

## NEANDERTHAL, OH HOW I NEED YOU!

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*For a century or more, and despite some voices raised to the contrary, Neanderthal man was touted as a bestial missing link, and that view was used to support the theory of evolution.*

*More recently it has become apparent that Neanderthal was a true human, not so very much different from modern man, and that fact is generally admitted, albeit sometimes reluctantly.*

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### I. The Finds

*The American Heritage Dictionary of the English Language* (1969) defines Neanderthal man as “an extinct species or race of man, *Homo neanderthalensis*, living during the late Pleistocene age in the Old World, and associated with Middle Paleolithic tools.” The illustration in the dictionary is the famous reconstruction by M. Boule (1908) showing a less-than-human creature.<sup>1</sup>

Joachim Neander (1650-1680), the foremost hymn-writer of the German Reformed Church, unknowingly gave his name to Neanderthal man. A century before his birth, the family name was changed according to the fashion of the time from Neumann to the Greek form of Neander. Thal means valley. Neanderthal is a ravine near the village of Hochdal between Dusseldorf and Elberfeld, Rhenish Prussia. Through this limestone gorge flows the Dussel River. Neander’s great love of nature often led him to the ravine where he is said to have composed many of his hymns. After a time the beautiful valley became known after his name. Almost two centuries after his death, workmen quarrying in the valley uncovered the skeleton of the so-called Neanderthal man who had been buried in a cave there.<sup>2</sup>

The discovery was made in a Quaternary bed in the Feldhofen Cave. Although much was lost in the crude recovery attempt, the bones found included a brain-cap, two femurs, two humeri, and other fragments. The find is preserved in the Fuhlrott Collection, Elberfeld. Johann Karl Fuhlrott, a local teacher, recovered the bones in August 1856, and the Neanderthal skull was first brought to the attention of a scientific body by Prof. D. Schaafhausen in a report read to a meeting of the Lower Rhine Medical and Natural History Society at Bonn on February 4, 1857. In his careful anatomical description of the Neanderthal find, he concluded that despite some interesting characteristics, Neanderthal man must be considered human and normal.<sup>3</sup>

The discovery thirty years later of two other skulls, almost identical in form, at Spy in Belgium, helped to show its typical character. As time went on other Neanderthal remains were recovered in China, Central and North Africa, Iraq, Czechoslovakia, Hungary, Greece, and in northwestern Europe. An earlier find (1848) at Gibraltar was also recognized later as a Neanderthal specimen.

In 1908 another Neanderthal burial was found near the village of Le Moustier in southwestern France. This is the same village which gave its name to the tools associated with the Neanderthals. In the same year the remains often called the classic Neanderthal skeleton were found near the village of La Chapelle-aux-Saints.<sup>5</sup>

Various techniques and assumptions were used to fit Neanderthal man into a time scale. Pearce placed the first indications of Neanderthal at 150,000\* years ago. Other sources give different estimates, but they are all in general agreement. He was believed to have become extinct 80,000 years ago according to Weckler (1957); 50,000 years ago according to Hurley (1959); 45,000 years ago according to Brodrich (1964); 40,000 years ago if we accept Pearce (1969); or 35,000 years ago according to Claiborne (1974). It is undoubtedly a coincidence that Neanderthal man becomes 5000 or more years younger at five-year intervals. Was Kluckhohn (1944) ahead of his time when he dated the extinction of Neanderthal man at only 25,000 years ago? Further, he held that modern types of man “gradually exterminated them, possibly absorbing them to some degree.” “Gradual extermination” and “absorption to some degree” are interesting concepts. Claiborne held that Neanderthal was the only variety of man on earth for thousands of years.<sup>6</sup>

Shanidar cave in Iraq represents a very important Neanderthal site. It is also a good example of how the scientific dating process was carried out. The oldest remains in the cave are Neanderthal men. Seven adults

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\*Conventional dates are used throughout this paper, generally without comment. The author’s position regarding these dates will become clear later in the paper.

and a child were found in deposits of five meters or about 16 feet thick. The deposit is said to have been laid down over a period of about 100,000 years, and this was determined by C14 tests. For example, a sample from the second stratum gave a reading of about 12,000 years; layer C was about 29,000 years old. Deeper in the C layer the date of 34,000 years was derived. It was then acknowledged that the C14 method can become very untrustworthy if continued too far. The lowest part of the C stratum was then estimated to be around 44,000 years old. The child's skull, still lower in the deposit, was estimated to be about 70,000 years old. The conclusion was that Shanidar cave was inhabited by Neanderthal man for about 60,000 years.<sup>7</sup>

In connection with the above comment on C14 dating problems if continued too far, Hurley observed that the problem occurs at around 20,000 years. He states that without special development work (no explanation given), it is not generally practicable to measure ages in excess of about 20,000 years, because the radioactivity of the carbon becomes so slight that it is difficult to get an accurate measurement above background radioactivity.<sup>8</sup>

Brace illustrates the tortuous path of dating, even today, of the remains of the past. The reader must attempt to judge where science leaves off and humbug begins. Speaking in all seriousness of Neanderthaloids (creatures supposedly half way between Neanderthals and modern man) found at Krapina in Croatia, Yugoslavia, Brace states: They were formerly considered third interglacial but recent stratigraphic work has equated them with an interstadial (amelioration) within the Wurm glaciation, making their age about equivalent to the Skhul Neanderthaloids.<sup>9</sup> One must admit that it is hard to argue against a statement like that.

## II. The Triumph for Evolution

In the early years after the appearance of Darwin's doctrine, his followers were determined to support it by evidence of more ancient and more primitive forms of man. The opponents of the principle of evolution were equally determined to discredit any such evidence.

The appearance of the Neanderthal specimen gave both sides the opportunity for which they had been waiting. For one thing they could now shift the argument from the relatively static and dull realm of the lower animals to the stage of man himself. The controversy over the real nature of the skull raged through the pages of the scientific journals and on the rostrums of the scientific meetings for many years.

The supporters of Darwin argued that the remains represented a normal (but ape-like) species. Opponents of Darwin argued that the remains were of a diseased human.

Marcellin Boule of the National Museum of Natural History in Paris was the early twentieth century's foremost authority on fossils, and he traveled the world to study new finds. His prize pupil was Teilhard de Chardin.<sup>10</sup> It was Boule who did more to shape twentieth century thinking about Neanderthal man than anyone else. He devoted years of study to the "classical" Neanderthal skeleton from La Chapelle-aux-Saints.

Between 1908 and 1913 Boule issued a series of scholarly papers on Neanderthal man climaxed by a massive monograph in three parts.<sup>11</sup>

In his report made before the French Academy of Sciences on 14 December, 1908, Boule included the following characterizations: It strikes us with its bestial appearance, or, to put it better, by the general collection of simian (ape) or pithecoïd (monkey) characteristics. The Neanderthal group represents an inferior type of being closer to the apes than to any other human group. He concluded also that Neanderthal was very primitive from an intellectual point of view. Elsewhere in his report, Boule commented on the slumped posture of Neanderthal man, the supposed monkeylike arrangement of certain spinal vertebrae, and he even suggested that the feet may have been grasping organs like the feet of gorillas and chimpanzees. As recently as 1957, the Boule study was cited as a major source of information about the nature of Neanderthal man. This is unusual durability for a report in the area of fossil man.<sup>12</sup>

Since Boule's reconstruction had such an overwhelming influence throughout the world, further details must be noted. The reconstruction was very ape-like, and clearly showed the following characteristics not already noted above: Regarding the foot bones, the big toe diverged from the other toes like an opposable thumb. This feature presumably forced the Neanderthal man to walk on the outer part of his foot, like an ape.

Another key point was the knee joint. Boule concluded that the Neanderthal could not fully extend his leg, and that this resulted in a bent-knee gait. Further, the spine lacked the curves that allow modern man to stand upright. The head was thrust forward so far that Neanderthal man probably could not look skyward. He could well be described as a shuffling hunchback. But the most devastating conclusion of the study focused on the intelligence of the man from La Chapelle-aux-Saints. Looking at the long, low skull, Boule perceived severe mental retardation. In brainpower Boule ranked Neanderthal man somewhere between apes and modern man—but closer to the apes.<sup>13</sup>

As indicated above, the European Neanderthals were believed to be incapable of walking erect because their foramen magnum, the hole at the base of the spine through which the spinal cord passes, was slanted rearward.<sup>14</sup>

The foot, according to Boule, was a prehensile organ. The neck vertebrae resembled the chimpanzee, and the pelvis was apelike.<sup>15</sup>

From the time of Boule down to the present, anthropology and countless other texts and printed materials depicted Neanderthals with the slumped, bent-knee posture that Boule had postulated. Museums feature Neanderthal exhibits which faithfully depicted the Boule reconstruction.<sup>16</sup>

William King, anatomist at Queen's University, Ireland, coined the name, *Homo neanderthalensis*. He first held that Neanderthal was human, but later changed his mind and held that Neanderthal was generically distinct from man, that is, more animal than man.<sup>17</sup>

In 1913 Gustav Schwalbe published a lengthy review of Boule's work and formally adopted Boule's position

that the Neanderthals were the direct ancestors of modern man.<sup>18</sup>

In the 1920's, Elliot Smith, noted anthropologist at University College, London, wrote about uncouth and repellent Neanderthal man whose nose was not sharply separated from the face, the two being merged in what in another animal would be called a snout. Furthermore, Neanderthal man probably had a shaggy covering of hair over most of the body. Smith also claimed that the Neanderthal hand lacked the delicacy and nicely balanced cooperation of thumb and fingers, which is regarded as one of the most distinctive human characteristics.<sup>19</sup>

Evolutionists believed they had good reasons to attempt to equate fossils with living primates in the 19th century. Strong support for this came from the Neanderthal jaw found at La Naulette in eastern Belgium in 1866. Darwin quoted the evidence to show that this Neanderthal jaw was supposed to have possessed enormous projecting canines. After the La Naulette discovery Neanderthal man was given many gorilla-like characteristics, and the tribe was described as appearing in the highest degree hideous and ferocious.<sup>20</sup>

In the 1940's, the noted British historian, Gordon Childe, stated that some very early 'men' indeed had projecting canine teeth set in very massive jaws that would be quite dangerous weapons, but these have disappeared in modern man. While Childe here was describing Piltdown man, his opinion of Neanderthal was similar in the following description: Neanderthals were a curious race in Europe perhaps specifically distinct from *Homo sapiens*. They had a huge bony vizer above the eyes instead of two eyebrow ridges, the forehead is retreating, the jowl enormous and the chin lacking. The head was so balanced on the spine that it hung forward. The structure of the legs and feet permitted only a shuffling gait. Childe doubted that Neanderthal blood runs in the veins of Europeans or any other modern races.<sup>21</sup>

Various scientists reported further information about Neanderthal man in the 1950's.

Berrill observed in 1955 that the Neanderthal people were uncouth to say the least, and they may even have sported a hairy coat like the mammoth and rhinoceros which they hunted.<sup>22</sup>

In the *Scientific American* in 1957, Weckler sums up a century of study and speculation about the Neanderthal man, and his description includes familiar elements: the skeleton is stooped. So-called classical Neanderthal man had a long, low-vaulted skull, a big, jutting, muzzle-like mouth and a retreating chin. He had a squat body with a barrel chest, bowed legs and flat feet, suggesting that he walked in a crouch with bent knees and a shuffling gait.<sup>23</sup>

Also in 1957 the scientist, Le Gros Clark, concluded that Neanderthal man had a distinctly simian (ape-like) appearance, basing his view on the enormous development of brow ridges, the receding forehead, and the flatness of the skull roof. Considering all known Neanderthal remains, Le Gros Clark concluded that Neanderthal man must in life have had a distinctly brutish appearance, with a thickset body and limbs of

ungainly proportions. He evidently walked in a rather stooping posture and with a lumbering gait. From an anatomical point of view, Neanderthal was much more ape-like than he was like *Homo sapiens*. The brain showed certain features of primitive appearance. At this point in time, he placed Neanderthal man into an aberrant side-line of evolution.<sup>24</sup>

In 1958 Weiner observed that the simple evolutionary series of Java man—Neanderthal man—modern man, established first just fifty years ago, was in itself a powerful validation of Darwin's views on human evolution.<sup>25</sup>

One further comment from the 1950's by Hurley was that "unsuccessful Neanderthal man lasted only about 2000 generations." He thus echoed the conclusion of Le Gros Clark that Neanderthal man became extinct, instead of serving as an ancestor of modern man.<sup>26</sup>

In 1966 Pollard observed that Neanderthal man would really not be considered human if he were encountered today, and that his brain was small by our standards.<sup>27</sup> In the same decade, the late Louis Leakey, the world-famous paleoanthropologist, suggested that any marriage between Neanderthals and modern man might well have produced sterile offspring, like a mule born of a horse-donkey mating.<sup>28</sup>

As recently as 1967, Brace included Neanderthal man as one of the major groups which formed the evolutionary stages through which it is claimed that man and his ancestors passed. He suggested the following sequence as a useful outline: The oldest were the two versions of Australopithecines in early Pleistocene times; next a cluster of Pithecanthropines in mid-Pleistocene times. In the upper Pleistocene immediately prior to the appearance of modern man, a fossil group we call the Neanderthals appeared.<sup>29</sup>

Neanderthal man is still very much in the news in the 1970's, and further research and opinions are reported. There is some shift of emphasis to the soft parts of the body. Presumably the bones of the specimens had been exhaustively studied by this time.

In 1971 Kolosimo restates what has been said before: The discoveries of Neanderthal remains were a triumph for Darwin's theory. In the first years of the twentieth century scholars no longer argued whether Neanderthal man was a representative of primitive humanity. The only point in dispute was where exactly he belonged in the story of evolution. As one find succeeded another, scientists felt able to paint a broad picture of the series of transformations which, they believed, led from the deformed ape of remote prehistoric times (Neanderthal man) to the final appearance of *Homo sapiens*.<sup>30</sup>

In the period of 1971 through 1975 considerable emphasis was made on a study of speech patterns of Neanderthal man made by Philip Lieberman, University of Connecticut, and Edmund Crelin, Yale. The scientists, the one a linguist, and the other an anatomist, modeled the talking apparatus of contemporary human adults, newborns, chimpanzees, and fossil hominids, including the classic Neanderthal from La Chapelle-aux-Saints in France. Reconstruction from the fossil skulls was based on anatomical clues such as the marks muscles leave on bones, and a computer helped determine the possible range of sounds that could have been

made by each type of vocal tract. It was concluded that classic Neanderthal man just did not have the equipment to produce the full range of sounds, particularly certain vowels, necessary for human speech, although other fossil hominids may have. Another conclusion was that chimpanzees have enough ability to produce enough sounds to develop a useful language of their own.<sup>31</sup> One of the investigators stated that if Neanderthal man tried to talk to you, his language would probably sound like a series of ape-like inarticulate grunts and noises.<sup>32</sup>

Soviet scientists such as Prof. Boris Porshnev and his colleagues, Dmitri Bayanov and Igor Bourtsec, believed that the term, Neanderthal man, was a misnomer. The creatures were not men but animals, since man begins where speech begins, according to their view. Both the body structure or morphology and the artifacts tend to show that Neanderthals (with perhaps just a few exceptions) had no speech and abstract thinking.<sup>33</sup> These comments are stated in a book published in 1975.

In 1972 Van der Veer comments on the remains of over a hundred Neanderthals which had been unearthed to date. These were primitive beings similar to man and we now have approximate dates of all the important states in man's descent. He finds it surprising that evolutionary doctrine is still found by some to be extremely difficult to accept. In his view all the evidence goes to show that man has clearly developed from a species of ape.<sup>34</sup>

Francis Ivanhoe (1971) of Cartwright Gardens, London, discusses another aspect of early man. Early man was a tropical primate who began his existence with dark skin. The pigment in the skin protected him from overdoses of vitamin D and resulting kidney problems. When man moved out of his tropical homeland to Europe, where ultraviolet radiation from the sun tended to be more scarce, the dark skin became a liability. It filtered out so much of the vitamin D-producing radiation that Neanderthal man may also have suffered rickets; from some also suggested congenital syphilis. Evidence for this was observed in the bulging of Neanderthal's skull, the curvature of his long bones, and his saddle-shaped nose.<sup>35</sup>

Van der Veer (1972) stated that Neanderthal men were offshoots of man which led nowhere, and the modern man could not have descended directly from Neanderthal man.<sup>36</sup>

As of 1973 we learn that Soviet anthropologists such as Yakimov, Bonch-Osmolovsky, and Bounak accepted the walk of Neanderthals as construed by experts, that is, Boule, on the analysis of fossil material. There was less impact on the heels than is the case with modern humans, and the legs were slightly bent even in the standing position.<sup>37</sup>

In June, 1974, Klein wrote about the anatomically primitive human subspecies we call Neanderthal man.<sup>38</sup>

Claiborne (1974) notes that Neanderthals were clearly different from the modern man. Neanderthals resembled one another more than any of them did modern man, and modern man resembles one another more closely than they do any Neanderthals (except for a few finds in Palestine). He based his judgment on the fact that Neanderthal foreheads sloped back more than

ours do. Their eyesockets had heavy bone ridges. Chins were flat or sloped back. He summed up by saying that Neanderthal man could be a different species, but there is no proof that they are.<sup>39</sup>

Brace sees no need to accept the view that Neanderthals and moderns lived at the same time in old Palestine. He notes that the Tabun skeleton showed a C14 date of 41,000 years and the Skhul materials were by projection some 5,000 years more recent. Thus the Skhul population, which is intermediate between Neanderthal and modern man, came at just the right time. This view eliminates all need, according to Brace, for theories involving hybridization of the two creatures with their attendant difficulties.<sup>40</sup>

In the *Smithsonian* (1975) we learn that a British scholar found that the Neanderthals' thumbs were barely opposable, which implies that there was still less than human development.<sup>41</sup>

The case of the evolutionist for the place of Neanderthal man in the story of man seems solidly based and a powerful argument against creationism. It is not surprising that Neanderthal was used to settle many an argument for at least three generations on the evolutionary development of man.

An incident in 1957 illustrates perfectly what a powerful weapon Neanderthal man had become. One of the great intellectuals of the twentieth century is Dr. Mortimer J. Adler, best known for his development of the *Great Books of the Western World*. Dr. Adler once expressed the view that evolution was only a popular myth for which the evidence is insufficient and conflicting. Evolution, according to Adler, is only an elaborate conjectural history, which vastly exceeds the scientific evidence. This kind of talk aroused the ire of Martin Gardner, mathematician and author of *Fads and Fallacies in the Name of Science*. Of all the possibilities which Dr. Gardner must have considered for a response to Dr. Adler, it is interesting that he chooses only one weapon with which to devastate his opponent, and that is Neanderthal man. Gardner asked: "Where is one to place the dozens of well-preserved skeletons which have been found of Neanderthal man—a creature with a low forehead like an ape, a head that hung forward, no chin, and non-opposable thumbs?"<sup>42</sup>

### III. Troubling Signs of Neanderthal Sophistication

From the animal-like characteristics ascribed to Neanderthal man, especially in the early twentieth century, one would hardly expect to find any significant cultural remains associated with their bones. Crudely chipped stones could be accepted by such beast-men, but more than one author can scarcely suppress his surprise in noting that somehow these creatures for reasons unknown buried their dead. Not even the brightest chimpanzee ever thought of doing such a thing.

As study continued of more and more Neanderthal finds, considerable tension emerged between two incompatible sets of beliefs. On the one hand it was held that Neanderthal man was more animal than man. On the other hand it was becoming increasingly obvious that this half-human creature was doing some very sophisticated cultural deeds. Something eventually had to give.

Constable credits Neanderthals with a certain sophistication. He suggests that they invaded some very dry lands by using water vessels—not of pottery or the gourd; but ostrich egg shells have turned up alongside Mousterian tools. By conventional standards, so-called Mousterian tools were the trademark of the Neanderthal. The sun-baked Negev region of Israel is given as an example. This region, however, is near the plain around Sodom and Gomorrah which in historic times was said to have been watered like the garden of Eden. There is something wildly improbable about the Neanderthal chronology here.<sup>43</sup>

Poirier observed that certain artifacts associated with Neanderthal remains suggest a certain sophistication in working skins and leather as well as butchery. Tantalizing finds of stone balls hint that they may have been utilized as bolas in hunting game. It must be said, however, that such round stones have not been found grouped as they have in ancient sites in East Africa.

It is curious that the bola has also been found among the Gauchos and among natives in the Rio Grande area in South America. Strangely, the Eskimos also made skillful use of this ingenious artifact.

Constable is willing to offer the conjecture that the Argentinian Gauchos who used the bola to capture their cattle had their counterpart in Neanderthal man who used the same artifact. His bola consisted of strips of rawhide weighted with stones and his target was the zebra.

Neanderthal man may have discovered the running rawhide noose, used as a snare or perhaps thrown as a lasso. Another mark of sophistication is indicated by the find of a Neanderthal burial deep inside a cave in Italy. The skull was found with a neat round hole bored into it.<sup>44</sup>

An interesting link between past and present was found with some Neanderthal remains. The middle incisors are missing from the skull and they were deliberately removed. This custom is still found today among some African tribes, Australian aborigines, and other peoples.<sup>45</sup> While this may hardly seem like a sophisticated action, it is even less characteristic of the animal world.

Bear cults and rites involving the bear are still practiced today by hunting peoples from Lapland across northern Siberia and into the Arctic of the New World. Siberian tribes today still worship the bear as the mythical first man and make profound apologies to the animal before killing it. Elsewhere bears are thought to be intermediaries between men and the reigning spirits of the land. The Ainu of northern Japan capture a bear cub and treat it as an honored guest through most of the year. It is then sacrificed in the winter. Men drink its blood while the shaman prays for good hunting for the following year.

There is much evidence that the Neanderthals were deeply involved with bear cults and rites. One Austrian cave held the remains of an incredible 30,000 bears brought there by Neanderthals.

Neanderthal hunting magic is assumed to be centered in the bear cult. In the Drachenloch cave, at an altitude of 8000 feet, a scientist found a cubical chest of stones covered with a large stone slab. Inside were the skulls of

seven bears all arranged with muzzles facing the cave entrance. Still deeper in the cave were another six skulls mounted in niches in the walls.

At Regoudu in southern France, a rectangular pit was covered by a flat stone slab weighing about one ton. The pit contained the bones of more than 20 bears, including the now-extinct cave bear, larger than the grizzly.<sup>46</sup>

Near Mixnitz, Austria, fifty-four bear thigh-bones were laid out in one direction in a cave. In another cave 42 bear skulls were found. In the Pyrenees at Montespan cave, a headless model of a bear was found. The skull of a real bear lay between the paws of the model. It may, however, have fallen off the model.<sup>47</sup>

The present preoccupation of Russia and other countries with the trained bear may hark all the way back to such bear cult practices. Brodrich finds it hard to imagine that the same beliefs involving bears could be handed down over many thousands of years. If, however, ancient chronology is grossly in error, this interesting possibility ought to be explored.<sup>48</sup>

Some religious significance must have been involved among Neanderthals in a remarkable cave burial studied in Bavaria. The severed heads of the dead had been placed into two scooped out nests in the earth, six in one and twenty-seven in the other, all wearing rich ornaments of deer teeth and shells. The skulls were sprinkled with red ochre, and all faced west toward the setting sun. From the charred remains nearby it was assumed that the bodies had been cremated. The precise symbolism involved in this practice is not known.<sup>49</sup> One can only guess at the rites performed in these caves.

Bodies were often bound in a peculiar fashion for burial. This had a religious significance. A strange kind of symbolism took place with the burial of a Neanderthal child in France. The skull and the skeleton were buried in a trench, but they were separated by a distance of about three feet. The skull was covered by a triangular limestone slab whose underside had a number of cup-shaped impressions. Cup marks were supposed to be a much more modern mystery, still unsolved. Nine curious circular Neanderthal graves, domed over with clay and arranged mysteriously in orderly rows of three, were found in 1909 at La Ferrassie, France.<sup>50</sup>

Something of a stir was created in the 1960's when the remains of a Neanderthal man were found in the Shanidar cave on the Iraqi side of the Zagros mountains. The man, 5 feet 8 inches tall, had been buried on a bier of wild flowers. The find was dated as 60,000 years old. From the pollen, the blossoms were identified as hyacinths, hollyhocks, bachelor's buttons, and other species.<sup>51</sup>

According to an anthropologist from Columbia University, Neanderthal man appears to have known that certain plants possessed medicinal properties. The burial is believed to date back to 60,000 years ago. The scientists found that the body has been laid on shrub branches containing ephedrine, a nerve stimulant. Furthermore, among the wild flowers laid around the body, six are known to have medicinal properties.<sup>52</sup>

It was becoming clear to some scholars at least, that

Neanderthal man displayed some very un-Neanderthal-like characteristics.

#### IV. The Scandal of the Neanderthal Brain

One who reads accounts of fossil man will note the great importance attached to brain size. The purpose is to show the evolutionary stages from the small ape brain to the large brain of modern man. The subject of the enormous variability within a species is carefully avoided in such accounts.

Le Gros Clark points out one special feature in the evolution of the primates (man and apes). That is the progressive expansion and elaboration (increasing complexity) of the brain. He states that there was a gradual increase in brain size since Eocene times in other groups of mammals as well.<sup>53</sup>

The brain size of Neanderthal man is a perfect object lesson on how facts get into the way of theory. The unexpected outcome, however, in a scientific age, is that the facts are ignored or compromised. When an exception occurs, it is refreshing.

The average brain capacity of modern man is estimated at about 1450 to 1500 cubic centimeters.<sup>54</sup> Unfortunately for evolutionary theory, Neanderthal man had an average brain capacity of about 1600 cc.<sup>55</sup>

It is dishonest for anyone to draw illustrations of a series of skulls showing increasing brain capacity in man. Some so-called ancestors of modern man possessed on the average a larger brain than modern man's.<sup>57</sup> It is embarrassing to argue that Neanderthal man evolved more brain capacity than he needed for the "sub-human" life-style depicted for him.

Boule resorted to phrenology. A detailed study of a cast made of the interior of the braincase of Neanderthal man convinced him that the brain was inferior in organization to that of modern man, particularly in the frontal lobes.<sup>58</sup>

Brace adopts a most curious approach to the problem. First, as others have done before him, he states that Neanderthals possess brain cases of fully modern size. As already noted, this is less than an accurate statement. If the situation had been reversed, that is, if modern man averaged from 100 to 150 cubic centimeters more than Neanderthal man in brain size, this would be pointed to as convincing evidence of evolutionary change. Brace next attacks the reader who might ask why brain size has apparently decreased. According to him, the reader has failed to realize that we should think of the survival of the fit instead of the survival of the fittest. As soon as the brain achieved a size adequate for survival, there was no point in getting larger. In the face of such an explanation it would be surprising to find an *increase* in cranial capacity during the last 100,000 years. On the surface this seems a rather clever way of avoiding the question of why man's brain seems to have decreased in size.<sup>59</sup>

It is very interesting to see how a variety of scholars and writers cope with an unwanted, unpalatable fact.

Rollard (1966) muddles the issue. (And the reader?) Lumping modern man's ancestors into a Neanderthaloid classification, he states that his brain capacity was small by our standards.<sup>60</sup>

The *World Book Encyclopedia* (1966) is typical of many sources which are willing to concede that Neanderthal brains were as large as those of modern man. The writer could not quite bring himself to say that the brain size of the Neanderthal averaged larger than that of modern man's.<sup>61</sup>

Colbert is one of many writers on the evolution of man. He states that men advanced to evolve the maximum of brain power. It is difficult to argue that man's brain became smaller in order to advance to its maximum power, but in effect this is what Colbert is saying.<sup>62</sup>

In *Man's Emerging Mind*, Berrill seems at a loss what to say. According to him, the Neanderthal brain may have been no worse than modern man's, whatever that might mean. Elsewhere he credits Neanderthal with brains as large as human brains are supposed to be.<sup>63</sup>

Grasping at straws, Berrill suggests that the cortex of modern man may now be twice as large as it was in mid-ice-age men, and larger than it was in a Neanderthal. No evidence is given by the author.<sup>64</sup>

Poirier is gamely honest but attempts to shore up a theory despite an unfortunate fact. He notes that the fossil record shows an evident trend to increasing brain size, although it is not a steady increase. He does note that the trend is not consistent since there was an actual reduction of approximately 300 cc. between the time of Neanderthal and modern man.<sup>65</sup>

Eisely states that evolutionists showed a tendency to see biological inferiority in human forms older than modern man. Even when skulls were the same as modern man's, it was argued that they must have contained less gray matter and more interstitial tissue. Virchow argued against this notion almost a century ago. Plain evidence was rejected when it did not fit assumptions. For example, plain and obvious Neanderthal burials were rejected because it was held that Neanderthal men were not mentally capable of doing so. Nothing which indicated any intelligence could be accepted.<sup>66</sup>

It was the large size of the Neanderthal brain that provided Le Gros Clark with the additional evidence he was seeking that Neanderthal man was not on the direct line of evolution of modern man. He admits that its large brain, larger than the average size of the modern human brain, makes it difficult to fit it into a scheme of the evolution of the brain of *Homo sapiens*. Yet he notes that the general shape of the brain showed certain features of primitive appearance. Despite its size, therefore, it was not up to the quality of that of modern man.<sup>67</sup>

By 1976 Hawkes is able to acknowledge the actual size of Neanderthal's brain, but not without some ungracious comments on the side. Although Neanderthal was still somewhat beetle-browed and the vault of the skull was low, its capacity was large, allowing a brain size often above the modern average.<sup>68</sup>

As standard texts go, Lasker is an exception in observing correctly that the Neanderthal brain was larger on the average than modern man's. Whereas brain size is stressed if it fits the theory, here Lasker cautions that Neanderthal man can't be assumed to be more brainy than modern man.<sup>69</sup>

While the above is not intended to be an all-inclusive summary of views of Neanderthal man's brain, the examples cited above are instructive. It is obvious that an unpleasant fact poses no problem at all for the scholar who does not wish to recognize its existence.

It is refreshing to find an exception to the above nonsense in a statement by Stephen Molnar, the Associate Editor of the *American Journal of Physical Anthropology*. He stated that in modern populations there is such a wide range in variation that the lower end of the range is well below the capacity for certain fossil hominids. Yet there is no evidence that these individuals are any less intelligent than persons with larger cranial vaults. He concludes that comparisons of cranial capacity between modern groups is a futile and meaningless exercise.<sup>70</sup>

### V. A Slight Case of Honesty—Upgrading Begins

In September, 1974 the Museum of Natural History, Smithsonian Institution, opened a new exhibit which features a 50,000-year-old Neanderthal burial in France. The exhibit includes the bound body of a deceased male, a shaman (priest), and two women.

It is very interesting to see details of the exhibit since Neanderthal has been officially upgraded into full human status by scientists recently. The faces bear a rather stupid look. Yet, one must confess that neither the features nor the hair-do's would attract a second glance anywhere today. The big difference from older reconstructions is body hair. The deceased male seems almost devoid of body hair. The shaman is still well-haired all over. One of the ladies, alas, has hairy legs, but otherwise the ladies are as hairless as any Madison Avenue advertisement. While a black-and-white photograph may be deceptive, it appears that none of the four persons had ever stepped out of the cave into the sunlight. There is no trace of tanned or weathered skin.<sup>71</sup> Thus Neanderthal has been welcomed into the human race in the 1970's.

Scientists sometimes remind other scientists to beware of reconstructions. One can scarcely open any book devoted to early types of man without being confronted with fanciful illustrations of Pithecanthropi, Australopithecines, or Neanderthals.<sup>72</sup>

Simpson makes a very revealing assessment of the humbug which attends the study of fossil primates (monkeys, apes, and man):

The peculiar fascination of the primates and their publicity value have almost taken the order out of the hands of sober and conservative mammalogists, and have kept, and do keep, its taxonomy (or classification) in a turmoil. Moreover, even mammalogists who might be entirely conservative in dealing, say, with rats, are likely to lose a sense of perspective when they come to the primates, and many studies of this order are covertly or overtly emotional.<sup>73</sup>

The reader will agree that this is an elegant way of saying that almost everything one is apt to read about the classification of fossil apes, men, men-apes, or ape-men is humbug, even though it is written by or quoted from the scientists in that field!

In connection with reconstruction, it should be noted that we do not know if Neanderthal's face was hairy or not, or if his skin was light or dark. It is instructive to place together all the reconstructions made of the same skeletal material. The variation is enormous.<sup>74</sup>

After generations viewed hairy Neanderthal man in texts and museums around the world, Hawkes announces to the world in 1976 that there is no reason to believe that Neanderthal man had much body hair.<sup>75</sup>

Why did the experts misjudge the Neanderthals? Why was very clear evidence to the contrary about Neanderthal shouted down? Neanderthal appeared at a critical moment in mid-nineteenth century. A faltering theory needing shoring up and Neanderthal was the best candidate for the task.

Eisely admits that Darwin's view of the gorilla-like Neanderthal fossil from La Naulette would have to be repudiated today. The teeth described as huge projecting ape-like canines were missing when the jaw was found.<sup>76</sup> The whole thing was fiction and was only something evolutionists wanted to believe.

It is interesting to observe that Thomas Huxley, a forceful champion of Darwin's theory of evolution, acknowledged that the Neanderthal skull seemed very ape-like, but "in no sense can the Neanderthal bones be regarded as the remains of a human being intermediate between men and apes."<sup>77</sup> Yet it took generations before Huxley's correct view became respectable among scholars.

C. Carter Blake, Honorable Secretary of the Anthropological Society of London (1862) held that Neanderthal man was a poor idiot or hermit, not like a normal, healthy, uninjured *Homo sapiens*. He was the first to say the remains were pathological.

The German anatomist Mayer in 1864 provided the most imaginative of the "idiotic" interpretations. The Neanderthal remains had been afflicted with rickets as evidenced by the pathology of the left arm. This affliction in turn caused the eyebrows to pucker, causing the enormous brow ridges. The bent femurs indicated that Neanderthal man had been a horseman. To Mayer the skull seemed more like a Mongol than it resembled an ape, gorilla, or New Zealander. He therefore concluded, unfortunately, that the remains were those of a Mongolian Cossack suffering from rickets who had died in the cave around 1814. In 1867 Dr. Barnard Davis stated that the Neanderthal skull proved nothing. It was obviously an abnormal development caused by ossification of the sutures. Similar skulls, he said, of modern men are in our museums.<sup>78</sup>

According to Constable (1973), Rudolf Virchow (1821-1902), famed German anatomist-anthropologist, presented a closely reasoned paper in 1872 in which he state that the man from Neander Valley was not ancient at all, but was a modern *Homo sapiens* who had suffered from rickets in childhood, arthritis in old age, and had also received several stupendous blows on the head at some time during his life. Virchow is credited with being the father of modern pathology, and he also placed anthropology on a sound critical basis.

According to Constable, this pronouncement, coming from such a respected source, effectively silenced all further speculation. The fossil ceased to disturb scien-

tists. They simply forgot about it.<sup>79</sup> How Constable could make such a statement defies any sort of rational explanation.

In a 1964 publication, Brodrich still chastises Rudolf Virchow for being so obtuse and stubborn in failing to recognize the great significance of the original Neanderthal skeleton.<sup>80</sup>

As of 1967 Brace lashes out at Virchow because Brace likes the idea of Neanderthal man being an intermediate step on the way toward modern man. Brace views Virchow as follows. He was a founder of German anthropology and the originator of the field of cellular pathology, Virchow was the most outstanding pathologist of the day. After a careful examination, he pronounced Neanderthal remains as pathological and sought to explain all of its peculiarities in that fashion. The body structure has been regarded as "aberrant" from the day to this, and authorities even today refuse to accept Neanderthals as something different from modern man. Brace believes that Virchow was wrong because other skeletons were found very similar to the first Neanderthal man. Brace thus states that after the second find it was no longer possible to expound with such certainty the supposed pathological features of the individual from the Neanderthal. However Virchow refused to back down and so the implications of abnormality and peculiarity tended to remain. Indeed, to this day, laments Brace, they have not been fully shaken off.<sup>81</sup>

The bones still exist in museums today. Curiously, Brace does not ask medical scientists to re-examine the bones to establish truth. He weeps that Virchow has spoiled a fervently desired theory.

In 1970 Ivanhoe discussed the possibility of rickets in Neanderthal man in *Nature* and suggested that the Neanderthals living in early Wurm times probably suffered from a vitamin D deficiency. He also stated that every Neanderthal child studied showed severe rickets. The title of the article, one hundred years overdue, was as follows: "Was Virchow right about Neanderthal?"<sup>82</sup> Yes, he was.

Since Boule's monographs and reconstruction of Neanderthal man were the accepted view world-wide for at least two generations among scientists, it is well to take a closer look at his work. He was dedicated to prove the great antiquity of man, and he built his case on three fossils: Grimaldi man, Piltdown man, and Neanderthal man. While only Neanderthal man is under discussion in this paper, one can mention in passing that a recent analysis of the Grimaldi site in Italy, according to Constable, has shown that the fossil is actually of rather recent vintage, postdating the Neanderthals. The second bastion crumbled when the Piltdown skull was exposed as a fraudulent combination of chimpanzee and human skull pieces. The full truth of the situation, however, does not become apparent until one sees what Boule did with Neanderthal man. Recently the skeleton upon which he based his work was described in the following terms: In 1908 the crushed skeleton of a Neanderthal deformed by osteoarthritis and many signs of advanced senility was found at La Chapelle-aux-Saints in France. Unable to hunt and having only two teeth remaining, scientists infer that this man must

have been cared for by his companions. From this material Boule prepared his famous model of the "typical" Neanderthal man.<sup>83</sup>

In 1939 Blanc and Sergi established that Neanderthal man stood as erect as modern man.<sup>84</sup> The world was not ready for this marvelous discovery, however, and more decades passed before Neanderthal man's rehabilitation really got under way.

The old prejudices began to evaporate in 1955, when several scientists again suggested that the slumped posture described by Boule might be in error. The major turnabout came, however, in 1957, when two anatomists, William Straus of The Johns Hopkins University and A.J.E. Cave of St. Bartholomew's Hospital Medical College in London, took a second closer look at the fossil from La Chapelle-aux-Saints that had provided the basis for Boule's contentions. The fossil was supposed to be typical. However, Straus and Cave discovered that this particular Neanderthal had suffered from a severe case of arthritis, which affected the structure of the vertebrae and the jaw. Boule, as a skilled paleontologist, should have detected the deformation of the bone joints indicating the disease.

Straus and Cave also spotted many other inexplicable mistakes in Boule's reconstruction. The Neanderthal foot, for example, was definitely not a "prehensile organ," as Boule has said. The neck vertebrae did not resemble that of the chimpanzee nor was the pelvis ape-like as he had claimed. Boule mistakenly arranged the foot bones so that the big toe diverged from the other toes like an opposable thumb. This was the source of the false belief that Neanderthal had to walk on the outer part of his foot, like an ape. Boule's interpretation of the knee joint, resulting in the so-called bent-knee gait, was equally incorrect. In every respect, the posture of Boule's reconstruction was incorrect. All in all, Straus and Cave found Neanderthal quite human indeed. If he were placed in a New York subway, it is doubtful that he would attract any more attention than some of its other denizens.

Neanderthal man is now officially *Homo sapiens neanderthalensis* vs. *Homo sapiens sapiens*. This indicates some differences, but he is squarely in the human fold.<sup>85</sup>

Various embarrassed authors, barely recovered from the Piltdown disaster, are hard pressed to explain how they were all taken in by Neanderthal. As we shall illustrate, the favorite way out is to blame Boule, "the early twentieth century's foremost authority on fossils." This is the man about which prize pupil, Teilhard de Chardin, liked to say, "If you don't believe me, read the Master!" Other writers incredibly hide Boule away and blame the public. See, e.g., Brace below.

Broderick (1964) blames Boule for a reconstruction which led to a hundred other ridiculous reconstructions, all of which of course are covered with a thick coat of hair.<sup>86</sup>

Brace manages to give equal blame to the "fascinated public" which, he says, invested Neanderthals with a hairy pelt and long simian arms. Nevertheless, Brace then says that Boule was in error on those matters. First Boule created a caricature; then he used it to proclaim that it could not be ancestral to modern man.<sup>87</sup>



Out of respect for the man who had misled them in many previous editions of the *Britannica*, the 1967 edition does not mention Boule by name: "The popular conception that these people were slouched in posture and walked with a shuffling, bent-knee gait seems to have been due in large part to the faulty reconstruction of the skull base and to the misinterpretation of certain features of the limb bones of one of the Neanderthal skeletons discovered early in the 20th century."<sup>88</sup>

One could hardly be more kind; but the statement is scarcely a recommendation for seventy years of hard labor in the field of human paleontology.

In the 1970's the *Britannica* takes a giant leap forward on behalf of interpreting Neanderthal and other ancient men. In speaking of the numerous fossil sapients found on all major continents, it is noted that the range of variability they exhibit is in no way greater than that known for the living races of modern man. This statement probably says far more than was intended since the author is firmly committed to evolution.<sup>89</sup>

It is almost unheard of for a writer on human fossils to mention any point about human variability—the kind of variability we can see among any group of people today. The practice in human paleontology is to set up some kind of hypothetical but undefined modern man and then show how the fossil bones under discussion deviate from modern man. And since at least something is thicker or thinner or taller or shorter or higher or lower or more pronounced or less pronounced or more advanced or less advanced or completely something as opposed to less completely something else the case is proved beyond all argument.

Colbert, for instance, stated that all later men were advanced over their more primitive Neanderthaloid predecessors. And what make modern man more "advanced"? Modern man's posture is completely upright. Further, modern man has a high forehead, a highly domed skull, a highly bridged nose, and a pronounced chin.<sup>90</sup> The notion about posture, of course, refers to Boule's erroneous reconstruction. None of the other characteristics noted has anything at all to do with being more or less advanced. They are all normal variations found within a given species.

In 1971 *Time* upgraded Neanderthal man. His primitiveness is unwarranted. His apish image was largely due to an early 1900's reconstruction by French paleontologist, Pierre Boule. But as a Harvard anthropologist said, "One can model on the Neanderthal skull the features of the chimpanzee or the face of a philosopher."<sup>91</sup> Evidently Boule made only a small but honest mistake.

The 1966 Edition of the *World Book Encyclopedia* offers a delightful example of the left hand not knowing what the right hand is doing. We read that at first scientists thought that Neanderthal was a squat, stooping, brutish, somewhat ape-like creature. But later "research" showed that the bodies of Neanderthal men and women were completely human, fully erect, and very muscular. This is not quite the whole truth, since the correct information about Neanderthals had been lying around for more than a century. Under another heading in this encyclopedia a Neanderthal family is pictured, and they can only be described as squat,

stooping, brutish, and somewhat ape-like creatures!<sup>92</sup>

On rare occasions, one can find a candid assessment of the whole matter. Pfeiffer noted in 1969 that the reconstruction of the La Chapelle remains was "one of the most amazing phenomena in the history of man's efforts to downgrade his ancestors."<sup>93</sup> And that seems to say it all.

## VI. A Matter of Sequence

Large amounts of scholarly energy went into the problems of sequence for Neanderthal man. For decades it was assumed and taught that primitive Neanderthal man evolved into modern man. The alternative was that Neanderthal was some kind of subhuman offshoot who eventually became extinct. Many kinds of conjecture were offered in support of one or the other view. Since both views were respectable in some of the best circles, the arguments did not become particularly heated. Complications, however, arose.

In 1947 scientists found two skulls of modern type lower than tools of Neanderthal man. Since the skulls were separated from the tools by a layer of limestone, they could not have been interchanged, and therefore the remains of modern type were older.<sup>94</sup> If it had not been for the layer of limestone, all kinds of explanations would have been offered for the material being out of the "proper" sequence.

The following year Jacob Gruber called for a re-examination of the place of Neanderthal man in human evolution. It was clear that the remains of *Homo sapiens* who lived before Neanderthal man had been found, and the finds were apparently substantiated.<sup>95</sup>

It hardly needs to be said that such a discovery created havoc for an enormous amount of writing about early man.

In the following decade Weiner joined other authorities in acknowledging that fully developed modern man predated Neanderthal man. Neanderthal could not be ancestral to modern man.<sup>96</sup>

At the same time Weckler summed up a century of study and speculation about Neanderthal man. Neanderthal is termed as still perhaps the most puzzling enigma about ancient man. Somehow the story now had to read that both modern man and Neanderthal roamed the world 100,000 years ago. The unpalatable fact was that the skull of Fontchevade man, discovered in 1947, seemed to be fully *Homo sapiens*, but he is dated at more than 150,000 years ago, well before Neanderthal man is supposed to have come along.<sup>97</sup>

As late as 1964 Brodrich affirms that Neanderthaloids disappear about 45,000 years ago, but *Homo sapiens* did not appear until about 12,000 years later. If we take this remarkable view seriously, modern man had to do a very rapid job of evolving from some kind of unspecified life in a mere 12,000 years.<sup>98</sup>

William G. Pollard, in the *Cresset*, wrote that our species, *Homo sapiens*, entered explosively on the stage of history all over the earth only 35,000 years ago, as the ice retreated from Europe after the last ice age. One is tempted to ask whether they were shot from guns. Prior to that, Pollard continues, there had been the Neanderthaloids. (This is a slippery term which

sometimes means supposed ancestors of Neanderthal, sometimes means creatures who lived after Neanderthal man but who predated modern man, and the word sometimes includes Neanderthal man himself.) The Neanderthals preceded modern man for some 80,000 years. While they used fire, flint implements, and buried their dead, "they would really not be considered human if they were encountered today."<sup>99</sup>

With remarkable originality, Brace solves the whole dilemma by smelling a plot against Neanderthal man. Evil British anthropologists, because of their long-standing lack of enthusiasm for facing the possibility that man may have had a Neanderthal ancestor, were desperately eager to find evidence of modern form at an earlier time level than that attributable to the Neanderthals. As a result, modern features were stressed whenever possible, and, in the case of the Swanscombe skeletal remains, with the all-important facial parts missing, opinions about its status could be pushed without much risk of encountering solid objections from any quarter whatsoever. By default, then, Swanscombe has been regarded as modern ever since. Brace does not accept the finds at Fontchevade or Steinheim as being modern man either. He concludes that desperate people are simply trying to "prove" that Neanderthal man could not be ancestral to modern man.<sup>100</sup>

A popular view long held is that Cro-Magnon man caused the extinction of Neanderthal man. What is the evidence? According to Constable, cave strata sometimes showed the following: Neanderthal layers fading to sterile layers followed by Cro-Magnon layers. He notes, however, that there were many exceptions. Often there was no break between the two cultures, and one cannot really show that one culture disappeared to be replaced by another. Out of desperation Constable is led to suggest that maybe Neanderthal actually evolved into Cro-Magnon.<sup>101</sup>

As recently as 1974 Claiborne illustrates the ambivalence toward Neanderthal man. Despite racial differences among men in color and anatomy, we are left uncomfortably with only one human species. Yet differences much less than these in animal groups are easily accepted without argument as different species. Claiborne stresses how different Neanderthal man was from modern man. This is a curious and biased statement. Just what color, physique, and facial features constitute so-called Modern Man? There is a strange and unscientific persistence in equating the shape of the skull with intelligence and sophistication, although this notion, akin to phrenology, fell into disrepute in the nineteenth century except among some human paleontologists.

In a strange survey of history, Claiborne notes that the theory of evolution was long attacked on the ground that there was no missing link of man and ape. He makes no mention of the fact that for generations Neanderthal man was loudly proclaimed to be just that. Now that Neanderthal man has reluctantly been permitted to join in full the human race, Claiborne smoothly slides over to the discovery of the Australopithecines in the 1920's and 1930's as settling the missing link argument. For those who are still not impressed,

Claiborne fires his last cannon: the 50-million year detailed transitional record of the horse!<sup>102</sup>

On both counts, however, we are back to square one. According to Dr. Charles E. Oxnard, University of Chicago anthropologist, the missing link is missing again. The Australopithecines are not an ancestor of man.<sup>103</sup> And according to George Gaylord Simpson, the transition of the horse, so neatly pictured everywhere, never happened.<sup>104</sup>

Le Gros Clark takes an interesting view of the Neanderthal matter as of 1957. Aware that modern man preceded Neanderthal man, and assuming he was not ancestral to *Homo sapiens*, he argues that the apparently primitive features are a result of a retrogressive evolution from still earlier types which do not appear distinguishable from *Homo sapiens* or modern man.<sup>105</sup> He thus takes the "dangerous" view that evolution moved from higher to lower forms. Evidently Le Gros Clark did not realize the devastating consequences of such a view for evolutionary theory. The possibility of a degenerative process within evolutionary theory is sharply rebuked by Loren Eiseley.<sup>106</sup> Lubenow shows why. If reversals occur in evolution, then stratigraphy is futile. Evolutionary theory could not survive this view. The law of irreversibility was originated by Dollo in 1893. It holds that an organism is unable to return even partially to a previous stage already realized in the ranks of its ancestors. Yet Lubenow documents a large number of such impossible reversals.<sup>107</sup> It seems clear that Dollo's law does not describe the real world.

Every time Neanderthal's I.Q. is put down, along comes other information to raise it. Many authorities today grant the possibility that Neanderthal man might be a direct ancestor of modern man. First *Homo sapiens* evolved into Neanderthal man. Now Neanderthal man has evolved back into modern man, not too much the worse for wear.

## VII. Could Neanderthal Man Have Been "Recent"?

As the textbooks have it, the very last of the Neanderthals regretfully gave up the ghost roughly 45,000 or so years ago, when the world was still filled with many now extinct mammals. The find at Teshik-Tash or Pitted Rock, which lies about 5000 feet above a valley in the USSR Republic of Uzbekistan, is enough to make an anthropologist give up his profession. In this cave about 64 feet wide, many typically Neanderthal artifacts were found. Here also a Neanderthal child had been buried, circled by pairs of Siberian mountain goat horns as a ritual arrangement. The problem is that the associated fauna bones are all wrong. They are modern forms, e.g., the boar, the mountain goat, horse, leopard, marmot, and others. Not a mastodon or sabre-tooth was to be found.<sup>108</sup> One might be understandably reluctant to believe that at this place, not knowing that they had become extinct, Neanderthals continued to live on quietly until modern times. Again conventional chronology is found seriously wanting.

It is sometimes very difficult to extinguish the Neanderthal race thousands of years in the past. Custance cites an example in France where Neander-

that remains could hardly be dated more than 20,000 years ago. Then it was found that birch trunks in place rooted and extended up through 3,000 years of the deposits. Then Roman remains were also found in the deposit which indicated that the entire deposit could not be more than 3,000 years old.<sup>109</sup>

For a time it was fashionable to find Neanderthal remains almost anywhere in the world. In 1891, a classic Neanderthal skull was found in a mound at Floyd, Iowa.<sup>110</sup> At most, however, this skull could not be much older than 2000 years, while the scholars had decreed that the last Neanderthal expired many thousands of years ago. The finds then had to be ignored or written off as cases of mistaken identity.

In 1906, Robert Gilder excavated skeletons from an artificial mound on Long's Hill about ten miles north of Omaha, Nebraska. What caused consternation was that the bones were under about four feet of undisturbed loess soil. While little is known about loess soil deposits, they are usually dated about 6000 B.C. Further, the skeletons were said to exhibit very primitive characteristics. For a time the find was called the Nebraska Loess Man. The finds were studied by Alex Hrdlicka of the United State Museum and as a result he disputed both the geology (i.e., the loess) and the antiquity of the skulls.

It is of great interest to note his argument. He took such characteristics of Neanderthal man as thick cranial bones, heavy brow ridges, low receding foreheads and stated that they were not evidence of antiquity since the same characteristics were commonly found among historic Indians.<sup>111</sup>

We are then left with the impossible result that heavy brow ridges indicated great age if the skull was found in Neanderthal territory, but the same skull would be very recent if found in America where no Neanderthal remains were supposed to be found.

A tribe of aborigines in Australia, the Arunta, drew attention decades ago with respect to their physical appearance. They are noted for their excellent teeth, but the teeth are of large size. Some of the tribesmen grow extra molars which some authorities believe links them with so-called earlier human types. Evolutionist Thomas Huxley was the first to draw attention to similarity of the skull of these aborigines to prehistoric Neanderthal man.<sup>112</sup> More recently, Brace (1967) notes that the facial form of the aborigines is remarkably similar to that of the Neanderthaloids of Mount Carmel.<sup>113</sup> As noted elsewhere, however, other authorities decreed that Neanderthal man never reached Australia.

The following are interesting lessons about human variability. In 1930 Prof. F.C. Hansen, Copenhagen, received human bones from a 12th century graveyard in Gardar, Greenland. The lower jaw and large part of the skull were more ape-like than the Rhodesian skull, and very much like the Java and Peking skulls. Also in 1930 the skull and skeleton of a criminal executed in 1892 were exhumed in Australia. The bones exhibited very remarkable anthropoid-ape characteristics, yet it was a fully modern man.<sup>114</sup> Brodrich also refers to the Greenland find, but dates the skull from the 11th century and the find in 1927. Hansen observed that if the

skull had been discovered in a Mousterian context in the correct part of the world, it would probably have been accepted as Neanderthaloid. It was further noted that a malfunction of the pituitary gland will produce either or both gigantism and the abnormal growth of certain parts of the body, e.g., the skull.<sup>115</sup>

A "classic" Neanderthal man was noticed in Morocco some years ago and was photographed to show that he possessed all the physical characteristics attributed to Neanderthal man.<sup>116</sup>

In 1968, Otto F. Reiss, editor of *Art and Archaeology*, undoubtedly lost some subscribers when in a period of pure speculation he said yes to the possibility that Greek myths may have retained a memory of events many thousands of years earlier, e.g., Cro-Magnon contacts or battles in Greece with Neanderthals. Reiss then offers three candidates for the role of Neanderthal man or some other primitive man in the Greek myths.

One is the cercope. In one relief two of them are shown as prisoners of Heracles. They were described as a monkey-like species, yet capable of speech. In the relief they appear to be completely human.

A second candidate might be the centaur, fabled half-man and half-horse. In a relief which shows Heracles killing a centaur, one must look sharply to realize that the figure is not just a huge-torsoed man with very short legs. Greek tradition states that the centaur fought with a branch broken off the nearest tree. This centaur holds a rock, but in another later restoration a centaur wields a branch. The centaurs were said to be creatures of nature who ate raw meat and enjoyed the flesh of toads, snakes, and dogs. They were afraid of fire. The Lapiths fought a battle with the centaurs and drove them from their home at Mount Pelion. To this day superstitious peasants fear the callicantzaros (whose name seems to echo the word centaur), an eerie apparition that haunts the countryside at night to perpetrate all sorts of mischief.

The third candidate is the giants of the Greek myths, those powerful creatures with mighty torsos who could not stand up because their legs, supposedly made of coiling serpents, barely supported them. It is said that the giants arose against the Greek gods. In a terrible battle the giants were annihilated by them. Reiss speculates that such a battle could have taken place in the Louros Valley in northern Greece. In a rock shelter there the artifacts typical of Neanderthal man are succeeded in turn by Upper Paleolithic remains and then pottery sherds. Some think it is the site of the oldest human habitation yet found in Europe.

Reiss muses that possibly some of those old-world apparitions, the trolls, kobolds, callicantzaros, others lurking in the forest, and the demons against whom people barred their doors and windows at night were not figments of superstition but the starving, desperate holdouts of almost extinct species.<sup>117</sup>

In a source I cannot identify, I saw a photograph of the sculptured head of a Neanderthal man. What made it so unusual was the fact that it had been excavated from an ancient Greek (Mycenaean) site.<sup>118</sup> Could anyone dare to say that there had been actual contacts between the two peoples? The possibility seems unthinkable.

Some startling reports have emerged out of Ceylon in recent years about some creatures apparently related to Neanderthal man which are said to have been killed off by the dominant people in that region, the Vaddas, as recently as the early 1800's A.D. These reports were transcribed from oral tradition. The creatures were a naked, shaggy race possessing short powerful arms and short hands furnished with strong clawlike nails. They did not know the use of fire, and their only weapons were stones and their claws with which they tore and disembowelled their prey or enemies. The creatures called Nittavo (probable meaning is the 'clawed folk') lived in bands of ten to thirty, and lived in caves and rock clefts or in trees on platforms covered with a roof of leaves. Their language resembled the twittering of birds. Their main food consisted of mousedeer, hare, squirrel, iguana, and tortoise. A fossil human brow ridge displaying Neanderthaloid characteristics was found in the area, conceivably from an early Nittava, but there is no way this can be verified. In the early 19th century, the Vaddas drove the last surviving group of Nittavo into a cave in the Lenama district and suffocated them by maintaining a fire at the mouth of the cave for three days.<sup>119</sup>

Another possible link of the past with the present is related by Constable. On an April evening in 1907, a caravan led by the Russian explorer, Porshnyev Baradiin, made camp in the central Asian desert. It was a bleak land of rock and sand, silent and empty. Suddenly a member of the group saw silhouetted against the setting sun a huge slouching figure resembling a cross between man and ape. The shaggy brute stared, then turned and lumbered off. The story is undoubtedly overdone; and the author concludes the account has to be nonsense, especially since the Neanderthal is supposed to have disappeared many thousands of years ago.<sup>120</sup>

The word "documented" seems to reach a new low with the following "documented" account from Russia by Boris Porshnev. A young girl of pronounced Neanderthal characteristics was captured by hunters near the town of Ochamchire on the Black Sea. She eventually became the property of a family by the name of Genaba. She died in the late 1800's. At first she was kept in confinement, but later she was given free movement. She could not speak but made sounds that carried rudimentary intent. She however could understand and follow orders. She performed simple tasks, but she had immense physical powers. For example she could outrun a horse easily and could swim through the most turbulent waters. (How the hunters were able to capture this biological wonder, we do not know.) She was described as tall, bulky, with dark skin covered with red-brown hair. Her face was broad with prominent, high cheek bones, a very flat nose and small eyes which in certain lights appeared red. Apparently no one this attractive had ever been seen in this area and men found her irresistible. She became the mother of a number of children by several fathers. The first children are thought to have died because she plunged them into the icy waters of the river to cleanse them. After she found that this custom was unprofitable she had four more children which survived. The youngest, Khvit, died in 1954 at the age of 70. All four children were

considered human and they had children who are now living in the Caucasus republic of Abkhaz. Khvit's voice was high and adept at imitating animal calls, and his children were described as slightly negroid.<sup>121</sup>

### VIII. A Bit of Scholarly Backlash and More Confusion

Today, about 125 years after Neanderthal man was discovered, it is interesting to attempt to classify the kinds of things being said about this much maligned creature. We can note a number of categories.

A naive reader might think that a theory of early man is greatly weakened by recent revelations about Neanderthal man. Man, however, has an enormous tenacity and genius for clinging to the husk of an untrue concept.

(1) Some writers merrily go on about Neanderthal as though nothing has come to light in the last quarter of a century. They of course reveal that they haven't bothered to stay up with their reading, or they blithely ignore the facts of the matter.

With all the recent literature, it is truly astonishing to note the following statement by a scientist in a book published by a university press in 1973. The statement is that the first "modern" man, Cro-Magnon Man appeared in the world about 50,000 years ago. Further, *if* we admit Neanderthal man to the human race, then our species (modern man) has been around for only 100,000 years at the most. Anything before this time is classed as primitive, barely human creatures who date all the way back to three million and more years ago.<sup>122</sup>

The person who does not blindly accept without evidence what authorities declare will remind the evolutionists that large amounts of skeletal material in the past were discarded when they did not fit presuppositions about man's evolution. Evolution seems to be the only scientific pursuit where false information is hailed as a "powerful validation of Darwin's views on human evolution."

(2) Some correction have been made.

According to Pearce (1969), all museum exhibits have been altered to show that all fossil men remains reveal them as walking upright, except in Russia. As Garlick, an authority on human fossils, said, "The origin of *Homo sapiens* is more of a mystery than ever!"<sup>123</sup>

(3) There is a fair amount of confused doubletalk.

By 1964 the ancestry of man became sufficiently confused to lead Brodrich to proclaim in words difficult to refute: "The evolution of the hominids, in fact, resembled that of most other mammalian lines for which we have enough evidence to judge. Some forms developed in one direction, some in another. Some forms did not evolve as fast as others. Thus, the family bush of our kind is a tangle and tufted one that sprouts and shoots out in all directions."<sup>124</sup>

Literature on Neanderthal man is not intended to be read carefully. The fact that Neanderthal man was fully human, fully *Homo sapiens*, creates an unbearable tension with the fervent belief despite the facts that Neanderthal man was some kind of link between a more primitive form of man and the modern man. We now read such embarrassing statements as this: *Homo sapiens* had evolved into a true Neanderthal about

100,000 years ago. This is like giving the startling news that *Homo sapiens* evolved into *Homo sapiens*. Constable concedes that *Homo sapiens*, or modern man, had been around for at least 200,000 years before Neanderthal man came along. Writers on the subject don't know how to end the story of Neanderthal man, and they are about equally divided that Neanderthals were killed off by *Homo sapiens* in the form of Cro-Magnon man, or that Neanderthals were assimilated into modern man. This means that even your next door neighbor might be a carrier of Neanderthal blood.<sup>125</sup> Others say that the fate of Neanderthal man is unknown. Robert Ardrey managed to take two different positions on the matter within two pages: first that their fate is unknown; then with equal certainty he stated that Cro-Magnon killed all the Neanderthals.<sup>126</sup>

(4) Some tend to throw up their hands about the whole business.

Poirier paints an interesting picture of the nightmare that Neanderthal has become to the anthropologist. Skeletons simply were not fitting into the preconceived notion of how man was supposed to have developed. Poirier states that until this wide range of fairly numerous fossil materials is arranged into some kind of order, and the temporal, geographical, and cultural boundaries delimited, confusion will reign. That the assumptions and dogmas about man's supposed evolutionary development might be all wrong does not occur to him.

Furthermore, the appearance of what seems to be more "modern" forms in Europe actually predating the European Neanderthal population raised the spectre of evolutionary reversals (a very distasteful line of thought), polyphyletic lines of the evolution of man, and so on.

The existence of a quite variable middle eastern population predating and living contemporaneously with the European Neanderthals complicates the picture. Many a fairy tale about Neanderthal man went down the drain with this discovery.

Finally, what appeared to be the overnight disappearance of western European Neanderthals, and their replacement by Cro-Magnon (anatomically modern) populations, smacked of catastrophism, a process akin to the Biblical flood. Needless to say such a view was for the anthropologist a fate much worse than death.<sup>127</sup> To sum up, it is no longer quite as much fun being an anthropologist these days as in the good old arrogant days in the past when creationists were on the run.

(5) Some are bloody and bowed, but far from broken. If the hard parts of the body can't be used to support evolution, the argument shifts to the safer world of the soft parts of the body which have not been preserved.

As we find the matter recorded in the *Smithsonian* (1975): "For a while there it seemed that Neanderthal man had been rehabilitated and was slipping closer to the mainstream of human evolution, but the situation remains fluid . . ."

The author offers two findings in support of his fond hope. First, he cites the British scientist who found that Neanderthals' thumbs were barely opposable.

Comment: It is remarkable that more than 125 years have gone by before any scientist looked at the thumbs

and found they were scarcely opposable. One can safely assume that this scientist studied a hand crippled by rickets, arthritis, and advanced senility. Looking back at Boule's reconstruction, we observe that he not only found Neanderthal man's thumbs opposable, but he also rearranged his toe bones in order to make his big toes opposable like thumbs.

The second finding is the one about Neanderthal's vocal chords. To sum it all up, Neanderthal man couldn't talk if he wanted to, but chimpanzees could talk if they wanted to. There are a number of remarkable things about this so-called finding. The computer is invoked to lend an air of plausibility to the whole humbug. Computers respond only to what is programmed into them. The vocal chord study was done with the "classic" skeleton described as crushed and deformed by osteoarthritis and many signs of advanced senility. No vocal chords have been preserved from any Neanderthal burial, and this shift of study from hard to soft unpreserved body parts is hardly convincing.<sup>128</sup>

Another author finds a new way to make Neanderthal man less than modern man.

It is not good that Neanderthal man appear to be too bright, and so he put down as follows: He never reached the heart of tropical rain forests, and they probably did not make much of a dent on thick forests of the far north. How do we know? No skeletons have been found in those regions. This is hardly convincing evidence. Further, Constable is ready to grant that it was theoretically possible that Neanderthals could have reached the New World. According to Constable a few seemed to have got to the southern part of Siberia. In a remarkable display of logic, we learn that Neanderthals did not reach America. Not only that, they failed to reach Australia. The conclusion? In these ways and in many others, they did not measure up to the men who came after them.<sup>129</sup> Cro-Magnon man did not reach America or Australia, yet he measures up. If the stereotype of Neanderthal man falters as to his physical makeup, we see that he is made primitive nonetheless.

(6) Some shift to a totally different explanation for skeletal features—one that undercuts the whole scheme of human evolution.

Hawkes is surprised that Neanderthal's brain is so large, and she is even more surprised that the fossils with the less primitive features are the more ancient. She explains it this way. Those who lived in brutally harsh glacial conditions were affected physically, and thus such primitive features as heavy brow ridges and jaws were accentuated.<sup>130</sup>

Comment: There is evidence elsewhere that climatic conditions do affect the physical appearance. Such an admission, however, is disastrous for evolutionary theory, which depends on demonstrating some kind of sequence from primitive to modern. If appearance is more a climatic matter than one of evolutionary development, there is no point in trying to establish sequence any longer.

(7) Some scientists show refreshing signs of humility.

It is interesting and illuminating to read and reread a statement from Weiner in 1958 about the origin of modern man:

The accumulation of fossil material in relative abundance over the last fifty years has revealed the total inadequacy of this simple linear sequence; the analysis of the phylogeny (or evolutionary development) of *Homo* (modern man) has in fact been attended by many difficulties and inconsistencies.<sup>131</sup>

(8) And finally, some draw a moral from the whole unfortunate tale.

In discussing the Neanderthal controversy, Jacob Gruber (1948) makes the following comment:

"The pat answers of Cuvier (a catastrophist) and the religio-scientific dogmas (this apparently means science polluted by religion) surrounding the search for man's origins are almost forgotten in our own enlightenment. But it is disconcerting to find the Cuviers, the Mayers, and Virchows—all as equally devoted to the methods and objectives of modern science as any of today's scientists—with intellects imprisoned and imaginations shackled by hypotheses of their own making, hypotheses purportedly based on fact and uninfluenced by metaphysical considerations. It is disconcerting to realize that as their intellects were shaped and limited by the dogmas—often scientific—of their day, so may the intellect of the modern investigator be shaped by the a priori judgments of his time, the unproved hypotheses and overgeneralizations, the results either of the non-scientific environment in which he lives and works or of the sometimes equally non-scientific traditions he follows. One sometimes wonders how many "rickety Mongolian Cossacks" exist in the controversies and conclusions, the debates and deductions, of today."<sup>132</sup>

And so we have the story of Neanderthal man, a tribe of hunters who roamed over a broad geographical area. These people were as different from Modern Man as the rather odd person who lives down the street today, or as the even odder person who peers astonished at the viewer from the bathroom mirror each morning. No one would be more amazed than they at the fanciful tales spun by scientists who were out to firm up a theory, and who were not about to let any inconvenient facts get in the way.

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- <sup>7</sup>VAN, p. 44
- <sup>8</sup>HUY, p. 108, 131
- <sup>9</sup>BRC, p. 100
- <sup>10</sup>CST, p. 17

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<sup>12</sup>POI, p. 176  
<sup>13</sup>CST, p. 19  
<sup>14</sup>POI, p. 174  
<sup>15</sup>CST, p. 27-28  
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<sup>17</sup>SCM:67 12/48, p. 438  
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<sup>19</sup>CST, p. 20-21  
<sup>20</sup>ESL, p. 277; THO, p. 63;  
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<sup>21</sup>CHL, p. 8, 33  
<sup>22</sup>BRL, p. 82  
<sup>23</sup>SCA, 12/57  
<sup>24</sup>LEG, p. 157-165  
<sup>25</sup>HLL, p. 530-531  
<sup>26</sup>HUY, p. 108, 131  
<sup>27</sup>CRE, May/June '66, p.  
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<sup>28</sup>CST, p. 23  
<sup>29</sup>BRC, pp. 5-6.  
<sup>30</sup>K73, p. 2  
<sup>31</sup>SMI, 11/73 4:8, p. 10, 75  
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<sup>42</sup>GAR, p. 135-137  
<sup>43</sup>CST, p. 55, 58  
<sup>44</sup>POI, p. 169, 173; Ell:4,  
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<sup>45</sup>VAN, p. 28-29  
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<sup>47</sup>BRO, p. 218  
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<sup>49</sup>BRL, p. 105  
<sup>50</sup>CST, p. 97-98  
<sup>51</sup>TIM 6/21/68, p. 34  
<sup>52</sup>DFP 1/15/76, p. 78  
<sup>53</sup>LEG, p. 178-179  
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<sup>55</sup>C74, p. 248  
<sup>56</sup>CRS 3:4 3/67, p. 24  
<sup>57</sup>PEA, p. 14  
<sup>58</sup>BRC, p. 22  
<sup>59</sup>BRC, p. 89  
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