

Creation & Intelligent Design Vs. Evolution

Science and the Principle of Causality

Science is based on logic, first principles, and assumptions. We have faith in reason and reason demonstrates that there is a thinking entity independent of human thought. *Science is a matter of faith* in that it puts faith in the fact that logic and reason are reliable and can be used to find truth. If logic was not reliable, science has no basis.

The principle of causality states that every event has an adequate cause. In other words, that there is a necessary and sufficient condition that must exist for every effect. This is a philosophical assumption, not a reasoned one, upon which the discipline of science rests.

Proving the reliability of the causality principle: Try the logic & truth test!

- (LID) Every event has an adequate cause.
- (LEM) An event either has a cause or does not have a cause.
- (LNC) Something that does not happen (a non-event) does not have a cause.

Since the LNC is true, the LID must be true also. Every event must have a cause, therefore the principle of causality is reliable.

The Cause of the Cosmos

Are the Cosmos caused or uncaused? Basically, we have to ask whether the Cosmos had a beginning, because if the universe is eternal and unchanging we must assume that there is no "first cause". If the universe had a beginning then a "first cause" must have existed to set it in motion. Much study has been spent trying to answer this question and there are now many evidences that suggest the universe is currently expanding and therefore had a beginning.

If we look at the universe as being caused, and therefore having a beginning, we must either have an expanding or collapsing universe. Several evidences are presented below that show that the expanding view is the correct one, and the logical conclusion of that view is that the universe once existed as a single point sometime in the distant past. This implies that there was a "Big Bang" that began the universe, expanding it from a single dimensionless point out into the cosmos we see today.

- Einstein's Cosmological Constant
 - When solving some of his equations for General Relativity, Einstein had to include a cosmological constant to account for the fact that he expected an unchanging universe, not an expanding one.
 - Refinements later found that if we assume an expanding universe this constant is no longer needed.
- Radiation Echo
 - Assuming the Big Bang occurred, physicists expect that there should still be a residual "echo" of the radiation that was created during the Big Bang. A satellite called COBE was launched several years ago for the exact purpose of measuring this background radiation and creating a map of it. When completed, the radiation measured matched the predictions so exactly that a graph of the measurements have error bars that are too small to see.
- Redshift
 - Light travels at a constant speed, but the space between locations is expanding, so we should expect that stars that are farther away from us appear to be shifted towards the red end of the spectrum due to the space in between stretching. Observations of distant stars and galaxies confirm this phenomenon.

Macro-evolution

Evolutionary theory does not consider the origin of life, but rather the development of living species after its first appearance on Earth. It is important to understand the difference between macro-evolution and micro-evolution, as explained below.

- Macro-evolution: any evolutionary change *at or above the level of species*. It means *at least* the splitting of a species into two (*cladogenesis*, from the Greek meaning "the origin of a branch") or the change of a species over time into another (*anagenesis*, nowadays not generally accepted)
 - Cladogenesis example - "Darwin's finches" South American species split and uniquely adapted to environment of Galapagos Islands
 - Anagenesis example - hard to find a good example, individual-based preference on when species has evolved enough to assign a new name
- Micro-evolution: any evolutionary change *below* the level of species, refers to changes and their effects on the form (phenotype) of organisms that make up that population or species. It can also apply to changes within species that are not genetic.
 - Mutation or natural selection example - Black peppered moths became more common than white peppered moths after forest environment darkened due to industrial pollution.

Recommended Reading for Further Study

- ***Unshakable Foundations* by Norman Geisler & Peter Bocchino (Intelligent Design)**
- *The Language of God* by Francis S. Collins (Theistic Evolution)
- *Darwin's Black Box* by Michael Behe (Intelligent Design)
- *Evolution for Everyone* by David Sloan Wilson (Evolution)
- *Finding Darwin's God: A Scientist's Search for Common Ground Between God and Evolution* by Kenneth Miller (Theistic Evolution)
- *Fingerprint of God* by Hugh Ross (Old Earth Creationism)
- *The Genesis Flood* by Henry M. Morris and John C. Whitcomb Jr. (Young Earth Creationism)

Discussion Questions

1. What experiences have you had discussing this topic with other believers? Non-believers? How do you think evolution or creation should affect our behavior as Christians, if at all? If you have not yet had discussions on this topic, which theory would you stand by and why? What influences have you received on either evolution or intelligent design?
2. What implications do each of the theories (if they are true) have for the Body of Christ as a whole and the Christian doctrine? What implications do they have for you as an individual? How much weight should we give to the origins discussion when sharing our faith?
3. Do you think there is any conflict between science and religion? Should there be one, and how should we resolve that conflict, if so? Can you think of any Biblical evidence that supports evolution or any non-Biblical evidence that supports creationism?

Macro-evolution and Intelligent Design Chart

	Macro-evolution			Intelligent Design		
	Gradualism	Punctuated Equilibria	Theistic Macro-evolution	Young Earth	Old Earth (Day-Age)	Irreducible Complexity
Person(s) Responsible (Modern Supporters)	Charles Darwin, (Stephen Hawking, Richard Dawkins)	Stephen Jay Gould, (Niles Eldredge)	Francis Collins, Kenneth Miller, (Eugenie Scott)	(Kent Hovind)	(Hugh Ross, Gerald Schroeder)	Michael Behe
Theory originated	1800's	1972	1990's	1600's	1900's	1990's
Existence of the universe	Not addressed, no purpose or reason	Not addressed	God created, left to evolution	God created in 24 hour days	God created in million-year "days"	God created
Age of Earth	4.5 billion y	4.5 billion y	4.5 billion y	6000 - 10000 y	4.5 billion y	4.5 billion y
Species	Change occurs at a very slow pace Process of natural selection and random micro-evolutionary mutations at the genetic level leads to the gradual emergence of a new life form	Species remain within their own genetic limits for very long periods of time Environmental pressures force species to "burst forth" (sudden punctuations) into new life forms	Life created by God Macroevolution created by God to bring about new life forms and eventually the human race	Species were created fully designed as they exist today "great creatures of the sea...every winged bird...livestock and wild animals"	Created as they exist today	Species vary within a certain range, but certain cellular machines can not be reduced to any smaller components
Origins of Humanity	Humanity is part of the common descent, developed out of primates	Same as gradualism	Same as gradualism, but believes human consciousness is the result of divine interaction (Not universal)	Humans were created as they existed now, exactly as described in Genesis	Humans were created as they exist now, a long time after the creation of the earth	Nothing specific, but assumes intelligent design (God) is responsible for humanity and our consciousness
Supporting arguments	Predicts a large class of transitional fossils Large body of scientific evidence in multiple fields. (paleontology, geology, biology)	An explanation for the many large gaps in the macro-evolutionary phylogenetic tree Explains cases in the fossil record where large bursts of new species occur from time to time	Accepts all of the naturalistic evidence and theory without excluding God from the picture	(For believers) Literal translation of the Bible. (For nonbelievers) Humans have reason and logic, distinct from other species	Same as Young Earth, but avoids some issues by accepting a very old earth	Some cellular components or processes are extremely complex and have interlocking components
Main criticisms	No fossil records of intermediate species Assumes an naturalistic worldview	It's simply a rearranging of the facts in gradualism, it doesn't contribute anything new Created simply to explain certain hard situations in gradualism	Same criticisms as standard macroevolution	Doesn't match the Earth's appearance of extreme age	Species have changed considerably over the ages, which conflicts with species created in their final forms	Examples may actually be reducible