Disclosure

of things evolutionists don't want you to know

Volume 21 Issue 10 www.ScienceAgainstEvolution.info July 2017

The Whole Tooth

The latest theory about human evolution is based on the tooth, and nothing but the tooth.

If you can't keep up with all the different theories about when and where humans evolved, we don't blame you. We have trouble keeping up with the changing "truth" about human evolution. Here is the latest criticism of the Out-of-Africa Theory in the professional literature, which we think is still believed by most evolutionists (but we can't be sure).

> Europe, not Africa, might have spawned the first members of the human evolutionary family around 7 million years ago, researchers say.
>
> Tooth characteristics of a chimpanzee-sized primate that once lived in southeastern Europe suggest that the primate, known as *Graecopithecus*, may have been a hominid, not an ape as many researchers assume. One tooth in particular, the second lower premolar, is telling. It features two partially fused roots, a trait characteristic of early hominids but not ancient apes, a team led by geoscientist Jochen Fuss of the University of Tübingen in Germany reports May 22[, 2017,] in *PLOS ONE*.
>
> […] it's not known whether this creature regularly walked upright, a signature hominid behavior. [1]

Graecopithecus got its name because its discoverer believed it was a Greek ape. But now, on the basis of one tooth, Fuss and his associates believe it was a primitive human, not an ape, and have said so in a very long article published in the Public Library of Science journal, *PLOS ONE*. Here is the abstract of that article:

> **Abstract**
>
> The split of our own clade from the Panini [chimps] is undocumented in the fossil record. To fill this gap we investigated the dentognathic morphology of *Graecopithecus freybergi* from Pyrgos Vassilissis (Greece) and cf. *Graecopithecus* sp. from Azmaka (Bulgaria), using new µCT and 3D reconstructions of the two known specimens. Pyrgos Vassilissis and Azmaka are currently dated to the early Messinian at 7.175 Ma [million years ago] and 7.24 Ma. Mainly based on its external preservation and the previously vague dating, *Graecopithecus* is often referred to as nomen dubium [dubiously named]. The examination of its previously unknown dental root and pulp canal morphology confirms the taxonomic distinction from the significantly older northern Greek hominine *Ouranopithecus*. Furthermore, it shows features that point to a possible phylogenetic affinity with hominins. *G. freybergi* uniquely shares p4 partial root fusion and a possible canine root reduction with this tribe and therefore, provides intriguing evidence of what could be the oldest known hominin. [2]

We note in passing that the "missing link" is still missing, or, as Fuss prefers to say, "undocumented in the fossil record."

Notice also that he believes the tooth is 7 million years old. If he believed the tooth were 1 million years old, or 65 million years old, he would

[1] Bruce Bower, *Science News*, June 24, 2017, "European fossils may belong to earliest known hominid", page 9, https://www.sciencenews.org/article/european-fossils-may-belong-earliest-known-hominid

[2] Fuss, *et al*., *PLOS ONE*, May 22, 2017, "Potential hominin affinities of *Graecopithecus* from the Late Miocene of Europe", http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0177127

have come to a different conclusion. The assumed age of the tooth, and the assumed evolutionary timeline, influence his conclusion. His conclusion is then offered as proof of the assumed evolutionary timeline. This is an invalid form of reasoning called, "circular logic."

The Evidence

> In this study, we propose based on root morphology [the shape of the root of a tooth] a new possible candidate for the hominin clade, *Graecopithecus freybergi* from Europe. *Graecopithecus* is known from a single mandible [jaw] from Pyrgos Vassilissis Amalia (Athens, Greece) and possibly from an isolated upper fourth premolar (P4) from Azmaka in Bulgaria (Fig 1A and 1B). A new age model for the localities Pyrgos Vassilissis and Azmaka, as well as the investigations on the fauna of these localities confirms that European hominids thrived in the early Messinian (Late Miocene, 7.25–6 Ma) and therefore existed in Europe ~ 1.5 Ma later than previously thought. [3]

The only fossil evidence for *Graecopithecus* is a jaw from Greece and (maybe) a single tooth from Bulgaria. Fuss believes the single Bulgarian tooth does, in fact, come from the same species of critter known from the Greek jawbone, and bases his analysis on that belief.

Fuss gives this brief history of the jaw in question:

> The type mandible of *G. freybergi* was found in 1944 by von Freyberg, who mistook it for the cercopithecid *Mesopithecus* [an extinct monkey similar to a modern macaque]. In the first description by von Koenigswald the mandible was identified as a hominid. Some authors have concluded, based on external morphology and in particular the apparently thick enamel and large molars, that another hominid from Greece, *Ouranopithecus* (9.6–8.7 Ma), could not be distinguished from *Graecopithecus*, thus synonymizing the former with the latter. Other authors have consistently maintained a genus level distinction between *Ouranopithecus* (northern Greece) and *Graecopithecus* (southern Greece), based on the argument that the Pyrgos specimen is insufficiently well preserved to diagnose a taxon (nomen dubium) or based on anatomical arguments. [4]
>
> Here, we provide a detailed description of the Pyrgos and Azmaka specimens by using µCT based analyses and 3D visualisations. For the first time, their internal structures are examined in order to reveal previously unknown characters in root and pulp canal morphology. Additionally, previously described features are re-assessed and a new diagnosis of *G. freybergi* is given. Thereby, we address the taxonomic validity of *G. freybergi* and further, raise the possibility of a hominin affinity. [5]

I've Seen That Before

A "type fossil" is the first fossil discovered for a particular species. It becomes the reference fossil to which all subsequently discovered fossils are compared.

Von Freyberg found a jawbone which he thought was from a known, extinct monkey. When von Koenigswald took careful measurements on it, he realized that it was unlike that monkey, or any other critter, so he identified it as a hominid (a human ancestor). Hold that thought for a moment.

If, when taking a walk in the desert where I live, I find a rabbit skull or a coyote skull, I recognize it because I've seen those skulls before in the local museum. The museum knows what kind of skulls they are displaying because somebody donated a dead animal, and the bones were taken out of it and assembled into a complete skeleton for display. There is no question about what kind of skull it is because it has been observed scientifically to have come from a particular animal.

If I find a skull unlike any I have ever seen before, I don't imagine it came from a Purple People Eater [6], or any other unknown critter. It is not good scientific practice to speculate about the characteristics of an unknown creature based on a single tooth—but evolutionists do! For example, *Homo habilis* and Nebraska Man. [7]

When von Koenigswald studied von Freyberg's fossil, he had never seen anything like it before, so he knew it must have come from a human ancestor. ☺ If you have seen something before, you know what it is; but if you have never seen anything like it before, how can you be sure what it is?

Article Details

Of course, most of the article by Fuss is devoted to the measurements of various parts of

[3] *ibid.*
[4] *ibid.*
[5] *ibid.*
[6] Sheb Wooley - Purple People Eater (1958) https://www.youtube.com/watch?v=X9H_cI_WCnE
[7] *Disclosure*, March 2000, *Homo* "the Tool Man" *Habilis*, http://scienceagainstevolution.info/v4i6f.htm

fossil teeth that support the conclusion that *G. freybergi* was actually a primitive human, not the monkey it originally appeared to be. The whole argument depends upon whether you can deduce the properties of an unknown critter from the ratio of the length of a tooth from its width, and lots of other measurements.

We don't doubt that one can take lots of measurements and tell if they fall within the normal range of measurements for a known species, and make a reasonable conclusion that the tooth did come from that species. We do doubt that one can deduce the posture and manner of walking of a previously unknown critter simply from measurements of its teeth.

How Old is It?

There was a second article in that journal which explained how they determined that the tooth was just the right age to be a missing link. As noted in the third passage we quoted, they used "a new age model," perhaps in both senses of the term, "new age."

> **Abstract**
>
> Dating fossil hominids and reconstructing their environments is critically important for understanding human evolution. Here we date the potentially oldest hominin, *Graecopithecus freybergi* from Europe and constrain the environmental conditions under which it thrived. For the *Graecopithecus*-bearing Pikermi Formation of Attica/Greece, a saline aeolian dust deposit of North African (Sahara) provenance, we obtain an age of 7.37–7.11 Ma, which is coeval with a dramatic cooling in the Mediterranean region at the Tortonian-Messinian transition. Palaeobotanic proxies demonstrate C4-grass dominated wooded grassland-to-woodland habitats of a savannah biome for the Pikermi Formation. Faunal turnover at the Tortonian-Messinian transition led to the spread of new mammalian taxa along with *Graecopithecus* into Europe. The type mandible of *G. freybergi* from Pyrgos (7.175 Ma) and the single tooth (7.24 Ma) from Azmaka (Bulgaria) represent the first hominids of Messinian age from continental Europe. Our results suggest that major splits in the hominid family occurred outside Africa. [8]

Their whole argument rests on accurate dating because if the fossil is older or younger than the presumed time when humans and apes split, then it can't be the missing link, and can't prove that the missing link lived in Europe, not Africa.

How do they know the age? The abstract leads one to believe they know the age from the kind of salts found in the dirt, the climate of Greece 7 million years ago, the kind of grass that grew there 7 million years ago, and the age of the other mammal fossils found with it. If you actually read the article, you get a slightly different story.

> The type mandible of *Graecopithecus freybergi* was found in the Athens Basin of southern Attica near Pyrgos Vassilissis Amalias, an area that is today largely overbuilt by the rapidly growing Greek capital. To resolve the site stratigraphy it is necessary to study the adjacent Mesogea Basin, which preserves the famous bone accumulations of Pikermi, which have been excavated for nearly 180 years and are displayed in museums worldwide. Both the Athens and the Mesogea basins developed during the Late Miocene by activation of a major detachment fault, which separates carbonates of the Internal Hellenides from Mesozoic metamorphic rocks (Fig 1). … Here we reconstruct environmental conditions from the two *Graecopithecus*-bearing sediment successions using grain-texture analysis, end-member modelling of grain-size distributions, geochemistry of soluble salts and provenance analysis of U-Pb ages of detrital zircons. We then provide age constraints on fossils and document environmental changes on the basis of combined bio-magnetostratigraphy and cyclostratigraphy. Furthermore, we analyse vegetation using phytoliths and palynology and discuss changes in large mammal associations to elucidate landscapes and the biogeography of this putative oldest hominin. [9]

They didn't actually date the dirt where the jaw was found in 1944 because people have built so many things there since then. Instead, they dated some nearby dirt that looks (to them) like it is the same age.

In the "Materials and methods" section, they describe the "new age model" they used. It depends upon grain-size analysis, silt grain texture, end member modeling of grain-size spectra, and dust mass accumulation rate to determine how old dirt similar to the dirt where the jaw was found is. What could possibly go wrong with that?

But they didn't stop there. They also used ion chromatography, and U-Th-Pb isotopes, which depend upon unverifiable assumptions of initial conditions. They also used magnetostratigraphy

[8] Madelaine Böhme, *et al., PLOS ONE*, May 22, 2017, "Messinian age and savannah environment of the possible hominin *Graecopithecus* from Europe", http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0177347

[9] *ibid.*

despite the fact that nobody really knows the strength or orientation of the Earth's magnetic field 7 million years ago. Since all these dating methods are so sketchy, they turned to astrochronology.

Astrochronology

Orbital tuning and astrochronology

For calibration we use the bio-magnetostratigraphic age constraints given by the Astronomically Tuned Neogene Time Scale (ATNTS2012) tuned to insolation seasonality at 40°N ($I_{40°N\ 21June} - I_{40°N\ 21Dec}$ of the astronomical solution La04 with present-day values for the dynamical ellipticity of the Earth and tidal dissipation by the moon). We use this insolation curve rather than the similar 65°N summer insolation and the summer inter-tropical insolation gradient (SITIG), because it appears more appropriate for the Mediterranean. High seasonal insolation contrast during precession minima and obliquity maxima has been attributed to increased Mediterranean winter rainfall related to convective precipitation.

Fluvial runoff and debris-flow occurrence are accelerated during times of increased seasonal precipitation, which is why we chose for orbital calibration to tune the mid-points of fluvial channel-trains (Chomateri Member) and debris flows (Red Conglomeratic Member) to insolation seasonality maxima. Our orbital tuning of the Pikermi Formation suggests that between sub-sections PV3 and PV1 less than a precession cycle is missing in our stratigraphic record. [10]

Dang it! Our BS detector just blew up! It produced such a loud warning tone that it tore up the speaker, the needle bent, caught fire and melted! They dated the tooth using tidal data from a computer model that told them how high the tides were 7 million years ago! No, we aren't kidding—and neither are they!

They chose the summer inter-tropical insolation gradient that gave them the answer they wanted, after tuning the mid-points. The technical term for this is, "fudging the data."

Science News quoted scientists who took this study seriously (but with possible reservations).

> For now, there is no way to know whether *Graecopithecus* jaws and teeth belonged to an ape with some hominid-like features or a hominid with some apelike features, says paleoanthropologist Bernard Wood of George Washington University in Washington, D.C. "My guess is the former."

[10] *ibid.*

> But fossil evidence of hominid origins in Africa is also sparse and controversial (*SN: 4/9/05, p. 227*), says paleoanthropologist David Begun of the University of Toronto, a coauthor of Fuss' study. [11]
>
> A lack of fossils from chimp and gorilla ancestors contributes to the difficulty of establishing whether creatures such as *Graecopithecus* and *Ar. kadabba* are truly hominids, says biological anthropologist Matthew Skinner of the University of Kent in Canterbury, England. [12]

The more we learn about the jaw and isolated tooth, the more convinced we are that they came from a Purple People Eater. ☺

Email

Scientific Bias

Is the scientific method valid if the scientist is biased?

Dear Do-While,

My question is about the scientific method. I know from your writing that you believe firmly in its importance. I can't deny that it serves to keep science honest, as long as scientists have the integrity to remain objective, but that's actually the problem with it. They don't.

It's the "develop a theory" part that I see as a flaw. In a field where brainpower is everything, who wants to admit that they are wrong? Nobody wants to submit research with a conclusion that says, "The evidence disproved my idea, so that's that, I guess."

However, I am unable to think of a better way. Simply observing without forming a theory would produce information without any significance attached. If you have the time, would you care to share your thoughts?

Also, if you know of any good, OBJECTIVE sources of science, for the pure sake of knowledge, not atheism and politics couched in scientific terms, let me know! I'm not smart enough to make much sense of many of the articles in peer-reviewed journals.

John

Both of John's questions have to do with bias in science. Does the scientist's expectation of a desired outcome negate the validity of the experiment? Are there any objective scientific sources? They are two good questions which deserve to be answered. First, let's examine if a desired outcome necessarily invalidates an experiment.

[11] Bruce Bower, *Science News*, June 24, 2017, "European fossils may belong to earliest known hominid", page 9, https://www.sciencenews.org/article/european-fossils-may-belong-earliest-known-hominid

[12] *ibid.*

Experimental Expectations

Yes, we firmly believe in the scientific method. The experimental part of the method is what gives it objective integrity. The experiment succeeds or fails regardless of what the scientist believes. The scientific method is a reliable way to discover the truth.

We also recognize, as John does, that some scientists are dishonest. Dishonest scientists can ignore results they don't like. They might fool themselves into believing that unexpected data points are "outliers," and need not be taken into consideration. They might even make up data to conform to what they think would have been the experimental outcome if their equipment had been more accurate. The blame rests on the dishonest scientist, not the method.

But John isn't really concerned with dishonest scientists. He wants to know if having a preconceived theory in mind invalidates the scientific method. That is, if the scientist is trying to prove a theory, can the experiment still be unbiased? Does a prejudicial expectation somehow invalidate the objectiveness of an experiment? No, it doesn't. The goal of an experiment is usually to prove (or disprove) an expected outcome, and that's good.

Sometimes a scientist does conduct an experiment without any clue as to what the outcome will be. This happens often in genetic research. The scientist might damage a gene in a fruit fly to see what kind of birth defect it will cause. That's how the functions of many genes have been discovered, and it is certainly an unbiased method—but it has two drawbacks.

First, doing an experiment without having any expectations is inefficient. A chemist might randomly mix some chemicals together to see what happens, but it is unlikely that anything useful will result. If he is lucky, he might stumble on a new kind of glue, or a more powerful explosive. But if he is looking for a new kind of glue he would be better off mixing together chemicals that are known (or suspected) to have adhesive properties, rather than things that are likely to explode when mixed together.

Second, if you don't know what you are looking for, there is a good chance you won't see it. If a chemist just mixes some random chemicals together, it might create a really good cleanser. But if he isn't looking for a good cleanser he probably won't think to test his concoction on different kinds of stains.

Our point is that if one has no preconceived expectations of the experimental outcome when mixing chemicals, the probability of success is low. Furthermore, in the unlikely event that something useful is produced, the value of the product might not be recognized because the scientist wasn't looking for it.

On the other hand, there is the danger that if a scientist mixes some chemicals together in an attempt to make a better glue, he might produce a better cleanser, but he might not notice how well it removes stains because he is so intent on seeing how well it makes things stick together.

A properly designed experiment will unambiguously succeed or fail depending upon whether the theory is right or wrong. It could be that the experiment is flawed, and the outcome is misinterpreted. That's what critical peer review is for. That's why the methods have to be reported as well as the results. It allows other scientists to repeat the experiment to see if they get the same results, and to see if there are other effects that weren't noted by the originator of the experiment.

Yes, scientists are biased. They do experiments expecting their bias to be confirmed. There is nothing wrong with that. The experiment will reveal the truth, regardless of the scientist's bias. Of course, an unethical scientist might misreport the result of an experiment that doesn't turn out as desired; but that is a failure of the scientist, not a failure of the scientific method.

Objective Sources

In regards to John's second question, we suggest to John, and all our readers, that one should operate under the presumption that no source, including Science Against Evolution, is objective. Question everything and everyone. Be skeptical, and honestly evaluate every idea for yourself. Listen to both sides.

John's Response

We didn't want John to have to wait a month for his answer, so we mailed him a preliminary draft of this column. Here is part of his response:

> I was thinking of the penchant of a large number of scientists to put the fate of their "pet theory" ahead of scientific integrity. I believe this is why I see so many articles riddled with the second causative, or words like "might", "could", "possibly", etc. I find it sad that the science available to the general public (who, like me, have a difficult time with the technical language in journals like *Science* or *Nature*) is left up to what individuals like Dawkins, Coyne or the editors of *National Geographic* choose to tell us.

The reason why so many articles are riddled with weasel words is because there is no experimental proof—it is all speculation, not science.

When people tell you things, you have to check them out for yourself. There is no shortcut.

by Lothar Janetzko

Creation vs. Evolution

https://www.goodreads.com/list/show/8704.Creation_vs_Evolution

Best books about Creation (not just the six 24-hour day variety) and Evolution

The website review for this month looks at a list of books about Creation and Evolution found on the Goodreads.com website. From the home page of "goodreads" you learn that this site will help you to "meet your next favorite book". All you need to do is, "Tell us what titles or genres you've enjoyed in the past, and we'll give you surprisingly insightful recommendations." On the site, you can search and browse for books and explore lists about many different topics. You can also create a free sign-in account on the site, or download apps for either Apple or Google.

Since summer is a good time to spend reading books while on vacation or just traveling, if you are interested in finding a good book to read about the Creation versus Evolution controversy, then the list of 84 books on the website should help you find a book.

The list of books is organized by score. "A book's total score is based on multiple factors, including the number of people who have voted for it and how highly those voters ranked the book." By clicking on a book's title, you will find a brief description of the book's content and some information about the book's author. Also, you will find Community Reviews of the book by various readers, a rating of one to five stars and a link to open a preview of the book using a Kindle reader.

Space does not permit providing a complete list of all the books on the Goodreads list. The first ten books ranked by score are: 1) The Case for a Creator: A Journalist Investigates Scientific Evidence That Points Toward God by Lee Strobel; 2) The Origin of Species by Charles Darwin; 3) Darwin's Black Box: The Biochemical Challenge to Evolution by Michael J. Behe; 4) Why Evolution Is True by Jerry A. Coyne; 5) Origins of Life: Biblical and Evolutionary Models Face Off by Fazale Rana; 6) Icons of Evolution: Science or Myth? Why Much of What We Teach About Evolution Is Wrong by Jonathan Wells; 7) Darwin on Trial by Phillip E. Johnson; 8) The Greatest Show on Earth: The Evidence for Evolution by Richard Dawkins; 9) Life—How Did It Get Here? By Evolution or by Creation? by Watch Tower Bible and Tract Society; and 10) The Selfish Gene by Richard Dawkins.

If you are familiar with the Creation versus Evolution debate then you probably have heard of many of the books on the Goodreads list. Some, however, may be new to you. Just click on the title of the book that you find interesting and explore to see if you would like to add it to your own personal book library. Details on how to purchase a book can be found on the website.