VOLUMENCE FOR GOD'S GLORY STEWARDING SCIENCE FOR GOD'S GLORY

EVOLUTION

The Explanatory Theory of Naturalism

[Evolution] has come to touch every aspect of modern thought; and no other theory in recent times has done more to mould the way we view ourselves and our relationship to the world around us.

This philosophy [evolution] controls academic work not only in science but in all fields, including law, literature and psychology.

The battle for humankind's future must be waged and won in the public school classroom by teachers who correctly perceive their role as the proselytizers of a new faith: A religion of humanity.

Let me control the textbooks, and I will control the state.

Evolution has now become the dominant philosophy and for several generations has been taught as fact in practically all our schools, from elementary schools to university graduate schools. Evolutionary assumptions also dominate the news media and all our public institutions...It seems obvious that an issue that is so vitally significant ought to be seriously studied by all thinking men and women.

DEFINITIONS

- Change in a population over time of the proportions of individual organisms that differ in one, or more, geneticallydetermined traits. — Ernst Mayr
- The transformation of genetic variation originally present within populations into variation between populations in both space and time. — Theodosius Dobzhanksy
- Evolution is an unsupervised, impersonal, unpredictable, and natural process of descent with genetic modification that is affected by natural selection, change, and changing environments. — National Association of Biology Teachers

EVOLUTION AS A THEORY

- Pre-Socratic records indicate that Empedocles (450 BC).
- Jean-Baptiste Lamarck (1744-1829) proposed transmutation by acquired characteristics in his publication, *Philosophie Zoologique*. (giraffe).
- Edward Blyth (1810-1873) was an English chemist and zoologist who published three major articles on the principles of natural selection in the leading zoological journals of the time (1835-1837).
- **Gregor Mendel** (1822-1884) was an Augustinian monk and botanist whose experiments in the reproduction of peas led to his discovery of the science of genetics.



CHARLES DARWIN

- 1809 February 12 Born into wealthy British family (father was a physician)
- 1827 (18yrs) His father sent him to Christ's College, University of Cambridge to become a minister of God's word
- 1831 (22yrs) Left Devonport, England on HMS Beagle
 - 5 year expedition intended to survey exotic land and examine native plant life
 - 1835 September Galapagos Islands 600 miles off the SW coast of Ecuador
- 1 month Darwin studied plant and animal life and gathered an extensive collection of specimens. He then left never to return again. Returned to England 1836 October
- 25 years He developed his theory to propose a naturalistic explanation for the diversity of life on earth
- 1859 Published: Origin of Species by Means of Natural Selection or the Preservation of Favored Races in the Struggle for Life

If I were convinced that I required such additions [saltations] to the theory of natural selection, I would reject it as rubbish.

Variations are supposed to be extremely slight...they are not supposed all to appear simultaneously, but often after long intervals of time.

There seems to me too much misery in the world. I cannot persuade myself that a beneficent and omnipotent God would have designedly created the [parasitic wasp] with the express intention of their feeding within the living bodies of caterpillars, or that the cat should play with mice.

NON-SCIENTIFIC ORIGINS

- Not inspired by a scientific "problem"
- Not inspired by observable "evidence"
- Not in response to a failing *scientific* concept
- Response to a failing theological misconception

The acceptance of this great claim and the consequent elimination of God from nature was to play a decisive role in the secularization of western society.

Darwin made it possible to be an intellectually fulfilled atheist. **Richard Dawkins**

In the survival of favoured individuals and races, during the constantly-recurring struggle for existence, we see a powerful and ever-acting form of selection.

Natural Selection

- Slight Graduation (uniformitarian assumption)
- Micro-Mutations
 (point mutations)
- Functional Advantage Advancement

Natural Selection

"I would give nothing for the theory of natural selection, if it requires miraculous additions at any one stage of descent."

-Charles Darwin

Natural Selection

"Natural selection can act only by the preservation and accumulation of infinitesimally small inherited modifications, each profitable to the preserved being."

-Charles Darwin

Biology

- Darwin had 2 microscopes with a maximum magnification factor of approximate 300x
- Darwin did not see much difference between living matter and non-living matter
- "In 1905, Ernst Haeckel described living cells as being merely 'homogeneous globules of plasm'. In those days they didn't have any way of seeing the complexity that exists within the membrane of the cell. But the truth is that a one-cell organism is more complicated than anything we've been able to recreate through supercomputers."

 -Dr. Walter Bradley



Darwin's microscope © AMNH / Denis Finnin

An onion cell at 100x



Plant and animal cells at +1000x



"A single-cell organism [is] as a high-tech factory, complete with artificial languages and decoding systems; central memory banks that store and retrieve impressive amounts of information; precision control systems that regulate the automatic assembly of components; proof-reading and quality control mechanisms that safeguard against errors; assembly systems that use principles of prefabrication and modular construction; and a complete replication system that allows the organism to duplicate itself at bewildering speeds."

- Dr. Walter Bradely, University of Texas A&M

- Proteins are the "builders" of living organisms
- Proteins are amino acid polymers
- An amino acid is a small organic compound consisting of about ten to twenty atoms
- "Each protein is a sort of micro-miniaturized machine, so small that it must be magnified a million times before it is visible to the human eye." –Joseph Mastropaolo, PhD
- Even the most basic cell consists of a minimum of 445 proteins, each comprised of at least 239 amino acids, coming from 20 specific types, each made up of 10 to 20 atoms.

"[the cell is]... in effect a veritable micro-miniaturized factory containing thousands of exquisitely designed pieces of intricate molecular machinery, made up of one thousand million atoms, far more complicated than any machine built by man and absolutely without parallel in the non-living world."

- Michael Denton, PhD, Biochemist

"More than 30 years of experimentation on the origin of life...have led to a better perception of the immensity of the problem...rather than to its solution."

- Klaus Dose, Origin-of-life researcher and president of the Institute of Biochemistry at the University of Johannes Gutenburg in Mainz Germany

"All of us who study the origin of life find that the more we look into it, the more we feel that it is too complex to have evolved anywhere. We believe as an article of faith that life evolved from dead matter on this planet. It is just that its complexity is so great, it is hard for us to imagine that it did."

- Dr. Harold Urey, Nobel Prize Winner

"To believe natural processes assembled a living cell is like believing a tornado could pass through a junkyard containing the bits and pieces of a airplane, and leave a Boeing 747 in its wake, fully assembled and ready to fly!"

- Sir Fredrick Hoyle, Astronomer, Cosmologist, and Mathematician, Cambridge University

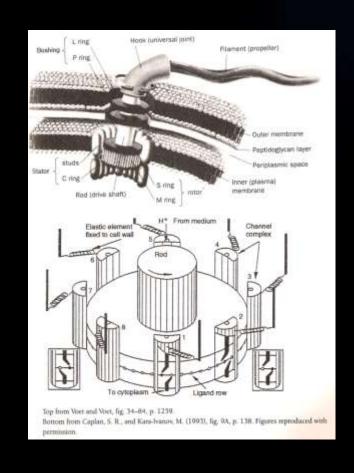
Irreducible Complexity

"If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down. But I cannot find such a case."

- Charles Darwin, Origin of Species page 175 [2]

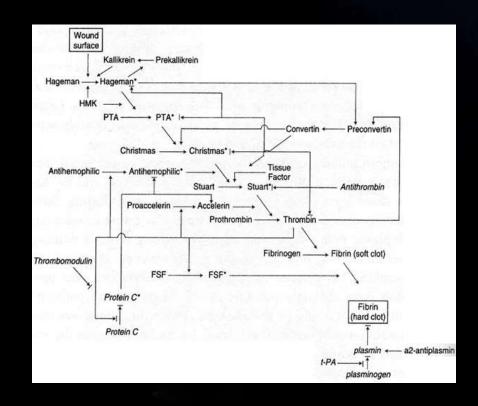
- Bacterial flagellum
- ~40 required parts
- 100,000 RPMs
- 1/4 turn reversal
- 32 conductor stator
- Commutator
- Propeller

Irreducible Complexity



Irreducible Complexity

- Blood clotting
- 10 interdependent steps required
- One mistake means death



"without the whole system in place, it doesn't work"
-Michael Behe

Irreducible Complexity

"To Darwin, the cell was a 'black box'--its inner workings were utterly mysterious to him. Now, the black box has been opened up and we know how it works. Applying Darwin's test to the ultra-complex world of molecular machinery and cellular systems that have been discovered over the past 40 years, we can say that Darwin's theory has 'absolutely broken down.

-Michael Behe, biochemist and author of Darwin's Black Box

Irreducible Complexity

DNA

- Chemistry is the vehicle but not the source
- 4 character language
- 1 x 10⁸⁷ ways to construct 1 rung
- 4.5 billion years = 1 x 10²⁵ seconds

Not merely chemicals, information!

Irreducible Complexity

"It is astonishing to think that this remarkable piece of machinery, which possesses the ultimate capacity to construct every living thing that ever existed on Earth, from a giant redwood to the human brain, can construct all its own components in a matter of minutes and weigh less than 10-16 grams. It is of the order of several thousand million million times smaller than the smallest piece of functional machinery ever constructed by man."

-Michael Denton

Biochemical Complexity

Irreducible Complexity

"Human DNA contains more organized information than the Encyclopedia Britannica. If the full text of the encyclopedia were to arrive in computer code from outer space, most people would regard this as proof of the existence of extraterrestrial intelligence. But when seen in nature, it is explained as the workings of random forces"

-George Sim Johnson

Biochemical Complexity

Irreducible Complexity

"An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have to have been satisfied to get it going."

Sir Francis Crick, Nobel Prize Winner for discover of DNA

Biochemical Complexity

Irreducible Complexity

"Darwinian evolution could account for no more than variations within the species boundary."

 Professor Richard Goldschmidt of the University of California at Berkeley

- Artificial Selection
- Altruism
- Sexual Reproduction
- Symbiosis
- Attrition
- Adaptive Feedback Mechanism
- Preservation Efficacy
- Nature of Mutations
- Genetic Capacity
- Biogenesis

- Cannot be compared to "natural" selection, since it injects:
 - Intelligence
 - Specialized Knowledge

"In spite of the intense pressure generated by artificial selection over whole millennia, no new species are born. A comparative study of sera,..., proves that the strains remain within the same specific definition. This is not a matter of opinion or subjective classification, but a measurable reality."

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"Survival of the fittest"

"Preservation of favoured races in the struggle for life"

altruism –

- 1. unselfish regard for or the devotion to the welfare of others;
- 2. behavior by an animal that is not beneficial to or may be harmful to itself but that benefits another

"Many animals, including humans, will endanger or even sacrifice their lives to save another—sometimes the life of another species."

-Walter Brown, PhD MIT Physicist

"The existence of altruism between different species—which is not uncommon—remains an obstinate enigma."

-Gordan Taylor, Chief Science Advisor, BBC

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- "...those individuals that have the most offspring are by definition...the fittest ones."
 - -Ernst Mayr, Biologist, Harvard University
- "Natural selection favors fitness only if you define fitness as leaving more descendants...To a geneticist, fitness has nothing to do with health, strength, good looks, or anything but effectiveness in breeding."
 - -George Simpson, Paleontologist, Columbia University, Dept. of Geology and Paleontology at the American Museum of Natural History

- Reproductive Dependencies
 - Availability (location and time)
 - Physical and chemical precision
 - Many intricate processes required at molecular level
 - Environment
 - Diversity and disparity of methods of reproduction

- Genetic sex determination (GSD)
 - male heterogamety
 - female heterogamety
 - polyfactorial
- Environmental sex determination (ESD)
- Cytoplasmic sex determination
- Haplodiploidy

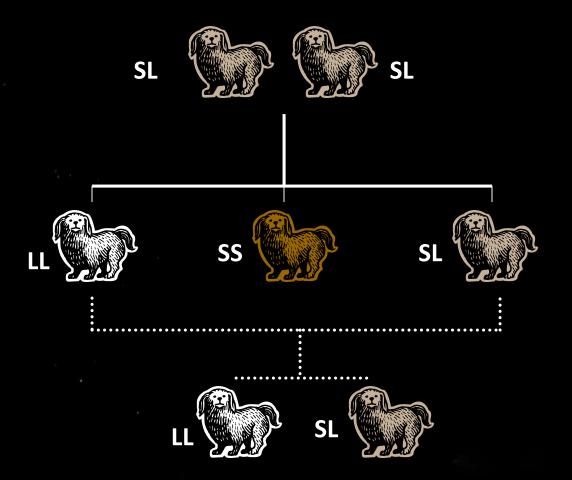
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- Male and female
- Parasites and their hosts
- Pollen-bearing plants and the honeybee
- Commensal organisms
- Ecology

- Artificial Selection
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attrition –

a reduction in the number of living organisms, especially of a particular species, usually as a result of environmental, biological, or ecological alteration or deterioration



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Geneticists began breeding the fruit fly soon after the turn of the century, and since 1910 when the first mutation was reported, some 3,000 mutations have been identified. All of the mutations are harmful or harmless; none of them produce a more successful fruit fly.

-Dan L. Lindsley and E.H. Grell, *Genetic Variations of Drosophila melanogaster*, Carnegie Institution of Washington, Publication No. 627, 1967.

"All point mutations that have been studied on the molecular level turn out to reduce the genetic information and not to increase it."

--Dr Lee Spetner, a highly qualified scientist who taught information and communication theory at Johns Hopkins University

"The theory of the transmutation of species is a scientific mistake, untrue in its facts, unscientific in its method, and mischievous in its tendency."

-Prof. J Agassiz, Harvard University, Methods of Study in Natural History

"To improve a living organism by random mutation is like saying you could improve a Swiss watch by dropping it and bending one of its wheels or axis. Improving life by random mutations has the probability of zero."

-Albert Szent-Gyorgi, Nobel Laureate

"In spite of the intense pressure generated by artificial selection over whole millennia, no new species are born. A comparative study of sera, hemoglobins, blood proteins, interfertility, etc. proves that the strains remain within the same specific definition. This is not a matter of opinion or subjective classification, but a measurable reality. The fact is that selection gives tangible form to and gathers together all the varieties a genome is capable of producing, but does not constitute an innovative evolutionary process."

-Pierre Grasse French zoologist

THREE BIOLOGICAL KEYS TO A RATIONAL WORLDVIEW

- 1. Origin of Life (biogenesis)
- 2. Information
- 3. Irreducible Complexity