

Engels, Neanderthals and the origins of the family

BEAKEN, Mike

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/14159/>

This document is the Accepted Version [AM]

Citation:

BEAKEN, Mike (2017). Engels, Neanderthals and the origins of the family. *Internationals Socialism*, 154. [Article]

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Engels, Neanderthals and the Origins of the Family

Mike Beaken

Introduction

Engels and Marx both took a great interest in early human history and prehistory, and it was Marx's notes on Lewis Henry Morgan's *Ancient Society* that prompted Engels to produce *The Origins of the family...in 1884, a year. after Marx's death*. It is still important today for socialists to consider questions about the origins of human life and human society. Our rulers are all too ready to assert that human beings are innately greedy, violent, and that society's inequalities and injustices are in some way 'natural', and an essential feature of human life from its very beginnings. To be a socialist is to oppose such views, and that is why it is important to study alternatives to our modern way of life in the history and prehistory of our species. In studying the human family, Engels suggested that the modern human family - in particular in the way it subjugates women - is in many ways an aberration, and that earlier forms of the family saw women enjoying much greater freedom, and equality with men.

The way the family evolved over time, he argued, could only be understood in relation to the way that human beings' material conditions evolved. In particular the way we obtained our food and other means of existence influenced the form that the human family took, and in turn the form of the family at any particular time affected our ability to survive in what were sometimes difficult circumstances. Much of what Engels wrote looks like 'blind speculation', as Chris Harman has called it¹, and based on times so far in the past as to be incapable of confirmation. Some of his conclusions were based on linguistic evidence that has since been challenged – though some Marxist writers like George Thomson and Eleanor Burke Leacock still consider them valid. An increasing amount of evidence in archaeological, anthropological and, lately, genetic studies has started to throw light on the period known as the Pleistocene, when modern humans came into contact with Neanderthals. The disappearance of the Neanderthals in the late Pleistocene is a mystery that has led to enormous amounts of speculation amongst scholars. It is possible that as well as inspiring socialists and feminists in their fight against women's oppression, Engels' work, now well over a hundred years old, can throw light on a question that still baffles scholars of human origins.

Origins of modern humans

It's generally agreed that humanity originates from Africa. This is where our oldest human remains are to be found. It's thought that there have at different times been migrations, out of Africa to the rest of the 'Old World', of early forms of our ancestors, known as *Homo Erectus* ('Upright Humans'). *Homo Erectus* is thought to have evolved in Africa about 1.5 million years ago, and to have spread around the world, where the species survived for a million years or more without any dramatic changes. Then about half a million years ago a period of climate change seems to have led to the emergence of what are now called 'archaic humans' - with larger brains and a variety of physical characteristics, between *Homo Erectus* and modern humans. Fossils have been found in Beijing, Heidelberg Germany, Broken Hill South Africa, Petralona Greece. Among these archaic humans one variety - *Homo Heidelbergensis* – is suggested as the common ancestor of both the Neanderthals in Europe and Western Asia, and the early modern Humans that were developing at roughly the same time in Africaⁱ. It was late in the Pleistocene period - between 80,000 and 50,000 years ago - that a new migration from Africa brought early modern humans, sometimes referred to as *Cro-Magnons* - into the same regions in the Middle East and Europe where Neanderthals were livingⁱⁱ. What happened during these early contacts is still a topic of some controversy, in particular

¹ in ISJ 65, Winter 1994

the reasons for the apparent disappearance of the Neanderthals after roughly 30,000 years ago.

The Neanderthals

At one time it was thought the Neanderthals were a separate human species who were driven to extinction when the early modern humans arrived from Africa in first the Middle East and then in Europe. Since the finding by Svante Pääbo that all Europeans and Asians have some Neanderthal DNA², attitudes to these early Europeans have changed dramatically. No longer viewed as lumbering, insensitive, inarticulate brutes, Neanderthals have now largely been accepted as part of the human race, what is described as a 'sub-species'. The official classification is *Homo sapiens neanderthalensis* – as distinct from *Homo sapiens sapiens* – that's us. However it is still clear that there were significant differences between the two groups and these are of some significance for the development of the human family.

What we know about Ns

The Neanderthals were one of a variety of archaic humans living in Europe and parts of Asia between 350,000 and 24,000 years ago. The latest of their remains are the group of skeletons found at Gorham's Cave, Gibraltar, dated to 24,000 years ago. A few 'late' Neanderthals, with more modern skeletal features, have been recorded in places such as Croatia, Southern Spain and Portugal³. They lived in Europe and parts of Asia, in a range stretching from Wales, eastward to the steppes of Russia, south to Spain, Greece, Israel, Iraq. Their Northern limit in Britain is probably no further than Cresswell Crags in Nottinghamshire.

Their anatomy was tough and robust. They were squatter than modern humans, more muscular. Many had red hair and pale skinⁱⁱⁱ. Their facial characteristics include a 'prognathous' face, jutting forward compared to modern humans, and showing no chin. Their big square jaws had powerful muscles that were attached to heavy brow ridges. It is speculated that their teeth were used as a clamp for gripping meat, animal hides, and so on, which over time led to development of the strength and musculature of the jaw. Neanderthal skulls show evidence of heavy wear on teeth. The heavy bone at the front of their faces was balanced by a backward projecting skull, with an 'occipital bun'⁴

It is interesting that some 'late' Neanderthal skulls show signs of modifications such as reductions in browridges, jaw size and so on – in the direction of more modern anatomy. The suggestion⁵ is that the heavy bones of Neanderthal anatomy were expensive to maintain. In other words, they needed to consume more to feed the requirements of their body - to grow the bones and the muscles to move them, and to keep their bodies fit to deal with a strenuous lifestyle. When changes in lifestyle meant they were no longer essential, the tendency was for them to reduce in the direction of 'gracilisation'⁶. It's certainly possible that these changes were the result of cross-breeding interbreeding with early modern humans, as fossils of early modern humans have also been found with Neanderthal characteristics – such as the backward projection of the skull⁷.

Neanderthal behaviour was not greatly different from that of other archaic humans up to 50,000 years ago. They hunted small and large animals, used fire, built shelters, may have made canoes⁸, buried their dead⁹, so almost certainly had some form of language¹⁰, though this of course can never be proved for definite. They made sophisticated stone tools, what are known as *Mousterian*, used

2 Pääbo 2014

3 Walker *et al* 2008

4 <http://australianmuseum.net.au/homo-neanderthalensis> - excellent account of the Neanderthals

5 Brace 1979

6 Milo and Quiatt

7 Condemi *et al* 2013

8 Choi 2012

9 Gargett 1989

10 Dedieu & Levinson 2013

spears to hunt large animals. Their hunting technique seems to have been fairly dangerous and scary, involving a group of individuals - both men and women - getting close enough to large animals to thrust their short spears into them. Projectile weapons – such as throwing spears, or bows and arrows – seem to have been unknown to them. Neanderthals are reported to have used short, heavy spears for thrusting rather than throwing. Many of their skeletons show signs of fairly serious injuries, broken bones that have healed and so on, that attest to these dangers. There is increasing evidence that they cared for their disabled and injured, both young and old. It has been speculated that they had some kind of religion, possibly a 'bear cult', suggested by the finding of carefully arranged cave bear bones in a cave, though this, like many other suggestions about Neanderthals, is controversial¹¹. For 5,000 years or more they lived in the same areas as the Cro-Magnons that had arrived from Africa, in the Middle East and Europe, though the question of whether there was direct contact between the two types of human is still unclear.

The number of Neanderthal groups in Europe and Asia seems to have been relatively small, and rather widely scattered. Evidence indicates that they lived in small isolated groups, with few signs of inter-group exchange.

"An emerging picture is that Neanderthals had a long-term small population size, lived in small and isolated groups and probably practised inbreeding at times.¹²"

We can surmise that the limited gene pool (the total population of Neanderthals over the Eurasian range is estimated at no more than 70,000¹³) would have emphasised the peculiar physical characteristics that we recognise as distinctively Neanderthal.

What do we know about the incoming humans from Africa?

It is now thought that there was one significant 'exodus' of early modern humans from Africa, sometime before 45,000 years ago. Eske Willerslev's finding, based on DNA analysis, is that all non-African humans in the world today originate from this migration. These migrants settled first in parts of the Arabian peninsula and spread from there into the rest of Asia and into Europe.¹⁴

What happened thereafter is a matter of some controversy. The so-called 'Out of Africa' theory suggests that all modern humans originate from this African migration. An alternative theory, the Multiregional hypothesis, suggests that humans world-wide evolved towards modernity as a result of the interchange of both genes - by interbreeding - and of cultures¹⁵. This would include the suggestion that earlier forms of humans interbred with the newly arrived 'Cro-Magnons' or their descendants. A separate theory put forward by Chinese scholars is that modern East Asian populations have evolved from much earlier *Homo Erectus* living in and around China, with little admixture with Africans. The Neanderthals in Eurasia, and the Denisovans in Central and East Asia, another recently revealed archaic human, are clearly important in this debate.

It seems likely that the incoming Africans had more advanced hunting techniques than the resident Neanderthals, in particular better projectile technology, such as long throwing spears, and possibly bows and arrows with fine stone points¹⁶. They came in relatively large numbers. There seems to have been a dramatic population growth in Africa in the period before this migration to Europe. It may be this that led to the migration, or there may have been climate changes that forced, or enabled people to move in search of new sources of food. It is probable that Northern Africa and Arabia were wetter at the time of the migration¹⁷

Two factors would have led to the increase in the population, by improved infant survival and a

11 Wunn 2000

12 Sánchez-Quinto & Lalueza-Fox 2014; Vergano 2014

13 O'Neill 2011

14 See also Alice Roberts' BBC programme about the human story.

¹⁵ Wolpoff, Milford et al 2004

16 Lombard & Phillipson 2009

¹⁷ Carto et al 2009

reduction in deaths due to periodic starvation or accidental injury. One would be new technologies in food production; the other would be risk-management strategies involving long-distance exchange¹⁸. The new technology was the production of small, fine stone points such as spear or arrowheads, with hafting techniques to attach the points to arrows or spears. Strong evidence for long-distance exchange of goods is found in Africa in the Middle Stone Age (MSA) – i.e. before the move of Africans into Europe.

McBrearty and Brooks comment:

“The presence of exotic obsidians at some East African sites indicates that the distances involved in some tropical African MSA exchange networks exceeded 300 km. This activity may have involved both a higher degree of planning and scheduling, and more complex interactions among early human groups than has customarily been envisaged. The regional distributions of projectile point styles in Africa suggest social networks on a similar order of magnitude¹⁹.”

Material found at more than 100 km from its site of origin implies more than simple travel; it must have been exchanged, possibly as a result of trade, but more likely as a result of gift-giving involved in mating networks²⁰.

The new technology - what Shea and Sisks call 'complex projectile technology', in the form of either spear throwers or bow and arrow, with fine stone points²¹ - almost certainly led to increased and reliable food supplies, hence an increase in population.

“the use of complex projectiles has its origins in the African MSA²². Populations armed with complex projectiles are more ecologically versatile and can access a broader niche than those without them.”²³

The bow and arrow, or the spear thrower, is a tremendous technical advance. It means an individual hunter can access food more efficiently and safely than before, and can feed far more people.

Did the Neanderthals disappear?

The last Neanderthals, i.e. the sites that have been dated to the most recent dates, around 30k ago, are in Spain, Gibraltar, Croatia, suggesting that 'classic' Neanderthal groups were slowly pushed out of central European areas that were becoming settled by Cro-Magnons - but very slowly, over a period of 5,000 years. What is certain is that after 30k there are very few relics of Neanderthal groups in Europe or elsewhere (so far! - bear in mind that new and amazing discoveries are being recorded as digging goes on)

It was at one time widely assumed that they disappeared, went extinct, and a variety of explanations have been put forward, some quite bizarre, such as Mithen's suggestion that they didn't speak at all, but only hummed²⁴. It would of course be quite difficult to construct a hut or make a dugout canoe, let alone plan a hunting expedition, by humming. Villa and Roebroeks have surveyed a number of explanations for the supposed 'demise' of the Ns, some plausible, some less so. The advantages of the incoming Cro-magnons have been suggested to be:

“inventiveness and capacity for innovation, complex symbolic and linguistic abilities, more efficient hunting strategies, exploitation of a broader range of resources including plants and aquatic ones....., projectile technology, heat treatment of lithic raw materials, hafting technology, planning capacities including larger scale social networks as shown by large transport distances of raw materials....., environmental flexibility, memory capacity, as well as larger population sizes, Inferiority in one or more of these domains has been at the core of many explanations for the demise of the Neanderthals.”²⁵

18 McBrearty & Brooks 2000

19 McBrearty & Brooks 2000, p. 531

20 Marwick 2016

21 Sisk and Shea 2011; Lombard & Phillipson 2009

22 Middle Stone Age

23 Sisk & Shea 2011

24 Mithen 2006

25 Villa and Roebroeks 2014

Putting aside unprovable suggestions of cognitive differences, it is feasible to suggest that the more advanced technology of the Africans put the Neanderthals at a disadvantage in hunting and gathering, so they were 'out-competed'. However, over a period of 5k years it is more than likely that they would have been able to adopt their neighbours' technology – as has been suggested in relation to the Chatelperronian culture at sites such as Arcy-sur-Cure.²⁶

A significant number of palaeoanthropologists are now arguing that the Neanderthals didn't disappear but were integrated into the mass of Euro-Asian humanity, their anatomy gradually modifying towards that of modern humans. The clincher was the finding that modern humans of European and Asian descent share between 1 and 4% of Neanderthal DNA – Asians slightly more than Europeans²⁷.

Milo & Quiatt make the point that anatomically modern humans accomplished by cultural means tasks that which Neanderthals accomplished physically, evolving anatomically in certain directions, e.g. the large jaw muscles and accompanying brow ridges.²⁸ It follows that once the technology had developed to carry out these tasks, the specific physical adaptations shaped by the tasks would no longer be required, and could be allowed to wither away.

We do know that migration from Africa brought much larger numbers of people into Europe than the relatively small resident archaic population. Some estimates suggest Cro-Magnons outnumbered Neanderthals in a ratio of 9 to 1, based on the number of sites of Neanderthals and Cro-magnons in the same area in the same period, and the relative size of those sites²⁹. The Cro-magnons, in other words, seem to have arrived in the Middle East and Europe in larger numbers, with more advanced technology, and a rather different culture. It could well be that some of the resident Neanderthal groups adopted the incomers' culture. Why not, if it promised a better supply of food? Others may have clung stubbornly to the 'old ways', and become increasingly marginalised, in southern Spain, the caves of Gibraltar and so on. So what we may be looking at is not the disappearance of the Neanderthal people themselves, but the disappearance of Neanderthal anatomy and of the Neanderthal way of life.

Recent genetic discoveries

Work pioneered by Pääbo and his colleagues surprised those who assumed that Neanderthals and early modern humans did not interbreed. While they showed that Neanderthal DNA differs noticeably from modern human DNA, they also found that modern humans of today from Europe and Asia – but not Africa - have between 1% and 4% of Neanderthal DNA in their genetic make-up, and that a sample of modern Eurasian humans between them contained as much as 20% Neanderthal DNA, scattered across the genome as a whole³⁰. It may be that in the past Eurasian humans had even more Neanderthal DNA, as was found in the body of Ötzi the 'iceman' – a 5,000 year old human found frozen in the Alps, whose DNA was 5.5% Neanderthal. Kelly and Nielsen suggest that humans in the past may have had as much as 10% Neanderthal DNA.³¹ Over time the amount of identifiably Neanderthal DNA in non-Africans may have reduced, as their beneficial 'genes' spread among the world's human population and thus became unrecognisable (for example the genes for pale skin among people in less sunny regions), while carriers of any deleterious genes have died out³². The present proportion of Neanderthal DNA may have been greater if it had not been for the fact that some matings between Cro-Magnons and Neanderthals could have produced sterile offspring, or stillbirths³³. Given the different sizes of Neanderthal and Cro-Magnon

26 Hublin *et al* 1996, and Welker *et al* 2016

27 Green *et al* 2006

28 Milo & Quiatt. p. 574

29 Shaw 2011

30 Green *et al* 2006

31 Hawks 2012 reports that Ötzi had some 5.5% Neanderthal-type DNA

32 Danneman *et al* 2016; Deschamps *et al* 2016; Reich 2016

33 Mason & Short 2011

populations - in the ratio of 9 to 1 as noted above - it is not surprising that the proportion of Neanderthal DNA would be relatively small in a population resulting from interbreeding. It seems also that the Neanderthal gene pool as a whole was less varied than the Cro-Magnon, possibly as a result of inbreeding³⁴, so 'mixing' the two would also result in the Neanderthal proportion looking smaller in a DNA analysis.

It is now clear that Neanderthals and humans interbred at some point in the past. All scholars are agreed on that, but there are differences in when, and at what stage in the migration into Europe of the Cro-Magnons, it may have happened. Some think in the period when Africans first came into the Middle East³⁵ or later, when Neanderthals met Cro-Magnons in Eurasia. That is not really of vital importance. What is clear is that there was a difference between the two populations in both anatomy and culture at the time they came into contact. It is these differences in culture and lifestyle that are important to consider in understanding the development of humanity.

What about Engels, then?

In *The Origins of the Family* Engels argues that human society evolved out of ape society, and that for this to happen two 'rules', or taboos, had to be adopted by our ancestors.

The first rule prohibits older people mating with younger. As Engels puts it, the problem of male jealousy has to be tackled in order for members of the primitive troupe to start cooperating in essential labour activities. A troupe based on the domination of a jealous, competitive alpha male, fighting for the right to mate with all females, younger and older, can never take that first step.

“Mutual toleration among the adult males, freedom from jealousy, was the first condition for the formation of those larger, permanent groups in which alone animals could become human. And what, in fact, do we find to be the oldest and most primitive form of family whose historical existence we can indisputably prove and which in one or two parts of the world we can still study today? Group marriage, the form in which whole groups of men and whole groups of women mutually possess one another, and which leaves little room for jealousy. And at a later stage of development we find the exceptional form of polyandry [a woman with several partners], which flies even more in the face of all feelings of jealousy and is therefore unknown among animals³⁶.”

We cannot know how that first step took place, but the most likely scenario is one where a female matriarch, or a group of females, provided the leadership of the troupe³⁷. This kind of structure is often observed among groups of bonobo chimpanzees, who are very closely related genetically to human beings. This would have enabled both male and female members to cooperate in such activities as making fire, collectively foraging and gathering food, and sharing it on a more equitable basis than favouritism – in other words the development of organised, collective labour³⁸. This would be very important in the care of babies, which over this period of time were born more and more vulnerable, as a result of our bigger brains, lodged inside bigger heads. Women could no longer give birth to a baby with a head of adult size. It is simply physically impossible. Instead, human babies are born at a much earlier stage of maturation, and require a long period - at least four or five years, and a lot more depending on the society you are looking at - of adult care. This is another factor that requires adult cooperation.

The development of collective labour is only possible with the development of communication. Communication is encouraged and established as a behaviour by the development of labour. Neither of these developments is possible without the emergence of some form of cooperation, albeit of limited scope and of limited duration. Nevertheless, the beneficial effects of cooperation would mean the cooperative group enjoyed an advantage in terms of survival and in terms of competition (ironically!) with other species. The origins of language must also lie initially in forms of

³⁴ Kelly and Nielsen 2016

³⁵ Hershkovitz *et al* 2015

³⁶ Engels *Origins* p.40

³⁷ See for example Briffault 2014, Burke Leacock 1981; Knight 2008

³⁸ Engels *Labour*

communication that made it possible for humans to cooperate in sophisticated activities like the making of tools, construction of shelters, making and tending of fire. To these practical activities should be added the origins of the poetic and musical aspects of communication, which George Thomson sees as arising from collective dancing and ritualized activities that he sees as necessary to bond a group and motivate it to stay together³⁹.

To prevent a reversion from this early cooperative culture back to the dominance of an alpha male, jealously guarding his females, an inter-generation taboo must have become established. This of course also presupposes some form of language. Engels argues that once this prohibition is established, an early form of the family appears:

“the consanguine family, the first stage of the family. Here the marriage groups are separated according to generations: all the grandfathers and grandmothers within the limits of the family are all husbands and wives of one another; so also are their children, the fathers and mothers; the latter's children will form a third circle of common husbands and wives; and their children, the great-grandchildren of the first group, will form a fourth. In this form of marriage, therefore, only ancestors and progeny, and parents and children, are excluded from the rights and duties (as we should say) of marriage with one another. Brothers and sisters, male and female cousins of the first, second and more remote degrees, are all brothers and sisters of one another, and precisely for that reason they are all husbands and wives of one another. At this stage the relationship of brother and sister also includes as a matter of course the practice of sexual intercourse with one another⁴⁰.”

This last sentence scandalised some people at the time of publication, as it still does some scholars today. Although Morgan's evidence, that Engels was relying on⁴¹, is now thought to be largely discredited, this step and the next one that he outlined represent a logical necessity if we are to trace the way humanity developed. There is no way that we can explain the sudden emergence of modern couple-based marriage from ape society.

The second rule brings us to modern humanity, and is the taboo against brother and sister mating. Although a relatively small step, it means that men and women can no longer find mates inside the family group, but have to look outside the group or clan they are born to, a practice known as exogamy. Engels:

"There can be no question that the tribes among whom inbreeding was restricted by this advance were bound to develop more quickly and more fully than those among whom marriage between brothers and sisters remained the rule and a precept⁴².

The long-term effect of exogamy is that each clan has a network of alliances through 'marriage' with other clans or tribes. This means that when times are hard our clan can go to allied clans for assistance. Equally importantly it leads to the sharing of information, of technology, of knowledge about food supplies, and so on, and acts to prevent conflict⁴³.

Ember suggests that this development – what she describes as the 'incest taboo' - may have occurred by accident, as an example of natural selection:

"The action of natural selection may by itself account for the universality of the familial incest taboo, since any significant departure from close inbreeding in an earlier human population would have permitted that population to expand in numbers at a faster rate than other populations, so that the earlier pattern of mixed incestuous-non incestuous mating would eventually have been eliminated."⁴⁴

But was it just accidental? Or can we relate it, as Engels was attempting to do, to material conditions? Engels, like Morgan, outlines several steps in the development of humanity from the earliest periods. In the period of what they call 'savagery', and we would now call foraging, or hunting-gathering, they define 3 stages:

39 Thomson 1949; Beaken 2007

40 Thomson 1949, p.42

41 Morgan 1871 – though strongly supported by G D Thomson

42 Engels *Origins*, p.43

⁴³ Melotti 1990

44 Ember, 1975, p. 256

Stage 1: foraging, with few or no tools - but speech had developed

Stage 2: fish food; clubs and spears, some hunting but mostly foraging; use of fire.

Stage 3: bow and arrow - a significant technological advance that enabled consistent hunting for meat. No pots yet.

On the basis of current evidence, Neanderthals could be described as having reached Stage 2. While they show little evidence of fishing technology, they have been shown to eat seafood⁴⁵, and as for clubs, spears, fire - these aspects are all attested. There are few signs of their having advanced to stage 3.

On the other hand Africans in the period before the move into Europe did apparently have control of more advanced projectile technology - either spear throwers or bow and arrow, as explained above.⁴⁶ But did complex projectile technology, have anything to do with the sibling taboo?

Since it means increased and more reliable food supplies, it leads to better survival rates of children and adults, larger human groups, and hence groups more likely eventually to split up, since hunter-gatherers, unlike farmers, need relatively large areas of land to forage over. Breakaway groups need then to move to other territories, but may well maintain links to their parent group. This does not inevitably lead to exogamy, but makes it possible. A chance adoption of exogamous practices by one group may have led to it benefiting from the survival advantages that exogamy bestows in terms of support networks, leading eventually to the establishment of exogamy as a standard practice. Thus we can see a dialectical relationship between advancing technology and changing family structure. The resulting culture or lifestyle is what characterised the Upper Palaeolithic in Europe, but its foundations had, as far as we can see, been established in Africa long before. This looks like natural selection, but of course it is not selection of individuals on the basis of their anatomy or their individual behaviour. It is a development that is both cultural and also the result of technological advance, a form of development that is essentially human, based on cultural and technological practices that are passed on from one generation to the next – practices that are learned, not genetic.

Thomson presents a detailed study of the relationship between food supply and tribal structure, and shows that the prohibition against brother-sister mating is consolidated in the practice of totemism. Totemism is not just an abstract form of words, or an example of primitive psychology, but a very concrete way of relating to the world around, and a practical method of obtaining and distributing food. Basing his analysis on the structure of Australian tribes, he shows that tribes typically consist of at least two distinct clans, and proposes that this must have been the structure of early hunter-gatherer tribes. The members of a clan identified themselves with a source of food (in his example, the witchety grub). This food became the clan totem, and there was then a strict taboo on eating that food except at specific times of the year⁴⁷. An important function of exogamy thus became to circulate the food-supply. A man went to live with his wife's clan, and in doing so had to give up his food. The totemic ban on eating the food of his clan, meant that the wife's family could eat his totem-food, while the man could not touch it - but only supply it. Meanwhile the man's clan had access to the totem food of the other clan.

As was said above, because Engels is writing about periods in the remote past, there is little or no concrete evidence for the first stages of the family that he proposes – what he calls group marriage. This is not a situation where everybody mates with all possible partners. It simply implies that an individual has no restrictions on who they mate with, provided they keep to their own generation. George Thomson supports Engels' theory on the basis of the historical linguistic principle that the form of words changes much more slowly than their meanings. An example from contemporary English would be the word *gentleman*, which for most of us is seen only on toilet doors, but which had a

45 Cortes-Sanchez *et al* 2011

46 McBrearty & Brooks 2009

47 Thomson 1949, p.44

very specific meaning in its mediaeval origins – as a man of property whose status was still below that of the aristocratic knights, early and dukes. Thomson argues that kinship terminology in a number of Polynesian languages betrays a time when there were only two terms for each generation: mother-father, brother-sister and son-daughter, and only a single term for grandparent and grandchildren. His argument, following Morgan, is that this harks back to a period

"when there was no restriction on sexual intercourse within each generation."⁴⁸

i.e. the period of the endogamy of the 'primitive horde'. Thomson observes that tribal ancestors in myth are often represented as mating with men or women of their own totem – i.e. brothers with sisters. That's a bad idea in practice, as all the totem food gets eaten up. He argues that

"the transition from the primitive horde to the tribe - the complex of exogamous clans - was dictated by the advance from appropriation to production, and that the economic interdependence of the clans took the form of a taboo on the totem species, which obliged each clan to share with the others the food it obtained on its own hunting ground. The practice of getting husbands from other clans enabled each to extend its diet by obtaining access to foods which it did not produce itself."⁴⁹

Now it is possible that Neanderthals did not observe the incest taboo. This may have been as a result of long established cultural traditions that had not advanced beyond Morgan's stage two. It may also, though less probably, have been as a result of reverting to an earlier stage of social evolution because of hardships resulting from unpredictable climate change⁵⁰, and their relative isolation in small groups. The evidence is fairly indirect, although signs of what we now call incest are found in some DNA analyses of Neanderthals in Central Asia⁵¹. A number of researchers, on the basis of archaeological and now genetic evidence have argued that Neanderthals lived in small isolated groups, and practised endogamy – what we would now call incest. It is the lack of evidence of long-distance exchanges between groups that suggests strongly that Neanderthals before the arrival of Cro-Magnons practised endogamy, and that this was the key difference between the two populations.

What is looking increasingly plausible is that the Neanderthals did not disappear and were not 'driven to extinction', but were in at least some parts of Europe, adopted into Cro-Magnon society – sharing the technology and adopting their culture, interbreeding with our ancestors and leaving with us some of their genes. Their distinctive anatomy would gradually give way to the 'gracile' African anatomy, and their archaic culture and endogamous family practices would be abandoned, except in a few isolated communities. Of course some of the other factors suggested may have accelerated their disappearance as Neanderthals. Severe fluctuations in the climate in this period would have been much harder for isolated groups to survive without contacts with other groups to help them through hard times. The small population of Neanderthals, and their relatively limited gene pool, may have made them vulnerable to diseases brought in by the arriving Cro-Magnons – though over a period of 5,000 years this does not look like a major factor. We can certainly reject theories of war, cannibalism, intellectual inferiority or anatomical inadequacy.

Thus it may be that we have in this period of ancient history a confirmation of the long maligned theories of Engels and Morgan, based on concrete evidence from genetics and archaeology.

48 ibid, p.61

49 ibid, p.44

50 Finlayson 2010

51 Prüfer *et al* 2014

- Bar-Yosef & Kuhn (2008) The Big Deal about Blades: Laminar Technologies and Human Evolution 332-338, 1999, online 2008. *American Anthropology* 101. 2 2008 321-
- Beaken, Mike (2007) *The Making of Language*. Edinburgh; Dunedin.
- Brace, C L (1979) Krapina, "Classic" Neanderthals, and the evolution of the human face. *Journal of Human Evolution* 8,5: 527-550
- Briffault, Robert (2004) *The Mothers: the Matriarchal Theory of Social Origins*. Kessinger Publishing
- Burke Leacock, Elizabeth (1981) *Myths of Male dominance*. NY, London; Monthly Review
- Carto, Shannon L, Andrew J. Weaver, Renée Hetherington, Yin Lam, Edward C. Wiebe (2009) Out of Africa and into an ice age: on the role of global climate change in the late Pleistocene migration of early modern humans out of Africa *Journal of Human Evolution* Vol.56(2), p.139-151
- Choi, Charles Q. (15 November 2012). [Ancient Mariners: Did Neanderthals Sail to Mediterranean?](#) *LiveScience*. Retrieved 5 May 2016
- Condemi, S.; Mounier, A.; Giunti, P.; Lari, M.; Caramelli, D.; Longo, L.; Frayer, D. (2013). [Possible Interbreeding in Late Italian Neanderthals? New Data from the Mezzena Jaw \(Monti Lessini, Verona, Italy\)](#) *PLoS ONE*. **8** (3): e59781. doi:10.1371/journal.pone.0059781. PMC 3609795. PMID 23544098
- Cortes-Sanchez, Miguel, 20 others, and Nuno F. Bicho (2011) Earliest Known Use of Marine Resources by Neanderthals. *PloS One*. <http://dx.doi.org/10.1371/journal.pone.0024026>
- Culotta, Elizabeth and Ann Gibbons (2016) Almost all living people outside Africa trace back to a single migration more than 50,000 years ago *Science* Sep 21
- Dannemann, Michael, Aida M. Andrés, Janet Kelso. (2016) Introgression of Neandertal- and Denisovan-like Haplotypes Contributes to Adaptive Variation in Human Toll-like Receptors. *The American Journal of Human Genetics*, 2016; 98 (1): 22 DOI: 0.1016/j.ajhg.2015.11.015, reported in <https://www.sciencedaily.com/releases/2016/01/160107140408.htm>
- Dedieu, D and S.C. Levinson (2013) On the antiquity of language: the reinterpretation of Neanderthal linguistic capacities and its consequences. *Frontiers in Language Sciences* 4, 397 DOI: 10.3389/fpsyg.2013.00397
- Deschamps Matthieu and 7 others (2016) Genomic Signatures of Selective Pressures and Introgression from Archaic Hominins at Human Innate Immunity Genes. *The American Journal of Human Genetics*, 2016; 98 (1): 5 DOI: 10.1016/j.ajhg.2015.11.014 , reported in <https://www.sciencedaily.com/releases/2016/01/160107140408.htm>
- Duarte, C.; Maurício, J.; Pettitt, P.B.; Souto, P.; Trinkaus, E.; Plicht, H. van der; Zilhão, J. (1999). "The early Upper Paleolithic human skeleton from the Abrigo do Lagar Velho (Portugal) and modern-human emergence in Iberia. *PNAS*. **96** (13): 7604–9. doi:10.1073/pnas.96.13.7604. PMC 22133. PMID 10377462.
- Ember, Carol R (1975) Residential variation among hunter-gatherers. *Cross-cultural Research* 10, 3: 199-227
- Engels, Frederik, (1942) *The Origins of the Family Private Property and the State*. Beijing; Foreign Languages Press
- Engels Frederick (1954) 'The part played by labour in the transition from ape to man', in *The Dialectics of Nature*, Moscow: Foreign Languages Publishing House
- Finlayson, Clive (2010) *The Humans who went extinct: Why Neanderthals died out and we survived*. Canada: OUP.
- Gargett, R.H., 1989. Grave shortcomings: the evidence for Neanderthal burial. *Current Anthropology* 30, 157–90.
- Green, Richard E, Johannes Krause, Susan E Ptak, Adrian W Briggs, Michael T Ronan, Jan F Simons, Lei Du, Michael Egholm, Jonathan M Rothberg, Maja Paunovic and Svante Pääbo (2006) Analysis of one

million base pairs of Neanderthal DNA. *Nature*, 2006, Vol.444(7117), p.330-336

Green, Richard E, and 55 others (2010) 'A Draft Sequence of the Neanderthal Genome' *Science* 328, 710. DOI: 10.1126/science.1188021

Harman, Chris (2004) Engels and the origins of human society. *International Socialism Journal* 65

Hawks John (2012) http://johnhawks.net/weblog/reviews/neandertals/neandertal_dna/neandertal-ancestry-iced-2012.html

Hershkovitz Israel, 23 others & Omry Barzilai (2015) Levantine cranium from Manot Cave (Israel) foreshadows the first European modern humans, *Nature* 14134, doi:10.1038

Hublin, J-J, F. Spoor, M. Braun, F. Zonneveld (1996). A late Neanderthal associated with Upper Palaeolithic artefacts. *Nature* 381, 224

Jones, Dan (2007) The Neanderthal Within. *New Scientist* 193.(3 March), 28–32.

Kelly, Harris and Rasmus Nielsen (2016) The genetic cost of Neanderthal introgression *Genetics* vol 203, no. 2 881-891 DOI: 10.1534/genetics.116.186890

Knight, C. 2008. [Early human kinship was matrilineal](#). In N. J. Allen, H. Callan, R. Dunbar and W. James (eds.), *Early Human Kinship*. Oxford: Blackwell, pp. 61–82.

Lalueza-Fox, Carles; Römpler, Holger; et al. (2007-10-25). "A Melanocortin 1 Receptor Allele Suggests Varying Pigmentation Among Neanderthals". *Science*. **318** (5855): 1453–5. [Bibcode:2007Sci...318.1453L](#). [doi:10.1126/science.1147417](#). [PMID 17962522](#).

Lombard, Marlize & Laurel Phillipson (2009) Indications of bow and stone-tipped arrow use 64,000 years ago in KwaZulu-Natal, South Africa *Antiquity* 84: 635–648, <http://antiquity.ac.uk/ant/084/ant0840635.htm>, accessed 4th May 2016

McBrearty Sally & Alison S Brooks, (2000) The revolution that wasn't: a new interpretation of the origin of modern human behavior *Journal of Human Evolution*, 39, 5: 453-563

Marwick, Ben (2016) Pleistocene Exchange Networks as Evidence for the Evolution of Language <https://www.academia.edu/270350>, accessed 5th May 2016

Mason, Paul H, Roger V Short (2011). Neanderthal-human Hybrids *Hypothesis Journal*, @ <http://www.hypothesisjournal.com/?p=932>, accessed 4th May 2016

Melotti, Umberto (1990) War and peace in primitive human societies: a sociobiological view in J. van der Dennen and V. Falger (ed.) *Sociobiology and Conflict: evolutionary perspectives* 241-245

Milo, R and D. Quiatt (1993), The evidence for and implications of a late origin of vocal language *Current Anthropology* 34: 569-598

Mithen, Stephen (2006) *The Singing Neanderthals*. Weidenfeld & Nicholson

Morgan, Lewis H (1871) *Systems of Consanguinity and Affinity of the Human Family*. Smithsonian Institution

O'Neill, Dennis (2011) *Evolution of Modern Humans: Neanderthals*, Palomar College, June 2011

Pääbo, Svante (2014) *Neanderthal Man: in Search of Lost Genomes*. Basic Books

Pearce, Eiluned and Theodora Moutsiou (2014) Using obsidian transfer distances to explore social network maintenance in late Pleistocene hunter-gatherers - *Journal of anthropological archaeology*, 36, 12-20

Prüfer Kay, Fernando Racimo, 42 others & Svante Pääbo (2014). The complete genome sequence of a Neanderthal from the Altai Mountains. *Nature* 505 (7481): 43–49. doi:10.1038/nature12886.

Reich, David (2016) The genetic history of Ice Age Europe *HMI News*, 2 May

Rincon, Paul (2007) Neanderthals were flame-haired. *BBC News*. Retrieved 25 October 2007

Sánchez-Quinto, Federica and Carles Lalueza-Fox (2014) Almost 20 years of Neanderthal palaeogenetics: adaptation, admixture, diversity, demography and extinction. Contribution to Ancient DNA: the first three decades. *Philosophical Transactions*, December 2014

Sisk Matthew L and John J Shea (2011) The African origin of complex projectile technology: an analysis using tip cross-sectional area and perimeter. *International Journal of Evolutionary Biology*, Volume 2011, Article ID 968012, doi:10.4061/2011/968012.

Shaw, Kate (July 29, 2011). *Sheer Numbers Gave Early Humans Edge Over Neanderthals* Wired.com

Soficarus, A, Dobos, A, Trinkaus, E (2006) Early modern humans from the Peștera Muierii Baia de Fier, Romania. *PNAS* 103(46) 17196-201 doi: 10.1073/pnas.0608443103.PMC1859909PMID 17085588

Thomson, George D (1949) *The Prehistoric Aegean: Studies in Ancient Greek Society Vol. 1* Lawrence & Wishart

Trinkaus E.; Moldovan O.; Milota S.; Bîlgăr A.; Sarcina L.; Athreya S.; et al. (2003). "[An early modern human from the Peștera cu Oase, Romania](#)". *Proceedings of the National Academy of Sciences*. **100** (20): 11231–6. doi:10.1073/pnas.2035108100. PMC 2087403. PMID 14504393.

Villa, Paola and Wil Roebroeks (2014) Neandertal demise: an archaeological analysis of the modern human superiority complex *PLoS One*, Vol.9, 4: p.e96424 journals.plos.org

Walker, Michael J, Josep Gibert, Mariano V. López, A. Vincent Lombardi, Alejandro Pérez-Pérez, Josefina Zapata, Jon Ortega, Thomas Higham, Alistair Pike, Jean-Luc Schwenninger, João Zilhão, and Erik Trinkaus (2008) Late Neandertals in Southeastern Iberia: Sima de las Palomas del Cabezo Gordo, Murcia, Spain *Proceedings of the National Academy of Sciences of the United States of America* 105,52: 20631-20636.

Welker, Frido (2016) Palaeoproteomic evidence identifies archaic hominins associated with the Chatelperronian at the Grotte du Renne *PNAS*. DOI: 10.1073/pnas.1605834113

Willerslev, Eske Almost all living people outside africa trace back single migration over 50000 years
<http://www.sciencemag.org/news/2016/09/>

Wolpoff, Milford and 9 others (2004) Why not the Neandertals? *World Archaeology* 36, 4. 527-546. pub online Nov 2010

Wunn, Ina (2000).Beginning of Religion. *Numen* 47 (4)
