

1 **The Origin of the Species**

- Module: Science
- Lesson 27

2 **Some Recommended Sources**

- John Lennox, *God's Undertaker, Has Science Buried God?*
- Michael Denton, *Evolution, A Theory in Crisis*, and *Evolution, Still a Theory in Crisis*
- Jonathan Wells, *Icons of Evolution*, and *Zombie Science*
- Tom Bethell, *Darwin's House of Cards*
- David Berlinski, *The Devil's Delusion*
- Stephen Meyer, *Signature in the Cell*, and *Darwin's Doubt*
- Michael Behe, *Darwin Devolves*, *Darwin's Black Box*, and *The Edge of Evolution*
- Kenneth Keathley and Mark Rooker, *40 Questions About Creation and Evolution*
- *Theistic Evolution, a Scientific, Philosophical, and Theological Critique*, ed. by Moreland, Meyer, Shaw, Gauger, and Grudem

3 **What Is Evolution?**

- Three Meanings:
 - Change over time.
 - Common Descent (Or Universal Common Descent)
 - Creative Power of Random Mutations/Natural Selection (Typically apart from the activity of an Actual Designing Intelligence)
- 2 & 3 Are Elements of Darwinian Explanations for The Origin of the Species
- In this lesson, evolution will refer to Darwinian evolution unless otherwise indicated.

4 **An Important Distinction**

- Microevolution vs. Macroevolution
- Microevolution:
 - Small changes over time.
 - Adaptation within a species or genus.
 - Bacteria (e.g. e. coli bacteria)
 - Finch beaks of "Darwin's Finches" on the Galapagos Islands
 - Peppered moths
 - Breeding of livestock, dogs, etc
- Microevolution is widely understood, observed, and non-controversial.

5 An Important Distinction

- Macroevolution:
 - Macroevolution entails the production of new body parts and ultimately entirely new families of living organisms by the development of entirely new genetic and epigenetic information.
 - Is very controversial.
 - Has never been demonstrated, observed, or proven.
 - Is counter-indicated by homeostasis: no apparent development between species either in the fossil record or in the laboratory.
 - In the fossil record species tend to appear fully formed, and go extinct many generations later without significant evolutionary change.
 - In the laboratory: Fruit flies (Thousands of generations, yet never a successful new body part or species.)
 - In the laboratory: E. coli bacterium (currently 65,000 generations, yet no successful new body parts or species.)

6 An Important Distinction

- Some evolutionists object to the distinction between micro- and macroevolution.
 - They assert that all evolution is the result of the minute variations of microevolution.
 - New body parts and eventually new species are thought to be merely the accumulation of these minute variations.
- The million dollar question: Does evolution actually grow new genetic (DNA) and epigenetic information, or merely favor one existing trait above another, or even degrade existing information?
 - e. g. A variation of finches' beaks shape and length, or entirely new finches, let alone new species?

7 What Was New About Darwin's Idea?

- The idea of evolution of biological life had been around since the time of the Greeks and the Romans.
- Various Enlightenment and post-Enlightenment writers had proposed a variety of evolutionary explanations for the variety of species of biological life.
- Darwin's "Great Idea" was the combination of two factors to account for the evolution of the species (His "mechanism").
 - Random (unguided) mutations (this was not a particularly new idea, but Darwin coupled it with his second factor.)
 - Natural selection as the primary, if not sole mechanism by which beneficial random mutations are preserved and passed on to subsequent generations, eventually resulting in new body parts and new species.

8 What Was New About Darwin's Idea?

- Darwin (and subsequent Darwinians) made two, sometimes stated but always present, assumptions that 1) random mutations are always unguided products of chance, and 2) repeated rounds of mutations and selection together can somehow form complex organized functional features.
 - Concerning the first assumption, Michael Denton, author of *Evolution, a Theory in Crisis*, and *Evolution, Still a Theory in Crisis*, says this is "...an entirely unsubstantiated belief, for which there is not the slightest evidence whatsoever."
 - Concerning the second assumption, Denton says: "...the claim that gradualism can generate the sorts of complex systems throughout the biosphere is again, not only is it unsubstantiated, but in many cases is beyond the realm of common sense that such things have ever happened."
<https://www.youtube.com/watch?v=B-Nh3RjZQil>

9 **Darwinism to Neo-Darwinism**

- Darwin, and mid-19th century scientists, had little knowledge of the cell, and genetic science was nonexistent, so his theory did not account for those factors.
- Neo-Darwinism, arising in the 1930's with the advent of modern genetics, among other things, focuses on evolution at the genetic level, within the cell.
- Three pillars of Neo-Darwinism.
 - Variation: Random, minute variations or mutations at the genetic level.
 - Natural Selection: Natural selection sifts among those variations and mutations so that some leave more offspring.
 - Heritability: "Favored" variations must be inheritable. (Must occur at the genetic level and be replicable in succeeding progeny.)

10 **Darwinian Evolution—A Theory in Crisis: Some Daunting Challenges**

- Fossil Record
- Information
- The problem of devolution
- No Molecular Evolution (Chemical Evolution)
- No Cellular Evolution
- Irreducible Complexity
- Probabilities
- How to Get New Body Plans
- Existence of Consciousness, Cognition, and Values
- Failure of the "Tree of Life" (Common Descent)

- (Each of these issues either counters Darwinian claims, supports Intelligent Design, or both.)

11 **The Fossil Record?**

- Homeostasis within species: Species appear on the scene with definite characteristics, and remain largely unchanged until they go extinct.
- The missing intermediate “steps” between species in the fossil record.
- The Cambrian “explosion”.
 - All the major animal groups appear suddenly, within a brief period of geological time in the Cambrian layer, rather than appearing in a developing pattern throughout geological time.
 - “Major transitions in biological evolution show the same pattern of sudden emergence of diverse forms at a new level of complexity.”
-Eugene Koonin-
- Other, less-known, explosions: the Great Ordovician Biodiversification Event, The Devonian Nekton Revolution, Odontode Explosion, Carboniferous Insect Explosion, Origin of Genus Homo, etc. etc.

12 **Molecular Evolution**

- There is no publication in the professional literature describing how molecular evolution might have or did occur.
- There are numerous assertions, but no support from experiments or calculations for molecular evolution.

13 **Cellular Evolution?**

- “Molecular biology has also shown us that the basic design of the cell system is essentially the same in all living systems on earth from bacteria to mammals. ...therefore, no living system can be thought of being primitive or ancestral with respect to any other system, nor is there the slightest empirical hint of an evolutionary sequence among all the incredibly diverse cells on earth.”
-Michael Denton-

14 **Information and Devolution**

- The sudden appearance of vast amounts of information in the Cambrian explosion of biological species.
- The Law of the Conservation of Information. (Peter Medawar and William Dembski) Neither chance, nor necessity, nor their combination, are able to generate specified complexity or complex specified information.
- “The crucial point of the Law of the Conservation of Information is that natural causes (conceived as chance, necessity and their combination) can at best preserve specified complexity, or they may degrade it, but they cannot generate it.” (William Dembski)

15 **Information and Devolution**

- Michael Behe argues (in Darwin Devolves) that genetic evidence, unavailable even twenty years ago, now demonstrates that most known (micro)evolutionary changes occur by degrading a gene in a way that is actually beneficial. (What he calls “devolution.”)
 - e coli bacteria growth rate
 - Polar bears
 - Human resistance to malaria
 - Bacterial resistance to antibiotics
- Natural selection, according to Behe, will favor the more frequent degrading but helpful mutations, fixing them in the population, and thereby rendering previously existing genetic information no longer available for constructive mutations.
- This means that mutations and natural selection, while making small adaptations possible to solve immediate problems, actually takes an organism down a cul-de-sac or dead end, making large scale (macro) evolution impossible.
- * Michael Behe, Darwin Devolves, The New Science About DNA That Challenges Evolution, (Harper One, 2019)

16 Irreducible Complexity

- Some “machines” within living organisms possess a complexity of multiple parts, each one of which is essential for the functioning of the whole. Without the presence of all of the parts the “machine” does not function and serves no purpose. It's complexity cannot be reduced.
- The mousetrap—
an irreducibly complex mechanism.
- Each part is unique, and each part is necessary in order for the mechanism to work. The mousetrap is purposeless without each part being present from the outset.

17 Irreducible Complexity

- an example:
The Bacterial Flagellum
- A complex propellor mechanism by which a bacteria is enabled to move. It consists of some forty parts, each of which is necessary for its function, and without which the mechanism would have served no purpose and could not have evolved piece by piece.

18 Irreducible Complexity

- Can co-option account for irreducible complexity? (Co-option is the adaptation of a part from somewhere else—co-opting— for use in a new developing mechanism.)

- In the case of the bacterial flagellum, there are not enough roughly corresponding parts elsewhere in the organism to account for all forty parts of the flagellum.
- Even if there were such parts available, how does one account for the blueprint of assembly, or the precise simultaneous assembly of parts to achieve a functioning mechanism?

19 **Evolutionist Version of “God of the Gaps”**

- Evolutionists often criticize theistic creationists as believing in a “god-of-the-gaps”—that God is merely a “placeholder” for the things we don’t understand. (Which, of course, is not how most theists view God.)
- Evolutionists, on the other hand, are constantly promising that they will eventually find the evidence that proves their theory or that resolves some particular obstacle. Their belief in science serves as a placeholder for their lack of evidence. (e. g. Darwin’s hope the fossil record would eventually substantiate his theory. It never has.)
- Darwinian evolutionists are like compulsive gamblers, always promising to pay their evidential debts sometime in the future.
- Sometimes they get desperate:
 - Rafting monkeys
 - Convergent Evolution

20 **Science Looking For An Alternative Naturalist Explanation**

- Many scientists are coming to recognize the explanatory deficits of Neo-darwinism.
- Some evolutionists are now proposing alternate theories or adaptations to Neo-darwinism (Extended Evolutionary Synthesis—EES).
- Meeting at the Royal Society of London (November 2016) called largely to address problems w/the standard Darwinian theory. (The meeting failed to offer any new mechanism that could resolve the main deficits of Neo-darwinism.)

21 **Evolution and the Christian Faith**

- Evolution says nothing about the existence of God.
 - Evolution, even if true, says nothing about whether God exists or how He may have played a role in the development of life.
 - But, as Alvin Plantinga has demonstrated, Darwinian evolution, if true, does undermine naturalism which denies God’s existence.
- Three general categories of views held by confessing Christians on the subject of creation/evolution.
 - Theistic evolution
 - Old earth creationism
 - Young earth creationism

22 Three Chief Views on Creation/Evolution

- Theistic Evolutionists:
 - Generally accept Darwinian theory in whole, including the creative power of random mutations coupled with natural selection to generate all complex features of living organisms and the organisms themselves.
 - Consider the Bible either to be in error or non-literal on matters of science. (Many reject literal Adam and Eve, and hence the biblical account of the Fall.)

23 Three Chief Views on Creation/Evolution

- Theistic Evolutionists (cont.):
 - Theistic evolution, so defined, faces three major objections:
 - Those who hold that God somehow guided the random (unguided) mutations hold a logically contradictory view. (How can an unguided process be guided?)
 - The view is increasingly scientifically problematic as Darwinian evolution is becoming progressively more untenable as new discoveries emerge.
 - The view is theologically objectionable since:
 - It represents God as not being involved in either the specific creation of kinds of living things, or in the ongoing sustaining of creation, both of which Scripture teaches.
 - It maintains that God's involvement in nature is undetectable, which runs directly counter to the biblical stress on God's nature and attributes being detectable in "the things that were made."
 - It calls into question the biblical teachings regarding sin, since it denies a real Adam and Eve and what Scripture teaches about the Fall and its effect on the human race.

24 Three Chief Views on Creation/Evolution

- Old Earth Creationists
 - Believe in an old cosmos and an old earth. (Generally accept Big Bang cosmology.)
 - Accept the authority and reliability of the Bible. (Many are inerrantists.)
 - View the Genesis creation accounts as poetic history, metaphorical, or phenomenological genre of literature.
 - Believe God created life and distinct life forms (species), but may have done so over a long period of time. (e.g. "Gap theory," the day/age view of creation week, "Temple theory," "Historical Creationism," etc.)

25 Three Chief Views on Creation/Evolution

- Young Earth Creationists
 - Hold to a literal seven day creation week, and the cosmos and earth as roughly six to ten thousand years old.
 - Accept the authority and reliability of the Bible. (Typically inerrantists.)
 - View the early parts of Genesis as strictly historical genre of literature.

- Tend to question Big Bang cosmology, particularly its implications of an old cosmos/earth.

26  **Next Week:**

- Origin of Humans and More