

# Hunter Gatherers of the Middle Stone Age: An Essay in Historical Conjecture

**Alan Barnard\***

Department of Social Anthropology, United Kingdom

## Abstract

The Middle Stone Age (MSA) is a specifically African phase of human prehistory. It should not be confused with the Mesolithic, which might literally mean the same thing but is different in terms of geographical spread and content. In terms of material culture, the MSA saw the use of red ochre and the rise of rock art. This is important because it implies both symbolic thinking and the earliest phase of modernity. That is how it is defined. It is also the period in which language evolved and in which it diversified, and it saw too the emergence of kinship structures recognizable as such today. This essay focuses on what is known about the MSA and on what can be discerned through both analysis and conjecture about how it occurred. It is 'conjectural' simply because I want to probe some aspects of the MSA that others seem not to have noticed. If I emphasize language and kinship, it is because these are the things I know most about. We cannot understand the MSA unless we note that symbolic thought, and not just material culture, is a key component.

**Keywords:** Middle stone age; Rock art; Language; Kinship

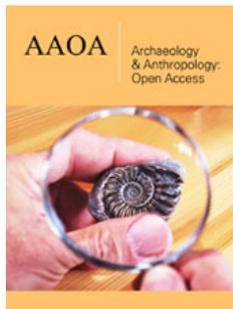
## Introduction

The Middle Stone Age is a specifically African phase of human prehistory. It is also known as the Sub-Saharan Middle Stone Age. It should not be confused with the Mesolithic. "Mesolithic" may literally mean much the same thing, but its usual presumed dates are rather shorter: around 22,000 to 5,900BP in Europe. The Middle Stone Age (commonly abbreviated as MSA), in contrast, lasted very roughly from 300,000 to 50,000; or some prefer 550,000 to 25,000BP. Both periods, in fact, have very variable timespans because it matters to which part of the world they refer, as well as to which form of "culture": art, pottery or stone tools. If we are looking for some correspondence, then the MSA is very vaguely like the Mesolithic, but notably without the domestication of plants or animals. Basically, both terms indicate times of advanced hunter-gatherers [1].

The word advanced is crucial here: it means a time when rock art, music, and language prospered. And probably dance too. It is a time when advanced kinship structures developed, and symbolism was to the fore. Symbolic behavior was vested in personal ornament and ritual [2]. It was a time of population expansion, as the MSA emerged from the long darkness of the Early Stone Age (sometimes known as the Earlier Stone Age). Times were better in the MSA, as not only material culture but also language and symbolism came to dominate what we now think of as a hunter-gatherer existence. This is a late hunter-gatherer existence since it assumes the presence of sophisticated language. The earliest language may have been spoken, or it may have been gestural. Specialists in language origins such as Michael C [3] and Michael A [4] tend to be concerned with issues in brain science, and the earliest language may indeed have been gestural or primarily gestural. However, we are not concerned with that, since all hunter-gatherers today have full language, and it is always spoken. My guess is that the same was true in the MSA. With changes in material culture, but more importantly with changes in sociality because of language and symbolic thought, the MSA was quite different from all that had gone before.

According to Robert F [5], "If you're for a big framework in which to look at the evolution of modern humans, it is the African Middle Stone Age." The implication is that perhaps the whole of the African continent (and possibly the Middle East too) was inhabited by isolated, scattered populations of Homo sapiens. Eventually, enough of them got together and produced modern humanity. The first real clue to answer to the question of this "big framework" came

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**\*Corresponding author:** Alan Barnard, Department of Social Anthropology, United Kingdom

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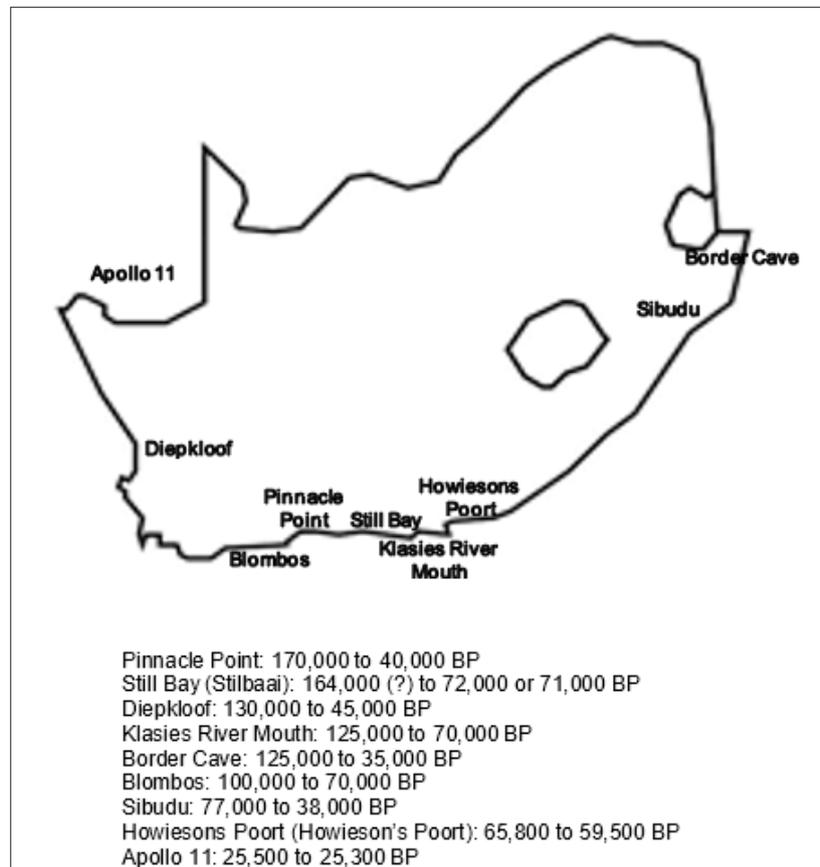
in 2017. In that year Jean-Jacques Hublin and his colleagues [6] published on the discovery of evidence of *Homo sapiens* at Jebel Irhoud in Morocco. The site had been known since 1961, but its implications for human evolution were not. What the site yielded was a fossil dated to 315,000 years, as opposed to the 200,000 years that humans had previously been assumed to be present in eastern or southern Africa. The site was in the “wrong” part of Africa, as well as pushing back the date of *Homo sapiens* by some 115,000 years.

But the bigger questions are: did these humans have language, and did they think as we do? In other words, did humanity evolve physically and then with symbolic thought, or the other way around? Or did symbolism and physical characteristics evolve at the same time? And ultimately, is human evolution uniform across Africa, or did it evolve quicker in some parts than in others. These are the sort of questions Foley was alluding to. They are archaeological questions, but they have implications for social anthropology (or cultural anthropology) as well, and here I want to consider them

mainly from a social anthropological point of view. The evidence from southern Africa is the best [7], although in the days before the existence of radiocarbon dating (developed in the late 1940s) the MSA was thought to be more primitive than it is today.

### Attributes of the MSA

Early hunter-gatherers and scavengers, those of the Upper Palaeolithic, were different from later ones. This is what led Irish archaeologist Hodder W [8] to add the term ‘Mesolithic’ to Sir John L [9] list. That addition was controversial, and it does not work on every continent. The hunter-gatherers that we know today are products of the Later Stone Age. Yet their ways of life had their beginnings in Africa and in the MSA. And yes, dogs were domesticated during the MSA and the Upper Palaeolithic [7], but the beasts we think of as ‘livestock’ did not exist before the Neolithic. While some archaeologists [10] estimate an origin for the Middle Stone Age as early as 500,000 or 555,000 BP, a date of 280,000 BP, McCrearty and Brooks’ estimate, seems more reasonable.



**Figure 1:** Major MSA sites in southern Africa.

This is based on the presumption of advanced cognition. In short, the Mesolithic is defined by stone tools, always Lubbock's intention, and in his case the stone tools of Europe. The MSA is defined more by cognitive behavior and concomitant sociality: what we think of today as normal for advanced hunter-gatherers.

We know this was not a time of a Hobbesian ‘nasty, brutish and short’ existence, but one dominated by kinship, sharing and the development of culture. Table 1 shows the place of the MSA, particularly in southern Africa, in comparison to the rest of the world. Indeed, the whole of Africa may share the attributes of

the MSA, as reported recently by the science writer Graham L [5], although here we concentrate on southern Africa. There are many MSA sites. Some key ones are shown in Figure 1. They are mainly in modern South Africa. I list them on the map in order of presumed first occupation, and no doubt there are more sites and a number

yet to be discovered. Diepkloof is inland, and Border Cave is on the Eswatini border. Apollo 11 is in southern Namibia. The others are all along the South African east coast. All are caves or rock shelters, but often there are associated shell middens.

**Table 1:** “Stone Age” archaeological periods.

Worldwide	Southern African
Lower Palaeolithic 2,600,000-100,000 BP Oldowan and Acheulean Early Homo only in Africa <i>H. erectus</i> and First Out of Africa migration Middle Palaeolithic 300,000-30,000 BP Mousterian and subsequent industries Stone-tipped spears Denisovans and Neanderthals Second Out of Africa migrations Upper Palaeolithic 45,000-10,000 BP Diversity of artefacts, bow and arrow Figurines, rock art Earliest domestication Mesolithic 22,000-5,900 BP Microliths, ceramics Neolithic 12,700-5,300 BP Farming, urbanization Origin of warfare	Early Stone Age 2,600,000-300,000 BP Oldowan and Acheulean Further evolution in Africa Middle Stone Age 300,000-50,000 BP Still Bay and Howiesons Port industries Flaked tools from prepared cores Early symbolic culture: beads, ochre Development of language Later Stone Age 50,000-recent Robberg, Oakhurst, Albany, Wilton, etc. Extensive rock art Modern hunter-gatherers Contact with herders and Iron Age agro-pastoralists

The dating of the sites is often speculative. This is especially true of Still Bay (Stilbaai), the name given by Goodwin and Van Riet L [11]. Still Bay is more than one site. A date of 72,000 or 71,000 is attested, but the 164,000 date is not. Klasies River Mouth is also a few different sites. There was, of course, no radiocarbon dating at all until the late 1940s, and in any case 50,000 or at most 75,000 years is generally agreed to be the limit for that technique. Other techniques are also in use today though, thermoluminescence, for example. None of this was known in 1929, and it is for this reason that both these early archaeologists and those who followed employ seemingly vague phrases like ‘Earlier’, ‘Middle’ and ‘Later’ Stone Ages. Yet essentially, the Goodwin and Van Riet Lowe scheme has never really been altered.

At first there seems to have been a presumption that the MSA was more primitive than recognized today [7], but today there is little disagreement that the scheme is correct. How the MSA came about is probably because of social changes and population changes, perhaps simply the increase in numbers, that enabled greater communication among these groups of people. The degree to which this was spread right across Africa may be open to question, although the Jebel Irhoud finds [3] do point in this direction. However, the standard model of ‘the human revolution’ may need adjustment. In Mellars et al. [12] volume by that name, Ernest G [13] wrote of the genetic under-determination of *Homo sapiens* and suggested that instead there was a compensating cultural system that enabled rapid evolution. His model assumed the existence of language, and in this he seems to have been right. A subsequent volume rethinking the matter [14] only touches on language in a very cursory manner. Language seems to have been of little interest to most of the authors, at least when writing primarily for an archaeological audience. Yet for me language is of prime importance. Language, of course, makes communication possible.

A mutation in the FOXP2 gene, which for other mammals affects breathing, became important for humans (and Neanderthals)

because it had the added advantage of enabling language [15]. The mutation, of course, occurred long before the MSA, but once the faculty of language was enabled, humans were able to use it to speak (or sign) to one another. There are any number of theories about as to what came first and how it happened: the use of ochre for cosmetics, a sex strike among females, or whatever [16], but somehow when the demography of human populations was right language came to the fore. I have speculated about when this was and have suggested “at least 130,000 years” (Barnard). Possibly it was rather earlier, as the duration of the MSA might imply. If we allow for the possibility of primitive language, preceding modern language, it could, of course, be earlier still.

Grammaticalization theory [17] provides some clues, but it does lie in the realm of speculation. Bernd H et al. [17] argue that the evolution of grammar took this historical sequence:

- a. Nouns,
- b. Verbs,
- c. Adjectives and adverbs,
- d. Demonstratives, negation, etc.,
- e. Pronouns, etc. (enabling early clause subordination),
- f. Markers for agreement, passive voice, and adverbial clause subordination.

This model suggests that language evolved gradually and that the lexicon preceded syntax. In short, after nouns, verbs, adjectives, and adverbs came complexity in the form of belief and symbolic thought, then ritual, music and art, and then complex symbolic thought and finally mythology. Michael W [18] argues for a common origin of the world’s mythological systems at least 100,000 years ago, and it would be plausible to imagine semi-linguistic Neanderthals [19] within this scheme too. Certainly, the peoples of the MSA are not precluded. So, we might easily imagine the almost

simultaneous coevolution of language and grammar, symbolic thought, cosmetics, art, and music. This may be going a bit far, but it is at least imaginable. The first Out of Africa migration was that of *Homo erectus*. What I have in Table 1 labelled the “Second Out of Africa migrations” was a series of migrations, perhaps 60,000 years ago that led to the population of the whole world. Any one migration in between must have been short-lived and leading to the extinction of the migrating group [20].

The total of the successful migrating unit, to Yemen, on to the Arabian Peninsula and beyond, may have been as small as 150 individuals [21,22]. What I am suggesting is that the population of earlier times was simply too small to sustain advanced hunter-gatherer culture. This was only able to develop once population size was large enough. Therefore, it is not just a division between hunter-gatherers and others that should concern us, but a division between primitive hunter-gatherers (and scavengers) of the distant past, and the linguistically and culturally sophisticated hunter-gatherers who came later. Possibly Neanderthals or others may be included here too, but the important thing to me is that the bulk of evidence points to what went on mainly, if not exclusively, in southern (and eastern) Africa. This is probably the main place of origin of modern humanity. We all trace our descent from this tradition, no matter what the specifics are concerning the exact origin of language and symbolic thought.

The MSA is defined by behavioral modernity. Features include jewelry and self-ornamentation with ochre, rock art and the use of pigment, burial of the dead and the ability to transport resources for long distances. Material advances include the use of bone in tool making, composite tools and other advances in blade technology [23]. In the MSA fishing becomes common, as do hearths. Why did the MSA ever exist? The answer to that lies in what it replaced. Before the MSA, populations were very small, and they tended to be stable. Yet, and for this reason, life expectancy was short. By the standards of later times, there was little time to be inventive. Denisovans and Neanderthals lacked the sociality of modern humans, and therefore did not pass on the knowledge they would have acquired even in material culture. Cultural stagnation was no doubt the norm.

The MSA brought an end to this, and the cause, very simply, was an explosion of culture, of all kinds: art, music, religion, artefact production, everything! The main proponent of the idea of a “fortuitous mutation” has been Richard Klein, but the relevant cognitive mutation lies well before the MSA. Social anthropology and linguistics ought to take over where archaeology has led us. Many ideas are interrelated: from the existence of shamans to artistic developments, the use of ochre to the need to acquire and to transport it, and so on. And all of this was related to cognitive enterprise and to the acquisition of kinship structures and to the use and quite rapid development of language within the MSA. Much of Chris K [16] argument on this revolves around events leading up to the MSA, but the key point is that southern Africa was ready for a symbolic revolution before it occurred. There was no need to wait until material culture caught up.

The site of Blombos [23] is interesting in its discovery and significance. What happened was that South African archaeologist Christopher Henshilwood decided to do his PhD on the site, which happened to be on land his family owned. He dug down to the Khoekhoe level, dating to just a couple of thousand years ago at most. This was the intended topic of his thesis. Then he thought he would dig a little deeper. What he found was a huge time gap. Apparently, only the top layer was occupied by the Khoekhoe: two thousand years of cattle and sheep herders. But underneath, when he dug deeper, he discovered another layer of occupation: the MSA site now known as Blombos Cave. The time gap of perhaps 68,000 years when the site was unoccupied is interesting, but it does raise the question of when a site is not a site. Among other sites, Border Cave dates from a time clearly within the MSA, but it was also occupied in its later years by people of the Later Stone Age [24]. Indeed, when in the early 2000s I visited yet another MSA site, I found it reoccupied by modern vagrant.

## Languages

There is a common assumption that language began late in prehistory, maybe 50,000 years ago according to Richard Klein. However, I think that this date is far too late. We know that Neanderthals had the ability to speak and that their sounds were reasonably close to those of modern humans [25]. That is one reason I have suggested that it is at least 130,000 years. It could even be earlier and certainly within the MSA [26]. In other words, it could not have sparked the migration out of Africa: it was the other way around. We know that humans got to New Guinea and Australia by 60,000 years ago [27], or at least by 45,000 ago [28]. The first Australian may simply have been “a pregnant woman on a log” (as has been suggested), or the earliest inhabitants may have got there by more sophisticated seafaring craft; it does not really matter. Australia was not encountered by Europeans until 1770. So what languages were Aborigines speaking at the time of European arrival on the continent? Obviously, it was a modern language and not a primitive version of a language. Entire language families are generally less than 7,000 or 8,000 years old. Even Indo-European is dated at less than 10,000 years [29]. Therefore, a date of 45,000 or 60,000 years ago for the first Australians is virtually impossible, especially given the necessity that the evolution of grammar would require. Many, many languages must have existed in southern Africa in the Middle Stone Age. These were fully formed, about as fully formed as any languages today.

As every hunter-gatherer specialist knows, so-called “primitive” people do not speak primitive languages. I have heard it suggested that they do on several occasions, even by people who should know better, like whites who grew up with Bushmen and themselves speak Bushman or San languages. But just take one example: my own fieldwork language, Naro, has twenty-six words for “to talk” or “talking” [30]. It also has as many as eighty-six person-number-gender markers. Why do you need they need so many grammatical “genders” when you live in groups of only dozen or a few dozen? Plainly, they do not need as many as they have. I could go on about this, but my point is that language is, in a sense, more complex than

it must be to do the job it must. Language does not exist merely for communication. Its primary purpose lies rather in the ability to deal with symbols. This, no doubt, is what was transformed as people (or indeed earlier hominins) moved from speaking primitive languages to speaking fully formed ones.

What is more, Bushmen do not generally speak just one language, but several. I once met a man who spoke languages in five different language families: he was a native speaker of N!aqraxe, or at least he claimed this as his first language. I met him in 2011. He spoke to his children in G/wi, because they spoke no N!aqraxe at all. N!aqraxe is also known as Eastern ≠Hoan; it was only discovered by linguists in the early 1970s. Eastern ≠Hoan, by the way, is nothing to do with Western ≠Hoan or !Xoon, which is quite unrelated. The two languages just share the same words for “person.” Of course, there do exist Sprachbunde, and this idea of languages that may share vocabulary, rather than an origin, probably led linguists to assume a single origin of Eastern ≠Hoan and Western ≠Hoan.

Think how many Bushman languages there are, and how many more must have existed through the tens of thousands of years between the first habitation of southern Africa and the present. It is impossible to count them, but certainly throughout prehistory Bushmen will have spoken many tens of thousands of different languages. It almost does not bear thinking about. And no doubt vocabulary was often shared between different languages. We see this quite often in the Kalahari today: grammar is more diverse than vocabulary, and grammar evolves predictably [17,31]. For example, the words for supernatural beings are similar or the same from one end of the Kalahari to the other: g//aqa- for “spirit” (with appropriate suffixes). Yet the grammars of the many languages are extremely diverse in matters such as word order, such as typically SOV (subject-object-verb) for Naro but SVO (subject-verb-object) for Ju/’hoan. The use of prepositions and postpositions, adjectives before the noun or after the noun, and so on, also varies considerably.

The very existence of language in the abstract itself suggests advanced cognitive behavior [23,32]. The MSA was a time of intense cognitive development, with art, music and ritual all feeding in to create a cultural and social fabric of image-making not unlike what we know of southern Africa in relatively recent hunter-gatherer times. So, in summary here, language is complicated, and it is diverse, and Bushman or San languages are as complicated as any others on earth. The fact that they have long lived in their present locations[33] provides proof of this. I have no doubt that language was invented at least at the same time as symbolic thinking, and probably before it.

### Migration, Volcanic Winter, and Kinship

The population that first walked into Yemen may have been very small. It took their descendants a great many centuries to reach China, Southeast Asia and so on, but eventually they did, likely more than once. *Homo erectus* got there, and so, long before that, did our own ancestors too. I once, in a lecture in China, suggested this scenario, but virtually no-one believed me. They had been taught that China was the seat of humanity. However, at least most of us do assume otherwise: humankind originated in Africa and spread out

from there, with greatly expanding populations. Yes, there may be a few mavericks: I am thinking here of German [34], but at least on this point their theories are simply not credible. We are all basically Africans in origin, despite elements of Neanderthal, Denisovan and other ancestry. China cannot be the point of origin for all humanity: genetic studies [35,36] tell us this, essentially incontrovertible, fact. Southern and eastern Africa is the point of origin and the place where expansion began, and this was during the Middle Stone Age.

About 74,000 or 75,000 years ago there was a volcano located on Sumatra, in modern Indonesia[37]. Yes, this is only a theory, but it is a highly likely one and supported by genetic and ecological evidence. The volcano is still there, but now it is a lake: Lake Toba. The total human population after Toba’s eruption may have been just a few thousand: one commentator [38] suggests perhaps possibly only 150 of them made the migration from eastern Africa to Yemen, perhaps coincidentally ‘Dunbar’s number’ [39]. We are all descended from them. There are, of course, billions of others among our ancestors, but this was the defining group. The post-Toba volcanic winter, lasting perhaps ten years, virtually wiped out virtually all humanity, because it destroyed most the food supply. But humanity survived. We are still here: but descended from between 1,000 and 10,000 breeding pairs of survivors[40].

Many years ago, I wrote on what we can expect of hunter-gatherer kinship. Nearly all hunter-gatherer societies in existence today practice what I called universal kinship: this means that they classify everyone with whom they come into contact by kinship terms[41]. It matters not whether this is ‘real’ or ‘fictive’ kinship: it is the fact of classification that is important. Such classification determines several things, including how close people can sit next to each other and even the incest taboo. Along with sharing within a community, kinship is of primary importance in hunter-gatherer studies-as it is in hunter-gatherer communities themselves. This was shown long ago by Lorna M [42]and more recently by Nurit Bird-David[43].

I have written on this a few times, especially in my human origin’s trilogy but let me suggest a slightly more conjectural model here (Table 2). This table is, of course, rather simplified. My earlier versions are often more complicated. However, the diagram does capture the essence of the evolution of society and specifically kinship. Kinship evolved from elementary to complex structures and involved an expansion of the range of interaction[44]. In Marshall’s words, it involved “sharing, talking and giving.” Art, music, language, and myth are all products of the MSA, and sharing and sociality generally are part of this. The lack of sharing is, of course, a product of the breaking down of elementary structures. Incest avoidance, exogamy and links between groups are all products of this, as Lévi-Strauss well knew. In addition to myself, Steen Bergendorff cites two others thinking along the same lines: Bernard C [45] and Robin F [46]. We are all after, to quote Bergendorff “the basic structure of symbolic thought, or what we might term the elementary unit of meaning that corresponds to the basic unit of kinship.” For all of us, this is to be found in pair-bonding and cooperation within and between social units. It no doubt has a biological basis, but it requires a symbolic dimension too.

**Table 2:** The evolution of society and kinship.

Early Homo	MSA	LSA
Proto language simple communication small groups links between groups sharing within families	Sentences us/them ideology incest avoidance exogamy links between groups barter and exchange elementary kinship systems teaching and learning rapid development of group structures art, music, symbolism, and myth	True language fully developed kinship developed universal structures explicit rules of exchange advanced hunter-gatherer lifestyles multilingualism eventual breakdown of elementary structures eventual neolithization and division of labor violence and eventual development of war and slavery in the Neolithic

War, slavery and so on are what followed the MSA. The earliest societies were anarchistic; later ones produced government to regulate human behavior. In short, neolithization was the problem. It gave humankind more work and but less free time. It created wealth, though at the expense of liberty[47]. I am not saying that any of this has never been said before, but only that its implications have rarely been recognized even among specialists in hunter-gatherer studies. When I wrote my short book *Hunters and Gatherers: What Can We Learn from Them*, I reflected on the idiocy of war, although I think the late Lorna Marshall (pers. com.) probably said it better[48-63].

Lorna was once trying to get at whether Bushmen had a concept of warfare. She described what she meant as follows: "It's when your people attack other people and try to take over their land and their property."

"Wait a minute," one interrupted. "Do your people have this custom?"

"Yes, sadly, we do," Lorna replied.

"Well, forgive me," the Bushman said: "It sounds like a damned silly custom! Somebody might get hurt!"

## Conclusion

Art, music, language, and myth: think Middle Stone Age. Modern humanity, symbolic thought: again, think Middle Stone Age. War, slavery: think Neolithic. Of course, I am not suggesting we retreat to pre-Neolithic times. We are stuck with what we have created. I am only suggesting that we take note. And that we try to regain the best of what we have lost, lost either through plan or through our collective stupidity. It is probably time we take the MSA as a baseline, or a new baseline, to consider the rapid evolution of modernity. The Neolithic is, in a way, its end point: the start of postmodernity. The Neolithic is neither good nor bad. It just is what it is

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