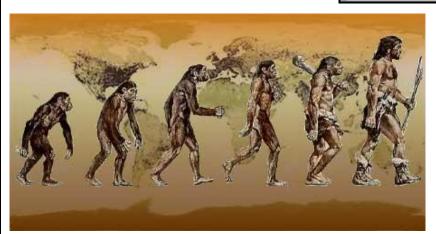
Apologetics Outreach: Challenging the Secular

4. Is Evolution True?



Who are we? Where did we come from? In addition, where are we going? These questions have pondered theologians, philosophers and scientists. The meaning of our existence frees us to pursue truth. If we are accidents, let us eat drink and be merry for tomorrow we die. If created by an eternal, "First Cause", we can pursue the questions of life. Why we are here and where are we going?

Based on the cosmological (cosmos) and the teleological

(design) arguments, it is logical to conclude the existence of a "First Cause" for the universe and for life. In addition, the moral argument demonstrates without moral absolutes and objective truth there can be no right or wrong. Man is merely a random collection of protein molecules nothing more or less then a collection of rocks at the bottom of a canyon. Is there way to know the "First Cause"? What was the process for life to exist? Was the First Cause active in creation? The debate on the process of life's existence has been divisive. There are two camps with subsets to each view.

Evolution (Macroevolution) and Design/Creation are two diametrically opposed views. Geisler defines evolution,

Macroevolution is a theory or model of origins that holds to the dea that all varieties of life forms emanated from a single cell or "Common ancestor". Macroevolutionist believe that once the first living cells came into existence, it was just a matter of time, natural selection, and random molecular biological changes in their genetic information systems (mutations) that caused new characteristics (microevolutionary changes) to occur.¹

The creation or design model is a theory diametrically opposed to the theory of Macroevolution, Geisler writes,

The design model is a theory of origins asserting that all life forms were designed to experience only limited genetic variations (microevolution) in order to adapt to and survive the stresses caused by environmental changes.²

The difference between these two theories is presupposition. Macroevolution assumes there was no outside intelligence involved in the process of life's creation. Design assumes there was outside intelligence involved in the process.

How does the Macroevolution work? Macroevolution assumes there is no outside

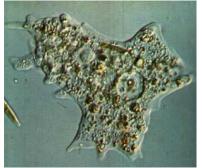


intelligence involved in the process of life's existence. The main factors are chance and environment. Following the explosion of matter from nothing, into the universe (Big Bang), the universe expanded outward. Large gaseous clouds of matter condensed into stars and collected into galaxies. Around our star, the sun, formed planets composing our solar system, the planet earth, had the right mixture of environmental factors conducive to life. In a pond of water, a primeval soup,

¹ Geisler & Bocchino, Unshakable Foundations, Bethany House, 2001, pg. 141

² ibid, pg. 143

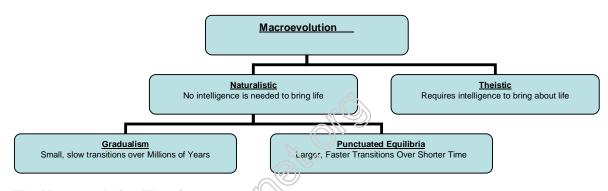
the right collection of chemicals and environment formed protein molecules. These molecules later would form into more complex protein molecules. With the right environment and time, random collections of chemicals became living matter, a one-celled organism. With *natural*



selection and *mutation*, this first cell was able to multiply. This cell became the basis of all future life forms.

The first life like all living matter to follow is made of carbon-based molecules with its genetic blueprints encoded in DNA. The cell had the ability to adapt to its environment through natural selection (Microevolution)³. However, in order for this cell to transition to a more complex form, what is the mode of operation? Since there is no outside intelligence involved, (According to the theory of macroevolution) how does a one cell living organism obtain additional information? The problem this first living cell would have to overcome in the evolution of itself into a more complex life form is solved as a result genetic mutation.

Mutation is inherent in the macroevolution model of life. There are three views of macroevolution.



The Macroevolution Theories Gradualism

Gradualism calls for an organism to change at a very slow pace by the process of natural selection and random micro-evolutionary mutations at the genetic level, which would gradually lead to the emergence of a new life form.⁴

Punctuated Equilibria

This theory attempts to find a solution to the lack of transitional forms. It demands that life forms remain within their own genetic limits for very long periods of time (Stasis), until environmental pressures force to "burst forth" (sudden punctuations) into new life forms. ⁵

Theistic Evolution:

Theistic macroevolution believes God is the cause behind life on the earth, but that He uses macroevolution to bring about new life forms and eventually the human race. This theory was developed by theists who thought that macroevolution had some academic merit.

Many theistic macroevolutionists who believe in gradualism believe that bringing God into the model relieves them of the nagging problem of the need for an intelligent cause.⁶

³ Natural Selection, microevolution, is system of genetic variety within a living system. The living system naturally selects, by survival, what genetic traits will dominate. For example short necked giraffes die because they are unable to reach the leaves on the tree. Long necked giraffes survive and become the dominate gene for giraffes. No new genetic information is introduced into the system.

⁴ Geisler & Bocchino, Unshakable Foundations, Bethany House, 2001, pg. 164

⁵ ibid, pg. 164

⁶ Geisler & Bocchino, Unshakable Foundations, Bethany House, 2001, pg. 170-171

What is mutation?

Genetic mutation or transmutation is the method one species transitions to another species in macroevolution via its genetic blueprint.

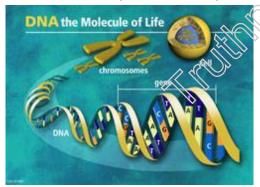


The transition of life from lizard to eagle according to those who believe in Macroevolution is the result of a series of mutations and natural selection. Additional

information is introduced into the living system's genetic blueprint. This mutation followed by the natural selection, selects those aspects that are beneficial, allowing "upward" mutation. This "new" genetic information is passed to following generation. These transitional forms are the precursors of today's life forms. However, the fossil record of these forms is nonexistent. Dr. Etheridge from the British Museum commented on this lack of transitional forms,

"Nine-tenths of the talk of evolutionists is sheer nonsense, not founded on observation and wholly unsupported by facts.

This museum is full of proofs of the utter falsity of their views. In all this great museum, there is not a particle of evidence of the transmutation of species.⁷



Natural Selection (Microevolution)

Microevolution is distinct from macroevolution no



mutation is involved. Microevolution or adaptation uses the genetic variety already in the system of the living organism. For example, within every person is a gene code with genetic potential. If a 7-foot woman man married, a 5-foot man there is a certain probability that if they had 100 children a certain percentage will be 7 foot and 5 foot. However, zero probability that they will develop wings. In order for the couples children to develop wings new genetic information needs introduction into their genetic

code. Since there is no outside intelligent source for this information, mutation is the only viable method. This is the difference between microevolution and macroevolution. Darrel Kautz, author of the Origin of Living Things comments on this distinction.

"People are misled into believing that since microevolution is a reality, that therefore macroevolution is such a reality also. Evolutionists maintain that over long periods of time small-scale changes accumulate in such a way as to generate new and more complex organisms ... This is sheer illusion, for there is no scientific evidence whatever to support the occurrence of biological change on such a grand scale.

In spite of all the artificial breeding which has been done, and all the controlled efforts to modify fruit flies, the bacillus

⁷ Dr. Etheridge,

World famous palaeontologist of the British Museum

escherichia (E-coli), and other organisms, fruit flies remain fruit flies, E-coli bacteria remain E-coli bacteria, roses remain roses, corn remains corn, and human beings remain human beings." ⁸

This difference between microevolution and macroevolution is a point of confusion for many. Artists produce pictures, which are not justified by facts but based on imagination. These pictures are then confused with Microevolution, based on science. Adaptation within species is not a



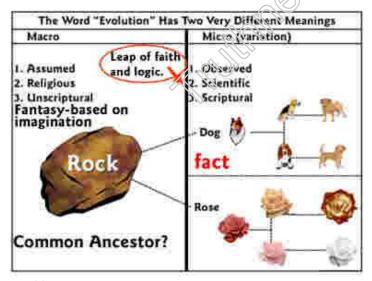
disputable issue, but is observable. Macroevolution is not observed anywhere in the fossil record.

Darwin trip on the beagle documented microevolution not macroevolution.

Isolated in the Galapagos Island, Darwin discovered finches that had much longer beaks than those found off the island. His assumption was that evolution was changing this species. However, these finches remained finches. Princeton professor Peter Grant completed an 18-year study of the finches on this island. He concluded that during drought years, the finches with shorter beaks died off because with a limited supply of seeds, only those that could reach the grubs living under tree bark could survive. With limited resources on a small island, these finches could not migrate to find food. We clearly observe natural selection, but not macroevolution. However, it is not a permanent change. The finch offspring with shorter beaks prospered during seasons of plenty. Natural adaptation is the function of microevolution. There are three plainly observable

principles to microevolution.

- 1. A trait will alter because of a stimulus.
- 2. The trait will return to the norm if left to nature or returned to its original conditions.
- 3. No new information is added to the DNA.



One of the best examples of the creation of macroevolution evidence is the story of Piltdownman used in the scopes monkey trial. (See Below)

The Problems with Macroevolution

There are severe problems with macroevolution as demonstrated in the illustration. Macroevolution ultimately argues that man came from rock. With no transitional fossils, and mathematically probability rendering evolution impossibility those holding such a view are operating under blind faith with little logic behind the

position.

1. Complexity of Life

⁸ Darrel Kautz, The Orgigin of Living Things, pg. 6

Describing how a theory works and examining its probability are two separate issues. Each protein molecule is a particularly organized structure composed of about twenty different amino acids, and each amino acid is made up of four elements hydrogen, oxygen, nitrogen and carbon (in two cases a sulfur atom is also present).

These complex systems are all, in the case of every known organism, reproduced and assembled on the basis of the "instructions" built into the DNA molecular system. DNA (deoxyribonucleic acid) is composed of six simpler molecules; these consist of four bases, the arrangement of which specifies the message, made up of nitrogen, oxygen, hydrogen and carbon, along with a deoxyribose sugar molecule and a phosphate molecule which hold the bases in place.

The DNA molecule not only has information required for the synthesis of the specific protein molecules needed by the cell, but also that needed for its own replication. Thus, reproduction and inheritance depend directly on this remarkable molecule, as organized differently and specifically for each kind of organism.

Thus, the problem of abiogeneis devolves upon the method by which the first replicating system evolved. The insuperable barrier; however is that DNA can only be replicated with the specific help of certain protein molecules (enzymes) which, in turn, can only produced at the direction of DNA. Each depends on the other and both must be present for replication to take place.⁹

2. Parallel Evolution

Yet, somehow, if the evolution model is valid, wings have "Evolved" four different times (in insects, flying reptiles, birds and bats) eyes have "evolved" independently at least three times. Salisbury has recently commented on this remarkable fact as follows:

"My last doubt concerns so-called parallel evolution...Even something as complex as the eye has appeared several times; for example, in the squid, the vertebrates, and the arthropods. It's bad enough accounting for the origin of such things once, but the thought of producing them several times according to the modern synthetic theory makes my head swim."¹⁰

3. Genetic Mutations

Mutation is the most important component in macroevolution; this is the mechanism to produce the required upward progress in complexity. There are serious problems with mutations.

1. Mutations are random, not directed.

"It remains true to say that we know of no way other then random mutation by which new hereditary variation comes into being, nor any process other than natural selection by which the hereditary constitution of a population changes from one generation to the next."¹¹ 2. Mutations are rare

"It is probably fair to estimate the frequency of a majority of mutations in higher organisms between one in ten thousand and one in a million per gene per generation"¹² 3. *Good Mutations are very, very rare.*

"But mutations are found to be of a random nature, so far as their utility is concerned. Accordingly, the great majority of mutations, certainly well over 99%, are harmful in some way, as is to be expected of the effects of accidental occurrences"¹³

4. The Net Effect of All Mutations is Harmful

"The large majority of mutations, however, are harmful or even lethal to the individual in whom they are expressed. Such mutations can be regarded as introducing a 'load' or genetic burden, in the pool. The term genetic load was first used by the late H.J. Muller who

⁹ Morris, Henry, Scientific Creationism, Master Books, 1985 pg. 47

¹⁰ Ibid, Pg. 53

¹¹ C.H. Waddingon, The Nature of Life (New York: Atheneum, 1962), P. 98

¹² Francisco J. Ayala, "Teleological Explanations in Evolutionary Biology" Philosophy of Science, Vol. 37 (March 1970), p. 3.

¹³ H. J. Muller, "Radiation Damage to the Genetic Material", American Scientist, Vol. 38 (January 1950), P. 35

recognized that the rate of mutations is increased by numerous agents man has introduced into his environment, notably ionizing radiation and mutagenic chemicals" ¹⁴

5. Mutations affect and are affected by many genes.

It now appears that each gene affects many characteristics and every characteristic is controlled by many genes.

"Moreover, despite the fact that a mutation is discrete, discontinuous effect of the cellular, chromosome or gene level, its effects are modified by interactions in the whole genetic system of an individual."¹⁵

4. Improbability

1. Probability of a complex system arising instantly by chance.¹⁶

Assume a sea of freely available components, each uniquely capable of performing a specific useful function. What is the probability that two or more of them can come together by chance to form an integrated functioning organism?

As long as the number of components in the organism is small, the chance association in this way is a reasonable possibility. For example, consider two components, A and B. If they happen to link up in the form A-B, say the combined system will work, but B-A will not work. There is a $\frac{1}{2}$ probability of success.

If there are 3 components, A,B, and C there are six possible ways these can link up, ABC, ACB,BAC, BCA,CAB, and CBA. Since it is assumed that only one of these will work there is a 1/6 probability of success

The more the components the less the probability, consider, for example an organism composed of only 100 integrated parts. Remember that each of these parts must fulfill a unique function in the organism and so there is only one way in which these 100 parts can link up, the probability of a successful chance linkage is only one out of 10¹⁵⁸. (10 with 158 "zeros")

Research sponsored in part by NASA has shown that the simplest type of protein molecule that could be said to be "living" is composed of a chain of at least 400 linked amino acids, and each amino acid is a specific combination of four or five basic chemical elements. 2. Probability of Synthesis of DNA Molecule¹⁷

The problem discussed is oversimplified. A simple inked protein molecule, or any other such system, could never reproduce itself. In the voil of living organism, the phenomena of reproduction and inheritance are always directed by the DNA molecule. The evolution of life therefore must have involved somehow the accidental synthesis of the first such DNA molecule. Frank Salisbury, who is himself an evolutionary biologist, discusses this riddle as follows:

Now we know that the cell itself is far more complex than we had imagined. It includes thousands of functioning enzymes, each one of them a complex machine itself. Furthermore, each enzyme comes into being in response to a gene, a strand of DNA. The information content of the gene (its complexity) must be as great as that of the enzyme it controls. A medium protein might include about 300 amino acids. The DNA gene controlling this would have about 1000 nucleotides in its chain. Since there are four kinds of nucleotides in a DNA chain, one consisting of 1000 links could exist in 4¹⁰⁰⁰=10⁶⁰⁰. This number is completely beyond our comprehension.

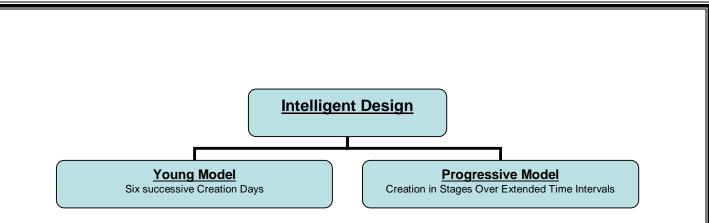
The Design Theory:

¹⁴ Christipher Wills, "Genetic Load", Scientific American, Vol 222 (March 1970), p. 98

¹⁵ George G. Simpson, "Uniformitarianism," Chap. 2 in Essays in Evolution and Genetics, 1970 pg. 80

¹⁶ Henry Morris, Scientific Creationism, Master Books, 1985, pgs. 59-60

¹⁷ ibid, pg. 62



The theory of creation as opposed to evolution sees the "First cause" of the universe as the designer of life. There are two views of the creation theory; Progressive and Young Earth.

Progressive Model

The progressive model teaches that God created life in stages that parallel the days of creation. The days in creation were not literal days, but successive periods.

Stages	Genesis Event	Verses	Science/Paleontology	
1-2	Creation of the space-time universe	1-5	Big Bang of cosmology (light bursts forth from darkness)	
2-3	Earth formed/water begins to condense/global sea emerges/atmosphere(expanse) created	6-8	Volcanic activity ends/Earth cools/ atmosphere forms over the sea (troposphere- greenhouse effect)	
3-4	Dry land created/Earth-moon system created/atmosphere becomes transparent (single-celled plant life created by now)	4,9-10	Origin of double planet system(theory of the origin of the moon from the Earth would create a basin in the earth for water to gather to one side)	
4-5	Creation of sea animals(multicellular to amphibians/reptiles/winged animals) creation of "Great reptiles" (the largest reptiles are dinosaurs)	14-19	Cambrian explosion/age of fish (array of multicellular animals having the body plans of virtually all creatures that now swim, fly or crawl throughout the world.)	
5-6	Creation of land animals(domesticated livestock, non-domesticated-wild) creation of mammals/human life	24-27	Age of amphibians/reptiles Age of mammals/humanity	

Young Earth

The young Earth model views creation from a literal 6 day, 24 hour creation. The universe is created with the appearance of age. Adam, for example, was not created as a baby but as a full-grown man with the appearance of age. The same can be said for the creation of wine at Cana, Jesus created wine from water a process that normally takes time, the wine had an appearance of age, though it was created moments prior. Supernatural events are not subject to the physical world. The creation of the universe is a supernatural event. Matter, space and time exploded into existence at God's creation of the universe.

What about Noah's Arc?

- The deposits of coal and oil underneath the Earth surface demonstrate living matter was covered by sedimentary deposits of the great deluge. Oil and Coal are the remains of dead living matter.
- Fossils only occur if living matter is immediately buried. The large numbers of fossils are the result of the deluge in Noah's day.
- Sea life fossils are the top of Mt. Everest in addition to the rest of the mountain chains.

٠	Languages, both written and spoken demonstrate that mankind was once a single tribal
	group that separated in the past.

Verse Day Bible					
	of				
	Crea tion				
Genesis 1:1-2		¹ In the beginning God created the heavens and the earth. ² The earth was without form, and void; and darkness [□] was on the face of the deep. And the Spirit of God was hovering over the face of the waters.	Creation of matter, space and time. Big Bang.		
Genesis 1:3-5	1	³ Then God said, "Let there be light"; and there was light. ⁴ And God saw the light, that <i>it was</i> good; and God divided the light from the darkness. ⁵ God called the light Day, and the darkness He called Night. So the evening and the morning were the first day.	Creation of light, and its physical properties.		
Genesis 1:6-8	2	⁶ Then God said, "Let there be a firmament in the midst of the waters, and let it divide the waters from the waters." ⁷ Thus God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament; and it was so. ⁸ And God called the firmament Heaven. So the evening and the morning were the second day	Condensation of matter to form the earth, Creation of the watery planet.		
Genesis 1:9-13	3	⁹ Then God said, "Let the waters under the heavens be gathered together into one place, and let the dry <i>land</i> appear"; and it was so. ¹⁰ And God called the dry <i>land</i> Earth, and the gathering together of the waters He called Seas. And God saw that <i>it was</i> good. ¹¹ Then God said, "Let the earth bring forth grass, the herb <i>that</i> yields seed, <i>and</i> the fruit tree <i>that</i> yields fruit according to its kind, whose seed <i>is</i> in itself, on the earth"; and it was so. ¹² And the earth brought forth grass, the herb <i>that</i> yields seed according to its kind, and the tree <i>that</i> yields fruit, whose seed <i>is</i> in itself according to its kind. And God saw that <i>it was</i> good. ¹³ So the evening and the morning were the third day.	The appearance of land, and separation from water, Plants are created with genetic variety,		
Genesis 1:14-19	4	¹⁴ Then God said, "Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years; ¹⁵ and let them be for lights in the firmament of the heavens to give light on the earth"; and it was so. ¹⁶ Then God made two great lights: the greater light to rule the day, and the lesser light to rule the night. <i>He made</i> the	The matter in the universe is organized and is turned on. The light and light sources are created. The Sun		

		stars also. ¹⁷ God set them in the firmament of the heavens to give light on the earth, ¹⁸ and to rule over the day and over the night, and to divide the light from the darkness. And God saw that <i>it was</i> good. ¹⁹ So the evening and the morning were the fourth day.	and moon. The stars in the universe is created for light on the earth during the night.
Genesis 1:20-24	5	²⁰ Then God said, "Let the waters abound with an abundance of living creatures, and let birds fly above the earth across the face of the firmament of the heavens." ²¹ So God created great sea creatures and every living thing that moves, with which the waters abounded, according to their kind, and every winged bird according to its kind. And God saw that <i>it was</i> good. ²² And God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth." ²³ So the evening and the morning were the fifth day.	All varieties of birds and sea animals are created each with genetic variety and limitations (kind)
Genesis 1:25-31	6	 ²⁴Then God said, "Let the earth bring forth the living creature according to its kind: cattle and creeping thing and beast of the earth, <i>each</i> according to its kind"; and it was so. ²⁵And God made the beast of the earth according to its kind, cattle according to its kind, and everything that creeps on the earth according to its kind. And God saw that <i>it was</i> good. ²⁶Then God said, "Let Us make man in Our image, according to Our likeness; let them have dominion over the fish of the sea, over the birds of the air, and over the cattle, over [−]all the earth and over every creeping thing that creeps on the earth." ⁽²⁷S) God created man in His <i>own</i> image; in the image of God He created him; male and female He created them. ²⁸Then God blessed them, and God said to them, "Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that creeps on the earth." ²⁹And God said, "See, I have given you every herb <i>that</i> yields seed which <i>is</i> on the face of all the earth, and every tree whose fruit yields seed; to you it shall be for food. ³⁰Also, to every beast of the earth, to every bird of the air, and to everything that creeps on the earth, in which <i>there is</i> life, <i>I have given</i> every green herb for food"; and it was so. ³¹Then God saw everything that He had made, and indeed <i>it was</i> very good. So the evening and the morning were the sixth day. 	Land animals and insects with genetic variety and kind are created. Man is created in the image of the "First Cause".

These website are very helpful for those seeking additional information <u>http://creationists.org/debates.html</u> Creation/Evolution Debates <u>http://www.icr.org/pubs/imp/</u> Impact articles

http://www.creationscience.com/ http://www.creationism.org/ http://www.gospelcom.net/faithfacts/ev_origins_b.html http://www.answersingenesis.org/



'Reconstruction' of the Piltdown skull by J.H. McGregor (1914)

Piltdown Man¹⁸

also called Dawson's dawn man (Eoanthropus dawsoni), proposed species of extinct hominid whose fossil remains, discovered in England in1910–12, were later proved to be fraudulent. Piltdown man, whose fossils were sufficiently convincing to generate a scholarly controversy lasting more than 40 years, was one of the most successful hoaxes in the history of science.

In a series of discoveries in 1910–12, Charles Dawson, an English lawyer and amateur geologist, found what appeared to be the fossilized fragments of a cranium, a jawbone, and other specimens in a

gravel formation at Barkham Manor, on Piltdown Common near Lewes in Sussex. Dawson brought the specimens to Arthur Smith Woodward, keeper of the British Museum's paleontology department, who announced the find at a meeting of the Geological Society of London on Dec. 18, 1912. Woodward claimed that the fossils represented a previously unknown species of extinct hominid (E. dawsoni) that could be the missing evolutionary link between apes and early humans. His claims were eagerly and uncritically endorsed by some prominent English scientists, perhaps because the Piltdown fossils suggested that the British Isles had been an important site of early human evolution.

As long as the remains were accorded a high antiquity, Piltdown man seemed a feasible alternative to Homo erectus (then known from scanty remains as Pithecanthropus) as an ancestor of modern humans. In 1926, however, the Piltdown gravels were found to be much less ancient than supposed, and from 1930, more finds of Pithecanthropus, the discoveries of the more primitive Australopithecus, and further examples of Neanderthal man left Piltdown man completely isolated in the evolutionary sequence. In 1953–54, as an outcome of these discoveries, an intensive scientific reexamination of the Piltdown remains showed them to be the skillfully disguised fragments of a quite modern human cranium (about 600 years old), the jaw and teeth of an orangutan, and the tooth probably of a chimpanzee, all fraudulently introduced into the shallow gravels. Chemical tests revealed that the fragments had been deliberately stained, some with chromium and others with acid iron sulfate solution (neither chromium nor sulfate occurs in the locality) and that, although the associated remains were of genuine extinct animals, they were not of British provenance. The teeth, too, had been subjected to artificial abrasion to simulate the human mode of flat wear.

The first solid evidence regarding the identity of the perpetrator emerged in 1996, two decades after a trunk marked with the initials M.A.C.H. had been discovered in storage at the British

¹⁸ Encyclopedia Britanica, 2004 "Piltdown Man"

Museum in 1975. Upon analyzing bones found in the trunk, the British paleontologists Brian Gardiner and Andrew Currant found that they had been stained in the exact same way as the Piltdown fossils. The trunk apparently had belonged to Martin A.C. Hinton, who became keeper of zoology at the British Museum in 1936. Hinton, who in 1912 was working as a volunteer at the museum, may have treated and planted the Piltdown bones as a hoax in order to ensnare and embarrass A.S. Woodward, who had rebuffed Hinton's request for a weekly wage. Hinton presumably used the bones in the steamer trunk for practice before treating the bones used in the actual hoax.

THUMMER.