



# PLEISTOCENE COALITION NEWS

VOLUME 2, ISSUE 6

NOVEMBER - DECEMBER 2010

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## The Battle of the Mammoths and the Mastodons!

### SYNCHRONICITY (by JF)

Several weeks ago responding to Barb Purdy *et al's* recent claim of a Vero Beach Florida mammoth engraving as the oldest proboscidean art in the Americas, Virginia Steen-McIntyre submitted an article on the Tetela 1 "mastodon" engraving from Valsequillo, Mexico. Most would never even know of the Mexican mastodon, as it, along with related engravings, have been held back from the public in one way or another for over 30 years. Steen-McIntyre's reply reveals some standard practice in mainstream archaeology and anthropology.

Within a week of Virginia's submission, linguist and rock art photographer, Ekkehart Malotki and archaeologist Henry Wallace, submitted an announcement regarding discovery of an exciting American prehistoric rock art panel featuring a clearly recognizable mammoth. Interestingly, both Steen-McIntyre and Malotki mention the Florida mammoth engraving, though from two very different perspectives. The Tetela 1 mastodon engraving was discovered by Juan Armenta in 1959 and published in *LIFE* (a full spread) and *National Geographic* magazines in 1960 and 1979 and was also displayed at the Smithsonian in Washington D.C. It later went missing from Mexico City and then completely out of the scientific discourse. So, the Vero Beach mammoth is being issued a trumpet challenge to decide who is oldest; itself, or an ancient mammoth from the Colorado Plateau, or a primitive four-tusked mastodon from central Mexico. Let the battle begin!

## Depiction of a mammoth in the prehistoric rock art of southeastern Utah

By Ekkehart Malotki and Henry Wallace

### News release

Flagstaff, Arizona.

Between 16,000 and 11,000 years ago, during the final phase of the last Ice Age, enormous elephant-like mammoths and mastodons roamed the North American continent, including the Colorado Plateau, along with humans and other large mammals such as bison, sloth, camel, horse and llama.

Because humans elsewhere in the world were image-makers, archaeologists have always assumed that the earliest entrants to the New World, too, would have brought with them the universal predisposition for image-

making, including the making of rock art.

Yet, rock art researchers have not found verifiable depictions of these pachyderms, despite ample fossil evidence that the

two probably shared the same home range until these large beasts became extinct at the end of the Ice Age

That is, until 2009, when James Kennedy, an amateur fossil collector in Florida, turned up

with an exciting discovery—a small mammoth image, approximately 3 inches in length, incised on a 15-inch piece of mineralized mammal bone. Initially suspected to be a fraud, like other similar "finds," the "Vero Beach mammoth," so named for the fossil-rich site where it was

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**Fig.1.** Detail of mammoth image engraved on a rock panel in south-eastern Utah. Photo courtesy of Ekkehart Malotki © 2010

## Mammoth depiction (cont'd.)

found, was exhaustively tested and pronounced authentic by the investigative

The rock art site, consisting entirely of petroglyphs representing various prehistoric

Northern Arizona University professor Larry Agenbroad, it had never been scientifically



**Fig.2.** Mammoth (left) engraved on a rock panel in southeastern Utah. The bison, which is engraved over the smaller and older mammoth image, fills most of the panel. Photo courtesy of Ekkehart Malotki © 2010

described or investigated, probably because of its difficult access more than 15 feet above ground level. Also impeding its recognition as a mammoth is its indistinctness—the image is best viewed under conditions of strong side light—and the fact that it is dominated

***“Rather than being engraved on a piece of portable art, Mammoth Number Two occurs amidst other petroglyphs incised high on a sheer cliff of Navajo Sandstone.”***

team under Dr. Barbara Purdy, professor emerita of Anthropology at the University of Florida. This was sensational pictorial evidence that Paleoamericans and Ice Age megafauna had indeed coexisted.

Now, as discussed in a paper in preparation by two Arizona rock art specialists, Ekkehart Malotki of Flagstaff and Henry Wallace from Tucson, the confirmation of a second probable mammoth depiction in North America is a similarly spectacular find.

Rather than being engraved on a piece of portable art, Mammoth Number Two occurs amidst other petroglyphs incised high on a sheer cliff of Navajo Sandstone bordering the floodplain of the San Juan River in southeastern Utah (**Figs. 1 & 2**).

and historic cultures, was first described in 1985 by archaeologists from the Crow Canyon Center for Southwestern Archaeology based in Cortez, Colorado. However, their report did not discuss the mammoth design. In the early 1990s, Malotki was introduced to the site by Joe Pachak, an artist from Bluff, who had begun investigating the site on his own. But it was not until 2009 that he was able to revisit the site with Wallace, who made a detailed examination of the find under magnification.

Although the image, one among many engravings of humans and animals at its location, had been known to a few archaeologists and rock art enthusiasts, and its image has been depicted in print by Malotki and by

by the much larger depiction of what is probably a bison that partially overlies the mammoth.

Malotki and Wallace had first to establish that it was prehistoric and not the work of a modern forger, and second that the image actually did portray a mammoth and was not the product of auto-suggestion or mind-sight.

A visual examination of the engraved contours of the pachyderm by means of a hand lens with 5X magnification revealed no evidence for any use of metal tools as might be anticipated for a modern forgery.

Other evidence for deep-time prehistoric manufacture includes rock wear and degree of repatination—the surface varnish deposited on

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## Mammoth depiction (cont'd.)

**"The San Juan River image shows all the diagnostic features of a *Mammuthus columbi*, or Columbian mammoth, resident in western North America during the Pleistocene."**

rocks over thousands of years—that was greater than that observed on nearby Puebloan and Historic period petroglyphs in comparable environmental settings.

Identification of the megamammal was accomplished by a combination of anatomical details observable in the portrayal itself.

Though not drawn as elegantly or with the same anatomical precision as the Vero Beach specimen, the San Juan River image shows all the diagnostic features of a *Mammuthus columbi*, or Columbian mammoth, resident in western North America during the Pleistocene: a dome-shaped head, long trunk, and two relatively short tusks which, according to Flagstaff paleontologist David Gillette, may indicate that the artist intended to portray a young or female animal.

Particularly noteworthy is the depiction of an anatomical detail no hoaxer would be likely to have known about: the strikingly bifurcated tip of the mammoth's trunk, known as "fingers" by mam-

malogists. This feature has nearly disappeared in modern elephants found in both Asia and Africa, but is a strong identifying mark of their extinct ancestors (**Fig.1**).

In addition, says Malotki, modern counterfeit designs are nearly always done in isolation, whereas the San Juan River mammoth is part of a panel that includes not only a superimposed bison but also several other petroglyph designs that, based on stylistic criteria and weathering, appear to have been made at about the same time as the mammoth.

If this line of evidence is finally found to be well-grounded and accepted by the rock art and archaeological community, then the San Juan River mammoth will indeed fulfill its potential as the second newsworthy piece of direct visual evidence that man and mammoth coexisted in North America, and specifically that they lived together on the Colorado Plateau of the American Southwest.

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### Additional information

EKKEHART MALOTKI is an expert on the Hopi language and Hopi culture and a premier photographer of American rock art. His photography is featured in several stunning volumes including recently, *The Rock Art of Arizona*. Malotki was also Hopi language consultant for the ground-breaking Godfrey Reggio/Ron Fricke film *Koyaanisqatsi* (Life Out of Balance), scored by Philip Glass.

HENRY WALLACE is an expert on the Hohokam culture of the American Southwest.

### From the editors

A glance at the last page of this issue will show you that we have expanded our editorial staff. We now have nine on the team, all of us volunteers, the result of a November panic cry for help to share the work load. Thank you for stepping forward Patrick Lyons, Paulette Steeves, Alan Cannell, Jim Harrod, Richard Dullum, and Matt Gatton!

It seems as though the PCN newsletter has suddenly become quite popular. As a result, we have been (happily) inundated with e-mails from new contacts offering exciting ideas for future articles. But then reality hit. Virginia, for example, could handle the scientific manuscripts and perhaps a bit of the art work, but she has had no experience with paleoanthropology, linguistics, ancient archaeological sites (besides her own), and her foreign language skills are limited. Time to call in the reinforcements!

The dust may take awhile to settle as we take up our new routine. Important articles for Issue 8 had to be held in reserve for Issue 9. We simply ran out of space! This is also why the small font was necessary in several places. We trust future issues will be as interesting to you, the reader, as the past ones, while at the same time giving the original editors, John, Virginia, and Tom some much needed slack.

Thank you for your patience.

## IN THEIR OWN WORDS

### "Never before in the Western Hemisphere" ?? Tetela 1 mastodon

By Virginia Steen-McIntyre

**"Thousands of depictions of proboscideans are known to-day from European caves and portable bone art... but none from America... until the recent find from the Old Vero site... Florida."**

**"The oldest and only existing example of late Ice Age art in the Americas has been discovered in Florida."**

Barbara A. Purdy, Kevin S. Jones, John J. Mecholsky, Gerald Bourne, Richard C. Hulbert, Jr., Bruce J. MacFadden, Krista L. Church, Michael W. Warren, 2010, Earliest Art in the Americas: Incised Image of a Mammoth on a Mineralized Extinct Animal Bone from the Old Vero site (8-IR-9), Florida, *L'art pléistocène dans le monde / Pleistocene art of the world / Arte pleistocénico del Mundo*, IFRAO Congress, 2010, September 6-11, Ariège, Pyrénées, France.

#### Background

Barb Purdy and I go back a long way, ever since Washington State University and the Laboratory of Anthropology in the early 60s. We'd lost track of each other until this past April when after a hiatus of 40-some years Barb contacted me. She wanted information about Juan Armenta's Tetela 1 piece, the mastodon bone, found in 1959, engraved with, among other animals, the figure of a *Ryncotherium*, an early form of a double-tusked mastodon (**Fig. 1** on next page).

Tetela 1 was collected some 50 m northwest of the Hueyatlaco site and in the same type of indurated sediment, later dated to the Sangamonian Interglacial (at least 80,000 years old) by diatom biostratigraphy and even older (ca 250,000 years) by other methods (U-series, fission-track dates.)

Seems that Barb's group at the University of Florida had an engraving of a mammoth on an ancient bone from Florida's central east coast and were wondering if it was real or a fake.

Happy to oblige an establishment archaeologist, I gave her a link to Armenta's monograph where he de-

scribes his find in detail and how he examined it. I mentioned the articles in *LIFE* and *National Geographic* as well. Juan was way ahead of his time! I also wrote her of Chris Hardaker's book, *The First American*, that discusses the same, and put him in touch with her.

Nothing more until November 7, when I received an e-mail from Barb informing me of her most recent publication. To view it online, go to

<<http://www.ifraoariego2010.fr/presentation.html>>, "chose the English version, click on Articles, then North America" then her name. I've included some quotes from the abstract and text, below, as well as the full abstract.

#### Quotes

"The oldest and only existing example of late Ice Age art in the Americas has been discovered in Florida."

"Never before in the Western Hemisphere has there been found and validated a bone from an extinct faunal species incised with a recognizable picture of a proboscidean."

"Thousands of depictions of proboscideans are known today from European caves and portable bone art (Delporte 1990; Guthrie 2005), but none from America (Meltzer 2009: 76), until the recent find from the Old Vero site (8-IR-9), Florida."

"There is a significant scientific literature addressing the gross and microscopic characteristics of tool marks in bone. These studies have utilized both experimental and observational approaches to attempt to differentiate human agency from other taphonomic agents..."

"The development of a method to date mineralized bone is needed and, if successful, would furnish a valuable means to solve persisting problems about America's ancient inhabitants, including an age for the gift of a mammoth carving bestowed posthumously by Florida's earliest people."

Juan Armenta and the Tetela 1 piece are mentioned in the article, in a brief footnote on their page 4. The mastodon figure is called a mammoth there. Armenta's 1978, 128-page monograph, which has a whole section on Tetela 1 and the results of his year-long study of it is not cited. Neither is our 1981 paper giving U-series dates for mineralized bone from archaeological sites in the area as young as 22ky (14C). Sigh.

I guess as far as the establishment is concerned, the Valsequillo, Mexico sites, the dated stone artifacts and bone engravings found there, and the scientists who studied and published on them just don't exist!

**Abstract:** The oldest and only existing example of late Ice Age art in the Americas has been discovered in Florida. A fragmented fossil bone incised with the figure of a proboscidean was recently found at Vero Beach, Florida near the location where Late Pleistocene fauna and human bones were recovered from 1913-1916. Because of the uniqueness, rarity, and antiquity of this specimen, caution demanded that a variety of tests be used to verify its authenticity. The mineralized bone was identified as mammoth, mastodon, or giant sloth. Rare earth element analysis was consistent with the fossil bone being ancient and originating from the Old Vero site (8-IR-9).

Forensic analysis suggests the markings on the bone are not

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## Tetela 1 mastodon (cont'd.)



**Fig.1.** Juan Armenta holding the Tetela 1 engraved mastodon pelvis bone from Puebla, Mexico (photo by David Hiser). The artifact was published in *National Geographic*<sup>1</sup> as well as *LIFE* magazine<sup>2</sup> where it was given its own spread. By 1960, the Tetela 1 engraving was on display at the prestigious Smithsonian Institution in Washington, D.C., along with other artifacts from Hueyatlaaco which are now "missing."

<sup>1</sup> Canby, T. Y. 1979. The Search for the First Americans. *National Geographic* Vol. 156 (3): 330-63, September 1979 (pp. 350, 352 & 354).

<sup>2</sup> Art of the Americas from 30,000 B.C. p.86. *LIFE* magazine, August 15, 1960.

recent. Optical microscopy results show no discontinuity in coloration between the carved grooves and the surrounding material indicating that both surfaces aged simultaneously.

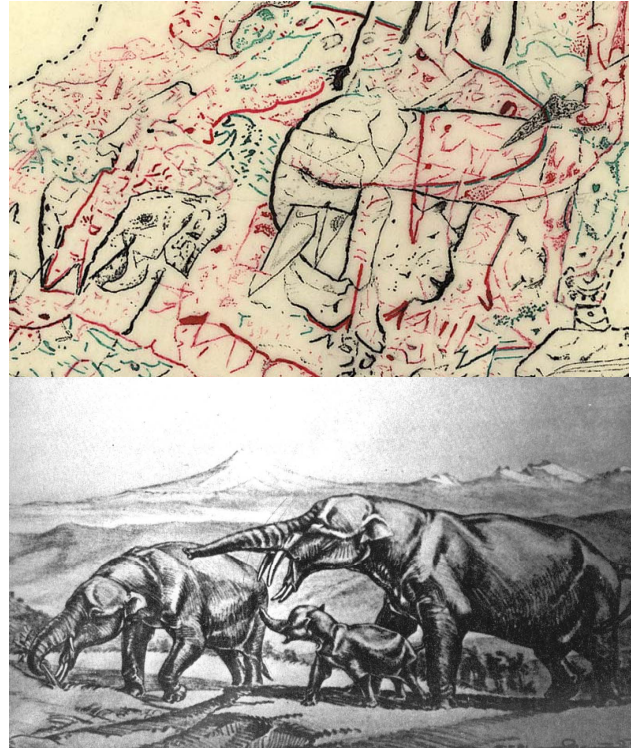
Scanning electron microscopy (SEM) revealed that the edges of the inscription are worn and show no signs of being incised recently. In addition, the back-scattered SEM images suggest there is no discontinuity in the distribution of light and heavy elements between the scribed region and the surrounding bone indicating that both surfaces aged in the same environment. This is very different from an intentional mark made on the bone for comparison. Energy dispersive x-ray spectroscopy (EDXS) shows that the surface contains significant amounts of calcium, phosphorus, oxygen and carbon typical of a mineralized bone surface. All of these results are consistent with the drawing on the bone being authentic.

**Resumen:** El único y más viejo ejemplo de arte en las Américas de la Era de Hielo ha sido descubierto en la Florida. Un fragmento de hueso fosilizado con la figura de un proboscideo fue recientemente encontrado en Vero Beach, Florida cerca del lugar donde los huesos humanos y fauna de la época tardía de Pleistoceno fueron recuperados entre 1913-1916. Debido a la singularidad, rareza y antigüedad de este espécimen, precaución exigió que se usaran una variedad de pruebas para verificar su autenticidad. El hueso mineralizado fue identificado como perteneciente a un mamut, mastodonte, o un perezoso gigante. El análisis de las tierras raras fue consistente con el hecho de que el fósil era antiguo y originario del lugar 'Old Vero' (8-IR-9). Análisis forense sugiere que las marcas en el hueso no son recientes. Los resultados de microscopía óptica muestran que no hay discontinuidad en la coloración entre las ranuras talladas y el material circundante lo que indica que

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Department of Anthropology; Kevin S. Jones (kjones@eng.ufl.edu), John J. Mecholsky (jjmech@mse.ufl.edu) and Gerald Bourne (grb@ufl.edu): Department of Materials Science and Engineering; Richard C. Hulbert, Jr.

So, the "oldest and only" existing example of late Ice Age art is from a Florida beach? I suppose it all depends on who you want to believe.



**Fig.2. (Above)** One of the many deliberate engravings on mastodon bone from Puebla, Mexico. This detail is from a 1959 drawing by Juan Armenta of the Tetela 1 artifact. Among other images it features what appears to be a representation of a double-tusked mastodon or *Ryncotherium* (center). *Ryncotherium* lived in the same area where the engraving was made which is dated c. 250,000 years old, and yet the overall quality is as good as any Picasso or Kandinsky [ed]. **(Below)** A modern representation of *Ryncotherium* from the valley of Puebla, Mexico, whose principal characteristic was to possess double tusks. From Armenta Monograph p. 110 (citing H. F. Osborn, 1945, *Proboscidea II*: 805-1675. American Museum Press, 1942); image flipped horizontally to facilitate comparison with the engraving.

(rhulbert@flmnh.ufl.edu), Bruce J. MacFadden (bmacfadd@flmnh.ufl.edu) and Krista L. Church (kristalchurch@gmail.com): Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611.

VIRGINIA STEEN-McINTYRE, Ph.D, is a tephrochronologist (volcanic ash specialist) involved in preserving and publishing the Palaeolithic evidence from Valsequillo since the late 1960s.

# Stratigraphic mythology

A brief report on the Radcliffe Exploratory Seminar on Comparative Mythology: Deep Reconstruction

By James B. Harrod

PhD, religion;  
MA, philosophical  
theology; MA,  
depth psychology



**Fig.1.** Cast of the Oldowan stone from Koobi Fora, Kenya. Photo by James B. Harrod.

**"It was in regard to Gimbutas' findings that Campbell declared that all of his work would now have to be revised."**

Knowing that our readers are interested in the 'long chronology' of human settlement and symbolic behavior as well as stages of hominid evolution, I'd like to give a brief report on a recent Harvard seminar at which I spoke which was on a new paradigm for the study of mythology.

In response to new discoveries over the past couple decades in paleontology, archaeology, and the genetics of "Out-of-Africa," the field of comparative mythology is itself undergoing a major change. The old paradigm is represented by those such as the historian of religion Mircea Eliade, psychologist Carl Jung, anthropologist Claude Levi-Strauss and mythologist Joseph Campbell. This approach could be called 'archetypal' in that it sought to find 'primordial' patterns of mythology across global cultures, including hunter-gatherers, horticulturalists, and on down to the 'world religions.' The new paradigm theorizes that over several stages of hominid evolution distinct 'strata' of mythological patterns were laid down and that any given myth, like an archaeological site, may be a palimpsest or superimposition, which then requires a stratigraphic profile and taphonomic analysis of its strata. I call this 'mytho-stratigraphy.'

The approach is not altogether new for even in the 19th century Ancient Greek myths were analyzed in search of earlier social organization or deities preceding the compilation of the extant myth. More recently, archaeologist, linguist and mythologist Marija Gimbutas in her works decoding the iconographic systems of Neolithic Europe showed how the Neolithic mythic symbols, with their 'matrifocal' motifs, survived into Ancient Greek myth and cult along with their modification under the sway of

the rise of the patriarchal kingship systems. It was in regard to Gimbutas' findings that Campbell declared that all of his work would now have to be revised. Similarly, in Mayan mythology one may see a hunter-gatherer stratum overlain by horticultural and then by kingship-agricultural stratum.

What is new is that now we are analyzing myths in a global context with reference to global waves of migration and dispersal. As one trained in the 1970's in the methods of Eliade, Jung and Levi-Strauss, I see these as groundbreaking revisions to how we understand myth.

On October 6-8, 2010, the Radcliffe Institute for Advanced Study, Harvard University, sponsored 'Exploratory Seminar on Comparative Mythology: Deep Reconstruction.' The website for this seminar and abstracts and pdfs of the papers can be found at <http://www.fas.harvard.edu/~sanskrit/2010/oct6-7/home.html>. This was an incredibly exciting two days; I will summarize highlights from several papers including my own presentation.

The seminar was held in conjunction with the 4th Annual Conference, International Association for Comparative Mythology. If you are interested in mythology, I recommend joining this organization, <http://www.compmymth.org>

The seminar was organized and introduced by Michael Witzel, professor of Sanskrit at Harvard. As explained in his forthcoming book, *The Origins of the World's Mythologies* (2010), Witzel identifies three primary strata in world mythology: (1) 'Pan-Gaea,' mythologies represented by African DNA lineages that did not leave Africa; (2) 'Gondwana,' the mythology survivals of the c. 100,000 years ago 'out-of-Africa' *Homo sapiens*, who followed the 'Southern Route' via India to East Asia, Melanesia and Aus-

tralia; and (3) 'Laurasian,' mythologies that survive across northern Eurasia and into North and South America. In his presentation, Witzel described how a comparison of these types holds out the promise for gaining access to some of the earliest myths told by anatomically modern humans ('African Eve').

My paper, *Four memes in the two million year evolution of symbol, metaphor and myth*, complemented Witzel's perspective adding two earlier stages of symbolic evolution, the Oldowan (of *Homo habilis*, **Fig.1**) and Acheulian (*Homo erectus*). I reviewed over 750 Lower and Middle Paleolithic sites around the world, identified 318 reports of symbolic behavior (collecting of exotic objects, pigment use, beads, incised objects, marking inscriptions, figurative representation, mortuary ritual, etc.), and based on these derived the 'memic' transformations that were generative of the distinctive symbolic systems in each of the four major periods of hominid speciation. Of the sites reviewed, I found at least 11 reports of symbolic behavior from the Oldowan; 67 from the Acheulian Periods; and over 240 for Middle Paleolithic traditions—all this well prior to the Upper Paleolithic/Later Stone Age.

In the process, I re-affirmed Witzel's thesis, arguing that the 'Gondwana' mythologies were carried out-of-Africa or SW Asia c. 125,000 years ago during the last Interglacial and that the 'Laurasian' mythologies were most likely not out-of-Africa but out-of-Central-Asia or SW Asia c. 40-50,000 years ago. This Four-Meme model supports Witzel's hypothesis and requires substantial revision of previous theories, such as those of Merlin Donald (*Origins of the modern mind*, 1991) and Steven Mithen (*The Prehistory of the Mind*, 1996).

While in popular parlance all the hunter-gatherer religions are

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# Stratigraphic mythology (cont.)

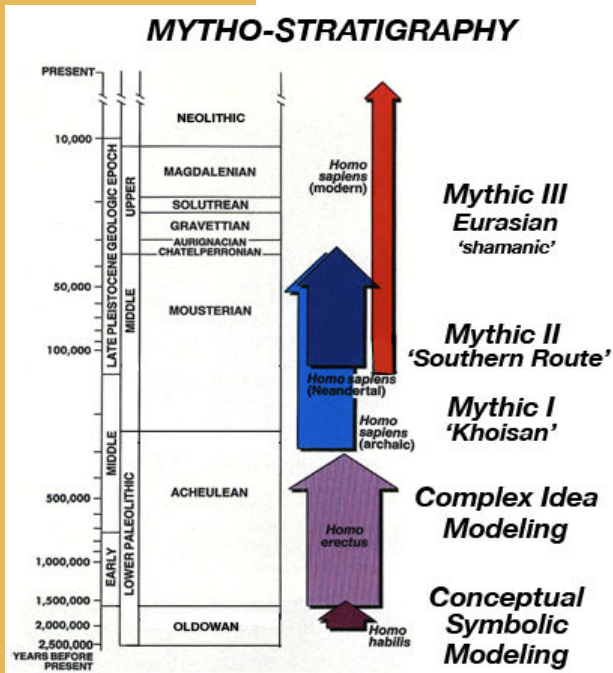
'shamanic,' even Eliade was clear that there were mythologies in Australia and Africa that did not fit this pattern. It is now

manic, and based on mytho-stratigraphy (See **Fig.2**), attempts to interpret it through the lens of Australian aboriginal culture—as was done in the early 20th century—or Khoisan culture—as in some current approaches—would be necessarily inadequate to the task.

Southern Route from Africa to India to Australia; or to southern Africa. These three zones correspond in Witzel's terms to 'Laurasian,' 'Gondwana' and 'Gaea' mythology and, as I have argued, Upper Paleolithic (and Mesolithic), Middle Paleolithic, and (probably) Early MP or Late Acheulian archaeology, respectively.

Two other presenters at the Radcliffe seminar are doing research of direct relevance to the Pleistocene Coalition. I thought I was obsessive about facts until I met Yuri Berezkin, chair of the Department of America, Museum of Anthropology and Ethnography, Russian Academy of Sciences. Berezkin gave a paper on European Mesolithic cosmonymy, including 'cosmic hunt' star lore. Berezkin's work is based on the author's electronic catalogue of world mythology and folklore that includes c. 45,000 abstracts of texts, which he has mapped onto global migration patterns. His seminar paper is online and if you google his name several other papers are online, with his extraordinary global maps of where specific mythic themes are found. In my read his maps are strong confirmation of Witzel's thesis as they show clearly that specific mythic motifs are geographically localized to the northern-Eurasia-to-the-Americas zone; along the

John Bengtson, affiliate Santa Fe Institute, website <http://jdbengt.net/index.html> gave an overview of the application of historical/comparative linguistic methods to prehistory (paleolinguistics), including taxonomic methods, language families and macro-families, and global etymologies (lexemes that have survived from 'proto-sapiens' language). In problems of human prehistory these linguistic methods and results can be coordinated with those of human genetics, archeology, and other anthropological disciplines. In this regard, I recommend the article 'Global Etymologies' (Bengtson and Ruhn 1994), which is on Bengtson's website. The geo-stratigraphy approach to myth studies is a major paradigm shift. I highly recommend Michael Witzel's new book, which will be available 2011, on the origins of the world's mythologies.



**Fig.2.** In mytho-stratigraphy it is suggested that distinct 'strata' of mythological patterns are laid down like at an archaeological site and can be represented in a stratigraphic profile.

clear that these belong to the 'Gondwana' stratum or earlier, the term 'shamanic' being reserved for 'Laurasian' cultures. As a corollary, I argued that based on its intrinsic depictions the rock art of Upper Paleolithic Europe is Laurasian and sha-

**"Quarries that provide sieved, uncrushed gravel are usually located nearby their market."**

## OUR READERS SHARE

### Driveway Archaeology

Avocational archaeologist and flintknapper Ron Alexander of Gypsum, Kansas, points fellow enthusiasts to a new source of potential stone artifacts; one that is simple, legal, and occurs everywhere a gravel company has delivered uncrushed rock. He calls it "Driveway Archaeology" and is writing a book about it.

Ron has found artifacts in his driveway, in bags of stone from the garden center, at campsite parking lots, old railroad beds, and in decorative planters and landscapes of river rock around urban commercial buildings. Most show up in the finer-grained material that has passed through a two-inch screen.

Quarries that provide sieved, uncrushed gravel are usually located nearby their market. It is possible they will be mining ancient Pleistocene gravel deposits, so that any artifacts found in their product will be old, 10 thousand years or more.

Driveway Archaeology opens up the possibility for others to enjoy the hunt for artifacts that can be legally collected—inner city kids, for example, and amateurs like Ron. Ranging the hills may not be possible, but spying out the gravel beds in a shopping mall parking lot certainly is!

Ron Alexander can be reached at: 6944 Kipp Road, Gypsum, Kansas 67448.

# The Calaveras Skull

By Michael A. Cremo

**"However, there are several different hoax stories told by contemporaries of Whitney ...**

**They cannot all be true."**

**The most notorious human fossil discovered in the Gold Rush mines of California was the Calaveras skull (Fig.1).**

The state geologist of California, J. D. Whitney (1880, pp. 267-273), described how it came into his possession. In February 1866, James Mattison, the principal owner of the mine on Bald Hill, near Angels Creek, removed this skull from a conglomerate gravel layer 130 feet below the surface. The gravel was near the bedrock, underneath several distinct layers of volcanic material. Volcanic eruptions began in this region during the Oligocene, continued through the Miocene, and ended in the Pliocene (Clark 1979, p. 147). It would thus seem likely that the gravel in which the skull was found was Pliocene or older, as Whitney believed.

After finding the skull, Mattison kept it in his house for some time. Later he gave it to R. C. Scribner, who sent it to Dr. William Jones, who lived nearby. Jones forwarded it to the office of the State Geological Survey in San Francisco, where Whitney examined it. Whitney went to the site, where he personally questioned Matti-

son, who confirmed the details of the discovery.

On July 16, 1866, Whitney presented to the California Academy of Sciences a report on the Calaveras skull, affirming that it was found in Pliocene strata. Supporters of the theory of evolu-

tion instead from an Indian burial cave.

There are even some suggestions that the hoaxed skull found by Mattison was not the hoaxed skull that eventually wound up in the hands of Whitney (Dexter 1986). But this appears to

be untrue. In 1883, Dr. A. S. Hudson interviewed Mattison and his wife. When shown a picture of the skull from Whitney's book, Mrs. Mattison recognized the skull as the same one she had kept in



**Fig. 1.** The Calaveras Skull. Photographs from Ales Hrdlicka (1907), *Skeletal Remains Suggesting or Attributed to Early Man*, p. 23. It has resided in the Peabody Museum, Cambridge ever since the mid-late 1800s. The pictures were taken in 1902 by the Smithsonian Institution while visiting the Peabody Museum.

her house after Mr. Mattison brought it home from the mine (Holmes 1901, p. 461).

Today, most scientists believe that the skull came from a recent Indian burial cave. Because the conditions of a skull found embedded in Pliocene auriferous gravels and a skull found in recent cave burials should be different, this opens up a chance for consideration of objective evidence. But the testimony on this point is contradictory.

Anthropologist W. H. Holmes (1901, p. 469) examined the Calaveras skull at the Peabody Museum in Cambridge, Massachusetts, and

tion suggested that the skull was a fairly recent Indian skull, from a cave burial, that had been planted as a hoax in Mattison's mine. And today this is the standard explanation for the Calaveras skull.

However, there are several *different* hoax stories told by contemporaries of Whitney, which I have reviewed in my book *Forbidden Archeology* (Cremo and Thompson 1993, pp. 439-446). They cannot all be true, and if some of them are not true, perhaps all of them are not true. What these stories have in common is the idea that the skull did not come from the auriferous gravels in Mattison's mine, but came

her house after Mr. Mattison brought it home from the mine (Holmes 1901, p. 461).

Today, most scientists believe that the skull came from a recent Indian burial cave. Because the conditions of a skull found embedded in Pliocene auriferous gravels and a skull found in recent cave burials should be different, this opens up a chance for consideration of objective evidence. But the testimony on this point is contradictory.

Anthropologist W. H. Holmes (1901, p. 469) examined the Calaveras skull at the Peabody Museum in Cambridge, Massachusetts, and

> [Contd on page 9](#)



## The Calaveras Skull (cont'd.)

**"Dr. D. H. Dall states that while in San Francisco in 1866, he compared the material attached to the skull with portions of the gravel from the mine and that they were alike in all essentials."**

concluded that it "never came from the old gravels in the Mattison mine, and that it does not in any way represent a Tertiary race of men." Dr. F. W. Putnam of Harvard University's Peabody Museum of Natural History said about the skull: "Had it been taken from the shaft there probably would have been some trace of gravel, such as is found in the beds through which the shaft was sunk, mixed with the materials taken from the skull...but no such gravel has been found in the several examinations which have been made of the matrix" (Sinclair 1908, p. 129).

On the other hand, Holmes (1901, p. 467) reported: "Dr. D. H. Dall states that while in San Francisco in 1866, he compared the material attached to the skull with portions of the gravel from the mine and that they were alike in all essentials." And W. O. Ayres (1882, p. 853), writing in the *American Naturalist*, stated: "I saw it and examined it carefully at the time when it first reached Professor Whitney's hands. It was not only incrustated with sand and gravel, but its cavities were crowded with the same material; and that material was of a peculiar sort, a sort which I had occasion to know thoroughly. It was the common 'cement' or 'dirt' of the miners; that known in books as the auriferous gravel." Ayres was a member of the California Academy of Sciences.

Whitney (1880, p. 271), in his original description of the fossil, observed that the Calaveras skull was highly fossilized, with chemical tests yielding no organic residues.

This is consistent with extreme antiquity. But a radiocarbon date on a human metatarsal that apparently came from the skull's matrix yielded a radiocarbon age of about 1,260 years BP (Taylor et al 1992). The authors of the study admitted that because of the small sample size they were unable to perform adequate pretreatment for the sample. For example they did not remove humic acid compounds. The authors said, "We certainly acknowledge the possibility that non-*in situ* organics in the bone may not have been totally excluded by the pretreatment technologies employed." Thus the age obtained could be anomalously recent. That the dated sample did not come from the skull itself is also problematic.

On January 26, 2003, geologist Sam VanLandingham sent me an email, saying: "If it might be possible to obtain for microscopical examination even a tiny cut from the original matrix (if any still remains) from the Calaveras skull, then the odds are good that it can be linked to one of the beds at the Table Mt. locality. If those beds happen to be below the 'pipe clay & lava' then a good case by indirect evidence can be made for a > 1.6 m.y. (or upper Pliocene) age." Table Mountain is another Sierra Nevada site where human bones and artifacts were found in Tertiary auriferous gravel deposits, as documented by Whitney.

A long time ago, Sir Arthur Keith (1928, p. 471) wrote: "The story of the Calaveras skull...cannot be passed over. It is the 'bogey' which haunts the student of early man...taxing the powers of

belief of every expert almost to the breaking point."

Unfortunately, it has been passed over.

### References

- Ayres, W. O. 1882. The ancient man of Calaveras. *American Naturalist*, 25(2): 845-854.
- Clark, W. B. 1979. Fossil river beds of the Sierra Nevada. *California Geology*, 32: 143-149.
- Dexter, W. D. 1986. Historical aspects of the Calaveras Skull controversy. *American Antiquity*, 51(2): 365-369.
- Holmes, W. H. 1901. Review of the evidence relating to Auriferous Gravel man in California. *Annual Report of the Smithsonian Institution for 1899*, pp. 419-472.
- Keith, A. 1928. *The Antiquity of Man*. Vol. 1. Philadelphia, J. B. Lippincott.
- Sinclair, W. J. 1908. Recent investigations bearing on the question of the occurrence of Neocene Man in the auriferous gravels of the Sierra Nevada. *University of California Publications in American Archeology and Ethnology*, 7(2): 107-131.
- Taylor, R. E., Payen, L. A., and Slota, Jr., P. J. 1992. The age of the Calaveras Skull: dating the "Pitdown Man" of the New World. *American Antiquity*, 57(2): 269-275.
- Whitney, J. D. 1880. The auriferous gravels of the Sierra Nevada of California. *Memoirs Museum of Comparative Zoology at Harvard College*. Memoir 6 (1).
- MICHAEL A. CREMO is a long-time researcher on the topic of human origins and human antiquity. He is best known for his comprehensive volume, *Forbidden Archaeology*, which he co-authored along with the late Richard Thompson as well as for the controversial television special, *The Mysterious Origins of Man*, hosted by Charlton Heston.

At the XV UISPP Congress, Lisbon 2006, two 56-slide programs on the mathematical and graphic design capabilities of *Homo erectus* people were presented. At the time of this writing the first of these programs, *The Graphics of Bilzingsleben* (evidence demonstrating that human intelligence does not evolve), has been held back from publication for over four years. After some resistance, however, the second paper, *Phi in the Acheulian*—without the benefit of the Part 1 introductory paper—was published in 2008.<sup>1</sup> In that paper, the technique of 'phi-based conceptual units' was introduced as a means to prove early human intelligence extending as far back as 400,000 years and much earlier. It was demonstrated that works of *Homo erectus* feature unambiguous use of the golden ratio or phi (decimal equivalent, 1.618), to utter perfection rivaling even the work of Leonardo da Vinci who is commonly cited for his use of the golden ratio.

In 2010, SCIENAR mathematics group, published a follow-up, *Phi-based conceptual units: Pushing math origins back to the Acheulian age*.<sup>2</sup>

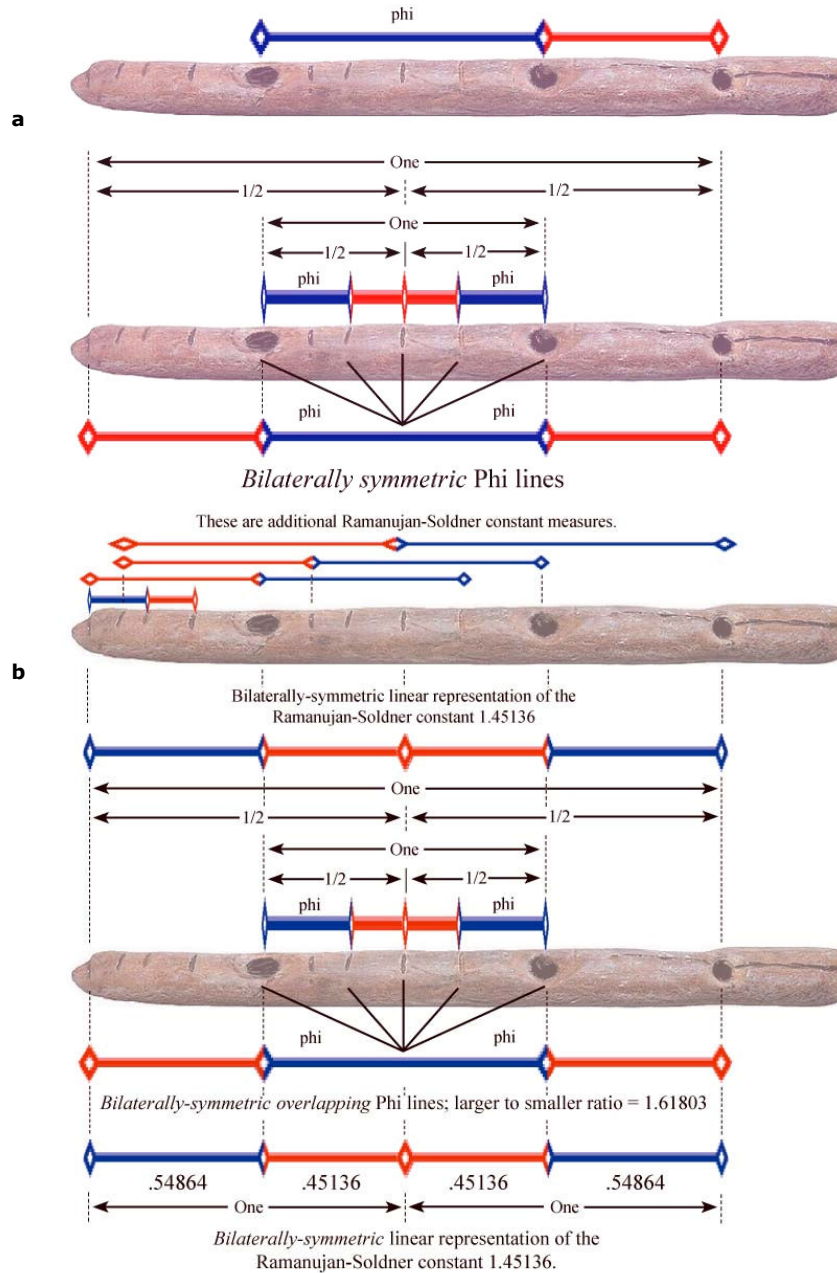
Here, through the 35-40,000-year old swan-bone flute from Geissenklösterle, Germany, I offer more evidence that the golden ratio and perhaps other mathematical constants were well-understood by our early ancestors throughout the Lower, Middle, and Upper Palaeolithic. Clearly, we are talking about more than a musical instrument here, and perhaps equally, a "mathematical instrument," in its own time and way as sophisticated as a slide rule.

JOHN FELIKS is founder of the Pleistocene Coalition. He has specialized in the study of early human cognition for nearly twenty years. Feliks is also a composer and taught computer music including MIDI, digital audio editing, and music notation for 11 years.

# The golden flute of Geissenklösterle

By John Feliks

Preview of APLIMAT 2011 paper



**Fig.1.** The 35,000-year old swan bone flute from Geissenklösterle, Germany, and two of several hundred studies of mathematical constants in early artifacts: **(a)** the golden ratio or phi in bilateral symmetry (Note: the smaller units, though not indicated here, are also phi); **(b)** linear representation of the Ramanujan-Soldner constant in bilateral symmetry as it relates to phi. Disclaimer: The author is not a mathematician but uses the mathematics of ancient artifacts to prove that human cognition does not evolve but has remained the same over hundreds of thousands even millions of years time. Geissenklösterle flute replica photo by Jose Manuel Benito; public domain. All geometric studies © John Feliks 2010.

<sup>1</sup> Feliks, J. 2008. Phi in the Acheulian: Lower Palaeolithic intuition and the natural origins of analogy. *Pleistocene palaeoart of the world*. Proceedings of XV UISPP World Congress (Lisbon, 4-9 September 2006). British Archaeological Reports International Series Vol 1804:11-31. Oxford.

<sup>2</sup> Feliks, J. 2010. Phi-based conceptual units: Pushing math origins back to the Acheulian age. SCIENAR website.

# The abomination of Calico, part three

By Chris Hardaker

Archaeologist  
EarthMeasure Research

<http://www.earthmeasure.com/first-american.html>

***"For twenty years nobody budged. They just ignored Monte Verde while the experts fiercely repeated the chorus of the '12,000-years—no older' date for the Clovis-First Americans."***

We are examining ancient and not-so-ancient New World archaeological sites that are ignored by mainstream scientists.

**Monte Verde, Chile (ca. 14,500-33,000 years old): Paradigm Buster**

There is no better mirror of First American research than the history of the legitimization of the Pre-Clovis Monte Verde site in Chile (Fig. 1).

Modern U.S. archaeology—since the end of the 19th century—has insisted that the arrival of the First Americans was relatively recent. Alex Hrdlicka of the Smithsonian and UC Berkeley demanded that the earliest arrivals be no older than about 5,000 years ago, and that any co-existence between humans in the New World alongside antediluvian ("before the flood"/ extinct Ice Age) animals like mammoths, camels and horses was impossible. Then came Folsom and the subsequent Clovis discoveries during the 1920s-30s. They were absolutely revolutionary at the time. During the 1950s and with the inven-

tion of Carbon 14 dating, the Clovis paleo-culture, known for its excellent and unique spearheads always provided the oldest firm dates of around 12,000yrs.

as their theoretical father, Hrdlicka, had been against Ice Age archaeology. It got so bad that archaeologist James Adovasio (Meadowcroft Rockshelter; Avella, Pennsylvania, USA) called this cell the Clovis Mafia. And that is virtually where the mainstream professional class stood from the late 70s, when Monte Verde was excavated, until 1999.

Enter Monte Verde, Chile, dated to 14,500 years old.

Monte Verde was a Pleistocene site with preserved sedentary structures, settled by folks who grew potatoes. Their technology was about as non-Clovis as you could get, yet it produced obvious artifacts and features.

Archaeologically speaking, Monte Verde was a no-brainer, except that it had the temerity to be one to two thousand years older than the Clovis horizon in North America. The site was dated back in the late 1970s. It took until 1999 for the mainstream (specifically, the U.S. professional class) to muster up the gumption to actually go down and take a look.

For twenty years nobody budged. They just ignored Monte Verde while the ex-

> [Contd on page 12](#)



Monte Verde

**Fig. 1.** Location of Monte Verde (14,000-33,000 BP) in Chile, South America.

That school of revolutionaries soon became the new normal (Clovis First); their dates becoming the new floor for North American archaeology—No older dates allowed.

Later they became as stubborn and insistent against any challenge to this model

## The Abomination of Calico (cont'd.)

The Bering Strait



**Fig. 2.** Location of the Bering Strait Land Bridge or Beringia between Siberia and Alaska when the sea levels are low. This is most likely how the first people came into the Americas. The evidence from Monte Verde suggests that this occurred at least 33,000 years ago and other sites such as Calico, National City, and Valsequillo suggest it occurred over 200,000 years ago. Either way, this is far earlier than what mainstream science teaches. Map, NASA.

***"Perhaps this was the reason for ignoring this paradigm-busting discovery for over twenty years: Admitting a 14,500yr date for Monte Verde meant admitting an earlier arrival date for New World migrations."***

perts fiercely repeated the chorus of the "12,000-years—no older" date for the Clovis-First Americans.

When an official U.S. field trip finally arrived, Monte Verde was christened the Clovis Paradigm-Buster. It

was huge news in 1999, but the data had been sitting around for twenty years. It took the experts an entire academic generation to actually test their beloved Clovis-First paradigm. Twenty years!

That's twenty years of ignoring Monte Verde's implications. To back up a bit for context, Clovis and its 12,000-year antiquity was understood as a late Pleistocene migration of people across Beringia, a natural land bridge that connected what is now Siberia and Alaska during the Wisconsin Ice Age Glacial Epoch at a time when sea level was low.

The proto-Clovis people arrived in Alaska but were blocked from going south by competing glaciers. Then, one or several thousand years later, it got warmer. The Beringia route was deluged by the rising ocean, and the glaciers receded to

the point where the founding culture could head south to the northern plains by way of the Ice Free Corridor along the eastern Canadian Rockies.

A key assumption throughout the Clovis-First idea, and one that continues today in the more reactionary circles of the profession: No boats from Siberia or anywhere else in the Old World are allowed until Columbus.

Let's be very clear about this. The official model for the First Americans meant that nobody came across from Siberia after the Clovis hunters for at least ten thousand years.

Around 3,000 years ago there were some dispersed Eskimo or Eskimo-like folks who made it across in boats along the North Pacific crescent, with another group or groups following behind one or two thousand years later. These later arrivals had no impact on the complex cultures or civilizations already in place south of the Mexican border. Neither did the later medieval Vikings leave any perceptible impact on the cultural trajectories of North-eastern native tribes.

Clovis-First made everything American homegrown: pure in-house cultural evolution without any influences from the Old World except for those initially brought from Siberia during the Ice Age trek.

Even Clovis culture itself was thought of as an American invention, e.g., their signature 'fluted point' affectionately referred to as America's first patent. All post-Clovis cultures, civilizations

and languages, all inventions and innovations, all biological variability, all advanced technological traditions of the pre-Columbian civilizations and other complex cultures in the New World were regarded as having had a single bio-cultural origin: the Clovis—by definition.

The Clovis First model meant that the original Clovis population was the founding population, the biological Adam and Eve culture of the New World. So, American Anthropology uses a model that assumes that the entire Western Hemisphere was a living test tube for examining unadulterated cultural radiation and evolution. The prehistory of the Americas demonstrates what happens when a Siberian hunting culture settles the empty New World at the end of the Pleistocene and is let loose for ten thousand years undisturbed by any additional diffusion or influence from the Old World. From at least the 1950s until the eve of the new millennium, the test tube model was sacrosanct. There were no exceptions.

In 1999 with the acceptance of Monte Verde's 14,500yr date, the test tube was smashed. In the "no foreign boat" worldview of US anthropology (which includes paleoarchaeologists), any archaeology site in the New World older than Clovis, like Monte Verde, could only mean one thing: a crossing during an earlier exposure of the Beringia landbridge.

For the sake of argument, let's say that an earlier exposure occurred 25-30,000 years ago. According to this boat-less model, if you find a 14,500-year old site, it implies that the population that lived at Monte Verde

> [Contd on page 13](#)

## The Abomination of Calico (cont'd.)

**"The only problem is that the site produced a carbon date of 33,000 years old, 2.5 times older than Monte Verde 1, the paradigm buster component. A paradigm buster's paradigm buster?"**

originated from ancestors who had walked dry shod across Beringia around 25-30,000 years ago.

You back yourself into this logical corner when you outlaw boats.

Perhaps this was the reason for ignoring this paradigm-busting discovery for over twenty years: Admitting a 14,500yr date for Monte Verde meant admitting an earlier arrival date for New World migrations [based on a previous exposure of Beringia].

### Political and Economic Repercussions

Consider the real-world consequences of ignoring Monte Verde since the late 1970s. In the realm of Cultural Resource Management, proposals and budgets are limited to 12,000yr-old cellars or oldest dates and no older. During this time, no pre-Clovis site was ever reported or accepted by the mainstream. Had the profession's experts taken that field trip twenty years ago and realized it was a paradigm-buster back then, contract archaeologists would have been obligated to look for pre-Clovis sites.

Now that we know pre-Clovis sites must be here somewhere, how many of them were either missed during surveys and excavations or destroyed by construction because it was considered bad form to suggest their existence?

It gets better. The very same site, Monte Verde, had another component; probably a butchery site because they found blood on the edges of stone cutters. The

only problem is that the site produced a carbon date of 33,000 years old, 2.5 times older than Monte Verde 1, the paradigm buster component. A paradigm buster's paradigm buster?

One of the kickers with respect to the operating worldview of U.S. paleoarchaeologists comes straight from the discoverer's mouth. Thomas Dillehay drew the line, saying to the effect, "I wish those dates would just go away."

His colleague, Michael Collins (Gault Site, Texas), went even further. In 2008 at a First American invitation-only affair in his state, Collins advocates cryogenesis for the 33,000 year old artifacts: Let's put the dates for the 33k MV2 component on ice for a decade until we know what to do with them.

A ten-year moratorium on discussing and/or dealing with Monte Verde's earlier component? Why? Does he figure it will take a decade for the pros to mentally adjust to such a theoretical jolt? Does he think a too-sudden leap will have them scurrying to their therapists? Is this what real men do? There are too many things spiritually and morally wrong with this professional's mindset to cover in this essay; but if I'm a developer down in Texas, and I want to be sure I don't hit anything inconveniently old during construction because of the potentially horrendous mitigation costs, that's my guy!

That was the second kicker. The third kicker is that nobody at the private meeting *publicly* contested this sentiment, this exercise in mass

self-censorship.

If Monte Verde's 33,000yr blood-soaked artifacts located stratigraphically below the first official Pre-Clovis site can be officially ignored for the next decade, and given it took two decades for its younger 14.5ky component to finally get noticed and accepted, you can see why a site like Calico is abominable. It is unfathomable to the mainstream experts. It simply cannot be. It is too old. I am afraid that at this rate we will need to wait until sometime in the distant future for space Captain James T. Kirk to champion the Calico cause while on shore leave.<sup>1</sup>

<sup>1</sup> At a 2005 public paleoarchaeological meeting in South Carolina, I asked the experts at a question-answer session what was the earliest date I should use if I were to write up a National Science Foundation (NSF) proposal for First American research in the States. Answer: 25,000 years.

CHRIS HARDAKER is an archaeologist working in California and is presently reviewing data from the massive artifact collection of Calico. He is author of [The First American: The suppressed story of the people who discovered the New World](#).

# THE DMANISI HOMINIDS

## Part 1: Uplift, Altitude and Coastal Location

By Alan Cannell

International Civil Engineer

**The story of the discovery of four *Homo erectus* crania plus an array of other**

Arabian Plate; as the deep river gorges and spectacular Khrami canyon about 20km from Dmanisi bear witness. The main geographical features of the region are shown in **Fig.1**: The Greater Cauca-

sus, the Lesser Caucasus and the Kura Depression are shown to have uplifted at 0.6 mm/a and the Lesser Caucasus at 0.3 mm/a."

A recent analysis, confirmed as "probably correct," used Google Earth images of Chile's Monte Verde site, which is also rapidly uplifting, to reveal it was once nearer to sea level and the ancient coast (Cannell 2010, [Pleistocene Coalition News May-June 2010](#)) encouraging a similar exercise for Dmanisi. The good news is that because of the Baku oilfields, the geology of the region has been extensively studied. The bad news is that the geology is extremely complex.

According to the TOPO-EUROPE Initiative – ILP (2): "The present-day to-

The warm climate at the time of settlement shows that the Caspian Sea was going through an enlarged Apsheronian phase and thus covered the Kura Depression leaving deposits of: "gypsum, sandstone, limestone, and volcanic ash. Thicknesses are 100 m in the Apsheron area and 350 m in the Lower Kura Depression." (4)

Dmanisi lies on the neck between the Greater and Lesser Caucasus so using an uplift rate of 0.3mm/a (given for the Lower Caucasus) we can estimate that 1.8mya the hominin site would have been some 540m lower than the present value. If a mixed value of 0.45mm/a is used (representing the average of both the Greater and Lesser ranges) the uplift would have been around 810m. The site, according to Google Earth, is now at some 860m, **so at the time of occupation the Mashavera River Valley inhabited by the hominins would have been rela-**

> [Contd on page 15](#)



**Fig.1.** Major features of the Dmanisi region. Dmanisi is near the upper left.

**"So at the time of occupation the Mashavera River Valley inhabited by the hominins would have been relatively close to the sea."**

**hominin remains during the excavation of a Georgian castle surprised the world.** Contrary to the then expected pattern, some 1.8 million-years ago, *erectus* hominins, apparently having recently evolved on the African savannahs, had briskly moved to the Black Sea and settled in the Caucasus. Most of us were left wondering: what were they doing close to the Russian border and 1000m up an alpine valley without fire? How did they get there? And isn't it cold up there?

The truth is that the region was enjoying a warm spell at the time - the associated flora and fauna later found with the hominins indicate that: 'the climate was warmer and dryer than the present and corresponded to the Mediterranean type' (1). OK, so what about the alpine valley?

The Caucasus is the most active tectonic zone in Europe in terms of uplift, due to the rapid movement north (4.65cm/a) of the tectonic

pography of the Caucasus – East Anatolian area reflects the distribution and arrangement of megatectonic features. Active and dormant mountain fronts shape the topography along the southern margin of the Greater Caucasus (...).Uplift of the highest summits in the central and northern parts of the Greater Caucasus is highlighted by the occurrence of marine Plio-Pleistocene sediments at elevations in excess of 2500 m above MSL. (...) Terraces are found along the Caspian Sea (Brod, 1962; Shirinov, 1973; Shirinov, 1975), with the highest, some 230,000 years old, being located at about 300m above MSL. Terraces younger than 1.8 Ma occur up to an elevation of some 475m in the mountain valleys. Regional compression is N-S directed, with an average deformation of 14mm/y across the eastern part of the Greater Caucasus and uplift rates of the order of 8 mm/y."

## The Dmanisi hominids (cont'd.)

tively close to the sea (Caspian); the lake into which this river flowed as mentioned in (1) may even have been an inlet of this sea. Chemical analysis of the groundwater calcite layer could perhaps determine if the groundwater was fresh (lacustrine) or brackish (from the sea) at the time it was deposited and thus shed further light on this. *Diatom Biostratigraphy*, VanLandingham ([Pleistocene Coalition News March-April 2010](#)) may also help to shed some light on nature of this lake. The presence of surface gold alluvial deposits at 700m in Bolnisi (about 20km downstream) also hints that fast running water, coming from the ore-rich volcanic mountains nearby, had suddenly slowed at this height as low-ground was reached. (No date could be obtained for these surface deposits). For millennia sheepskins pegged to the streambeds have been used to trap this gold dust—giving rise to the Golden Fleece of Greek mythology.

Google Earth allows for an examination of the cliffs surrounding the Kura depression and there is a series of marine terrace-like features at around 475m to the north and about 490m to the south of the Kura Depression. Thus using the 475m contour as a guide to the sea-level about 1.8mya (2) the Caspian (Apsheronian) Sea coastline at the time of the Dmanisi hominins would have been close to the red-dotted yellow line shown in **Fig.1**.

This has several implications:

It places this early human occupation in Asia close to a series of large bodies of water that stretched from the Caspian (and the conjoined Black Sea) east to the Babbi Hills in modern Pakistan (where stone tools have been found and dated at around 2 mya) and perhaps even

beyond into what were lowlands but are now part of the western altiplano. There is unconfirmed evidence of very early hominin occupation of Azakh cave, which also lies in a valley just upstream from this enlarged Caspian Sea (as is shown in **Fig. 1**). This region may thus have acted as a development cradle for early man, which helps to explain the strong relationship between the Dmanisi fossils and Eastern Asian finds.

- Rather than a site indicating that erectus had spread to Alpine valleys, this is another example of early human occupation close to a large lake or sea. Dmanisi thus fits the same pattern as the Awash region, Lake Turkana, Olduvai, Yuanmou, China, Nihewan Basin, China, Java (marine coastal environment), etc. Rather than evolving on savannahs, erectus peoples were drawn to seas and lakes. The reason for this was almost certainly food, and probably the gathering of gastropods. Even archaic forms of afarensis or erectus – such as KSD-VP-1 from 3.6mya (see [PC News September-October 2010](#), pp. 14-16) are found associated with lacustrine sediments.

- Shell middens are one of the few solid, remaining and dateable indicators of human presence. Ancient peoples in the Americas have left shell deposits the size of pyramids dating back 8,000 years known as 'sambaquis' in Brazil. If there is any truth in the theory that humans needed for the composition of the central nervous system: "two long-chain polyunsaturated fatty acids

(LC-PUFA), docosahexaenoic acid (DHA) and arachidonic acid (AA)" and that: "The littoral marine and lacustrine food chains provide consistently greater amounts of pre-formed LC-PUFA than the terrestrial food chain." (5), then the remains of crushed shells introduced into the geological strata on these ancient terraces may be worth looking for.

### References

1. Current Research On The Hominid Site Of Dmanisi. Leo Gabunia, Abesalom Vekua, David Lordkipanidze, Reid Ferring, Antje Justus, Givi Maisuradze, Alexander Mouskhelishvili, Medea Nioradze, Djemal Sologashvili, Carl Swisher III, Merab Tvalchrelidze ERAUL 92, 2000, p. 13 à 27
2. TOPO-EUROPE initiative (regional coordinating committee for Europe of the International Lithosphere Program - ILP)
3. Chronology of Neogene and Quaternary uplift and magmatism in the Caucasus: constraints from K–Ar dating of volcanism in Armenia, John Mitchell Rob Westaway. [Tectonophysics, Volume 304, Issue 3](#), 1999.
4. Oligocene–Miocene Maykop/Diatom Total Petroleum System of the South Caspian Basin Province, Azerbaijan, Iran, and Turkmenistan. Linda S. Smith-Rouch. Bulletin 2201–I. U.S. Department of the Interior U.S. Geological Survey. 2006
5. Brain-specific lipids from marine, lacustrine, or terrestrial food resources: potential impact on early African Homo sapiens. Broadhurst CL, Wang Y, Crawford MA, Cunnane SC, Parkington JE, Schmidt WF. US Department of Agriculture, Environmental Chemistry Laboratory, Agricultural Research Service. 2002.

### Part 2 in the next issue.

ALAN CANNELL is an international civil engineer specialized in urban transport and structuring. His anthropology work has been featured on *NatureNews* (the journal *Nature's* online magazine) and in *Scientific American* (France).

If you would like to submit a comment, letter, or article for publication in *Pleistocene Coalition News*, please e-mail the editor or [Virginia Steen-McIntyre](#)

## BOOK REVIEW

### [Drawing on the Right Side of the Brain](#)

By Betty Edwards

Virginia Steen-McIntyre

**"He, on the other hand, having been to school, has learned how things 'should be done.'**

**... you color within the lines; sun is a yellow circle**

**... sky is a blue strip at the top**

**... grass a green strip at the bottom."**

Betty Edwards, *Drawing on the Right Side of the Brain: a Course in Enhancing Creativity and Artistic Confidence*, 1979, J.P. Tarcher, Inc., Los Angeles, 207 pp., ISBN 0-87477-088-2 (paperback) (See website <<http://www.drawright.com/>>).

Two of the goals of the Pleistocene Coalition, unstated but important, are to integrate the contributions of right-brain and left-brain thinkers in the search for truth about our ancient ancestors, and to make us all appreciative and comfortable with each others' thought processes. *Drawing on the Right Side of the Brain* is a good place to start; a book that has been popular for decades as a helpful aid to primarily left-brain thinkers, the scientists and engineers among us, to re-acquaint themselves with their artistic side.

Give paper and a box of color crayons to two kids, one two years old, the other six, and compare the results. Let them draw what they want. The younger one will probably glory in the very act of making lines, especially colored ones! Crayon grasped in fist (or two or more in both fists), she will swing her arms from the

shoulder, covering paper and whatever is adjacent with what to her older brother are just scribbles. He, on the other hand, having been to school, has learned how things "should be done" —you hold the crayon like a pencil, so; you color within the lines; sun is a yellow circle (with or without rays); sky is a blue strip at the top of the page; grass a green strip at the bottom;



**Fig.1.** Line drawing of Russian composer Igor Stravinsky by Pablo Picasso.

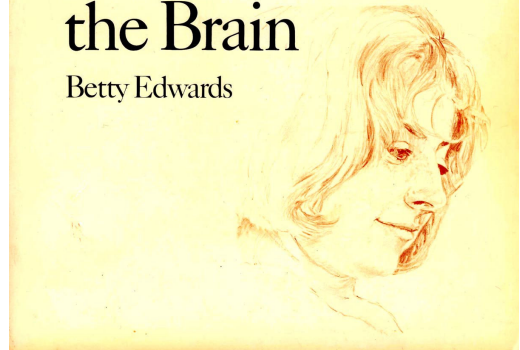
flying birds are a series of m's. An obvious shift in thought pattern from the imaginative, intuitive, timeless, analog, right hemisphere to the structured, digital, list-making, time-sensitive left hemisphere, the defining, categorizing part of the brain that "gets things done!"

Author Edwards realized that many of us adults have spent decades thinking almost exclusively in left-brain mode, and she wrote her book over 30 years ago to help us regain balance, awakening the passive right-brain hemisphere that can add such pleasure and adventure to life. She takes us in easy steps from the possibility that "can't draw flies" may not apply to us and on

A Course in Enhancing Creativity and Artistic Confidence

## Drawing on the Right Side of the Brain

Betty Edwards



from there. One of the first lessons concerns a Picasso line drawing of the Russian composer Igor Stravinsky (**Fig. 1**). Enlarge it several times and make a paper copy of it, then try to hand-draw it as is on another piece of paper, saying "mouth" when you draw the mouth, "ear" when you draw the ear, etc. This is left-brain thinking, drawing what a mouth and ear "should" look like. Next, turn the drawing upside-down and draw it again; this time thinking in terms of lines and spaces (right-brain thinking); "This line curves this way. This area is so big." When finished, compare the two drawings. You'll be surprised!

After all these years I'm only half-way through the book. This last time I stuck at the lesson where you draw a crumpled paper bag without looking at your paper. No time to finish the lessons at present, but it is on my "to do" list. And today they have a new edition, and a website <<http://www.drawright.com/>>.

Meanwhile, just to know that my artistic ability need not be arrested at the level of a 12-year-old gives me joy!

VIRGINIA STEEN-MCINTYRE, Ph.D, is a tephrochronologist (volcanic ash specialist) involved in preserving and publishing the Palaeolithic evidence from Valsequillo since the late 1960s.



## Update on Firestone et al's *Cycle of Cosmic Catastrophes*

By  
Virginia  
Steen-  
McIntyre

**Indigenous  
Groups with  
legends that  
may relate to  
Firestone's  
13ky cosmic  
event:**

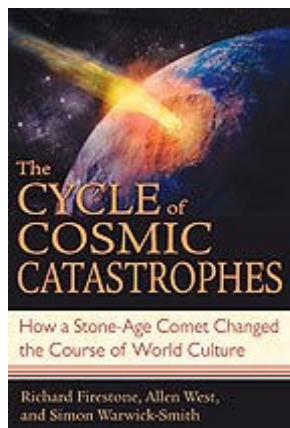
### North America

Brule, Ojibwa,  
Hopi, Matta-  
muskeet, Iro-  
quois, Pawnee,  
Aztec, Toltec,  
Navajo, Kato,  
Yurok

### Elsewhere

Taiwan: Atay;  
Caribbean:  
Aarawak; India:  
Manu and Magic  
Carp tale

The 2006 book *The Cycle of Cosmic Catastrophes* by Firestone, West, and Warwick-Smith was reviewed in the



July-August issue of this newsletter. In it the authors presented hard evidence of a possible supernova (exploding star) in the stellar neighborhood, an event that showered pulsating waves of radiation and "shrapnel" on the earth, beginning some 41,000 years ago and culminating some 13,000 years ago with the resulting extinction of the Ice-age megafauna in the northern hemisphere and the disappearance of the Clovis culture.

While writing the review, I corresponded with Firestone, and he mentioned that new evidence has come to light since the book was written. He now believes there was a series of near-Earth supernovae "that exploded 44 ka, 37 ka, 32 ka and 22 ka years ago. The earliest and closest event may have been responsible for the extinctions in Southeast Asia and Australia at that time" (pers. comm. May 3, 2010 e-mail.) For his latest results, he referred me to a recent paper of his in the *Journal of Cosmology*, 2009, v. 2, pp. 256-285, Oct. 27. (<<http://journalofcosmology.com/Extinction105.html>>. See abstract, below.

### The Case for the Younger Dryas Extraterrestrial Impact Event: Mammoth, Megafauna, and Clovis Extinction, 12,900 Years Ago.

Richard B. Firestone, Ph.D.

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94720

#### Abstract

The onset of >1,000 years of Younger Dryas cooling, broad-scale extinctions, and the disappearance of the Clovis culture in North America simultaneously occurred 12,900 years ago followed immediately by the appearance of a carbon-rich black layer at many locations. *In situ* bones of extinct megafauna and Clovis tools occur only beneath this black layer and not within or above it. At the base of the black mat at 9 Clovis-age sites in North America and a site in Belgium numerous extraterrestrial impact markers were found including magnetic grains highly enriched in iridium, magnetic microspherules, vesicular carbon spherules enriched in cubic, hexagonal, and n-type nanodiamonds, glass-like carbon containing Fullerenes and nanodiamonds, charcoal, soot, and polycyclic aromatic hydrocarbons. The same impact markers were found mixed throughout the sediments of 15 Carolina Bays, elliptical depressions along the Atlantic coast, whose parallel major axes point towards either the Great Lakes or Hudson Bay. The magnetic grains and spherules have an unusual Fe/Ti composition similar to lunar Procellarum KREEP Terrane and the organic constituents are enriched in <sup>14</sup>C leading to radiocarbon dates often well into the

future. These characteristics are inconsistent with known meteorites and suggest that the impact was by a previous unobserved, possibly extrasolar body. The concentration of impact markers peaks near the Great Lakes and their unusually high water content suggests that a 4.6 km-wide comet fragmented and exploded over the Laurentide Ice Sheet creating numerous craters that now persist at the bottom of the Great Lakes. The coincidence of this impact, the onset of Younger Dryas cooling, extinction of the megafauna, and the appearance of a black mat strongly suggests that all these events are directly related. These results have unleashed an avalanche of controversy which I will address in this paper.

**Keywords:** Younger Dryas, Extinctions, Extraterrestrial Impacts, Black Mat, Clovis, Mammoth, Megafauna

An example of left-brain thinking at its best!

But to return to the book itself, the right-brain thinkers are not given short shrift there. In a section titled "World View of the Ancients" (Chapter 12, Scientists and Storytellers, p.151) the authors acknowledge that "native cultures think in more symbolic or dreamlike terms [right-brain thinking]." Then they scatter throughout its pages tales of indigenous peoples from North America and elsewhere, passed down through who knows how many generations to the present, that may relate to this ancient cosmic tragedy. (See Side Bar)

Are there more such tales out there?



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**PLEISTOCENE COALITION  
NEWS**, Vol. 2: Issue 6  
(November-December)

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News is produced by the  
[Pleistocene Coalition](#)  
bi-monthly  
since October 2009.  
Back issues can be found  
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