

Music and Neanderthals: An Alternative Point of View

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Abstract

The Divje Babe I Neanderthal bone flute has been a “bone of contention” ever since its discovery in Slovenia in 1995. At the heart of the controversy as to whether this object is a flute or not have been two opposing views of Neanderthals: the belief that these ancient people were primitive and dimwitted, based on the theory of evolution; or, alternatively, that they were far more culturally and intellectually superior than first thought, based on a biblical creationist worldview. Creationists believe that Neanderthals could have made and played flutes, among many other achievements. It is also shown that skull growth science points to the Neanderthals as the early long-lived people in the biblical genealogies.

Introduction

Ever since the first Neanderthal fossil was found in the Neander Valley near Dusseldorf, Germany, in 1856, the scientific world has been wondering about these people (Trinkaus and Shipman 1993). Although Neanderthal man has been recognized as fully human (albeit primitive), paleoanthropologists have been ambivalent about the level of his abilities. The persistent tendency has been to picture him as mentally incompetent, indeed hardly able to walk and chew gum at the same time (Speth 2004). It would appear that this low opinion of Neanderthals stems from an evolutionist worldview.

But Neanderthal man has continued to surprise evolutionists, and has persisted in looking more competent than they wish to allow. It is the scholars called creationists, who do not follow the standard worldview, who have accepted without question that Neanderthals could have been advanced people. We will examine this alternative creationist worldview in this paper.

Two Opposing Views of the History of Mankind

Evolutionary belief can be atheistic, based on the premise that the universe evolved from nothing (Krauss 2012), or theistic, based on the alternative premise that a Divine Being created the original materials of the universe (Collins 2006). Either way, the assumption is that eons of time have passed since the origin of the universe, and that man evolved from earlier life forms.

Up to the end of the 1970s, it had been widely believed that Neanderthals evolved into modern people in most parts of the world (Stringer 2011a). But then the now-predominant “Out of Africa” theory of the origins of modern humans developed, with claims that a group of *Homo sapiens* emigrated from Africa around 60,000 years ago on the secular timeline. They then spread throughout Eurasia, replacing earlier humans such as Neanderthals (Stringer 2011b, *passim*), or possibly “interbreeding” with them (Trinkaus 2007). An alternative hypothesis, less popular, is called the “multiregional origin” of humans (Wolpoff et al. 2000), in which modern humans evolved worldwide.

But the alternative belief in the literal biblical account of the origins of mankind as narrated in Genesis 1 defines a Creator God who made the first two human beings less than 10,000 years ago. A discussion of timeline from this point of view is beyond the scope of this paper.

The biblical history describes a global flood by which all people on earth were destroyed except for eight persons who survived in a vessel that the Bible calls an ark. Only a few generations after this bottleneck in human population, God forced rebellious mankind to spread out in small groups from a place called Babel, famous for a pagan city and tower that the people had begun to build. For further information on Babel, see Habermehl (2011), who argues for the location of Babel in northeast Syria.

Belief in creation of the world by God, as described in the Bible, is widely claimed by its detractors to be religious and unscientific (Scott 2004, 194). On the other hand, evolutionism can be shown to be equally a religion, and its purported science is based only on theory (Morris 2001). The argument, therefore, is really between supporters of two differing views of the *historical* origins of the world, and is not science versus religion, as popularly posed. In addition, the world at large has been overly impressed by claimed scientific arguments for the eons of time required by evolution.

Who Were the Neanderthals Anyway? And Why Did They Disappear?

In 1998 Jack Cuozzo, an American orthodontist, published a book with a startling scientific thesis: the Neanderthals were people who had lived to be hundreds of years

old (Cuozzo 1998a). He said that the distinctive Neanderthal huge browridges, skull shape, and other characteristics had required hundreds of years to develop. This radical idea was based on Cuozzo's X rays of actual Neanderthal fossils, showing that different parts of their skulls had grown at different rates. The growth of human skulls with age had been well known in orthodontic and other circles; indeed the subject had been around in the literature since 1850 (Guagliardo 1982; Behrents 1985; Albert et al. 2007). In addition to his book, Cuozzo (1998b) published a paper showing that computer extrapolation of known human skull growth to an age of hundreds of years produced skulls like those of Neanderthals. Cuozzo's world standing as a scientist is shown by the inclusion of his paper on cephalometric radiographing of Neanderthal aging characteristics among 26 in a scholarly volume on the Le Moustier 1 Neanderthal skull (Cuozzo 2005).

There should have been an uproar over this new idea, because Cuozzo's science turned all belief about Neanderthals upside down. But the world at large has largely ignored the evidence that Neanderthals could have been long lived, apart from some ridicule (e.g., G.D. 2013). Most scientists believe that Neanderthals lived very short lives, with few surviving beyond their forties (Trinkhaus and Shipman 1993, 340), although admitting that there are unexplained inconsistencies in growth patterns (Nelson and Thompson 2005, 328–338). Cuozzo counters that their belief is based on mistaken assumptions about Neanderthal tooth growth (Cuozzo 1998a, 79–84).

The hard life that the Neanderthals had supposedly led, as evidenced by arthritis and healed broken bones (Trinkhaus 1978) now became more understandable. If these people had lived so long, visible wear and tear would be expected; indeed, it is surprising that the skeletons of these old people were in such good shape overall at the time of their death.

The Cuozzo thesis that the Neanderthals were long lived fit the biblical history of mankind perfectly, because there were people listed in the Bible by name who had lifespans of hundreds of years (see the Genesis 5 and 11 genealogies). These old people of the Bible were obvious candidates for being Neanderthals.

But who the Neanderthals were is only part of the matter. The additional question is what happened to them, a riddle that has mystified scientists. After all, the Neanderthals were a rugged group of people well suited to their environment (Trinkhaus and Shipman 1993, 417–18), and their disappearance did not make sense. Nonetheless, disappear they did, rather suddenly, before the end of what is commonly called the Last Ice Age (Van Andel et al. 2004).

There is a large literature on this subject, with the Neanderthal news constantly featuring scientists offering new and creative speculations. We can touch on only a

few of these here. Recently it was proposed that the Neanderthals' larger eye sockets caused their demise (Pearce et al. 2013); refusal to eat rabbits or inability to catch rabbits (when the large game became scarce) did the Neanderthals in (Fa et al. 2013); or (a rather horrifying possibility) systematic murder of Neanderthals by modern humans as part of the Quaternary animal extinctions may have been the real reason for the Neanderthals' disappearance (Hortola and Martinez-Navarro 2013). Carnieri (2006) suggested that anatomically modern humans in Europe ate a lot of seafood; this more healthful diet helped them outlive the largely carnivorous Neanderthals. Kuhn and Stiner (2006) argued that because Neanderthals did not divide their labor between the sexes the way modern humans did, this gave the latter a survival advantage. A rather grisly version surfaced in reports that, finally, there was good evidence that the Neanderthals actually did practice cannibalism, as had been suspected (Sanders 1999). Somehow intermarrying with moderns (Zilhao 2006) or a supposed inability to cope with climate change (Jimenez-Espejo 2007) seemed rather tame by comparison.

Musicians will be happy to know that music has not been overlooked as a possible factor. Conard et al. (2009) argue that early emergence of art and culture (as evidenced by complex musical instruments) among modern humans allowed them to develop social networks that helped them survive, while the less socially adept and more isolated Neanderthals became extinct.

Ultimately we must conclude that scientists have no idea why the Neanderthals did not survive. The American writer, Mark Twain, would have been quite impressed by how little hard evidence supports some of these papers. He wrote, "There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact" (Twain 1883, 208). One might think he was talking about scientists' papers on the disappearance of the Neanderthals.

However, Cuozzo's thesis about the Neanderthals explains readily where the Neanderthals went. As the biblical genealogies show, the human lifespan gradually decreased over the dozen generations after the worldwide flood (presumably for genetic reasons) until eventually people lived much the same length of time as they do today. The excavated cases of "mixed" Neanderthal and modern characteristics (Duarte et al. 1999) would have been people whose lifespan lay somewhere between that of the Neanderthals and that of modern humans (or were young Neanderthals who had not lived long enough to develop the full-fledged characteristics). The appearance of "modern" people at the same time that the Neanderthals supposedly disappeared is explained as well; the "moderns" were the not-so-long-lived descendants of the Neanderthals. We might invoke the principle of Occam's Razor here; this could be stated, "The simplest explanation is usually the best" (Occam's Razor 2013).

According to the Bible, the early long-lived post-flood people spread out from Babel. We would therefore expect to find Neanderthals who had migrated in all directions, and we do. For example, early people in the very south of Africa (Grine et al. 2000; Henshilwood et al. 2001) from the Neanderthal age can be recognized as Neanderthals (which the “Out of Africa” theory denies). Also, scientists’ calculations of small numbers of Neanderthals (Briggs et al. 2009) agree with a scenario in which they were the people who had dispersed from Babel only a few generations after Noah’s flood (Genesis 11:8). A recent paper claiming that a Neanderthal woman was the daughter of very closely related parents makes sense, because there would have been so few Neanderthals in each family group (Prufer et al. 2014).

There is a further outcome of the Cuozzo Neanderthal science. Because the Neanderthals didn’t actually go anywhere, but were long-lived people whose descendants had gradually decreasing lifespans, we are all descended from them. For a more extensive treatment of the Neanderthals from this point of view, see Habermehl (2010).

How Advanced was Neanderthal Man? Could He Have Played a Flute?

The Bible hints at the accomplishments of the long-lived earliest humans before Noah’s Flood. They could talk, raise sheep, and grow crops (Gen. 3, 4). They were metalworkers in brass and iron (Gen. 4:22), and they played musical instruments (Gen. 4:21). These people would have been the earliest Neanderthals, according to Cuozzo, because they lived an extremely long time (see the genealogy of Gen. 5). An important implication of this is that they would have had a very long lifetime during which to increase knowledge and improve their skills.

Their descendants, the post-Flood Neanderthals that we know, were stone-age people, many of whom lived in caves during the period of the great ice sheets on earth (Steffoff 2010, 20). Those Neanderthals should have been very primitive according to the evolutionist belief that mankind evolved from earlier animal forms. But there are persistent signs of advanced Neanderthal human behavior that do not support Neanderthals as being low in competence.

Some examples of Neanderthal achievement published by scientists are: wearing of colored shells as ornaments (Zilhao et al. 2010); cave painting (Pike et al. 2012); sophisticated bone tools (Blasco et al. 2013; Soressi et al. 2013); pitch adhesive for the hafting of stone artifacts (fire was used for this) (Grunberg 2002; Koller et al. 2001); red ochre for body painting (Roebroeks et al. 2012); making of string (Hardy et al. 2013); use of medicinal plants (Hardy et al. 2012); seafaring (Ferentinos et al. 2012); controlling fire in hearths (Courty et al. 2012); iron smelting indicated because

of vast ochre mining (Sherby and Wadsworth 2001); burials (Valladas et al. 1987; Rendu et al. 2014), and organization of their living space (Riel-Salvatore et al. 2013).

But the Neanderthal item of interest in this paper is the piece of a bear bone flute excavated in 1995 near Cercko, Slovenia, called the Divje Babe I flute (Turk and Dimkaroski 2011) (see fig. 1). The National Museum of Slovenia, where the flute is displayed, currently claims an age of 45,000 years for it (Orel et al. 2005), although its date has been updated to 50,000–60,000 years old (Turk and Dimkaroski 2011). Whatever, because of its provenance it must be recognized as a Neanderthal object, and it cannot be shifted forward into the era of modern humans (Kunej and Turk 2000, 238–9; Otte 2000).



Fig. 1. The Divje Babe I bear bone flute. Overall length: about 11 cm. (Photo 2009, from Wikipedia, released into the public domain by SI-Ziga.)

There is a current popular view that if an ancient accomplishment is primitive, it must be Neanderthal, but if it is sophisticated, it must be modern human. Scientists have therefore been pushing the era of modern humans further and further back in time as more ancient evidences of advanced human behavior have been unearthed. However, this view has not been accepted by all scientists. Hardy et al. (2013) discuss this phenomenon, listing scientists on both sides of the argument, but essentially showing that the Neanderthals have been more advanced than the scientific world has given them credit for. We will argue here that claiming that only modern people were advanced is based largely on a worldview that dictates that the Neanderthals had to be backward people. The alternative creationist view supports Neanderthals who were

advanced in their culture, and who could have played flutes.

But Is It Really a Flute?

When the Slovenian bone flute piece was initially found, it was enthusiastically recognized by ethnomusicologists as being a Neanderthal flute (e.g., Otte 2000; Turk and Dimkaroski 2011). Fink (1996) claimed that the uneven hole spacing indicated an instrument that could play a modern diatonic scale. There was discussion as to what design of flute it was, how many holes it had had originally, and how it was to be played (Kunej and Turk 2000). Flute players made reconstructions of this flute and played an amazing repertoire of music on it. Atema (Miller 2000) and Dimkaroski (Turk and Dimkaroski 2011) are two of note; the latter is recorded playing his bone flute in a Slovenian cave (Dimkaroski 2010). The acoustics of this performance are reminiscent of the work of Reznikoff (2008), who first discovered that prehistoric paintings in French and Spanish caves seemed to be located at points of greater resonance. Ancient man was aware of cave acoustics.

But then there was opposition to this object as a flute. Skeptics set out to discredit it by claiming that the holes had been produced by an animal gnawing it, and therefore it was no Neanderthal-produced artifact (Chase and Nowell 1998; Morley 2003, 2006).

However, experimentation with bear bone showed that if an animal had gnawed the bone's holes as claimed, the bone would necessarily have splintered (Turk and Dimkaroski 2011). In addition, probability arguments show that there are only a few chances in millions that animals could have gnawed four holes in a straight line. If we add in other features of the object, the probability becomes more like a few chances in a billion that animals could have produced this flute (Fink 2008, 4–5).

Scholars who deny that this object is a flute present weak arguments that appear to be based solely on their evolutionary worldview that considers Neanderthals incapable of this level of technology (Morley 2006). Apparently the fact that a reproduction of this flute makes beautiful music in the hands of expert flute players carries no weight at all.

As D'Errico et al. (1998) admit,

“If this piece were to be accepted as the oldest musical instrument, manufactured and used by Neanderthals, this would have important implications for our understanding of the evolution of the human brain.”

There is further support for the Divje Babe as a Neanderthal flute from an older bone flute piece; this is the less-well-known fragment that was excavated in the Haua Fteah cave in eastern Libya in 1955 (McBurney 1967, 90). McBurney (1967, 90) says that this is

“a remarkable bone object most plausibly explained as a fragment of a vertical ‘flute’ or multiple pitch whistle... In all important respects...the bone tube reproduces the features of known palaeolithic flutes from the European Gravettian both in the East and West...although older by a factor of at least 2 than any other specimen known.”

He places it somewhere between 80,000–60,000 BP because of the level where it was found (McBurney 1967, 325–6). More recently Blench (2013) concludes that this was indeed a fragment of a bird-bone flute, in spite of opposition from Davidson (1991), but now dates it to 90,000–115,000 years old because of current dating procedures.

If Neanderthals made flutes, their descendants would have merely carried on with expertise bequeathed to them by their forbears. There is therefore an inconsistency in denying that the Divje Babe flute could be a flute, but in accepting that later flutes really are flutes. Examples of these later flutes are the bone and ivory flutes from the early Aurignacian period of southwestern Germany that are being hailed as the workmanship of modern humans (Conard et al. 2009; Higham et al. 2012).

The Problem: Advanced Neanderthals Do Not Fit the Prevailing Worldview.

The controversy over this Neanderthal flute is a clear example of worldview pushing scholarship. That the anti-flute scientists continue to get so much traction in this argument appears to be because they do not want to recognize the Neanderthals as being advanced enough to produce a musical instrument. The Slovenian Neanderthal bone flute therefore has high status as a lightning rod in a war of scientific fact versus denial.

This is not the only case of worldview causing scholars to deny what appears to be obvious. An example is the Shanidar Cave Neanderthal flower burial in Iraq (Solecki 1975). Doubts were later expressed by various scholars, as summarized by Sommer (1999); their claim was that animals could have introduced the flowers into the Neanderthal grave, rather than humans, in spite of the unlikelihood of this. In order to appear open-minded, scholars now find it necessary to show skepticism, as in “questionable use of flowers in the Shanidar IV Neanderthal grave” (Nadel et al. 2013).

Another example of denial of facts is seen with respect to the Neanderthal teeth excavated in the Ghar Dalam cave in Malta in 1917. It should not have been considered unusual to find evidences of Neanderthals in Malta because nearby Sicily has indications of Neanderthals (Holloway 1991, 1–2) as well as North Africa (McBurney 1967, 93, 131). A description of these Ghar Dalam teeth as being definitely Neanderthal is given by Keith (1924). But because the prevailing view from the 1950s on was that Maltese history only began in the Neolithic era, long after the Neanderthals (Evans 1971), these Neanderthal teeth were discounted. The saga of the disappearance of Neanderthals from Maltese history via tampering and selective loss of evidence is recounted in well-referenced detail by Mifsud and Mifsud (1997, 34–80) and Hancock (2002, 383–412).

A parallel to the Neanderthal flute controversy exists in the matter of the Bosnian pyramids, first excavated in 2006 (Associated Press 2006). These are claimed by “experts” to be natural hills (e.g., Hawass 2006), even though they are very obviously pyramids. Originally estimated to be around 12,000 years old on the standard timeline, the age of the largest pyramid has now been determined by carbon dating of a fossilized leaf found on one of the covering concrete blocks to be about 25,000 years (Bosnian Pyramid 2012). Not only does this make this the oldest known pyramid in the world, it pushes its construction back into the beginning of the Last Glacial Maximum, almost to Neanderthal times (Clark et al. 2009). Clearly this presents problems for those holding the standard worldview that dictates that no humans could have constructed anything as sophisticated as this pyramid that far back in time. As a result, they are in denial.

There are some who suspect that we have lost track of an advanced ancient past civilization. For instance, Hancock (1995, 182–3) argues for this. What we know of the Neanderthals would support this view.

Music and the Two Worldviews

An evolutionary origin of music is assumed by many scholars. Various theories as to how music evolved have been put forward (Wallin et al. 2000). But this belief is not without its drawbacks, as McDermott and Hauser (2005) admit: “The evolutionary origins of music have...puzzled scientists and philosophers alike since the time of Darwin (1871).” Indeed, Cross (2009, 3) tells us that, while the theory of evolution has become valuable in thinking about music since the 1990s, “the idea that the theory of evolution has anything to add to our understanding of music ...has swung in and out of favour ...over the last hundred and fifty years.”

A tension within the music community manifests itself in this respect. “Clearly some kind of balance must be found between the need of ethnomusicologists to preserve the image that the music of a given culture is individual and special, and the important need of evolutionary musicologists to use music as a tool to study human evolution” (Brown et al. 2000, 19).

But contra, the creationist Demme (2011) says,

“...though we are told over and over that nothing in all of science makes sense except in light of evolution, evolutionists are completely incapable of giving a satisfactory description of the origins and the purpose of something as powerful and as uniquely and universally human as music. They are left, by their own admission, with mere speculation.”

Summary

There is an increasing number of scientific evidences that support the Neanderthals as a far more advanced people than they have been given credit for. Evolutionists are forced to grapple with fitting Neanderthals into their worldview, which demands that these ancient people be primitive and limited in their capabilities. On the other hand, within the creationist system of belief there is no difficulty with understanding that Neanderthals could have been competent enough to have made and played flutes.

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