

Re: Bipedal Orrorin?

Source: <http://sci.tech-archive.net/Archive/sci.anthropology.paleo/2004-10/0870.html>

From: Jason Eshleman (*jae_at_ucdavis.edu*)

Date: 10/15/04

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rmafarl@alphalink.com.au (Ross Macfarlane) wrote in message

[snip]

> ...

Algis:

> > *It hadn't been properly defined until recently, true. (See*

> > <http://www.riverapes.com/AAH/AAHDefined.htm>)

Ross:

> *The above statement, if true, is about as damning an indictment of a*
> *44-year old idea as anyone could make. If an idea that has been around*
> *that long pressing for scientific acceptance, and still hasn't been*
> *defined as a hypothesis, how could the scientific community be*
> *expected to take it seriously?*

>

> *And if true, then it still remains undefined, because Algis' attempt*
> *to define it fails miserably to satisfy the accepted criteria for a*
> *scientific hypothesis (let alone a theory).*

>

> *Algis' proposed definition (from the above weblink):*

>

> "

> *Proposed definition of the AAH (2004.)*

>

> *The Aquatic Ape Hypothesis (AAH):*

> *The hypothesis that water has acted as an agent of selection in the*
> *evolution of humans more than it has in the evolution of our ape*
> *cousins and that, as a result, many of the major physical differences*
> *between humans and the other apes may be explained, at least in part,*
> *as adaptations to moving (wading, swimming and/or diving) better*
> *through various aquatic media.*

>

> *Algis Kuliukas*

>

> *May 2004*

> "

>

> *A quick google on "hypothesis scientific definition" found the*

- > following site (and half a million others):
- >
- > http://phyun5.ucr.edu/~wudka/Physics7/Notes_www/node6.html
- > "
- > What is the "scientific method"?
- > The scientific method is the best way yet discovered for winnowing the
- > truth from lies and delusion. The simple version looks something like
- > this:
- >
- > 1. Observe some aspect of the universe.
- > 2. Invent a tentative description, called a hypothesis, that is
- > consistent with what you have observed.
- > 3. Use the hypothesis to make predictions.

It's right here where I see the greatest problems with what Algis is trying to pass as a hypothesis. The notion that some statement about water influencing us more than other apes is hopelessly vague in that there's no reason to believe that supporting one aspect supports the hypothesis in the whole. For example, if some pressure to wade was responsible in any way for changes that led to habitual obligate bipedalism, confirming this doesn't in any way strengthen a case that swimming led to our diminished degree of hair over most of our bodies.

They are entirely separate hypotheses that require different data to address and confirming one doesn't confirm the other. The predictions of one are not the predictions of another and the insistence that together they're stronger is a fallacy.

Undoubtedly, water has influenced *H.sapiens*, and perhaps our ancestors, in *different* ways than it has chimps or gorillas. Philip has voiced this rather reasonably in noting that humans have shown the ability to travel great distances over large bodies of water. Whether or not this accounts for any anatomical differences though isn't clear however.

I have personally speculated (in peer reviewed publications in anthropology) that water was a large factor in the initial peopling of the Americas, arguing—and presenting original evidence—that a coastal route of entry is more in line with the evidence than an overland passage through an "ice free corridor." [I do not mean to pass this off as any original hypothesis of my own, though I do believe I've seen novel evidence to support the claim. Further, in review, there were comments that my data wasn't strong enough to confirm what I put forward, but never was there any reaction that it should be dismissed because I suggested water had anything to do with it.] If confirmed, it's an indication of how marine resources (and thus water) were utilized in a major migration of *H.sapiens*. But if confirmed, it doesn't confirm anything larger. It doesn't help address anything about hairlessness for swimming or bipedalism due to wading or speaking due to "breath control." It is important to note what a hypothesis addresses and does not address. It's my opinion that this among the most serious failings of AAXers and in large part

makes what they try to do pseudoscience.

- > 4. *Test those predictions by experiments or further observations and*
- > *modify the hypothesis in the light of your results.*
- > 5. *Repeat steps 3 and 4 until there are no discrepancies between*
- > *theory and experiment and/or observation.*
- >
- > *When consistency is obtained the hypothesis becomes a theory and*
- > *provides a coherent set of propositions which explain a class of*
- > *phenomena. A theory is then a framework within which observations are*
- > *explained and predictions are made.*
- > "
- >
- > *Algis' above definition doesn't meet the criteria of a hypothesis,*
- > *because it makes no predictions that allow it to be tested and*
- > *refuted. The AAH barely passes the test of a hypothesis, because it*
- > *is:*
- >
- > – *Internally inconsistent (one example: comparing human hairlessness*
- > *to aquatic mammals, while insisting that humans were never as aquatic*
- > *as otters. No mammals that are less aquatic than otters are hairless.)*
- >
- > – *Rarely able to make predictions, and never yet to make any that*
- > *withstand close scrutiny (consider the differences in the proposed*
- > *evolutionary pathways & timelines of Hardy, Morgan, Verhaegen or*
- > *Kuliukas, for example. Or look at the current Verhaegen line proposing*
- > *seaside dispersal of early Homo out of Africa, and compare it with the*
- > *geographic location of Dmanisi, Georgia – home to early Homo ca. 1.6*
- > *MYA, and a long way from any ocean.)*
- >
- > – *Contradicted by available evidence (such as C12–C13 ratios in*
- > *Australopith bones, which imply a grassland–derived diet).*
- >
- > *Time and again AAH has been scrutinised here in SAP against scientific*
- > *criteria such as proposed above, and time and again it has failed.*
- > *Long–term SAP participants such as myself have tried on many occasions*
- > *to engage in reasoned debate with AAH proponents – especially Algis,*
- > *who used to be one of its more reasonable and likeable supporters. But*
- > *as time has gone on, he has become less and less amenable to reason,*
- > *and the more reason and logic are used against him, the more he is*
- > *liable to resort to ad hominem attacks, prejudicial language, appeals*
- > *to authority and other logical fallacies:*
- >
- > <http://www.datanation.com/fallacies/index.htm>.
- > ...
- >
- > *All my claims in the above paragraph can be subject to scrutiny by a*
- > *search of the SAP archive on Google:*
- > <http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&group=sci.anthropology.paleo>.
- >
- > *(Try a search for the thread "Bipedalism Thought Experiment" and watch*

sci.anthropology.paleo: Re: Bipedal Orrorin?

- > *how Algis handles Jason Eshleman's criticisms of his "thought*
- > *experiment". Jason is one of the few paleoanthropology professionals*
- > *who post here on SAP.)*

Not a paleo professional, but a professional physical anthropologist. My specialty is in molecular, specifically prehistoric DNA and migrations. My grad curriculum did cover significant paleo studies and I taught paleo for a number of years.