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SUMMARY OF
UNLOCKING THE MYSTERY OF LIFE VIDEO

Produced by **Illustra Media** (www.illustramedia.com)

Commentary by Ryan Huxley, IDEA Center

Opening Scene and Background:

Pajaro Dunes, California 1993.

Professor Phillip Johnson invites major academics to discuss the reigning paradigm of origins: neo-Darwinian evolution. Many of the original pro-ID “big names” were present: Michael Behe, William Dembski, Dean Kenyon, Stephen Meyer, and Paul Nelson. This meeting is considered the genesis of the current ID movement.

Where did we come from? How did we get here? What brought us into existence? What is our relationship to reality? Is life the result of undirected natural causes or design? As Phillip Johnson alludes to, these are the fundamental questions that origins science deals with, either directly or through a given theory’s implications.

The Birth of Darwin’s Theory:

In 1831, while aboard the HMS Beagle during a five-year survey trip, Charles Darwin visited the Galapagos Islands, off the west coast of South America. On the islands, Darwin saw animals he had never seen before. For several weeks, he studied the animal life extensively. Searching for an alternative explanation to the prevailing theory that God had designed life, Darwin began to speculate about other possible explanations. His thoughts, conjectures, and knowledge of breeding eventually led him to a plausible explanation based on natural selection. He published his theory years later in 1859 in his now famous book “The Origin of Species.” Darwin’s ideas had appeal because they were simple to understand and plausible. Natural selection became the cornerstone of his theory of biological change over time.

Natural Selection Explained:

On the Galapagos Islands, as in other parts of the world, climate determines seed availability. Some birds survive better than others based upon their beak characteristics. During periods of drought, longer beaks are better for getting at the few remaining seeds from the previous year. Birds with these beaks live longer and have more offspring than other birds. These offspring have similar beaks and could eventually be the majority of the birds on the islands if environmental conditions persist that favor these beaks. This is the core idea of natural selection.

Darwin, an expert on pigeon breeding himself, extrapolated the same process to account for all of life. He believed that the process which lead to longer bird beaks was the same as the process that lead to the emergence of new species. That is, he believed that the small obvious changes associated with “microevolution,” was analogous to the large changes required for new species “macroevolution.” Natural selection became the “designer” substitute: an unguided, non-planning mechanism for all changes, small or large. It was this mechanism that the scientists at Pajaro Dunes questioned – was the analogy between the variation within species and the origin of new species true or false?

Can Design Become A Pathway to Discovery?

Paul A. Nelson
Senior Fellow
The Discovery Institute
www.discovery.org/crsc

Intelligent Design and Evolution Awareness Conference
University of San Francisco
27 September 2002

I. Why is intelligent design so controversial?

A. An evolutionary biologist's reaction to *Unlocking the Mystery of Life*

"I can only say *shame on you*" wrote a prominent evolutionary biologist from New York. Intelligent design is not a "legitimate, alternative scientific theory for the origin and diversity of life on earth," but "carefully disguised" religion. This sort of angry reaction to design is widespread in the scientific community. Why?

B. Mano Singham on the nature of scientific explanation

Both scientists and philosophers of science appeal to criteria that demarcate whether a theory is, or is not, scientific. One of the most widely-invoked criteria is methodological naturalism. "Any scientific theory," argues philosopher of science Mano Singham of Case Western Reserve University (2002), "must be naturalistic. No serious scientific theory in modern times has invoked explanations that appeal to inscrutability or the miraculous." Design appears to many scientists to postulate miracles and to violate the naturalistic criterion. Thus, design explanations cannot be "scientific" *in principle*.

C. But what if intelligent design is the case?

Yet even philosophical naturalists allow that intelligent design might be true. Our intellectual curiosity should chafe at any rule restricting or limiting what science might discover. Few scientists, however, are willing to surrender the rule of methodological naturalism.

Intelligent Design and Evolution Awareness (IDEA) Conference
September 27-28, 2002
University of San Francisco

The Apologetic Value of Intelligent Design

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Discovery Institute
Seattle, WA

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Introduction

Arguments for design in nature, especially in biology, were revered for millennia. Even the otherwise skeptical David Hume conceded their intuitive plausibility. With the publication of Darwin's *Origin of Species* in 1859, however, these arguments became less and less common, not only in biology, but in apologetics as well. (Apologetics is the discipline of developing arguments and evidence in favor of a particular religious worldview, such as Christianity.) Until recently, even those who were sanguine about design arguments in cosmology assumed that they had little current value in the biological sciences.¹

In the last few years, however, design arguments have begun to turn up in science. While these arguments have become common—and less controversial—in physics and cosmology, they have begun to appear in biology as well, after a long hiatus. In fact, a number of scientists and philosophers, who have come to be called intelligent design theorists, have begun to envision a science that allows for intelligent agency as a mode of explanation in addition to chance and regular natural law. Their arguments, while empirical, constitute a critique of strict methodological naturalism, which Darwin and his successors helped establish as scientific orthodoxy. This fact has so far made many theologians hesitant in appropriating arguments from design theorists. This is unfortunate, for insofar as their arguments have merit, they have important implications for apologetics.

We should, however, first issue a cautionary note. We should not view arguments by contemporary “design theorists” as merely or even primarily a disguised Christian apologetic. Intelligent design, it seems to me, is best understood as an interdisciplinary “research program” comprised of individuals concerned with asking and pursuing a related set of questions.

¹For example, in his chapter on teleological arguments in *The Existence of God* (Oxford: Clarendon Press, 1979), p. 135, Richard Swinburne quickly dismisses the traditional design argument based on the complexity of biological forms:

Despite Hume's objections, the argument is, I think, a very plausible one—given the premisses. But one of its premisses was shown by Darwin and his successors to be clearly false. Complex plants can be produced through generation by less complex animals and plants—species are not eternally distinct; and simple animals and plants can be produced by natural processes from inorganic matter.

Intelligent Design and Evolution Awareness (IDEA) Conference
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A Theatrical Trailer for
The Privileged Planet:
How our place in the cosmos is designed for discovery

Jay W. Richards and Guillermo Gonzalez
Discovery Institute and Iowa State University

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There is an opinion, quite common among scientists and intellectuals, which holds that our Earthly existence is not only rather ordinary, but in fact insignificant and purposeless, at least as usually expressed. The late astronomer Carl Sagan typifies this view in his aptly-named book *Pale Blue Dot*:

Because of the reflection of sunlight . . . the Earth seems to be sitting in a beam of light, as if there were some special significance to this small world. But it's just an accident of geometry and optics. . . . Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves.³

We think this melancholy assumption, despite its heroic pretense, is mistaken. In fact, we think the unprecedented scientific knowledge acquired in the last century, enabled by equally unprecedented technological achievements, should, when properly interpreted, contribute to a deeper appreciation of our place in the cosmos. In the forthcoming book, *The Privileged Planet*, Guillermo Gonzalez and I hope to substantiate that claim by means of a striking feature of the natural world. Simply stated, the feature is that the conditions that allow for intelligent life on Earth also make it strangely well suited for viewing and analyzing the universe.

The fact that our atmosphere is clear; that our moon is just the right size and distance from Earth, and that its gravity stabilizes the Earth's rotation; that our position in our galaxy is just so; that our sun is its precise mass and composition: all of these and many more are not only necessary for Earth's habitability; they also have been surprisingly crucial for scientists to

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³Carl Sagan, *Pale Blue Dot* (New York: Ballantine Books, 1994), p. 7.

Intelligent Design and the Origin of Life

Edward T. Peltzer, Ph.D.
Monterey Bay Aquarium
Research Institute
Moss Landing, CA

Where do we come from?

- ◆ This is one of those “hard” questions that:
 - challenges the “deep” thinkers,
 - tests our faith,
 - taxes our science,
 - defines our identity,
 - is an integral part of our worldview.
- ◆ All civilizations develop answers to this question that help define that society.

What is abiogenesis?

- ◆ Current “scientific” explanation for the origin of life.
 - ◆ a = not
 - ◆ bio = life or living
 - ◆ genesis = origin or generation
- ◆ Origin of life from non-living materials or substances = “pre-biotic” chemistry.

Brief outline of today’s talk

- ◆ Who I am.
 - Scientific qualifications.
 - Personal biases.
- ◆ What is Science?
 - We need a proper definition.
 - Is “Intelligent Design” science?
- ◆ What is abiogenesis and does it provide an adequate explanation for the origin of life?

Origin of Animals Fossil Records and Intelligent Design

By Paul Chien, Department of Biology,
University of San Francisco

[Editorial Note: Understanding the fossil record requires knowledge of geologic time spans, the classification system of animals, and similar technicalities. Please see Appendix following Prof. Chien's material for background.]

The challenge to Darwinism presented by the Chengjiang fossils has drawn worldwide attention. The issue became publicized beginning in mid-1995 with a series of media blitzes by the Chinese government. The People's Daily, for example, reported that "530 million years ago (early Cambrian period), life took a gigantic leap from simple forms to extreme complexity.... It was the beginning of bio-diversity. Further studies may shake up the traditional theory of Evolution." The same theme, though in less critical tones, was echoed throughout the West in a wide range of publications from *Science* to *Time*. Magazine covers trumpeted such seemingly contradictory terms as "*Evolution's Big Bang*," "*Biological Big Bang*," "*The Big Bang of Animal Evolution*," and "*Animal Big Bang*."

In odd contrast, similar fossils discovered in the Burgess Shale in Canada in 1909 by Charles Walcott, the president of The Smithsonian Institute, were studied continuously for nearly a century but never captured the widespread attention garnered by the Chinese findings.

The author, as an interested observer, organized an international group of scholars to visit the Chinese Academy of Sciences and the Chengjiang fossil site in March 1996, and in subsequent years has interacted personally with several major researchers in this field.

With each new finding, including the ongoing discoveries of new phyla as well as the completely unexpected uncovering of chordates and fish in the same layers of lower Cambrian rocks, the animal big bang seems to grow bigger and bigger. The abrupt appearances of such a variety of morphologically isolated animals, representing almost all major phyla and classes without any traces of ancestry, leads to a description of a "top down" evolution which required a new, unknown mechanism. Furthermore, the fact that the Cambrian fossils contain the largest number of animal phyla, with virtually no new phyla appearing subsequent to the Cambrian, is very difficult to explain with the traditional theory of evolution.

Supporters of the Intelligent Design Theory liken the pattern of the first appearance of animal phyla in the ocean to the creation of automobiles, airplanes, and other human inventions. As cars and airplanes represent the isolated design of different modes of transportation without stepwise changes through intermediate forms, the diversity of unlinked animal forms in the fossil record suggest that the basic types of animals may be designed.

Color slides of representative fossils, as well as a small collection of exquisite fossil specimens from China, will be shown.

Irreducible Complexity and Biological Design

By Dr. Michael Behe

Friedrich Wöhler, 1828, showed:

ammonium cyanate



UREA

Dawkins, R., quoted in Easterbrook, G.
Science and God: a Warning Trend?
Science 1997, 277, 890-893.



- The universe we observe has precisely the properties we should expect if there is at bottom no design, no purpose, no evil and no good, nothing but pointless indifference.



Ratzinger, J. (1986) *In the Beginning: A Catholic Understanding of the Story of Creation and the Fall*; Eerdmans: Grand Rapids, p. 54.



- Let us go directly to the question of evolution and its mechanisms. Microbiology and biochemistry have brought revolutionary insights here... They have brought us to the awareness that an organism and a machine have many points in common... Their functioning presupposes a precisely thought-through and therefore reasonable design.

Ratzinger, J. (1986) *In the Beginning: A Catholic Understanding of the Story of Creation and the Fall*; Eerdmans: Grand Rapids, pp. 56-57.



- It is the affair of the natural sciences to explain how the tree of life in particular continues to grow and how new branches shoot out from it. This is not a matter for faith. But we must have the audacity to say that the great projects of the living creation are not the products of chance and error... (They) point to a creating Reason and show us a creating Intelligence, and they do so more luminously and radiantly today than ever before.

Three of Ratzinger's points:

- Life is designed
- *Physical* evidence
 - "the great projects of the living creation [which] point to a creating Reason"
- Biochemistry

**One Long Argument:
The religion behind the scientific arguments for evolution**
By Cornelius George Hunter

Overview of Lectures

- One Long Argument: The religion behind the scientific arguments for evolution
 - Weak scientific evidence
 - Strong metaphysical claims
- Darwinism: Apologetics, natural theology and the religion in evolution (1600-present)
 - Pre Darwinian thought on God’s role in natural history
 - Reactions to natural theology and apologetics
 - The Darwinian Turn
 - Today’s belief categories around evolution
- “Nothing in biology makes sense except in the light of evolution.”
 - Theodosius Dobzhansky, 1973

**One Long Argument:
The Scientific Arguments and Evidence for/against Evolution and
the religion behind the science**

- Comparative anatomy
- Small scale evolution
- The fossil record
- The negative evidence

First Category

- Comparative anatomy
 - **Similarities between species**
 - Hierarchical classification
 - Vestigial organs
 - Molecular comparisons
- Small scale evolution
- The fossil record
- The negative evidence

Darwinism: Apologetics, natural theology and the religion in evolution (1600-present)

By Cornelius George Hunter

Outline

- Pre Darwinian thought on God's role in natural history
- Reactions to natural theology and apologetics
- The Darwinian Turn
- Today's belief categories around evolution

Pre Darwinian thought on God's role in natural history

Pre Darwinian Cosmogonies

- The world created by natural processes
- Rene Descartes (1596–1650)
 - Universe formed from vortices
- Many other theories involving comets, etc.
 - Thomas Burnet (1635–1715)
 - *The Sacred Theory of the Earth*, 1681
 - Edmund Halley (1656–1742)
 - Renown astronomer
 - William Whiston (1667–1752)
 - Isaac Newton's successor at Cambridge

Pre Darwinian Cosmogonies

- Not an example of empiricism
 - Little scientific evidence involved
- Not an example of Bacon's utilitarianism
 - Where science was to seek practical solutions for humanity
- An example of natural explanations outside the realm of empiricism and practical value
 - Natural explanations replacing God's creative acts
 - Thomas Huxley acknowledged evolution's debt to the Cartesian worldview
 - Why? ...

Inventions, Algorithms, and Biological Design

By John Bracht

Abstract—This paper outlines a new model for understanding biological invention, based upon an extensive study of human inventiveness originating in Russia shortly after the Second World War. This science, known as the Theory of Inventive Problem Solving and referred to by the Russian acronym TRIZ, relies upon the study of human patents to reveal general principles of invention. TRIZ recognizes two distinct mechanisms of invention, operating upon two distinct types of problems. The first, trial and error, is a remarkably accurate description of the neo-Darwinian mechanism, natural selection. Furthermore, the trial and error mechanism has been found to be severely limited in the sorts of problems it can solve; these limitations are also found to apply to the Darwinian mechanism. The second mechanism, lacking an explicit TRIZ name but referred to here as the intentional mechanism, is the source of true inventiveness. The science of evolutionary programming gives insight into precisely why the intentional mechanism is required; certain fundamental parameters must be given before the Darwinian mechanism can even operate and these parameters are themselves out of reach of the Darwinian mechanism. Certain key events in the history of life require alterations of this sort of fundamental parameter, and it is precisely these events that the neo-Darwinian model fails to explain. Consequently, it is the inescapable conclusion that there is a second mechanism, an intentional mechanism, which operates in nature and is responsible for the changes that are not accountable via the Darwinian mechanism.

Introduction

Invent: to produce or contrive (something previously unknown) by the use of ingenuity or imagination. —*The American Heritage Dictionary, second college edition, 1985*

A defining feature of intelligent agency is inventiveness—the production of something previously unknown and, by definition, new. The painter and poet, engineer, inventor, and scientist all rely upon some form of invention to ply their trade. Inventiveness has long been the object of study with the goal of enhancing the problem solving process. The ancient Greeks began the search for heuristics in hopes of discovering a universal problem-solving, inventive procedure. Indeed, the art of invention appears to be a fundamental human activity; early human remains are recognized, in part, by the presence of tools and other artifacts that were invented.

Yet for its importance, the art of invention remains largely mysterious. Inventor John Rabinov commented, “it would be nice if inventions were the result of a logical and systematic process. Unfortunately, this is usually not the case. They are the product of what psychologists call ‘intuition’—a sudden burst of inspiration; a process hidden inside the human mind.”¹

Nonetheless, a detailed study of human inventions, recorded in patent records in the former Soviet Union, has provided key insights into the inventive process and a unifying framework that is broadly applicable to other fields—particularly, the study of biological organisms. Biological evolution is undoubtedly an inventive process, capable of generating a vast catalog of “inventions” –the biotic world. The insights gained from the study of human patents provide a model of how inventive processes work; thus, insight into how life itself has come to be.

Inventor and author Genrich Altshuller began the study of Soviet patents in 1946. In his lifetime, he studied 400,000 patents. Since that time, the founding members of the “Theory of Inventive Problem Solving”—known by its Russian acronym “TRIZ”—have extended this study to over 2 million patents. However, only since the downfall of the Soviet Union has TRIZ been available to those in the West. In the last 10 years TRIZ has been making large inroads into the US through conferences and seminars aimed at teaching people how to use TRIZ in business and industry.

**PHILOSOPHICAL IMPLICATIONS OF INTELLIGENT DESIGN & NEO-DARWINISM:
BIOETHICS & PERSONHOOD**

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By Eddie N. Colanter, Co-President of the IDEA Center

In this lecture, I will give a broad overview of the concepts concerning the philosophical implications (PI) of intelligent design (ID) and neo-Darwinism (ND), sometimes referred to as scientific materialism or atheistic naturalism. My focus will then be to contrast the PI of ID and ND, as they are applicable to the issues of bioethics and the concept of personhood. This is of vital importance because the way we treat human beings is largely influenced by what we think human beings are. In other words, all the professions, medicine, law, theology, and perhaps others, are based or structured by their concepts or beliefs of what it means to be a human being. Moreover, I will try to answer or at least touch on the following questions: Do human beings have a nature or an essence? Do they have a soul? Do they have moral status? Are they merely the products of time plus matter plus chance? If this is the case, can ND account for some of our basic notions of morality, human rights, and justice? I will explore the PI of ID and ND in this context. And by contrasting the two, I hope to demonstrate the philosophical and practical advantages of ID in regard to bioethics, personhood, and in general, meaning, purpose, and value. I will also try to show the strength and advantages of the historic Judeo-Christian worldview, over and against ND, in answering these pertinent questions.

1. What is intelligent design and neo-Darwinism?

i) What is science?

ii) presuppositions of science

a) the existence of the external world

b) the orderly nature of the external world and its knowability

c) the uniformity of nature and induction

d) laws of logic, epistemology, and truth; correspondence theory of truth

e) the reliability of the senses and the mind

f) the adequacy of language to describe the world

g) mathematics and the existence of numbers

h) the concepts of formal ontology

iii) limitations regarding the knowledge of origins

⁴ Portions of this outline are not referenced or footnoted and are based on information from the reading list (below). For more information, please contact Eddie N. Colanter at 760-685-2464.

Promoting Design on a College Campus: How to start an 'IDEA Club'
By Casey Luskin

- *Do you want to help expose students to scientific evidence that supports intelligent design?*
- *Do you care about people who are grappling with issues related to origins and creation-evolution?*
- *Do you like to build bridges, promote intellectual inquiry, make friends, and have fun?*

If you answered yes to all three questions, then you may be interested in starting an "Intelligent Design and Evolution Awareness (IDEA) Club" at your university or high school!

In founding an IDEA Club, you would take upon yourself the responsibility of having a formal position of leadership in helping others to explore this important issue of origins. Furthermore, you will be acting as a representative of the IDEA Center as you help other people deal with an issue which could lead to radical life and worldview changes.

The IDEA Center is a non-profit organization which grew out of the original IDEA Club at UCSD, that today helps interested students start and maintain IDEA Clubs. The Center believes that a good understanding of the origins (i.e. creation – evolution) issue is crucial to how we view the world, both as individuals and as a society. The Center is committed to helping people gain a better understanding of the scientific, philosophical, and religious issues surrounding origins. We approach the issue from a pro-intelligent design and Christian viewpoint. However, we are careful to take a scientific, non-dogmatic, and intellectually open approach to this issue, because we are committed to scientific truth; we feel that the scientific evidence supports the scientific positions that we take. In promoting our views, we feel that friendship, honesty, and “loving people” are just as important as advocating a truthful and accurate viewpoint. These tenets form the basis for our activities.

The following are some practical and material ways that we, at the IDEA Center, hope to serve clubs by providing:

- The right to use the name "Intelligent Design and Evolution Awareness Club" and "IDEA Club."
- Connection to a network of other IDEA Clubs doing the same things you are.
- IDEA Club Leadership training conferences.
- Connections to many speakers and authors in the intelligent design movement.
- Scientific papers, writings, and other materials to spark intelligent design discussions.
- An e-mail help-support staff along with tools, tips, and help creating Club websites.

For individuals serious about starting clubs that meet some basic requirements, we do have IDEA Club Startup Packets available. For more information, please contact the IDEA Center at info@ideacenter.org or visit us on the web at www.ideacenter.org