

## Straight Lines: Selected Reviews

by Richard D. Flavin

### Abstract:

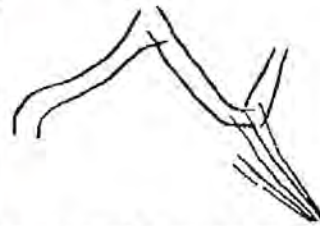
In mathematics two points are connected by a "right" or straight line, in the study of ancient rock art straight lines are regarded as decorative or numerical tallies, and among the Irish, straight lines were used to represent the letters of the oghamic alphabet. Determining a new meaning for an old straight line should be simple, but isn't. Clever claims have contributed to the popularity of various "straight lines," unfortunately science doesn't reward theories based upon how many books or publications are sold. While science still has much to offer with further investigation, a better understanding of many "straight lines" awaits.

I.



Engraved bone and quartz tool from the Congo, c. 9000 BCE.

After reading an article in *Scientific American* about a notched Mesolithic bone tool from the Congo, Alexander Marshack (then a feature writer with no significant academic background) published in 1964 a paradigm hypothesis which suggested the bone tool was engraved with a record of lunar observations. [1, 2] Soon afterwards, other examples of Upper Paleolithic and Mesolithic portable items with various series of straight lines (which had been previously regarded as decorative) were offered as perhaps being notational in intent. [3] The suggestion of lunar calendars hypothetically imparted cognitive and numbering abilities to our stone-age ancestors and pushed further away the popular perception of Ice Age cave-folks as grunting brutes with little or no intelligence. The suggestion continues to be improved upon, is often incorporated into models of Upper Paleolithic existence (along with diet, clothes, housing, art, and recently a proposal for coastal maritime technology), but is it true? Those straight lines previously regarded as decorative might be notational, some probably are, but proving it is another matter. Marshack has made a remarkable and most respectable contribution. Now, it's up to us to push the problem along. What do we really know about ancient straight lines?



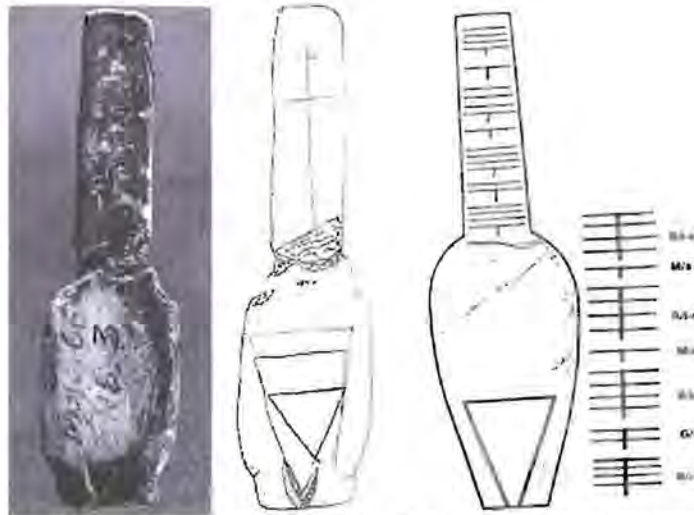
Engraved bone from the French Acheulean period, c. 200,000 BCE.

An engraved ox rib was discovered during the 1967-1968 excavation season at Pech de l'Azé and dated to c. 200,000 BCE. [4] The engraving, according to François Bordes (1919-1981; the archaeologist in charge of the excavation), consists of a "series of lines and incisions which are clearly intentional, not the random lines left by a flint cutting off the meat." [5, 6] It wasn't engraved by people like us, but rather by an earlier form of our species. The relationship of the engraved ox rib from the Upper Paleolithic site of Pech de l'Azé with Ice Age and later straight lines seems limited to a demonstration of ability and accomplishment. Some opine that the layer which contained the ox rib properly belongs to the Mousterian period, which requires a shifting of accomplishment from archaic humans (*Homo sapiens*) to the Neanderthals (*Homo neanderthalensis*). Modern humans (*Homo sapiens sapiens*) didn't enter Europe until the Neanderthals were on their way out and archaic humans had been gone a very, very long time. Any claims of traditions or traits and those early dates regarding straight lines are laughable, but ability and accomplishment remain a point of primitive pride. Apparently the engraving of straight lines goes back, way back.

With the initial dispersals of modern humans from Africa c. 100,000 BCE, the approximate beginnings of language and art may be imagined (Though an ability for both language and art may be considered for earlier hominans; see 'Update - 3/9/08' below). [7, 8] By 50,000 BCE modern humans had spread out across the globe, probably utilized a limited maritime technology to settle Australia and perhaps the New World, and shortly afterwards many examples of portable and parietal rock art begin to appear. Critical interpretations of these early examples of art are as problematic, debatable, and as opinionated as views overheard after any contemporary gallery opening (without, of course, comments about wine and cheese). Early art is often

straight lines of early art. Everyone's a critic and everyone has an answer.

The remains of Upper Paleolithic mammoth bone houses (c. 18,000 BCE) have been rightly famous since initial reports of their discovery in the 1920s. [10] From the Russian plain and across to Poland, mammoth bones served in the late Ice Age as a viable alternative to wood, stone or clay. Local material usage aside, certain engraved statuary from the Ukraine share basic construction and symboling with similar artifacts throughout Europe of that time and later. [11] One such example, an ivory female figurine from Mezherich, is engraved with a series of straight lines which may have been meant to depict a triangular vulva (perhaps re-engraved a few times), and other straight lines which may represent a simple stick figure with head and arms. Debates about why the figurine was made and how it was used (if re-engraved it could indicate multiple uses) are to be expected. What is surprising is that some believe the figurine is engraved with alphabetic characters. Yes, that's right; an alphabet from 20,000 years ago!



Engraved ivory figurine from the Ukraine, c. 17,000-14,000 BCE.

Working from a poorly printed photograph of the Mezherich ivory figurine, Michel-Gerald Boutet believes he has detected engraved straight lines which he's transcribed, transliterated, and translated as "Queen of the Aryans." [12] Boutet managed to impress a publisher, it sold fairly well, and too many continue to support his claims of an Upper Paleolithic script (though individual motivations are multitudinous) without being critical of basic problems. I know some of Boutet's supporters personally, or rather, those that have read his material and voice approval for almost any claim of the possibility of prehistoric scripts. Foolishness can account for much, but not all (see Fell's Windmill Hill "ogam consaine" claim below).



Parietal art from the French Dordogne region, c. 15,000 BCE.

Modern interpretations of early art will probably remain just that, modern interpretations. Unless extraordinary supporting evidence becomes available. Though, sometimes unproved and fantastic claims of ancient accomplishment can be educational and entertaining. Dr. Michael A. Rappenglueck (Kult-ur-institut für interdisziplinäre Kulturforschung e.V. > Mathematisches Institut, Ludwig Maximilians Universität, München > "independent, somewhat maverick researcher") recently presented a tempting match between some Upper Paleolithic paint dots and later numerical representations of the seven stars of the Pleiades. [13] Okay, seven dots equals seven stars and this was the intent of the cave artist. Makes the heart beat fast, doesn't it? As Rappenglueck continues and suggests certain cave art animal representations are constellations and his new software can prove it, the heart resumes its normal beat and mundane cadence. Upper Paleolithic constellations? Did Jean Auel start way too late?

Given sufficient fair weather and inspired need, many ancient cultures developed star lore which often utilized constellation images as mnemonic and narrative devices. Travel and navigation, whether for hunting, fishing, or trade, necessitates awareness of seasonal patterns and many ancient cultures devised wondrous

and productive systems (some of which continue in use). Upper Paleolithic representations of seasonal patterns have been advanced in a number of cases before, as in the bone knife from La Vache - Ariège; Magdalenian VI, c. 12,000 BCE, with engravings of plants and animals associated with spring on one side and those of autumn on the other. [14, 15] Naturalistic depictions were probably used in ritual art, magic and celebration, and though I don't doubt Ice Age folks had fair weather (towards the end, at least) and made engraved and pecked tallies on stone and bone which might represent limited solar and lunar notations (read: calendars), the leap of faith to believing that abstract constellation imaging was necessary and developed deep underground, far from the night sky, is one I cannot make.

A comment by Rappenglueck that his interpretation of cave art animal representations as constellations might help in explaining the peopling of the New World seems an invitation to disaster. The ongoing efforts by Dr. Dennis Stanford to connect the Old World Solutreans to the New World Clovis culture is a fascinating exercise in critical investigation. Two approaches are under consideration: a northern route tracking the coastal ice-shelf and a route directly across (perhaps following an ocean current). Stanford lectures that possible seasonal (read: hunting) images, from sites he believes would have been coastal during the Ice Age, suggest migratory animals may be depicted and some of those animals could have been tracked to an ancient current. I fail to see how a constellation-as-animal tradition would be necessary for either of Stanford's routes and hope Rappenglueck isn't just warming up for a career in fantastic claims. Btw, Stanford's work has been challenged [16] and some even debate if Stanford should be credited with being first with proposing a Solutrean and Clovis connection.

Rappenglueck recently announced his discernment of the stars of the constellation Orion on a carved piece of mammoth tusk which has been dated to c. 38,000 - 32,500 BCE. And major news organizations reported the claim. I still don't know whether I should laugh or cry.



Portable art from Germany, c. 38,000-32,500 BCE.

Remember *The Orion Mystery*? [17] Bauval now lectures alongside the infamous ex-neo-Nazi, Frank "Joseph" Collin, as well as the Hare Krishna and anti-science author, Michael Cremo. Oh, and he runs a vacation travel and tour company. His co-author, Adrian Gilbert remains equally whack. Extraterrestrials gave early man astral wisdom, it survived in the layout of the pyramids and the writings of Plato, but was then forgotten. Gullibility travels. And, for only the cost of a burger and a beer, one can read all about it. Elvis didn't leave the building; aliens took him.

Skinny time: there's "Orion," the great hunter from Greek mythology and the easily recognizable bright stars which make up the constellation of the same name. The rub? People at different times "saw" different images when they connected the (dots) stars. The three stars which form the so-called "belt" of Orion are recorded in various traditions (and, of course, as various things). [18] A male figure is not uncommon, but placed alongside of other constellation traditions, it becomes one interpretation among many. So, there are three factors: a male figure, a Greek mythological hero, and three bright stars which are variously interpreted as representing different things, i.e. a belt, fishermen, a turtle, etc. Ah, Orion!

The Egyptian decan system and diagonal calendars first appear with inscribed sarcophagus lids, c. 2100-1800 BCE, and mention a warrior constellation named *Sahu* (see image of *Senenmut's* tomb [var. *Senmut*] below with the three prominent stars today regarded as comprising Orion's Belt). A cuneiform text from Nippur (HS 245; Hilprecht-Sammlung, Jena), currently dated c. 1300-1000 BCE, contains the name, *SIBA.AN.NA* [var. *SIBA.ZI.AN.NA*], an Assyrian constellation ("True Shepard of the Sky") equated with Orion, though the name goes back to Old Babylonian times, c. 1830-1530 BCE. [19]



Senenmut's tomb, c. 1500 BCE.



Orion, the constellation.

Homer and Hesiod describe Orion as both hunter and constellation. Dr. E. C. Krupp (Director of the Griffith Observatory in L.A.) admits the unknown etymology of "Orion," quotes a nineteenth century opinion that the Greek name could have been inspired by the Akkadian title **URU.ANNA** or "Light of Heaven," and guesses a possible relationship with the Greek word for "warrior." [20] The Greek **Arion** [var. **Areion**], or "warrior," also figures into mythology as separate characters (a poet and a horse), were mentioned by Homer and Hesiod as distinct from Orion, and any etymological association with Orion would seem too much of a stretch. Ditto with comparisons of Orion and the Canaanite hero, **Aqhat**, known from Ugaritic and Hittite accounts. [21] Name games can be more confusing than connecting the dots or counting straight lines. R. H. Allen, the author of **Star-Names and Their Meanings**, a standard (though outdated) text on constellations, finds a hero-motif for Orion in many traditions and even repeats a previous translation of Kesil (*Isaiah* 13:10) as "the Orions." [22, 23] Well, so does Strong's (#3685), but *The Jewish Encyclopedia* is content to offer "Fool" as a likely translation. And it would be foolish, indeed, to pursue an Upper Paleolithic Orion, as Rappenglueck does. What do I think is represented? A hunter constellation on one side and a pregnancy calendar on the other? Nope. I'd guess there's a human back represented on one side and the notches on the other are designed to make the scratching of a back easier. One foolish guess should be as good as any other.


IL. "It's like you're unraveling a big cable-knit sweater that someone keeps knitting and knitting and knitting and knitting and knitting and knitting..."

As Marshack's hypothesis of Upper Paleolithic lunar calendars inspired others to approach the question of early human cognitive abilities with a greater sense of possibilities, likewise some exceptionally foolish claims have motivated some to boldly go where they shouldn't have. Prof. Howard Barraclough "Barry" Fell (marine biology, Harvard) made hundreds of claims not related to his field in books and articles published between 1973 and his passing in 1994 (many of which are regarded as fantastic and improbable), however a 1982 claim of his is noteworthy in that it has inspired an international industry of sorts.

Fell was fond of "deciphering" straight lines as "ogam consaine," a hypothetical abbreviatory method of constructing oghams in which only consonants are used. The expression has only a single attestation (as **chonsainidhe** or consonanted), which some believe was mistranscribed in a dictionary entry (as **consaine** or consonantal). [24] While examples exist of what appear to be vowelless oghams as abbreviations, debate continues as to whether these are magical, mistakes, or tallies, and no accepted argument has been put forth that this was a well known system within oghamic traditions.

  
 B L F S N

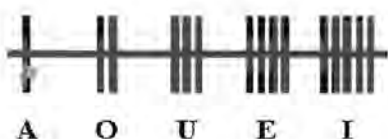
Brave Lad Fear Surely Not

  
 H D T C Q

Hidden Death Time Conquers Questions



Money Gains Knowledge Justice Reigns



Apollo Our Ultimate Eloquent Illusion

—the Irish ogham alphabet with a letter-order mnemonic.

Thought to have been invented c.1700 BCE, in or near Sinai, the acrophonic alphabet became codified (or ordered) at some point before its adaptation as a cuneiform script at Ugarit, 1400 through 1200 BCE. [25] The letter-order remained little changed as the alphabet was later used by the post-Ugarit Canaanite Phoenicians, followed by the Hebrews, Greeks, Etruscans, Romans, Arabs, and on out across the world. Though the alphabet diffused to far away places, in many cases some semblance of the original letter-order may still be found, and it's not difficult to trace the development of individual letter-forms (e.g., from South Semitic and Aramaic to Brahmi and Kharoshti, to Malay scripts and their influence on the problematic Philippine alphabet). The letter-order of the alphabet has had amazing staying power, with the notable exceptions of two early European writing systems: Norse runes and the Irish oghams. Runeforms follow a different letter-order, but their physical shapes show a clear relationship to Etruscan, which tempts a date of invention c.300-200 BCE. The oghamic scripts, however, consist of straight lines usually carved into wood or stone, defies a ready relationship with other alphabets, and continues to provoke investigators. How like the Irish!

Ogham (*var.* ogam) is thought to mean "skilled use of words," was originally "a peculiar form of cryptic speech, in which, for instance, the names of letters replaced in certain syllables the letters themselves," and a term for the entire spoken composition. [26] At some later point, perhaps even immediately afterwards, ogham was also used to describe an engraved inscription in oghamic script (as one pens a letter, so one would notch or cut an ogham). Both uses involve explicit occult cryptology and an implicit sense of cleverness.

Throughout the first half of the last century, R. A. S. Macalister promoted the hypothesis of a Western Greek (Chalcidian) influence on the oghamic script (via Etruscan or a related alphabet), an influence which may also have given rise to the Germanic runic *futhork* (the runeform alphabet, named after its first few letters). Macalister further conjectured that ogham progressed from a spoken, to a finger-language, merged with a tally-stick tradition as a monumental script, before becoming a manuscript pedantry and nearly forgotten. [27] No firm date of invention was ever advanced by Macalister, though with Caesar's mention that the Druids were forbidden to use writing, his hypothesis allowed for invention before the first century BCE, perhaps a few to several centuries before. Contrary to Macalister, many scholars didn't need such an early and direct Greek influence to explain the oghamic scripts and were satisfied with a Latin derivation in late Roman times.

Fueled in part by the literary and artistic 19th century "Celtic Revival," the study of oghams was again taken up. The 1917 publication of the *Auraicept na n-Éces: The Scholars' Primer*, edited and translated by George Calder, was met with critical acclaim and remains a classic for modern oghamists. [28] The *Auraicept* is a magical comedy originally written c. 650 CE (with additions over the next few centuries), and is thinly disguised as an ancient learned treatise describing a hoary and fantastic antiquity for oghams. Calder's publication of the work, with important photographs of four folio-pages from *The Book of Ballymote* showing 93 varieties of oghamic scripts, enabled later investigators to have a great deal of fun. But, here we split for the moment, between those amateurs and professionals who believe in a great antiquity for the oghamic scripts and those who support an invention shortly before the composition of the *Auraicept*. It is this extreme which still makes the casual study of oghams difficult for most.

Macalister's argument for a Western Greek influence on the development of oghamic scripts notwithstanding (though oghamic scripts did acquire additional characters, the *forfeda*, to represent diphthongs, based on Greek letters sometime between the sixth and eighth centuries CE), scholars continued to propose a derivation from the Latin (Roman) alphabet for the origin of the oghamic scripts. Such a derivation has steadily gained in acceptance, but the 'when' is still hotly debated.

The *Táin Bó Cúáinge* ("The Cattle-Raid of Cooley") is an Irish epic commonly believed to describe Iron Age Ireland, much like Homer's *The Iliad* described Achaean-era Troy. [29] The *Táin* has been dated to the early first century CE, around the time of Jesus, but many now disagree, with some claiming The *Táin* depicts Irish

life much earlier, while others maintain the Iron Age in Ireland lasted to c.500 CE and The *Táin* was probably composed shortly thereafter. [30] There is no mention of writing in the works of Homer, a fact many have pointed out tends to impart a certain verisimilitude to Homer's "history," while The *Táin* does include a mention of the making of an ogham. Some believe this reference was inserted into The *Táin*, perhaps as late as the 12th century, and is therefor unreliable in attempting to date the origin of the oghamic scripts.

A requisite for the study of any ancient language or script is the compilation of a corpus ("main body") of extant examples. This was done by Macalister in his monumental *Corpus Inscriptionum Insularum Celticarum*, and showed that the vast bulk of extant oghams occur in Ireland, with far lesser numbers in Scotland, Wales, England, and some of the islands. [31] No examples of ogham were recorded as being from the continent, though many amateurs and professionals had allowed for some form of Romano-Gaulish origin. With this apparently solid information, many scholars then projected a native invention of the oghamic scripts and even went so far as to declare the script was created in the southeastern corner of Ireland.

Ebb and flow, decadence and puritanism, liberal thinking and conservative judgments, are the extremes we endure until a lasting consensus is reached. The inescapable allure of the Druids, the Celtic myths and legends, the later fabulized manuscript claims regarding the age of the oghamic scripts, were all too much for academia to resist, and they've struck back in a most surprising manner. Many scholars today now understand the oghamic scripts as a reaction to the introduction of Christianity. Those extant examples referred to above? All appear datable to after the 5-6th centuries CE. Could the oghamic scripts have arisen as a joke in the face of Christianity? Some think so.

*The Christian Druids: On the filid or philosopher-poets of Ireland* by John Minahane [32] and *Ogam Stones and the Earliest Irish Christians* by Catherine Swift [33], are two examples of contemporary works which tack away from antiquity and support a late invention of the oghamic scripts, though one does so with a smile and the other without.

The current trend to regard the oghamic scripts as a druidic farce is, I believe, a response to previous claims, and merely describes late changes and nuances, but lacks the spine to understand the necessary requirements for a script, as opposed to some rarely used secret cipher. I don't doubt that ogham changed many times and eventually survived in a Christian context. However, I have three points of challenge to such a late, Christian-era origin for the oghamic scripts:

1) One of the so-called "Ballinderry Dice," from the second century CE, has the numeral 5 represented as three straight lines or the oghamic character "bilabial," which stands for the letter f or v, and another die has V, as in the Latin numerical convention for 5. Three lines to show the number five? The "Ballinderry Dice" would seem to suggest the oghamic script (and an Irish familiarity with Latin) was well established before the 4th century introduction of Christianity. [34]

2) Previous claims of no ogham on the continent, though based on earnest and seemingly thorough investigations, continue to be challenged. Oghamic flourishes on Celtic engraved stones in Brittany are too late to assist with the location problem for the invention of the oghamic script. Fell's claims of Swedish oghams and various Gaulish coins said to contain oghamic script in their decorations also offer little help. Yet, as recovery techniques and the discipline of archaeology improves, perhaps a future discovery of continental ogham awaits.

Most agree that the structural basis of the oghamic script developed from an earlier system involving the cutting of notches on wood (for tallies, divination, etc.). As wood seldom survives in the archaeological record, except under preservative conditions, it's not surprising we don't possess any examples of these early notations and possible transitions to the alphabetic oghamic scripts. The paucity of early runes is thus comparable to early oghams. [35]

3) I'm uncomfortable with the recent trend of some scholars to accept those sections of Josephus' *Antiquities* which mention Jesus, James, and Baptist John and reject the long held understanding that those sections were likely early medieval interpolations. But, I'm satisfied that everyone agrees that extant versions of Caesar's *De bello Gallico* are essentially the same as when various scribes and secretaries composed the classic military account (under Caesar's personal direction, of course). As Rome had despised the Celtic tribes to the north for centuries, it stands to reason that Caesar's explaining of the lack of a Celtic ethnic script (due to a profound regard for learning) was accurate, as it easily could have been bitterly dismissed by Caesar as profane and ignoble. Like the bit about the human sacrifices in wicker cages. Caesar's reporting on druidic traditions, c. 58-51 BCE, readily allows twenty years to learn how to voice a spoken ogham, how to signal a finger-language ogham, and perhaps how to cut an ogham inscription. [36]

While examples of ancient and medieval ciphers and occult alphabets exist, none (that I know of) achieved the enduring (widespread?) usage of the runic and oghamic scripts. Usually the invention or introduction of an alphabetic script is an almost nationalistic affair, with slight adaptations to individual cultures and specific requirements to accommodate the needs of the language being expressed. Also, there is the matter of the teaching of the alphabet, a collection of letters (an *abecedarium*), and a mnemonic attached to the letter-order to facilitate learning. All such mnemonics are lost, unfortunately, and various reconstructions are simply tantamount to wiley guesswork. However, it would not be unreasonable to assume that both the runic and oghamic scripts express far different mnemonic narratives than other alphabets. [37]

As we await further work and possible future discoveries, we're left with the choices of the oghamic scripts as likely being either a late creation inspired by such Latin grammarians as Aelius Donatus (fl. 354 CE), or a

first century invention using the divisions of the Latin alphabet as expressed by the rhetorician, Quintilian, in his *Institutio de Oratoria*. [38] An origin coeval with runes, c. 300-200 BCE, is an unsupported hunch I favor, in that such an early date makes it easier to accommodate known developments and changes in oghamic letters, sound values, and letter-order, but a first century BCE invention wouldn't surprise me.

Barry Fell was aware of the accepted approaches to the problem of the origin of the oghamic scripts, but offhandedly rejected over a century of sound and sincere scholarship. Working from a photocopy sent to him through the mail, of a line-drawing published almost thirty years previously, he produced a "decipherment" in "ogam consaine." [39] Fell wrote of the line-drawing:

Inscribed ogam consaine amulet excavated at Windmill hill, and ascribed by British Archaeologists to the late Neolithic, ca. 2000 B.C. Bronze Age artifacts were also found. The ogam inscription, though carefully illustrated by Stuart Piggott, was not recognized as such.

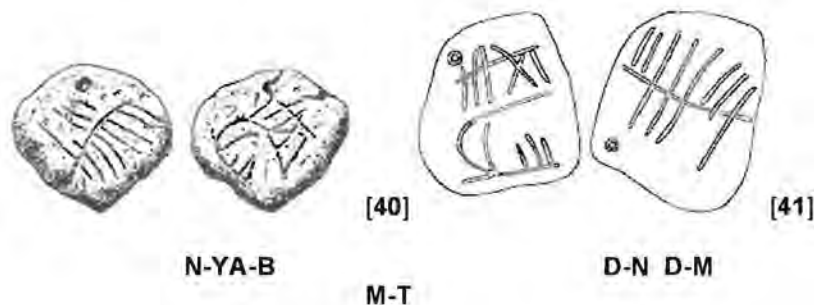
Decipherment (reading in boustrophedon)

B-YA-N M-T D-N D-M

which may be understood as Gadelic *Byanu mat, dion diom*

"Good Mother-Goddess, a protection for me."

The name Byanu, written in the same manner as above, was reported from the outer face of the left-hand entrance orthostat of the stone chamber at Vermont where Byanu is depicted on the ceiling, (America B.C. Photographs on p. 238). Despite this, the chamber is claimed to be of Colonial age by some archaeologists.



[42] Engraved chalk artifact from Windmill Hill, c. 3500-3400 BCE.

The implications were immediately recognized by those amateurs who needed a little something (or anything) extra to further their personal agendas. And, sadly, Fell's "decipherment" of oghamic script on a Neolithic artifact continues to enable further fantastic claims. The uncritical should be mindful that:

A. Fell often worked from material mailed to him, which he reacted to (read: "deciphered") without checking further. This seems to be a general complaint regarding his "epigraphic" work. He was an accomplished scholastic, well published, who knew the rigors of academic argument and presentation, yet with his epigraphic work Fell seldom stepped away from his desk to research an item or view it in person. Such pervasive carelessness (or, as some say, arrogance) marred his efforts and induced a negative reaction in most professionals. [43] Which is unfortunate, as he had some interesting ideas.

B. Interpreting straight lines engraved on a Neolithic artifact as oghamic script goes against every legitimate assessment and hypothesis as to the origin and history of the acrophonic alphabet.

C. His knowledge of the ogham language (a Celtic variant arising from \*proto-Goidelic, sometimes called Primitive Irish, which preceded Old Irish and writing with Latin letters) was outdated and insufficient against critics familiar with current scholarship.

D. The date of c. 2000 BCE for the Windmill Hill engraved chalk artifact, as reported by Piggott in 1954, was challenged shortly

thereafter in what has been described as the "first radiocarbon revolution." [44] Another revolution took place in 1967, when a conversion chart (calibrating radiocarbon dates utilizing dendrochronology and an awareness of past fluctuations in the Earth's magnetic field which affected levels of radiocarbon in the atmosphere) was first published. [45] Many refinements, taking in mind such techniques as thermoluminescence and varve dating, were subsequently made and adjustments continue. Fell, in 1982, seemed oblivious to the solid work which pushed the Windmill Hill engraved chalk artifact back to c. 3500-3400 BCE. Most public libraries would have been able to bring Fell up to date, yet he remained desk-bound and unaware of current science and scholarship.

Some have used Fell's claim of Neolithic "ogam consaine" to bolster their theories of oghamic scripts in South Africa [46], Japan [47], Canada [48], Mexico [49], and elsewhere. It's become a veritable industry and it's only a matter of time until Fell's claim is used to support fantasies that the alphabet originated in Atlantis or from Outer Space. Indeed, among a core-group of Fell enthusiasts, it's already happened.

To account for the global presence of petroglyphs consisting of straight lines, as well as the many examples known throughout North America, they use the term "Old People's Script" and believe the straight lines represent ancient writings in an unknown language. [50] Mindful that professionals regard these straight lines as tallies, tool-sharpening marks, decorations, etc., and because of a superficial resemblance to oghams and several imperfect attempts to "read" these straight lines, believers in the "Old People's Script" postulate (read: imagine) the existence of ancient travelers who journeyed around the world sharing their knowledge with Ireland as merely one stop among many. One member of this core-group of Fell enthusiasts has even gone as far as to argue that Neolithic travelers from central Europe brought the "Old People's Script" to North America and, later, the descendants of those travelers and Native Americans introduced oghams to Ireland. Such amateur theories may best be compared with *Six Degrees of Separation* (from reality). [51]

Fell's *America B.C.* [52], may have been chosen by President Jimmy Carter as one of the top 100 books about America published during our bicentennial, however subsequent critical reviews were not kind, in fact, some were downright mean. Much of Fell's early claims centered around New England (the now infamous "plough marks") [53], but he pressed on and the (re)discovery by enthusiasts of petroglyphs around North America which were distinct from the New England material (save, perhaps, the so-called "Blanchard Stone" [54]), reinvigorated the amateur hyper-diffusionist movement. Colorado, Utah, California, Kentucky, just across the Montana border in the Writing-on-Stone Preserve along the Milk River in Canada, and other locations contained petroglyphs which seemed related in style and manufacture. This was no longer a case for early Medieval Irish monks paddling their currachs to the New England shore – to account for the widespread North American presence of a related series of petroglyphs, the "Old People's Script" was conceived. Maybe the Irish didn't personally make it to Utah or Colorado, the enthusiasts reason, and suggest that Native Americans were copying or pretending to compose oghams. Very determined enthusiasts, for sure, but misguided and mistaken in their "Old People's Script" hypothesis none the less.



[55] Cliff face with petroglyphs in Kentucky (notice human at top for size perspective).

Gloria Farley was a very, very determined enthusiast and is most often associated with her discovery of the "Heavener Runestone," an enigmatic runic message located in Oklahoma, far from where one would normally think of finding Norse inscriptions. Her field-work continued and she's brought to light many priceless examples of rock art over the years. Believing she'd discovered "writing," she made tracings and drawings of some of the rock art and sent them to Barry Fell for "translation." One example comes to mind which, I believe, demonstrates how easily things can go wrong.

Farley, recently deceased, was once a tireless researcher who made many significant discoveries. What she did after those discoveries, making latex molds which destroyed any patina, drawing and only submitting

partial descriptions, and the like, has been debated in diffusionist circles for many years and I won't go into any of it here. At one point she sent Fell a drawing of a horse's tail. Fell should have requested a photograph of the rock art, maybe some more background information, but he didn't, and Fell "translated" the marks which make up the horse's tail. Fell believed he saw Irish oghamic letters in the horse's tail. Farley writes:

"Fell read the tail from right to left (upward) as 'M-H-M-D,' or 'Eihm' meaning 'tail, and 'Mold,' meaning 'Bulky' or 'Bushy.' Fell explains that the adjective in Gaelic follows the noun, and the words are pronounced 'eem mold.' . . . it is Gaelic for 'Bushy Tail.'" [56]



Close-up of Hays Canyon panel; © 1996 RDF.

Fell and Farley weren't troubled by the fact that the New World horse (and camel) became extinct some ten thousand years ago and the horse was only reintroduced by the Spanish in early 16th century. [57] The first problem, then, would be: here's rock art of a horse; why assume it's a few thousands of years old, despite the archaeological record which shows the horse wasn't in the Americas a few thousand years ago? Second, equally as disturbing: why assume some marks which make up a horse's tail represent an example of the Irish oghamic scripts? Farley, to her partial credit, attempts to address both, but can, unfortunately, only come up with the suggestion that Native Americans were taught the Irish oghamic script at some point, and retained knowledge of it. In the text of her book, but not in a drawing or photograph, she remarks upon the presence of the name of a "B. Kelley," some associated **International Order of the Odd Fellows** graffiti, and accuses this "B. Kelley" of vandalizing the ancient art depicting the horse. [58] I have serious issues with this approach.



Full Hays Canyon panel with I.O.O.F. graffiti; © 1996 RDF.

It's almost impossible for the naked eye to distinguish between graffiti incised on these canyon walls during WWII, 50 years before that, or 500 years before that, even. The markings only begin to show their age when they're 1000, 2000, or 3000 or more years of age. All of the markings on the Hays Canyon panel, pictured above, appear less than a thousand years of age. Sure, there's graffiti from different time periods, but all the markings appear relatively recent. Farley mentioned Kelley, the **I.O.O.F.** and saw vandalism. Apparently it didn't occur to her that "B. Kelley" was a bored cowboy at one point, a member of the **Odd Fellows** (as were many cowboys at that time), and the drawing of the horse was his. He wasn't the vandal; he was the artist.



Sniff Ranch w/ box-and-a-half brand; © 1996 RDF.

A "Bert Kelley" is known to have worked for The "Box-And-A-Half" Ranch (the name being taken from their brand). The box-and-a-half brand has been around for nearly 150 years, despite the ranch changing hands a few times. The current owners, Jack and Darlene Sniff, have added their own unique brand, but retain the box-and-a-half, as well. Above, is a picture of a sign outside of their ranch.



Sculpture atop Sniff mailbox; © 1996 RDF.

And, here's a photograph of their mailbox. The position of the box-and-a-half on the horse's shoulder matches the Hays Canyon rock art.



Burrows Cave stone with inscription.  
Photo by B. McGlone. Used with permission.

In *America B.C.*, Fell used photographs of plaster replicas made from latex molds taken (by one of Farley's helpers) directly from parietal engravings discovered in Colorado, which showed designs consisting of the pairing of a four-sided closed rectangle and a three-sided open square. [59] The "box-and-a-half" occurred in several of her reports and Fell translated the "letters" as being ancient Numidian or Tifinagh, and meaning *Ras* or chief. As misfortune would have it, the concept of *Ras* meaning chief was later utilized by a retired gravel salesman and local museum curator, Jack Ward, of Vincennes, Indiana. [60] Within months of the publication of Ward's book, an associate, Russ Burrows, began selling inscribed stones he claimed he discovered in a cave in southern Illinois. The so-called Burrows Cave problem continues until this day.



More straight lines from SE Colorado, © 1996 RDF.

Sometime in early 1983 I read a short mention in *The Boston Globe* about an "inscription" discovered in West Virginia and thought to be an ogham. I immediately went to the Boston Public Library and ordered a photocopy of an article by Barry Fell, published in *Wonderful West Virginia* (a state-sponsored magazine), which dealt with the claim of an ogham in the New World. [61] It cost several dollars (rather expensive at the time), took over a month to arrive, but I soon had the article in hand. I had no idea that more than twenty years later I would still be puzzled by it.



(Kiowa) calendar stick, McGlone *et al* remark: "Because the Indians also may have marked stone in this way, some of the more recently carved panels of parallel marks in southeast Colorado should be compared with this very interesting artifact for possible explanation as calendars. This has no impact on our acceptance of some of the ancient inscriptions as Ogam, however." [67] I don't care for the arrogance of "our acceptance" and charge that McGlone and his *et al* group couldn't escape their collected bias. Case in point: besides work on possible Upper Paleolithic lunar calendars, Marshack also studied Native American calendars. [68] In a 1989 book, Marshack again published about Native American calendars, the article was followed by a response (not entirely unfavorable), and the next article concerned "Navajo Indian star ceilings." [69] The book is not referenced in McGlone's publications, I don't recall him mentioning such to me during my week-long visit with him in 1995 or our many telephone conversations and letters that we exchanged. Still, he was a bibliophile, aware of most publications which even remotely mentioned his concerns, and I find it difficult to accept that he wasn't aware of "Navajo Indian star ceilings." The controversial dating of the so-called "Noble Twins" petroglyph and its impossible "translation" has been discussed and will, likely in an unconventional fashion, continue to be debated. [70] However, a scant several feet above that petroglyph is a natural partial cave with a "ceiling" containing star-like marks as used by the Navajo. The next state down from Colorado contains similar markings, but because some amateurs with old dictionaries "read" certain straight lines and have issues with "acceptance," a Native American origin is not considered? Blind bias.

"A hundred and fifty years ago the white man came here; they took our women but left us some guns and horses, and the rocks. A hundred years ago, they came back and took away the guns and horses. Now they're back after the goddamned rocks!"

An unnamed old man and Native American. [71]



Petroglyph from Colorado (a.k.a. the "Noble Twins inscription"), c. 1000 BCE; © 1996 RDF.



-----III-----III-III-----III-I-----
-----N-----N-S-----S-M-----
Celtic: <i>In Neas Saimh</i>
English: <i>The Noble Twins</i>

Diagrammatic representation of the "Noble Twins inscription" (after McGlone and Leonard).

McGlone and his *et al* group (much like Boutet and Rappenglueck; see above) have attempted to rewrite the origin of the alphabet and the history of astronomy. In 1986, McGlone and Leonard, based upon the work of Rollin W. Gillespie (said to have been responsible for the creation of NASA), believed the so-called "Noble Twins" petroglyph dated from shortly after Aug. 8, 471 CE. [72] The oghamic script was in use during the fifth century of the Common Era and if one can overlook a "translation" using not the ogham language, but Old Irish which developed afterwards, then such a date is allowable. After Ronald Dorn's experimental cation-ratio technique produced a date for the "Noble Twins" petroglyph of c. 1000 BCE, things got (and remain) silly. [73]

Skinny time redux: like Barry Fell, McGlone and Leonard arbitrarily separated various series of straight lines to form individual letters, combined those letters and searched dictionaries for words to suit their needs. [74] **MASH.TAB.BA.GAL.GAL**, the Mesopotamian constellation (the "Great Twins" **Lugal-irra** and **Meslamta-ea**; sometimes represented with the Sun as a "Triad of Stars;" see image below) was recognized before c. 1200 BCE. When the Greeks began to assimilate the Babylonian concept of the mathematical zodiac sometime shortly before the middle of the fifth century BCE, they associated the "Great Twins" with the local heroes, Castor and Pollux, the **Didymoi** ("Gemini" being a Latin translation introduced under the Romans). Herodotus of Halicarnassus, writing c. 440 BCE, names the peoples north of Greece from the Pyrenees in Spain to the coast of the Black Sea and Asia Minor as "**Keltai**" or the Celts (**The Histories**, Book II). Forty years later, because of mounting pressure from Germanic tribes living in the north, the Celts began to move into the Po Valley and Etruscan lands, eventually sacking Rome in 390 BCE. Today, many archaeologists suspect that the first migratory waves of Celts into the British Isles began c. 500 BCE and were probably initiated by the Celts

being displaced by encroaching Germanic tribes. Some believe, as I do, that the earliest possible date for an origin of the ogham script would have to be after 300 BCE and exposure to Latin letters. The attempted retrocession of Old and Middle Irish words and idioms by McGlone and Leonard to c. 1000 BCE is similar to Fell's Windmill Hill claim mentioned above. Too many problems exist for even polite consideration, McGlone et al were certainly aware of these problems during later publications, but decided not to retract or revise their "Noble Twins" claim.



[75] "Triad of Stars," c. 1200 BCE.

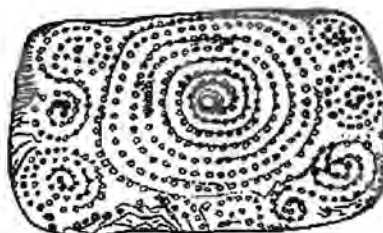
iii. "One of these days I gotta get myself organized."

For most, the claims mentioned above are clearly recognizable as pseudoscientific and implausible. Though Alexander Marshack's hypothesis of Upper Paleolithic lunar calendars has been published many times in various peer-reviewed scientific journals and is entirely plausible, some remain skeptical and consider his work incomplete and his case not made. This ongoing debate (rather than spewing irresponsible claims and moving on to the next impossibility) helps define modern science. Where there's critical discussion, there's likely science and everything's working fine.

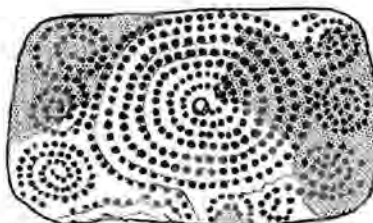
Marshack first tested his "notational thesis" by analyzing Ice Age artifacts with "a tiny Japanese binocular microscope, which had cost \$15." His initial results emboldened him to push further and with more research (and the use of the "finest possible micro and macro optical equipment"), Marshack began to establish a methodology which allowed serious speculation about the abilities of early man. [76]

My favorite Marshack story (everyone should have one, btw) concerns an engraved ivory object from the Mal'ta region of Siberia which is dated c. 24,000 BCE. In 1992, I purchased Geoffrey Ashe's *Dawn Behind the Dawn* and was intrigued with a proposed ancient tradition regarding the number 7 from a "homeland" somewhere near the Altai Mountains and Lake Baikal (where Siberia borders Mongolia). [77] Ashe reproduced a line-drawing of an Upper Paleolithic engraving which seemed to show a series of marks in 7 spirals and conjectured that this 7 tradition had diffused from Mal'ta to India, Sumer, and Egypt in one direction, and in another direction across the Bering Strait with the folks who would later become the Hopi. Eager at the possibility of furthering my skeptical diffusionism, I imagined that here was a way for New World traditions to be identical with Old World ones not from diffusion, but rather one in which the traditions were old enough to be brought to the New World as part of initial migrations. No secret history or archaeological conspiracies! The Hopi had the 7 tradition all the time! Things are never clear cut when you deal with fantastic propositions and I guess that's for the best. Shortly after buying Ashe's book I picked up a revised copy of Marshack's *The Roots of Civilization*. [78] There was a major problem with Ashe's proposed ancient tradition and it had to do with the engraved Mal'ta object. Marshack wrote:

When I went to the Soviet Union to study the plaque from Mal'ta I discovered that almost one quarter was missing and portions had been reconstructed and replaced with wax. This wax had then been marked with an approximation of the number of marks that may originally have been present. A precise count and test could not, therefore, be undertaken. That the spirals might, however, have been related to a symbolization of time and the year, is possible and the subject will be addressed in a separate and later study. [79]



"Design on ivory panel from Mal'ta, Siberia."  
See above, [77] Ashe 1992; p.16. Used without permission.



"Fig. 202 C A schematic rendition of the spiral design on one face of the ivory belt buckle from the Ice Age site of Malta, Siberia, showing the area of the break and the modern reconstruction."  
See above, [15] Marshack 1991; p. 337. Used without permission.

Reconstructed? Wax? Way to go, Alexander! Ashe's theory of a globally diffused number 7 tradition couldn't even get on-base because it struck out at home. Marshack answered a letter of enquiry with:

As to the Mal'ta plaque, I first learned of its existence in a number of papers sent to me by the Soviet historian and ethnologist, Boris Frolov. Since I could find no evidence of a counting by "sevens" in any of the materials I had studied, I made it a point to go to Russia to study the plaque. It was then that I discovered that the drawings were all in error, since they published and counted the reconstructed markings. The idea that the Upper Paleolithic notations were "hunting tallies," "menstrual counts" and pregnancy counts, etc. is common and is often found in the popular and professional literature. I have found no evidence for such hypotheses. [80]

[As a coda of sorts to the above tale, I sent Fell a copy of Ashe's *Dawn Behind the Dawn* to acquaint him with other models to explain similar cultural traits between New and Old world peoples without diffusion and also to begin a discussion about Marshack and the value of not being desk-bound and actually studying an object before publishing about it. Some weeks later, his wife sent me the book back along with a memorial card. My package containing the book had been on his desk, unopened, the day he passed away.]

By microscopically analyzing Ice Age art, Marshack has been able to argue for a "time-factored" process involved in the creation of certain works of Ice Age art, in that he's detected the use of individually identifiable tools at separate periods of time. In other words, some ancient objects show a variety of marks not usually associated with mere decorations, which are often made at a single sitting. The use of various tools, perhaps by different people, more pressure here and less there, a twist now with deep impressions, followed by a series of light punctures, and other traits combine to indicate in Marshack's view that spontaneity may have been supplemented with forethought and planning. Looking closely, Marshack believes he's been able to ascertain the order of many of the engraved marks and differentiate between markings which are made one on top of another. For many years now, he's rightly been the go-to guy for erudite comments on newly discovered Ice Age art and for good reason – he's been the most careful and hardest working individual in the field. Yet, his critics still challenge and we're the better for it.

Perhaps the most accessible example of critical discussion on Marshack's theory of Upper Paleolithic prearithmetical notation and the merits of his methodology involves a review by an art historian. [81] The journal, *Current Anthropology*, usually publishes a major article per issue along with several comments by professionals in related and pertinent fields, and allows the author to answer those comments. Major article + peer comments + rejoinder = critical discussion (or a damn fine approximation). Dr. James Elkins (art history and theory, Art Institute of Chicago) asked if a "close reading" was truly possible regarding Ice Age art and whether Marshack wasn't being too exact, allowing increasingly sophisticated scientific instrumentation to see what no Ice Age individual(s) intended, and had succumbed to personal discretion. Fair enough. The peer comments and the author's reply, however, were exceptional.

One commentator uses "Marshackian forensics" to express an ongoing frustration with what he correctly perceives as a potentially biased scrutiny of Ice Age engravings by Marshack. [82] Observer effect, after a fashion. Another commentator contributes: "Marshack has never clearly described or validated by replicative experiments the diagnostic criteria he uses in his microscopic analysis, and therefore when he identifies the technique used in producing prehistoric marks we do not know the basis of his claim." [83] Such demanding exactitude (mindful that the only exact science is mathematics, with astronomy as a lucky dependent) is currently used all too often as an argumentative end-run, especially when there's little else to complain about. And still another commentator offers: "Objects are lit, magnified, photographed, cropped, photographically enlarged, captioned, and accompanied by text in support of the position being advocated. This is not in any way to suggest purposeful sleight-of-hand on Marshack's part but rather to point out that his interpretive agenda leads him to see one of numerous possible patterns in a kind of optical and cognitive selectivity. Preferential lighting is a revealing example." [84]

Summing up his comments on Elkins' article, Marshack writes: "[Elkins] has indicated no knowledge of the Upper Paleolithic materials or their variability. He has not understood the nature of 'close reading' as an aspect of ongoing historical development rather than as philosophical and logical constraint. Nor has he addressed the

general problem of the nature of notation as a variable form of information encoding or of notational analysis as a specialized form of inquiry occurring at different levels of 'close reading.' Nevertheless, it will henceforth be impossible to discuss the problem of notation or notational analysis without reference to the perplexity of and the arguments and problems raised by Elkins." [85] Ouch! Marshack seems to employ an "appeal to authority" approach with himself as the authority!

Elkins' response to the commentators largely concerns evidentiary semantics and epistemological gobbledygook, yet he ended his reply with an honesty seldom exercised in academia. He wrote: "What initially drew me to Marshack's analyses was his writing, and what provoked my 'overly generous' assessment of his work was the power of his writing. Marshack can write with astonishing force, and his photomicrographs can be coercive 'visual arguments.' As far as I'm concerned, there is still no book in the history of art that arrays its visual material with such compelling success as *The Roots of Civilization*." [86] Here, here! Feature writers turned amateur prehistorians and Ice Age art critics rule!

In the recently published *Figuring It Out*, Prof. A. C. Renfrew (archaeology, Cambridge) writes of Marshack's work: "Perhaps the most intriguing of all are the notched artefacts .... of bones and antler, found mainly in the Franco-Cantabrian area, which have been studied in detail by Alexander Marshack. By showing that the incisions were made on several occasions, Marshack is able to claim them as a form of notation, perhaps recording successive observations of the moon. This would then qualify as the earliest known calendar notation, a good example of external symbolic storage. And if we are indeed claiming that these early humans were inherently every bit as clever as us, why should this not be so?" [87] Lord Renfrew is being cautiously optimistic. Two "perhaps" and he can share his excitement, while maintaining the status quo of skepticism. Is that cool or what?

We're still far from fully understanding the "Neolithic Revolution" and the spread of agriculture and language, yet there seems to be an Upper Paleolithic revolution slowly and steadfastly developing and Alexander Marshack's work has been in the forefront for decades. Marshack admits that external notches and straight lines are inherently susceptible to subjective interpretation and argues that his gleaned internal evidence makes his case. It doesn't. It's a maybe.

Ancient straight lines, whether parietal or portable, defy forensic interpretation because we can't penetrate their constituent phenomenological simplicity. Marshack attempts to turn *marques de chasse* ("hunting marks") into lunar calendars, eschewing a tally of prey for a tally of days (or nights). As all of the artifacts presented by Marshack as evidence for Upper Paleolithic lunar calendars are individual, seeming to share no consistent notational pattern, every artifact remains uniquely problematic. Much like every generation receives a different interpretation of Stonehenge, perhaps years from now the engraved items from the Upper Paleolithic will be envisioned as something beyond our current imagining.

The ancient straight lines in the New World, which some believe are related to oghamic scripts, likewise continue to resist any surety of interpretation. Unlike Marshack's Old World Upper Paleolithic straight lines, however, in the New World there are direct descendants of those who made some of those ancient straight lines. When joined with a better understanding of Native American number words and counting systems, perhaps we will one day be in a position to venture into proto-historical periods and even earlier. [88] Until then, they're just a bunch of straight lines.

#### Notes:

- 1) De Heinzelin de Braucourt, Jean. 1962. "Ishango." *Scientific American*. 206, 6: 105-116.
- 2) Marshack, Alexander. 1964. "Lunar Notation on Upper Paleolithic Remains." *Science*. 146: 743-745.
- 3) Vértès, László. 1965. "Lunar Calendar from the Hungarian Upper Paleolithic." *Science*. 149: 855-856. Further described in Rudgley, Richard. 1999. *The Lost Civilizations of the Stone Age*. New York: The Free Press; pp. 98-99.
- 4) Bordes, François. 1969. "Os percé moustérien et os gravé acheuléen du Pech de l'Azé II." *Quaternaria*. XI: 1-6.
- 5) Bordes, François. 1972. *A Tale of Two Caves*. New York: Harper & Row; p. 62.
- 6) Marshack, Alexander. 1975. "Exploring the Mind of Ice Age Man." *National Geographic*. 147, 1: 62-89; p. 85.
- 7) Renfrew, Colin. 1991. "Before Babel: Speculations on the Origins of Linguistic Diversity." *Cambridge Archaeological Journal*. 1, 1: 3-23.
- 8) Cavalli-Sforza, Luigi Luca et al. 1988. "Reconstruction of human evolution: Bringing together genetic, archaeological, and linguistic data." *Proceedings of the National Academy of Sciences*. 85: 6002-6006.
- 9) Bahn, Paul G. and Jean Vertut. 1988. *Images of the Ice Age*. London: Windward/Smith and Son Ltd.
- 10) Haddingham, Evan. 1979. *Secrets of the Ice Age*. New York: Walker Publishing; pp. 12-15.
- 11) Gimbutas, Marija. 1991. *The Civilization of the Goddess*. New York: HarperSanFrancisco; p.314.
- 12) Boutet, Michel-Gerald et al. 1996. *The Celtic Connection (Stonehenge Viewpoint No. 107)*. Santa Barbara, CA: Stonehenge Viewpoint. See p. 183.
- 13) Rappenglueck, Michael A. 1999. *Eine Himmelskarte aus der Eiszeit? Ein Beitrag zur Urgeschichte der Himmelskunde und zur paläoastronomischen Methodik, aufgezeigt am Beispiel der Szene in Le Puits, Grotte de Lascaux (Com. Montignac, Dép. Dordogne, Rég. Aquitaine, France)* [A Celestial Map from the Ice Age? A Contribution to the Earliest History of Astronomy and to Palaeoastronomical Methodology, Shown by the Scene in Le Puits, Grotte de Lascaux]. Frankfurt: Peter Lang GmbH. I recall that Rappenglueck was not alone in postulating a Paleo-Pleiades, as Luz Antequera Congregado's 1992 doctoral thesis, "Arte y

- astronomía: evolución de los dibujos de las constelaciones" also deals with this fantastic suggestion. It may be a case like Darwin and Wallace and dual priority. The descriptive "maverick" quote is from an online article at the Space.com website ("Stone -Age Cave Paintings Reveal Maps of Night Sky," by Jack Lucentini; [www.space.com/scienceastronomy/planetearth/cave\\_paintings\\_000810.html](http://www.space.com/scienceastronomy/planetearth/cave_paintings_000810.html)).
- 14) See above, [6] Marshack 1976; pp. 80, 82 and 83.
- 15) Marshack, Alexander. 1991. *The Roots of Civilization: the cognitive beginnings of man's first art, symbol, and notation*. 2nd edition, revised and expanded. Mt. Kisco, NY: Moyer Bell Limited; p. 174. For claims of other Upper Paleolithic seasonal patterns and representations, see Chapter 11 "Image of the World: Time-factored Art," pp. 169-234 and Chapter 12 "Time-factored Death," pp. 235-280.
- 16) Strauss, Lawrence Guy. 2000. "Solutrean Settlement of North America? A Review of Reality." *American Antiquity*. 65, 2: 219-226. Also, as an alternative rather than a repudiation, see: Koppel, Tom. 2003. *Lost World: rewriting prehistory—how new science is tracing America's Ice Age mariners*. New York: Simon & Schuster/Atria.
- 17) Bauval, Robert and Adrian Gilbert. 1994. *The Orion Mystery: Unlocking the Secrets of the Pyramids*. New York: Crown.
- 18) Krupp, Edwin C. 1991. *Beyond the Blue Horizon: Myths and Legends of the Sun, Moon, Stars, and Planets*. New York: HarperCollins; pp. 213-216.
- 19) Van der Waerden, Bartel L. 1974. *Science Awakening II: The Birth of Astronomy* (with contributions by Peter Huber). Leyden, New York: Noordhoff, Oxford; pp. 58 and 62-64.
- 20) See above, [18] Krupp 1991; p. 214.
- 21) Gordon, Cyrus H. 1965. *The Common Background of Greek and Hebrew Civilizations*. 2nd edition. New York: W. W. Norton; pp. 155-170. Originally published as *Before the Bible: The Common Background of Greek and Hebrew Civilizations*. New York: Harper and Row, 1962.
- 22) Allen, Richard Hinkley. 1899. *Star-Names and Their Meanings*. New York: G. E. Stechert.
- 23) Cheyne, T. K. 1898. *The book of the prophet Isaiah. A new English translation. Printed in colors exhibiting the composite structure of the book. With explanatory notes and pictorial illustrations by T.K. Cheyne. (The sacred books of the Old and New Testaments. A new English translation. Part 10)*. New York: Dodd, Mead, and Co.
- 24) O Hehir, Brendan. 1989. "The Origin, Development and History of the Ogam Script: Facts and Conjectures (Abstract handout sheets from the Ridgecrest Meeting of the American Rock Art Research Association 1988 Symposium. Ridgecrest, California May 28, 29 and 30)." *Epigraphic Society Occasional Publications*. 18: 30-34. O Hehir writes about a claim of McGlone's (see below; [50] McGlone and Leonard; p. 74): "From Eoghan Rua he mistranscribes a line of verse, *An ogham fada* [should be *fhada*], *aereach aosta chonsainidhe* with an accompanying 'translation': 'The Ogam of Long Ago, Peculiar, Archaic and using only consonants.' This translation is completely wrong, whether McGlone or Fell or a third party is to blame. What the line of verse speaks of is, 'The consonanted, aged, *airy*, long ogam.' 'Consonanted' ogam is *not* 'ogham written using only consonants', and 'long' is not 'of long ago', nor is 'aged' necessarily 'archaic.'" It seems the phrase ("o. consaine, consonantal ogam") is found in a dictionary used by Fell, McGlone and others, but O Hehir says this is an error. See: Dinneen, Patrick S. 1975. *Foclóir Gaedhilge agus Béarla - An Irish English Dictionary* (revised and expanded from 1927/1934 editions). Dublin: Irish Texts Society; under "Ogham." "Eoghan Rua" or Eoghain Ruaidh Uí Shúilleabháin (Ang. Owen Roe O'Sullivan) was an eighteenth century bard, drunk, sailor and soldier who barely lasted three dozen years after leaving the womb. I couldn't imagine a better source and citation for Fell to use. It's actually quite clever.
- 25) Cross, Frank Moore. 1989. "The Invention and Development of the Alphabet." *The Origins of Writing*. Edited by Wayne M. Senner. Lincoln, NE: University of Nebraska Press; pp. 77-90.
- 26) Diringer, David. 1948. *The Alphabet: A Key to the History of Mankind*. New York: Philosophical Library; p. 525. Diringer's assessment may have been based on: Meyer, Kuno. 1909. "The Secret Languages of Ireland." *Journal of the Gypsy Lore Society* (new series). 2: 241-246.
- 27) Macalister, R. A. S. 1937. *The Secret Languages of Ireland*. Cambridge: Cambridge University Press.
- 28) Calder, George. 1917. *Auraicept na n-Éces: The Scholars' Primer*. Edited and translated by George Calder. Edinburgh: John Grant. A lively overview of the "conspicuous genre of 18th-century alphabet symbolism," commenting on the works by Rowland Jones, L. D. Nelme, and Charles Vallancey, authors who undoubtedly swallowed the bait of various pre-Calder mss. versions of the *Auraicept*, may be found in: Drucker, Johanna. 1995. *The Alphabetic Labyrinth: the letters in history and imagination*. New York: Thames and Hudson; pp. 225-234.
- 29) Koch, John T. 1991. "Eiru, Alba, and Letha: When was a language ancestral to Gaelic first spoken in Ireland?" *Emania* 9: 17-27 (a date of 1141 BCE is proposed).
- 30) Mallory, J. P. 1992. "The World of Cú Chulainn: The Archaeology of Táin Bó Cúailnge." *Aspects of The Tain*. Edited by J. P. Mallory. Belfast: December Publications; pp. 151-153.
- 31) Macalister, R. A. S. 1996. *Corpus Inscriptionum Insularum Celticarum* (Preface by Damian McManus). 2nd edition. Dublin: Four Courts Press.
- 32) Minahan, John. 1993. *The Christian Druids: On the filid or philosopher-poets of Ireland*. Dublin: Sanas Press.
- 33) Swift, Catherine. 1997. *Ogam Stones and the Earliest Irish Christians* (Maynooth Monographs Series Minor II). Maynooth: The Cardinal Press.
- 34) Henken, H. O'Neill. 1942. "Ballinderry Crannog No. 2." *Proceedings of the Royal Irish Academy*. 47C, 1: 1-76.
- 35) Barry Fell. 1982. *Bronze Age America*. Boston: Little, Brown, & Co.; pp. 12 and 14. For a picture of a coin claimed to bear ogamic script, see: Payn, Marshall and Barry Fell. 1989. "The Origin and History of Ogam Script: an interview with Barry Fell." *Epigraphic Society Occasional Publications*. 18: 49(Fig. 10). The first edition of Diringer's *The Alphabet* (see above, [26] Diringer 1948) and the minimally changed second edition a couple of years later, were a goldmine for Fell and his enthusiasts. Though amazing and encyclopedic efforts, the first two editions of *The Alphabet* allowed some major guesswork to sneak through. Diringer repeats a 1902 report by Macalister (*Studies in Irish Epigraphy II*) of "limestone tablets, discovered at Brier near Magdeburg on the River Elbe

in

Saxony" which "are written in a script, which has some similarity with the oghams, but nothing can be said about their mutual connection." I've recently read that the Saxony pseudo-oghams were revealed as forgeries in 1917. Shortly before Glozel, Diringer took a peek behind the curtain when he wrote an encouraging introduction to Hugh A. Moran's 1952 *The Alphabet and the Ancient Calendar Astrological Elements in the Origin of the Alphabet* (Palo Alto, CA: Pacific Books). See also: Moran, Hugh A. and David

H. Kelley. 1969. *The Alphabet and the Ancient Calendar Signs*. 2nd edition. Palo Alto, CA: Daily Press; with new preface by Moran and "American Parallels" by Kelley; pp. 143-187. Kelley later published more of his Moran-related thesis in: Kelley, David H. 1974. "Eurasian Evidence and the Mayan Calendar Correlation." *Mesoamerican Archaeology: new approaches*. Edited by Norman

Hammond. Austin, TX: University of Texas Press; pp. 135-142. Diringer was interested in Moran's thesis that the 28 divisions of the Chinese Lunar Zodiac may have influenced the invention (and, later, diffusion) of the acrophonic alphabet, c. 1700. The late Prof. Cyrus

Gordon attempted to connect the 29 or 30 signs of the Ugaritic cuneiform alphabet with a lunar zodiac, but much like Kelley is still hoping for a Mesoamerican K-L-M sequence, Gordon didn't actively pursue his suggestion (see: Gordon, Cyrus. 1974. "The Accidental Invention of the Phonemic Alphabet." *Journal of Near Eastern Studies*. 29: 193-197). The last photograph reproduced in

Diringer's first edition (p. 569) of *The Alphabet* shows a chunk of slate engraved with a bunch of straight lines. "Is this a cryptic system of writing consisting in numerals? Nobody knows," Diringer commented. He says there's been over 500 inscriptions just like it

found in "different localities" in Spain. Unfortunately for footnote fetishists, he doesn't provide a citation or reference.



Engraved slate from Salamanca, Spain. See above, [26] Diringer 1948; p. 569 (Fig. 253.6). Used without permission.

36) *The Gallic Wars* by Julius Caesar; translated by W. A. McDevitte and W. S. Bohn. Book 6, Chap. 14: "The Druids do not go to war,

nor pay tribute together with the rest; they have an exemption from military service and a dispensation in all matters. Induced by such great advantages, many embrace this profession of their own accord, and [many] are sent to it by their parents and relations. They are

said there to learn by heart a great number of verses; accordingly some remain in the course of training twenty years. Nor do they regard it lawful to commit these to writing, though in almost all other matters, in their public and private transactions, they use Greek characters. That practice they seem to me to have adopted for two reasons; because they neither desire their doctrines to be divulged

among the mass of the people, nor those who learn, to devote themselves the less to the efforts of memory, relying on writing; since it

generally occurs to most men, that, in their dependence on writing, they relax their diligence in learning thoroughly, and their employment of the memory. They wish to inculcate this as one of their leading tenets, that souls do not become extinct, but pass after

death from one body to another, and they think that men by this tenet are in a great degree excited to valor, the fear of death being disregarded. They likewise discuss and impart to the youth many things respecting the stars and their motion, respecting the extent of

the world and of our earth, respecting the nature of things, respecting the power and the majesty of the immortal gods." Rather gracious for a bitter enemy, eh?

37) Graves, Robert. 1966. *The White Goddess: A Historical Grammar of Poetic Myth, amended and enlarged edition*. New York:

Farrar, Straus and Giroux. Graves argued that the medieval Welsh poem, *Cād Goddeu* ("The Battle of the Trees"), was a remnant of

the ogham mnemonic narrative for sequential letter-order. This approach is a mischievous sequel to the *Auraicept* and as Graves later

admitted, farcical and allegorical. Still, there could be truth in his twistory, as an ogham is by nature, a complex cleverness. Some grammarian invented the oghamic cipher alphabet, radically departing from the traditional A, B, C (G), D, etc. letter-order (though whether this took place in Ireland or Latin and Greek lands is still debated), and that a mnemonic narrative was used for education purposes is a given. What that mnemonic was remains as elusive as for that other European cryptic script, the runic alphabet. The mnemonic narrative of the Old Canaanite alphabet and its familiar 'alp, bêt, gaml and dalt (cow, house, throwstick, door) might, with luck, be identified someday in a previously overlooked Ugaritic cuneiform tablet

38) Carney, James. 1975. "The Invention of the Ogom Cipher." *Ériu*. 26: 53-65.

39) Fell, Barry. 1982. "An Ogam Consaine inscribed artifact from Windmill Hill, Wiltshire, England." *Epigraphic Society Occasional*

*Publications*. 10, 1: 110-111.

40) Line-drawing (Fig. 18) from Piggott, Stuart. 1954. *Neolithic Cultures of the British Isles: a study of the stone-using agricultural*

*communities of Britain in the second millennium BC*. Cambridge: Cambridge University Press; p. 87.

41) Line-drawing (after Fell); see above, [39] Fell 1982; p. 111.

42) Rotated digital photograph of "Chalk amulet with incised designs and incomplete perforation," from Smith, Isobel Foster. 1965. *Windmill Hill and Avebury: excavations by Alexander Keiller, 1925-1939*. Oxford: Clarendon Press. See: plate xxv. Used without permission.

43) Kelley, David H. 1990. "Proto-Tifinagh and Proto-Ogham in the Americas." *Review of Archaeology*. 11, 1: 1-10. Kelley writes of

Fell: "One of the striking things about Fell is that he seems to have achieved a substantial number of remarkable results which are broadly correct." The title of the article is misleading in that Kelley barely mentions tifinagh (a script used by today's Berbers, also known as Libyan or Numidian, and thought to be derived from Punic) or ogham. Instead, he attempts to cover four books and ten articles (seven authors) with diffusionist panache. He says that he isn't bothered by the lack of archaeological remains around Peterborough, Ontario, where instead of Native American rock art, he believes, like Fell and his enthusiasts, that Bronze Age

Swedes

from ca. 2000-1200 BCE, using a North African script commonly thought to have arisen around the time of Carthage, c. 725-146 BCE,

left their mark. He does say, however, that he feels bad about no archaeological remains to assist all those North American ogham claims. I believe he was on the editorial board of the journal when the article was published. A sequel of sorts is: Kelley, David H. 1994. "Epigraphy and Other Fantasies (a review of Williams' *Fantastic Archaeology*)." *Review of Archaeology*. 15, 2: 8-14.

More

fluff, but some good detective work on the "Grave Creek Stone," which still makes my top ten list of maybes, though there are problems

(see: Flavin, Richard D. 2008. "Fell and Egyptian Pt. 3." *Twisted History*. Forthcoming. Onlinet: [www.flavinscorner.com/twist.htm](http://www.flavinscorner.com/twist.htm)).

Prof. David Humiston Kelley (archaeology, Calgary) may have danced to the academic beat with most of his publications, but two stand

out as scholastic anarchy: Kelley, David H. 1990. "Tane and Sina: a Uto-Aztecan Astronomical Cult in Polynesia." *Circumpacifica, Band II* (Festschrift für Thomas S. Bartel). Frankfurt: Peter Lang; pp. 137-157, and Kelley, David H. 1995. "An Essay on Pre-Columbian Contacts between the Americas and Other Areas, with Special Reference to the Work of Ivan Van Sertima." *Race, Discourse, and the Origin of the Americas: A New World View*. Edited by Vera L. Hyatt and Rex Nettleford. Washington, D.C.: Smithsonian Institution Press; pp. 103-122.

44) Renfrew, Colin. 1973. *Before Civilization: the radiocarbon revolution and prehistoric Europe*. New York: Knopf; p. 59.

45) Suess, H.E. 1967. "Bristlecone pine calibration of the radiocarbon time scale from 4100 B.C. to 1500 B.C." *Radioactive Dating and Methods of Low-level Counting* (Proceedings of the Twelfth Nobel Symposium). Edited by I. U. Olsson. Vienna: International Atomic Energy Agency, pp. 143-151.

46) Sullivan, Brenda. 2001. *Africa Through the Mists of Time*. Forward by Credo Mutwa. Johannesburg: Covos Day.

47) Yoneyama, Masuhiro. 1984. An Ogam Consaine Inscription from Kashiba, Nara Prefecture, Japan. *Epigraphic Society Occasional Publications*. 12, 1:33-38. Also, see: Yoshida, Nobuhiro. 1993. "Implications of the Ogam Inscriptions in Japan." *The*

*Eclectic Epigrapher* (Stonehenge Viewpoint No.s 99-100). Edited by Donald L. Cyr. Santa Barbara, CA: Stonehenge Viewpoint; pp. 111-116.

48) Dexter, Warren W. 1984. *Ogam Consaine and Tifinagh Alphabets - Ancient Uses*. Rutland, VT: Academy Books.

49) Athy, Lawrence F. 1993. "Proto-Ogams on Olmec Monuments." *Epigraphic Society Occasional Papers*. 22:136-142.

50) McGlone, William R. and Phillip M. Leonard. 1986. *Ancient Celtic America*. Appendix by Rollin W. Gillespie. Fresno, CA: Panorama West Books; pp. 201-202. McGlone and Leonard here use "Old People style" to describe a series of heavily patinated straight lines combined with other symbols, thought by Fell to represent the Thamudic script; p. 202. Later, they use the term "Archaic

Geometric" for the same petroglyphs. Other enthusiasts use "Old People's Script" for straight lines that are "unreadable." The direct impetus for writing this portion of this review arose from discussions on the Usenet newsgroup, *sci.archaeology*. I'd made a post which described a conversation I had with McGlone in which he told me that a "lack of a backtrail" would always defeat his argument. Maybe he said "impede" (doubtful), or "hurt," or "damage," or something else. He took out maps, showed possible river routes to Southeastern Colorado and admitted there wasn't a shred of archaeological evidence to suggest a group of Shaolin-trained, Irish Culdee

monks made their way to canyon country. He still believed the marks were ogham, but in a moment of critical lucidity, he admitted how difficult his position was. I believe that moment of critical lucidity is to McGlone's credit. There've been Usenet posts suggesting I'm either lying or I misunderstood McGlone. That's the nature of Usenet: suggesting.

51) Athy, Lawrence F. 1998. *Statistical Correlations of Symbol Frequencies Demonstrate that the Ancient Ogam-like Inscriptions*

*of Colorado and the British Isles Share the Same Language* (Monograph Number One of Early Sites Research Society West). Independence, MO: ESRS West. This "monograph" is a reworking and an expansion of a presentation given at the 27th Annual Chacmool Conference at the University of Calgary in 1994. The theory that Native Americans introduced ogham to Ireland was made in

various 2002 postings by Athy to the Usenet newsgroup, *sci.archaeology*.

52) Fell, Barry. 1976. *America B. C.: Ancient Settlers in the New World*. New York: Demeter Press/Quadrangle/The New York Times Book Co.

53) Reynolds, Peter and Anne Ross. 1978. "Reflections of the "Ancient Vermont: Conference - Summary." *Ancient Vermont* (Proceedings of the Castleton Conference, Castleton State College, October 14-15, 1977). Edited Warren L. Cook. Rutland, VT: Academy Books, pp. 139-144. The expression "plough marks" appears on p. 140 and indicates the authors' British English background. American English requires "plow marks."

54) The "Blanchard Stone" in Vermont is engraved with straight lines which more closely resemble the "Old People's Script," than other

examples offered at Castleton in 1977 (that is, Native American calendar or tally marks rather than "plough marks"). A comment from a

bystander that the marks could have been made by "Boy Scouts" was later erroneously attributed to the Vermont State Archaeologist.

See remarks by Cook in *Ancient Vermont* ([53] above), p. 135, as well as the photographs on the unnumbered pages 180-181 (Figs. 23-32).

55) Cropped digital reproduction of "104. Petroglyphs on the east side of the panel at the Old Landing petroglyph site," from *Rock Art*

of

*Kentucky* by Fred E. Coy, Jr., et al; 1997; Lexington, KY: University Press of Kentucky; p. 88. Used without permission.

66) Farley, Gloria. 1994. *In Plain Sight: Old World Records In Ancient America*. Columbus, GA: ISAC Press; p.369.

57) Viola, Herman J. 1992. *After Columbus: The Horse's Return to America*, illustrated by Deborah Howland (Smithsonian Wild Heritage Collection). Norwalk, CT: Soundprints. For the hyper-diffusionist and anti-scientific approach, see above, [66] Farley 1994; pp. 339-377.

58) See above, [66] Farley 1994; p. 368.

59) See above, [52] Fell 1976; pp. 182-183. Fell presents two photographs on separate pages, giving the reader the impression that the

parietal engravings are spatially distinct from one another. Farley (see above, [66] Farley 1994; p. 55) later published a line-drawing which suggested that the engravings were scant inches away from one another.

60) Ward, John A. 1984. *Ancient Archives Among The Cornstalks*. Vincennes, IN: MRD Associates. "Ras" used throughout, but first "documented" on pp. 83-84.

61) Fell, Barry. 1983. "Christian Messages in Old Irish Script Deciphered from Rock Carvings in W. Va." *Wonderful West Virginia* 47, 1: 12-19.

62) Williams, Stephen. 1991. *Fantastic Archaeology: The Wild Side of North American Prehistory*. Philadelphia: University of Pennsylvania Press. Continuing to pursue a skeptical approach to diffusionist claims, Williams has recently published two related articles: "The Strait of Anian: A Pathway to the New World" and "From Whence Came Those Aboriginal Inhabitants of America?" A.D.

1500-1800" in *New Perspectives on the Origins of Americanist Archaeology*, edited by David L. Browman and Stephen Williams;

2002; Tuscaloosa, AL: University of Alabama Press; pp. 10-29, 30-59. Browman contributes a wonderful exposé of epigraphic fraud in

"Roots of the Walam Olum: Constantine Samuel Rafinesque and the Intellectual Heritage of the Early Nineteenth Century;" pp. 60-86.

Williams' comment about the West Virginia petroglyphs was made during a personal telephone conversation in early 1991.

63) These claims touch upon the worst our society currently offers:

i. Racism: Charges of racist motivations leveled against Fell and most of his enthusiasts were (and are), in my opinion, ad hominem,

mean spirited, and as unprofessional as it gets. I had dozens of long telephone conversations with Fell, I've met many of his enthusiasts personally (as much like I declare myself a Catholic until I'm excommunicated, I consider myself a critical "Fell enthusiast" until otherwise notified), there wasn't a single example of racist speech or behavior that I encountered or even suspected.

Unintentional insult? Carelessness or arrogance? Casting a net that far may get all of us into trouble. Today, however, some racists

and aberrant individuals use Fell's claims to reach their end. The stigma of accusation, unfortunately for Fell, remains.

ii. Cultural differences in modern times: I live in a state (Commonwealth, actually) recently governed by a Mormon hyper-diffusionist (think doctrinal racist, sexist pioneer-Scientology). Yet, Massachusetts may be the first in the nation to allow gay marriages. Next door, in Rhode Island, officials recently arrested a (Chief) Sachem on tribal land for selling cigarettes (tobacco being a Native American

religious product unknown to the rest of the planet until after Columbus' voyages of discovery). Several years back I was interviewed for

a Native American radio program and asked how I felt about scientists wanting to sample DNA from native populations. I didn't (and don't) have a problem with it. Science is cool and we are better the more we know. Some cultures abhor technology and resist its rise. Respecting a person's right not to be photographed or demanding to have their ancestors bones returned from a museum seems

the right thing to do. Sometimes truth must out regardless of cultural traits. There's a planet we share, it's got many names, but like science it's what we stand on. Of course, those Native Americans who proffer secrets of travelers from ancient times (read: buy my books) seem more American than "Native." The cultural differences many Americans see on their evening news from around the world

are also happening in their backyards.

iii. Bias and agenda driven: The romantic notion of the "amateur archaeologist" is still with us, as is "armchair archaeologist," though

one gets dirty and the other receives perhaps a paper-cut or three. While I strongly believe that Fell and some of his core-group of enthusiasts generally believe(d) in a past filled with heroic voyages of discovery and a 'Golden Age' of sharing (stimulus or idea diffusion) by ancient peoples, I don't think they had (or have) ulterior motivations. Not so with other Fell enthusiasts and some using Fell's work today. An anti-science coalition (think "Invisible College" drop-outs) of religious fundamentalists, Nazis, New-Agers, and others have joined to force open the doors of knowledge just a crack, so that their personal biases and agendas can sneak by. We see this all the time on Capitol Hill. Anti-science proponents sometimes have unique psychological problems (i.e., the above mentioned convicted pederast, half-Jewish, ex-neo-Nazi, Frank "Joseph" Collin, a past editor and now a "correspondent" of the Mormon-owned diffusionist rag, *The Ancient American*).

iv. Academic apathy: While individual theories sink or swim according to their own merits, which is to be expected, those theories which involve hyper-diffusion (trans-oceanic contact between cultures before Columbus) are too often ignored by mainstream professionals and academics because of a constant hemorrhaging of bad blood between sides. Both are guilty, but my criticism here extends to the amateurs: insulting seldom, if ever, wins cooperation. I've recently been told that much basic American archaeology may soon be jobbed off to the private sector. Keeping locations secret, calling professionals bad names, scoffing at alternative explanations which disagree with diffusionist theory, and not doing basic homework have combined to cause many academics to avoid

addressing certain diffusionist claims. Sure, poor behavior all around, however amateurs who name-call are merely playing out some

old debating trick to make the other person lose their composure. Such behavior may work in a bar or on the street, but for getting professionals interested in your ideas? I regret that many academics give diffusionist claims a wide berth, though I understand (all too well) why.

64) Whittall, James P. 1991. *American Epigraphy at the Crossroads* (E.S.R.S. Epigraphy Series No. 2). Rowley, MA: Early Sites Research Society. McGlone and his group contacted "more than 300 people" in an effort to initiate a discussion about "epigraphy" and

diffusionist claims. Three "statement papers" by William R. McGlone, Rollin W. Gillespie, James L. Guthrie and Phillip M. Leonard (with the order of credit changing slightly from paper to paper) were then sent to ninety individuals and the thirty-two replies were edited

by Whittall and printed alongside of the three papers.

- 65) Sigstad, J. Steve. 1989. "Ogam' and Rock Art in Southeastern Colorado." *Rock Art of the Western Canyons* (Colorado Archaeological Society Memoir No. 3). Edited by Jane S. Day, Paul. D. Friedman and Marcia J. Tate. Boulder, CO: Johnson Publishing; p. 175.
- 66) Buckles, William G. "Petroglyphic Research and Ogam in Southeastern Colorado: Strategies for Resolving Controversies." *Rock Art of the Western Canyons*. See [65] above; pp. 113-155.
- 67) McGlone, William R. et al. 1993. *Ancient American Inscriptions: Plow Marks or History?* Sutton, MA: Early Sites Research Society, p. 116.
- 68) Marshack, Alexander. 1985. "A Lunar-Solar Year Calendar Stick from North America." *American Antiquity*. 50, 1:27-51. See also, "The Astronomy of the Hopi Indians," by Alexander Marshack in *Mesoamerican Archaeology: New Approaches*. Edited by N. Hammond. 1974. Austin, TX: University of Texas Press; pp. 252-270.
- 69) Aveni, Anthony F. 1989. *World Archaeoastronomy* (Selected papers from the 2nd Oxford International Conference on Archaeoastronomy, held at Merida, Yucatan). Edited by Anthony F. Aveni. Cambridge: Cambridge University Press. See works by Marshack (pp. 308-324), a response to Marshack by William Breen Murray (pp. 325-330), and Von Del Chamberlain's "Navajo Indian star ceiling" (pp. 331-341). A paper about the Navajo and astronomy (Jett, Stephen C. 1984. Making the "Stars" of Navajo "Planetaria." *The Kiva*. 50, 1:25-40) is referenced by Von Del Chamberlain. McGlone (see [67] above, p. 394) also refers to this work. Prof. Jett knew McGlone personally and I cannot accept that "Navajo Indian star ceilings" were unknown to McGlone et al.
- Blind bias with a touch of intellectual dishonesty. Also McGlone et al made much ado about their "Music" petroglyphs in *AAI* (see above, [67] McGlone et al 1993; pp. 225-228) as well as in Phillip M. Leonard and William R. McGlone. 1996. *A Study of Script-Like Petroglyphs in Southeast Colorado*. Kamas, UT: Mithras, Inc.; pp. 28-31.



"Fig. 2.1" A petroglyphic count stone at Presa de La Mula, Nuevo Leon. Used without permission. Murray, William Breen. 1986. Numerical Representations in North American Rock Art. *Native American Mathematics*. Edited by Michael P. Closs. Austin, TX: University of Texas Press; p. 48.



"Figure 18. Examples of "Music" petroglyphs." Used without permission. Leonard, Phillip M. and William R. McGlone. 1996. *A Study of Script-Like Petroglyphs in Southeast Colorado*. Kamas, UT: Mithras, Inc.; p. 29.

An approximate (exact?) match to their "Music" petroglyphs, which they claim have a relationship to the North Arabian and/or Brahmi alphabets is shown above and in a popular 1986 book as a "count stone" from northern Mexico (Murray, William Breen. 1986. "Numerical Representations in North American Rock Art." *Native American Mathematics*. Edited by Michael P. Closs. Austin, TX: University of Texas Press; pp. 45-70; see especially the photograph on p. 48). I can't explain why McGlone et al were (are) so blinded.

70) Though over a decade old, an informative overview may be found in *AAI* (see above, [67] McGlone et al 1993); "Appendix B - Dating

- the Petroglyphs," pp. 355-364. Also, see: Loendorf, Lawrence L. 1998. *Visions from Canyon Walls: Petroglyphs and Pictographs from Pinon Canyon Maneuver Site*. Ft. Carson, CO: US Army, Directorate of Environmental Compliance and Management.
- 71) See above, [65] Sigstad 1989; p. 174.
- 72) See above, [60] McGlone and Leonard 1986; pp. 164-169 and 243-272.
- 73) Dorn, Ronald L., William R. McGlone and Phillip M. Leonard. 1990. "Age Determination of Petroglyphs in Southeast Colorado." *Southwestern Lore*. 56, 2: 21-36.
- 74) "Using these groupings of strokes, they can be transliterated to letter forms based on the alphabet in figure 24b, giving the letter sequence N,N,S,S,M. The next step is to group the letters and to find words in the dictionary employing these consonants and to record them with their English meanings. Often the letters may be grouped in several ways to form words, e.g., N-N, S, S-M, or perhaps N, N-S, S-M. Here, the letter grouping is indicated, or at least implied, by the stem-line, lack of stem-line, stem-line sequence, so that the second grouping above is chosen. For this translation, Dwelly's *Illustrated Gaelic to English Dictionary* was used, with selections from older roots. The authors also use the Royal Irish Academy's *Dictionary of the Irish Language*, along with other Gaelic sources. The rationale for using these sources for translating very old inscriptions is given as: "Once the possible meanings of the consonant groups are found, they are tabulated so that they can be arranged in the order given to make sentences, phrases, thoughts, names or titles, etc. The grammar, syntax, and form of the language used are considered, as well as the coherence and appropriateness of the meaning, to make a proper statement, etc., which is recorded in English. In this case the Old Irish words chosen were *In, neas* and *salmh*, which can be read THE NOBLE TWINS..." See above, [50] McGlone and Leonard 1986; pp. 84-85.
- 75) Olcott, William Tyler. 1911. *Star Lore of All Ages*. New York: G. P. Putnam's Sons; p. 209.
- 76) See above, [15] Marshack 1991; p. 18.
- 77) Ashe, Geoffrey. 1992. *Dawn Behind the Dawn: A Search for the Earthly Paradise*. New York: Henry Holt. Earlier in his career, Geoffrey Ashe described in his *Land To The West: A Search for Irish and Other Pre-Viking Discoverers of America* (1962; New York: Viking Press) his time in America investigating claims of pre-Columbian contact. None of the claims held up under scrutiny (including the tale of St. Brendan, which Ashe masterfully explains was written as allegory and not dependent on any actual "voyages" across the Atlantic by Irish monks), except the possible presence of ogham on the Brooklyn Bridge. A decade ago I spent a year and a half in Brooklyn and, though I was oft tempted, never went in search of the claimed ogham. Ashe says that an Irish iron-worker made the marks and I've no reason to doubt him. Besides, I've personal complaints with Brooklyn...
- 78) See above, [15] Marshack 1991.
- 79) See above, [15] Marshack 1991; pp. 336-337.
- 80) Personal correspondence between R. D. Flavin and Alexander Marshack, dated Jan. 11, 1993.
- 81) Elkins, James. 1996. "On the Impossibility of Close Reading: The Case of Alexander Marshack." *Current Anthropology*. 37, 2: 185-226.
- 82) Davis, Whitney. 1996. Comment in [81] Elkins 1996; p. 206.
- 83) D'Errico, Francesco. 1996. Comment in [81] Elkins 1996; p. 208.
- 84) White, Randall. 1996. Comment in [81] Elkins 1996; p. 219.
- 85) Marshack, Alexander. 1996. Comment in [81] Elkins 1996; p. 214.
- 86) See above, [81] Elkins 1996; p. 223.
- 87) Renfrew, Colin. 2003. *Figuring It Out: What are we? Where do we come from? The parallel visions of artists and archaeologists*. New York: Thames & Hudson; p. 130.
- 88) Closs, Michael P. 1986. "Native American Number Systems." *Native American Mathematics*. Edited by Michael P. Closs. Austin, TX: University of Texas Press; pp. 3-43.
- I. Linus Van Pelt in *A Charlie Brown Christmas* (1965).
- II. Pee-wee Herman in *Pee-wee's Big Adventure* (1985).
- III. Travis Bickle in *Taxi Driver* (1976).

RDF - 8/10/03 (slightly corrected 3/9/08)

Update - 3/23/04



1.4 to 1.2 million year old straight lines engraved on an animal bone from Kozarnika, Bulgaria. Photograph by Aleta Guadelli. Used without permission.

Pictured above is one of two animal bones engraved with straight lines which have recently been discovered at Kozarnika Cave in northern Bulgaria. Available at: <http://news.bbc.co.uk/2/hi/science/nature/3512470.stm>, a BBC News Online article states that the other engraved bone is said to have "27 marks along its edge." A journal article is said to be in preparation.

Update - 3/9/08



remains an easily acquired item. See: Guadelli, Aleta. 2004. "Étude des incisions du plus ancien os grave decouvert dans la grotte Kozarnika (Bulgarie du Nord-Ouest). Une preuve de l'existence du symbolism au paleolithique inferieur." *Archaeologia Bulgarica*. 8, 3: 1-17. For an earlier paper, also in French, which more fully describes the Kozarnika Cave site, see: Guadelli, Jean-Luc Guadelli; Françoise Delpech; Aleta Guadelli; Viviana Miteva. 1999. "Étude de la faune des niveaux gravettiens de la grotte Kozarnika (Bulgarie du Nord): Résultats préliminaires." *Archaeologia Bulgarica*. 3, 2: 1-14. Other online sources for Kararnika would be an English language version of a French article written by the lead investigator at Kararnika, the University of Bordeaux's Prof. Jean-Luc Guadelli, "French Prehistorical Mission in North Bulgaria - First human settlements in the Balkan Region," available at: <http://www.ipgq.u-bordeaux1.fr/Pages/operations/ukbulgarie.html> (a date of 780,000 BP is put forth). In a feature from the Bulgarian National Radio web-site, Guadelli mentions an early arrival in Europe by *Homo erectus*, though refers to the Kozarnika artifacts as being made by *Homo sapiens*. Available at: [http://www.bnr.bg/RadioBulgaria/Emission\\_English/Theme\\_Bulgaria\\_Europa/Material/bg\\_population.htm](http://www.bnr.bg/RadioBulgaria/Emission_English/Theme_Bulgaria_Europa/Material/bg_population.htm). I'm intrigued, but not terribly bothered by any debate over which specific species of the genus *Homo* did what or when, but rather I'm just busy struggling to stay on my two feet with the ongoing discoveries that we've been making straight lines for a really, really long time.



Engraving on stone from Bilzingsleben, Sömmerda - Freistaat Thüringen, Germany made by "Either *Homo erectus* or very robust archaic sapienoids (at roughly 300 ka probably the latter)." Quote and photograph from "Lower Palaeolithic Rock Art of India and its Global Context" by Robert G. Bednarik; © Robert G. Bednarik, 5 August 2007 International Federation of Rock Art Organizations (IFRAO), P.O. Box 216, Caulfield South, VIC 3162, Australia [ifrao@hotmail.com]. Used without permission. PDF available online at: [http://mc2.vicnet.net.au/home/eip1/shared\\_files/Man\\_in\\_India\\_2007.pdf](http://mc2.vicnet.net.au/home/eip1/shared_files/Man_in_India_2007.pdf). Drawing from "The earliest known palaeoart" by Robert G. Bednarik. Used without permission. PDF available online at: [http://mc2.vicnet.net.au/home/aura/shared\\_files/kemerovo.pdf](http://mc2.vicnet.net.au/home/aura/shared_files/kemerovo.pdf). [auraweb@hotmail.com]

With these new discoveries of intentionally made straight lines essential questions of symbolism and accurate dating arise. As these various marks are judged to be distinct from de-fleshing cuts on bone and do not seem to serve any utilitarian or tool function (e.g. being damage scars on stone from the sharpening of wood or bone needles or constituting an unknown device like combs or straighteners), the intentionally made straight lines should be regarded as our oldest examples of intellectual symbolism, though for decorative and artistic reasons or to represent notational or another graphical commutativity remains to be argued and demonstrated. Accurate dating is always appreciated and though relative dating brings us to a general chronological period, science is continuing to refine and create new forms of absolute dating through an ever increasing variety of ways such as noting the decay of carbon-14 (or radiocarbon), the radiometric potassium-argon and argon-argon methods, known geomagnetic fluctuation events and eras, thermoluminescence, etc. I haven't yet identified the dating systems used with these ancient artifacts and I'm going to guess that most of these items continue to be tested. Still, the possible evidence of symbolic ability and behavior by early *Homo* populations is most impressive and challenging. For two recent textbooks which discuss dating systems, see the relative chapters in: Feder, Kenneth L. 2006. *The Past in Perspective: An Introduction to Human Prehistory*. Fourth edition. New York: McGraw-Hill and Renfrew, Colin and Paul Bahn. 2004. *Archaeology: Theories, Methods, and Practice*. Fourth edition. New York: Thames and Hudson.



120,000 BP engraved scapula from Oldisleben, Freistaat Thüringen, Germany likely made by *Homo neanderthalis*. Photograph from "The Origins Of Symboling" by Robert G. Bednarik. Used without permission. Available online at: <http://www.semioticon.com/virtuals/symbolicity/origins.html>. Drawing from "The earliest known palaeoart" by Robert G. Bednarik. Used without permission. PDF available online at: [http://mc2.vicnet.net.au/home/aura/shared\\_files/kemerovo.pdf](http://mc2.vicnet.net.au/home/aura/shared_files/kemerovo.pdf). [auraweb@hotmail.com] For a fairly thorough overview of intentional designs (and "straight lines") from around the globe, see: Bednarik, Robert G. 2003. "The Earliest Evidence of Palaeoart." *Rock Art Research*. 20, 2: 89-135. His offhand remark that the Bilzingsleben and Oldisleben engraved artifacts, though separated by some 180,000 years, were discovered "only 10.5 kilometers apart." Six and a half miles, the Mindel-Riss and Riss-Würm interglacials, and two hominan species; it would seem that Germany has been a popular place to live for an extremely long time.

*Homo neanderthalis* continues to take two steps forward, a step back, and it now seems our distant cousins were definitely not the dumb brute caricatures of yesteryear, possessed advanced cultural components, but weren't actually our "distant cousins," still family, but it seems there was an evolutionary estrangement some 500,000 years ago (passim Richard E. Green, J. Krause, S. E. Ptak, A. W. Briggs, M. T. Ronan, J. F. Simons, Lei Du, M. Egholm, J. M. Rothberg, M. Paunovic, S. Pääbo. 2006. "Analysis of one million base pairs of Neanderthal DNA." *Nature*. 444, 16: 330-336). A recent claim has been made that although no *Homo neanderthalis* DNA (or mitochondrial DNA, actually) has so far been detected in any living *Homo sapiens sapiens*, at least one team of scientists is still sort of looking. The aside was included with a remarkable claim, the subject of a newspaper feature article, that all Europeans are descendent from women who lived somewhere in an area stretching from the Levant to Italy: "These seven women – or 'clan mothers' as Prof Bryan Sykes, professor of genetics at Oxford University, calls them – lived between 45,000 and 10,000 years ago, everywhere from the Syrian savannah to the Tuscan hills. See: [Davis, Laura](#). "How to trace your Ice Age ancestors by DNA testing." March 1, 2008. *Liverpool Daily Post*.





77,000 BP engravings on ochre from Blombos Cave, near Still Bay, South Africa made by early *Homo sapiens sapiens*. Photographs from The Blombos Cave Project web-site, funded by Norway's University of Bergen, at: <http://www.svf.uib.no/sfu/blombos/index.htm>. Used without permission. See also "Art Prehistory" by Sean Henahan; available online at: <http://www.accessexcellence.org/WN/SU/caveart.html>.

The emergence of modern humans, *Homo sapiens sapiens*, between 300,000 and 200,000 BP in Africa seems certain and migration of modern humans from Africa to the rest of Mom Terra appears to have begun around 100,000 BP. Many other hominans had been leaving Africa for over a million years, yet it's with the 'Last *Homo* Standing' model which has modern humans having evolved from and been distantly related to many species of *Homo* which have gone extinct (accepting that the cryptozoologists are wrong about the Yeti, Big Foot, etc. humanoid legends being observations of variations of *Homo erectus* or some other bipedal cryptid). We're the last of a long line of bipeds which kept getting smarter and finally mastered the ability to order a pizza and have it delivered in thirty minutes or less.

At 77,000 BP, the engraved ochre artifacts from Blombos Cave site are unquestionably the products from a series of *Homo sapiens sapiens* occupations from the late Mid Pleistocene to the early Late Pleistocene (approximately 130,000 to 70,000 BP). The ochre shown above is said to have been mined some twenty miles away from the site. Ochre (hematite, an iron oxide) had been used by other hominans (e.g. the so-called *Homo heidelbergensis* species at 300,000 BP) and its use as a pigment continues in almost every culture around the globe today. Though many thousands of examples of ochre have been found at the Blombos Cave site, the scratches made upon them to produce an ochre powder do not look anything like the straight line symbolism on the two engraved artifacts.



Mousterian engraved animal bone from 60,000-48,000 BP; I believe it's unknown if the marks were made by a *Homo neanderthalis* or early *Homo sapiens sapiens*, though the former seems more likely. Photograph from: Davis, Simon. 1974.

"Incised bones from the Mousterian of Kebara Cave (Mount Carmel) and the Aurignacian of Ha-Yonim Cave (Western Gallilee), Israel." *Paléorient*. 2, 1: 181-182. Used without permission. For a detailed, though a tad dated, overview, see: O. Bar-Yosef; B. Vandermeersch; B. Arensburg; A. Belfer-Cohen; P. Goldberg; H. Laville; L. Meignen; Y. Rak; J. D. Speth; E. Tchernov; A-M. Tillier; S. Weiner; G. A. Clark; Andrew Garrard; Donald O. Henry; Frank Hole; Derek Roe; Karen R.

Rosenberg; L. A. Schepartz; John J. Shea; Fred H. Smith; Erik Trinkaus; Norman M. Whalen; Lucy Wilson. "The Excavations in Kebara Cave, Mt. Carmel [and Comments and Replies]." *Current Anthropology*. 33, 5: 497-550. For a discussion of *Homo neanderthalis* co-existing with *Homo sapiens sapiens* in Israel, see: Shea, John J. 2001. "Feature: The Middle Paleolithic: Early Modern Humans and Neandertals in the Levant." *Near Eastern Archaeology*. 64, 1/2: 38-64.

Getting hominans out of Africa is still limited to land or short maritime crossings at the north-eastern point of Africa into the Near East of Asia and the north-western point which is an easy entrance into Europe. As we continue to investigate ancient coastal rafting technologies, a maritime migration out of Africa perhaps into the Indian Ocean with its monsoon currents may allow for different dispersion patterns for hominans leaving one

continent for one or more different continents. Sure, by the Neolithic humans were using boats (passim Stieglitz, Robert R. 1984. "Long-Distance Seafaring in the Ancient Near East." *The Biblical Archaeologist*. 47, 3: 134-142), but as *Homo erectus* may have been the best runner in our family, the species was also capable of limited maritime travel with rafting or drift-wood.

Still, while we share much with our hominan ancestors and the ability for language and symbolic representation should properly be credited to the various species who came and went long ago, it is with the modern humans leaving Africa beginning around a 100,000 BP we turn to for our traditions and technologies, languages of love and law, and our cultures and civilizations. The Upper Paleolithic and Ice Age with the parietal and portable art, symbolism and notations, though still far from totally understood is ever more breathtaking in its beautifully skilled accomplishments. The straight lines produced by modern humans wherever and whenever they've migrated has and remains conditional on context whether one is discussing an anthropological model or archaeological artifact. Generalization seems improbable because such a collections of lists would be too long from individual inclusions and author and reader would both lose interest or consciousness early on. And, with confidence in tomorrow, I expect more straight lines to be produced every day and perhaps future discoveries of ancient artifacts with still more exquisite and mysterious straight lines.



Photograph in a review of the first edition of *The Roots of Civilization* from: Trotter, Robert J. 1972. "New Lines: Science News in Science Fields. Tracing the Roots of Civilization." *Science News*. 101, 8: 124-126. Photograph of Marshack shortly before his passing from: Bahn, Paul G. 2005. "Obituary: Alexander Marshack, 1918-2004." *Antiquity*. 79: 489-490. Both photographs used without permission. Also, see: Bayot, Jennifer. 2004. "Alexander Marshack, 86; Studied Stone Age Innovations." December 28; B-6. *New York Times*. Retrieved March 8, 2008, from ProQuest Historical Newspapers: *The New York Times* (1851 - 2004) database. (Document ID: 1065399592). Marshack succumbed to heart failure on December 20, 2004. It's been over three years and I still have to remind myself that he's gone.

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