- Graduated Cambridge in 1831
- Accepted an unpaid position as a naturalist on the **H.M.S. Beagle**
- Sailed from England on December 27th, 1831 (age 22)
- Five year **scientific mission** to explore the islands and coastal regions of the **South Seas**



Fast Facts (cont)

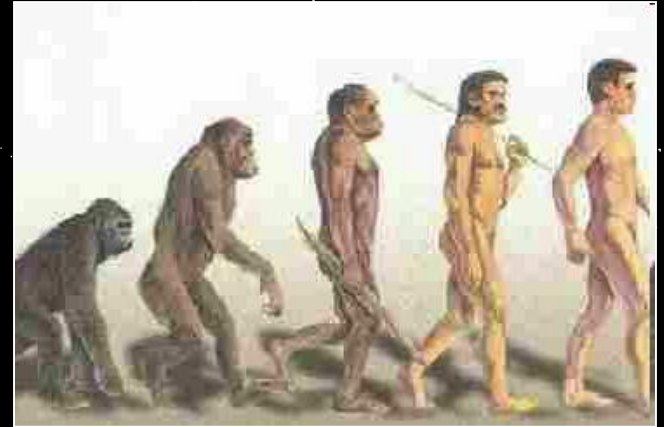
- In the **Galapagos Islands** he noticed many **variations** of plants and animals similar to those found in South America



- Darwin's research on this voyage formed the basis of his famous book, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*

Fast Facts (cont)

- By 1838 had settled on his “**Theory of Evolution**”
- Findings written by 1844
- **Reluctant** to publish his results for **many years**
- Finally, with Alfred Russell Wallace (who developed a similar theory) **jointly** presented to a learned society in London on July 1st, 1858
- Darwin’s book, published a year later, **sold out its first printing on the first day** (1200 copies)



Fast Facts (cont)

- Darwin **avoided** talking about the **theological** and sociological aspects of his work. He wrote:
“I cannot pretend to throw the least light on such abstruse problems. The mystery of the beginning of all things is insoluble by us; and I for one must be content to remain an agnostic.”
- He continued to write and publish works on biology, geology, and zoology
- **Died** on 19 April, 1882
- Buried in **Westminster Abbey**
- **Legend** says he recanted his belief in evolution on his deathbed. **Refuted** by daughter Henrietta.

Darwin's Theory of Evolution

- Focuses on how biological species came to be **different and varied**
- Darwin believed species **evolved in better and better versions over time**:
 - “I have called this principle, by which each slight variation, if useful, is preserved, by the term Natural Selection.”*
- Darwin defined “species” as a set of creatures which breed among themselves in nature
- Not what the Bible calls “kind”
 - Plants (third day), fish and birds (fifth day)
 - Cattle (*“beasts of the earth”*) and insects (sixth day)
 - Man (**not** referred to as a “kind”)

Darwin's Theory of Evolution

- Elegantly simple
- He **observed**:
 - **Variation** in all species—size, shape, color, features
- He **reasoned**:
 - Not enough **food** to support all organisms
 - Chance **variation** gives some an advantage in the struggle for life
 - “Improved” versions tend to **survive and reproduce**
- He **theorized**:
 - If changes are **inherited**, great **change** could happen over **long** periods of time

(OK, but does that explain how those **Monarchs** survive by finding **Mexico**?)



Main Points of Darwin's Theory

- Variation
 - **Random**—no directed, intelligent decision making
 - Darwin didn't know why animal populations varied
 - We know about gene variation and mutation—he didn't
 - Happens **generation to generation**
 - **Small** and happens **slowly**
- Struggle for existence
 - Name of the game is **procreation**
 - Some **win**, some **lose**
 - Winner's traits are **preserved**
 - Loser's traits become **extinct**
- Natural selection
 - Organisms that **adapt** win the **procreation** game

Working Definition of Evolution

Evolution: A process that results in heritable changes in a population spread over many generations.

Important points:

- Doesn't say how life began, just how it changes
- Changes must be passed on to the next generation
- No mention of the rate of change

Biologists note that many dictionary definitions are **wrong!**

(See www.talkorigins.org/faqs/evolution-definition.html for more details)

Working Definition (cont)

- Some creationists have accused scientists of being dishonest in their definition of evolution
 - Leads to disputes, but not much dialog

“It is important for us to not confuse the fact of evolution with the theory of evolution”

John Clayton

“Jurassic Park and Genesis”

- Clayton’s point: Evolution is clearly happening, but there’s **no proof that everything came from the same ancestor**
 - Claims most textbooks discuss the **fact** of evolution, but little or nothing of the **theory** of evolution

Micro- vs. Macroevolution

- Terms are **out of vogue** these days
- Refer to general boundary on change
- Example: Separated neighbors
 - 4-foot ditch
 - 8-foot, 15-foot, 100-foot ditch
- No denying organisms “evolve” but how much?



Micro- vs. Macroevolution

- Microevolution = change *within* a species
 - Hereditary changes—traits becoming dominant



Peppered Moths

- Without change, species die out fairly quickly
- DNA alleles allow for such changes *by design!*
- Might the allele boundary represent “**kind**”?

Micro- vs. Macroevolution

- Macroevolution = change *above* a species
- Changes across **large boundaries**
 - i.e. turtles becoming horses
 - One “kind” becoming another “kind”
- Mechanism is **mutation**
 - Often destructive
 - Almost never heritable



Television, household items,
wirecutters, and a soldering iron

- Odds of getting a better TV?
- Or a microwave oven?
- Or a 767 aircraft?

Intelligence and experience tell us that better TVs come from new designs and new parts—parts that can never come from old TVs!

What Darwin Couldn't Know

- Cells: extremely complex molecular machines
- Early evolutionists thought cells were simple
- **Drastically underestimated** the leap from single- to multi-cell organisms
- No concept of DNA, no tools to see inside cells!

[A cell] is an intricate... unit of harmoniously coordinated parts and chemical pathways. Its spontaneous assembly out of the environment, granting the unlikely simultaneous presence together of all the parts, is not a believable possibility.

J. Keosian

The Origin of Life and Evolutionary Biochemistry

(And Keosian **believes in evolution!**)

Observation and clever reasoning will only go so far if important parts aren't visible!

Another Example



- Remote tribe finds a **working TV**
- Experimenting, they **learn to control** it
 - Basically, they can predict how it will behave
- They form ideas about **what's inside**
 - Tiny people? Ghosts?
- Finally someone **opens the box**
 - Their ideas will be **completely wrong**
 - They're forced to **adjust** their **beliefs**
 - And they still won't know what they're seeing!

Similarly, now that we're starting to understand what's happening at the bio-molecular level, cells appear far too complex to have evolved!

What Christians Do Know

The deeper we look, the more complexity we find, and the more we see the **hand of God!**

Because that which is known about God is evident within them; for God made it evident to them. For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse.

Rom 1:19-20

What Christians Do Know

- It's not just about **evidence**, but **conclusions!**
- Unfortunately, not everyone draws the same ones...

...the god of this world has blinded the minds of the unbelieving, that they might not see...

2 Cor 4:4

Take heed, you senseless ones among the people; you fools, when will you become wise? Does he who implanted the ear not hear? Does he who formed the eye not see? Does he who disciplines nations not punish? Does he who teaches man lack knowledge? The LORD knows the thoughts of man; He knows that they are futile.

Psalms 94:8-11 (NIV)

*But what happens when we live God's way? He brings gifts into our lives, much the same way that fruit appears in an orchard--things like **affection** for others, **exuberance about life**, **serenity**. We develop a willingness to **stick with things**, a sense of **compassion** in the heart, and a **conviction** that a **basic holiness permeates things and people**.*

Gal 5:22 (The Message)