“Politics” and “Religion” in the Upper Paleolithic:
A Voegelinian Analysis of Some Selected Problems

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Outline

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1. Introduction

The Voegelinian analysis referred to in the title refers primarily to two elements of the political science of Eric Voegelin. The first is his philosophy of consciousness, systematically developed first in *Anamnesis*.\(^1\) The second is his concept of compactness and differentiation of experience and symbolization. It will be necessary to touch upon a few other Voegelinian concepts, notably his understanding of “equivalence,” but for reasons of space only a summary presentation is possible.

A second preliminary remark: the terms “Religion” and “Politics” are in quotation marks because their usage in the context of the Upper Paleolithic is anachronistic, though not entirely misleading. The meaning of these terms is commonsensical, not technical, and is meant to indicate what Clifford Geertz once called “oblique family-resemblance connections” among phenomena.\(^2\)

Third, as a matter of chronology the Upper Paleolithic conventionally refers to the period between 50,000 and 10,000 years ago (50KYBP-

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\(^1\) Voegelin refined his analysis of consciousness in the last two volumes of *Order and History*. These changes are ignored on this occasion.

10KYBP). It corresponds in Eurasian periodization approximately to the Later Stone Age in Africa. We will discuss chronology in more detail below. In any event, strict chronology is an external and relatively unimportant matter. Our concern, again approximately, is in geological terms with the late Pleistocene, the period prior to the Neolithic and well before the advent of agriculture and the creation of large political units (Voegelin’s cosmological empires of Order and History, vol. I), but after the appearance of what archaeologists and paleoanthropologists often call “behaviourally modern” humans, who are popularly referred to as Cro-Magnons, named after a discovery of human bones in 1868 in a rock-shelter near the town of Les Eyzies in southwestern France. These humans are often distinguished from “anatomically modern” humans (that is, humans with skeletons and general morphology similar to present-day humans) who appear much earlier in the fossil record – although the significance of this distinction is contested. There is, moreover, an enormous amount of material dealing with the Upper Paleolithic about which I know nothing. And even regarding the material I have examined it is necessary to be highly selective. Even so, this is a very long paper. During the process of writing it I was reminded of Voegelin’s remarks on the problems he encountered writing what was

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3 See Brian Fagnan, Cro-Magnon: How the Ice Age Gave Birth to the First Modern Humans (New York:
supposed to be a relatively short college textbook that grew to the eight volume *History of Political Ideas*. His problem was that he had to present “the materials,” because they were not well known, before he could analyze them. Although the selection of materials dealing with the Upper Paleolithic here may be well known to archeologists and associated paleoscientists, they are not well known to political scientists, and the questions political scientists ask of these materials are rather different than those usually raised by specialists.

A fourth observation follows from this: it is practically self-evident to contemporary political science that an exploration of “politics” in the Stone Age is, if not a waste of time, then standing sorely in need of at least a summary justification. Here goes: first, the proof of the pudding is in the eating, so the first task is to see what can be said of the Paleolithic materials. Second: by convention, the “history of political thought” starts with the Greeks. Voegelin, however, had listened to Eduard Meyer in Berlin in the early 1920s and was clearly persuaded of the legitimacy of *Altertumswissenschaft*. This was why he began *Order and History* with an analysis of the great empires of the Ancient Near East. But if it is legitimate to consider “The Admonitions of Ipuwer” a political text worthy of attention

and analysis or, at least for Voegelin as early as 1938, the “Hymns of Akenaton” as being relevant to an understanding of Nazi spirituality, there is no a priori reason why the historical frontier should not be pushed as far back as records permit. After all, written records, which appear around 5KYBP, cover less than ten percent of human history.

We must, therefore, provide a brief account of what is often still called prehistory or, perhaps more accurately, very early history. By the middle of the nineteenth century natural historians were able to argue persuasively and on the basis of geological phenomena that the earth was older that the 6000 or so years calculated on the basis of counting “begats” in the Old Testament. Some natural historians got carried away and thought that geology was a new kind of metaphysics or theology. Today some of their successors, particularly biologists and geneticists, have voiced similar sentiments. In fact, however, the appearance of a new species, Homo sapiens, is, for biologists, simply a biological event, but inasmuch as it is an event it also has a historical dimension to it. In other words, the subject-matter of very early history appears to overlap with biology even though the approaches to this subject-matter by historians (and a fortiori by political scientists) is not the same as that used by biologists. I have already used the biological term for this new species, H. sapiens. Let us therefore by
discussing the question of what a biological species conventionally is understood to be today.

Richard G. Klein began his comprehensive thousand-page book, The Human Career: Human Biological and Cultural Origins,\textsuperscript{4} with an account of what the term means. “The species,” he said, “is the least arbitrary and most fundamental evolutionary unit…. Evolutionary biologists define a species as a group (or a population) of organisms that look more or less alike and that interbreed to produce fertile offspring.” The necessity of producing fertile offspring is usually called the “biological species definition” whereas more or less looking alike is usually called the “typological species definition.” The contemporary biological definition replaced the older typological definition in part because of the acceptance by biologists of the major tenets of Darwinian evolution. So far as the fossil record is concerned, however, only the typological definition is applicable for the obvious reason that fossils don’t breed.

Species, then, is a biological concept, and biology, including evolutionary biology, is a natural science the epistemological limits of which are confined to asking questions and seeking answers within the context of data regarding the natural world, whether comprised of living organisms or

\textsuperscript{4} 3\textsuperscript{rd} ed. (Chicago: University of Chicago Press, 2009), 1.
of their material traces such as fossils. In contrast, philosophy, including political philosophy, has a different remit inasmuch as the latter two are concerned with the nature of inquiry per se and with the content of inquiry from the perspective of human consciousness per se. Hence the discussion of philosophy of consciousness in the following section. The epistemologically subordinate status of biology or of other specialized natural and social sciences is not always acknowledged. By way of illustration with respect to evolution, as Daniel Dennet said, “evolution studies the pathways and mechanisms of organic change following the origin let alone the meaning of life.”

It does not, therefore, raise questions about the origin of life. Moreover, the terms “pathways” and “mechanisms” are clearly metaphorical, which is to say they are images that evolutionary biologists typically accept as unproblematic. As we shall see, major problems arise when one science intrudes into the area of competence of another science – biology into philosophy or political science for example. When such intrusions take place, as Brendan Purcell put it, “we may speak of them [the intruders] as committing the Fallacy of Answering the Unasked Question.” That is, the one science “attempts to answer a question that is neither raised

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nor answerable within their area of experience or discipline."⁶ So far as evolutionary biology or, more broadly the theory of evolution is concerned, it is a scientific account of living realities and their development from other living realities. That is to say it presupposes the existence of living realities or “life” or even “life forms.”⁷

The meaning of species as a concept within contemporary evolutionary biology has several important implications for our present concern with very early history and evolution. First, every species consists of individuals that vary slightly among themselves. More are born than survive to reproduce. As a distinguished paleoanthropologist explained:

Those that survive are “fittest” in terms of the characteristics that ensure their survival and successful reproduction. If such characteristics are inherited, which most are, then the features that ensure greater fitness will be disproportionately represented in each succeeding generation, as the less fit lose out in the competition to reproduce. In this way, the appearance of every species will change over time, as each becomes better “adapted” to the environmental conditions in which the fitter individuals reproduce more successfully.⁸

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⁷ The theory of evolution is therefore to be distinguished from evolutionism, an ideological conceit that claims to be able to account for the genesis of all living things. That the two are sometimes confused is a separate problem, but one that we will deal with in due course.

It is important to note at the outset one significant implication: there is nothing “creative” about this process of natural selection. On the contrary, random genetic changes or “genetic drift” that result in biological novelties are either eliminated or not. There is nothing directional or inevitable about the process and it can reverse itself quite quickly when the environment, whether material or cultural, changes. This is why biologists speak of “exaptation” as well as “adaptation.”

The modern distinction between the two terms originated in a disagreement between Alfred Wallace and Charles Darwin concerning the “creativity” of natural selection. The controversy arose over a question raised by Darwin in The Descent of Man: how can we account for “the intellectual and moral properties of man?” Darwin proposed the usual mechanism of natural selection but Wallace saw the fallacy in Darwin’s reasoning – natural selection only eliminates the unfit. But then Wallace accounted for the intellectual and moral properties of humans by invoking “a superior intelligence” that “has guided the development of man in a definite direction,” and invocation, Tattersall said, that “has clouded Wallace’s reputation ever since.”

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intelligence was as uncongenial to biologists in Wallace’s time as it is today. And yet, as we shall argue in section four, the symbolic capacities of humans, as the moral ones, were not just more of the same, such as the acquisition of bipedalism.

Bipedalism was not a result of a biological design by a higher intelligence. As a biological theory, rather than a theological or metaphysical one, natural selection can deal only with what is already there so that innovations are never properly speaking short-term adaptations to current circumstances but exaptations, which are “new features that are not related to current circumstances but that are potentially available to be used in new ways.” Thus, to use a famous example, feathers could change from insulators to a means of flying. In short, adaptations fulfill specific and identifiable functions; exaptations are just there and may someday be useful for some new and unspecified function or not. We will have occasion to recall this proposition in section three.

Genetics, especially after the discovery of recessive genes, complicated the story and today can account for why there are relatively rapid changes in appearance. Moreover, modern evolutionary biology also accepted the notion that competition could exist within species as well as
between them and this latter possibility changed the way biological scientists looked at human evolution. We are not referring here to the nineteenth-century ideology, “social Darwinism” but simply to biological changes. As noted above, members of the same species can generally interbreed whereas members of “discontinuous” ones cannot. But what constitutes discontinuity? There appears to be no universal agreement, not least of all because discontinuity or separation of species is a result, not a “mechanism.” And so, Tattersall concluded, “while it is clear that species are fundamental to the evolutionary process, it is also evident that species are to biologists much as pornography is to some U.S. Supreme Court justices, who cannot seem to define it even though they claim to know it when they see it.”

Judgement and connoisseurship, particularly with respect to fossils, are inherent in evolutionary biology.

Whatever the status of any particular species, there is general agreement that the key concept within evolutionary biology is the individual organism. Some individuals are better adapted to prevailing circumstances than others. They achieve reproductive success and so change the populations of which they are a part, over long periods of time, towards improved adaptation. This story would account for the appearance of new

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species and was certainly congenial to the progressivist assumptions of Victorian liberalism. But the edges of species identity remain blurry, which poses a biological problem regarding what a human being is. Granted there is an obvious “gap” or “discontinuity” between a Welshman and a bonobo, there are “intermediate” forms as well, and their significance is hotly debated in terms of competing narratives. The reason for the existence of competing narratives is because, on the one hand, evolution is assumed to be a continuous process, whereas taxonomy “is about categorizing living organisms into discontinuous entities. The two are incompatible.”

According to Darwinian theory, individual variation is essential for constant change and adaptation to new environmental conditions. Thus, by trying to describe a “typical” organism an essential element of the evolutionary process is necessarily excluded. Hence the competing narratives.

As interesting as such disputes are, it is important to remember that the problem of a gap or of discontinuity is only biological. It is not psychological or philosophical. Remarkable as humans may be compared to other species, “the evolutionary history of humans and their extinct relatives is not necessarily any more remarkable in itself than are those of squirrels or

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12 Tattersall, The World from Beginning to 4000 BCE, 11.
14 Maciej Henneberg, “Comment” to Trinkaus, “Modern Human versus Neandertal Evolutionary Distinctions,” 610.
horses.

It is just as “remarkable” that a Great Dane or a mastiff as well as a Chihuahua or Yorkshire terrier evolved from a wolf. As Tattersall noted, “the fact that Homo sapiens is the only hominid species on the Earth today makes it easy to assume that our lonely eminence is historically a natural state of affairs – which it clearly is not.” Biologically speaking, therefore, H. sapiens was not destined to be the only hominid.

There is one important exception to the use of typological rather than biogenetic distinctions in the fossil record. As Tattersall and Schwartz observed, the only example of interspecies interaction for which any useful information is available concerns that between H. sapiens and H. neanderthalensis – and that is also highly controversial. The range and historical presence on earth of Neanderthals and behaviourally modern humans (Cro-Magnons) overlapped as did the range and presence of Neanderthals and anatomically modern humans at an earlier period. The pre-Cro-Magnon version of Homo sapiens we will simply call Homo sapiens, anatomically modern humans, or, following Finlayson, the Ancestors. The interaction of Neanderthals and Cro-Magnons provides much of the subject-matter of section 3.

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16 Tattersall, The World, 41.
17 Tattersall and Schwartz, Extinct Humans, 175.
To see the context for that interaction we need to make a couple more preliminary observations. From the early twentieth century, archaeologists have known that when Neanderthals and Cro-Magnons used the same sites, the evidence for Neanderthals was found at lower levels, which meant they were in Europe first. There arose from this observation a century-long controversy over whether the Neanderthals evolved into modern humans or were extinguished in some other way and if so, how?\textsuperscript{19}

There is widespread agreement that the common ancestor of both Neanderthals and \textit{H. sapiens} was \textit{Homo heidelbergensis}, named after a lower jaw found in a sand quarry near Heidelberg in 1907, and dating back over half a million years. Mitochondrial DNA analysis confirmed the separation of \textit{H. neanderthalensis} and \textit{H. sapiens} between ca. 410-440 KYBP during the mid-Pleistocene. This DNA analysis is generally consistent with a paleoanthropological interpretation of distinct lineages of humans north and south of the Mediterranean commencing around the same time.\textsuperscript{20} There is one additional piece of archaeological information to


\textsuperscript{19} Richard G. Klein and Blake Edgar, \textit{The Dawn of Human Culture} (New York: John Wiley and Sons, 2002), 172.

consider: an even earlier hominid, H. ergaster, invented what archaeologists call the Acheulean hand axe, named after the discovery of flint axes in the Amiens suburb of St. Acheul in 1854. When similar axes were later discovered in Africa, the oldest of which are dated to 1.65MYBP, much earlier than the European ones, they were similar enough to be assigned to the Acheulean class of artifacts. This was far from the last Eurocentric decision by archaeologists. Because such axes are relatively abundant (and are often found on the surface and so cannot be reliably dated) and are highly durable pieces of stone, archaeologists conventionally speak of an Acheulean culture or an Acheulean industrial complex to designate the hominids who used this style of tool.

What replaced the Acheulean hand axes was the new and improved Mousterian or Middle Paleolithic model, which was much smaller than the Acheulean hand axe. One reason was the Mousterians (named for a rock shelter at Le Moustier in southwest France first excavated in the 1860s) may have discovered how to haft stone flakes onto wooden handles, which could do the same things as the Acheulean tools, but more efficiently and more effectively. The approximate chronology is as follows: the last Acheuleans lived around 250 to 200 KYBP; the Mousterians, which included

_— separation of Neanderthals and H. sapiens_ were also established by analyzing Neanderthal DNA. See
Neanderthals and *H. sapiens*, lasted until sometime after 50KYBP. By and large (but not entirely) the Neanderthals remained a Mousterian people even after that date. *Homo sapiens*, however, invented what archaeologists call the Aurignacian or Upper Paleolithic industry or culture.21

Before glancing at the Upper Paleolithic, we must mention that these chronological estimates must be further qualified. We will discuss this question in more detail below. Here we simply note that it is generally agreed that anatomically modern humans appeared in Africa around or a little after 200KY ago. At the time of their dispersal, anatomically modern humans encountered other kinds of humans living in the lands of Eurasia into which they dispersed. The extent and nature of these encounters are disputed. Notwithstanding this complex, murky, and often hypothetical story, there is considerable agreement that the Upper Paleolithic material culture was much more elaborate than the Mousterian and shows many more differences with the Mousterian than the Mousterian did with any of its predecessors. Klein said it represented “a quantum change from everything that went before.”22 Likewise, Tattersall and Schwartz indicated that *H.*

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21 In fact, they divide what for simplicity we have called the Upper Paleolithic industry into additional subdivisions and there are further distinctions to be made between Eurasian and African technologies. For the moment, we will ignore these finer grained distinctions and consider the Upper Paleolithic to be synonymous with Aurignacian.

sapiens “is not simply an extrapolation or improvement of what went before” but “an entirely unprecedented entity in the living world.” We will revisit the question of what the meaning of “quantum change” or “entirely unprecedented entity” might mean in section four below.

So far as the material culture of the Upper Paleolithic as compared to the Mousterian is concerned, the following list of changes has secured wide agreement: (1) sites are larger and there are more of them; (2) there are more “blades,” which are stone tools significantly longer than they are wide, which means they embody a greater length of cutting edge per unit volume of stone than either core or flake tools; that is, they are an improvement; (3) there was a rapid diffusion of new tool forms; (4) they used multi-component tools such as bone points and projectile weapons including a spear-thrower (called by Aztecs and then by archaeologists an atlatl); (5) they used more specialized tools such as “burins,” which are implements that could be used for scraping skins and for engraving plastic substances such as ivory or antler (the word is taken from the contemporary French word, le burin, which means engraving tool); they used more shaped bone and antler tools; (7) there was greater use of personal ornamentation and burial; (8) they used non-local sources of flint for tools, shells for ornaments,

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23 Extinct Humans, 9.
etc. which indicated the existence of long-distance trade, wider inter-group contacts, and larger social units.

As we will see in section three, this is not the whole story. Differences among material artifacts – burins, for example – have allowed archaeologists to distinguish several different cultures, some of which bridge the Mousterian/Upper Paleolithic distinction. Of these the most significant for the problem of Neanderthal-Cro-Magnon contact is the Châtelperronian, ca. 45-36 KYBP located in Franco-Cantabria, northwestern Spain and southwestern France. Probably the only remaining item on the “laundry list” approach to distinguishing Mousterian from Upper Paleolithic culture still acceptable to archaeologists was the creation of representational art, which took the form of mural, wall, or “parietal” art in caves – engravings and paintings, chiefly – and home or “mobilary” art, including statuettes. However, to call these images and artifacts “art” exhibits a prejudice toward the aesthetic and presumes already an interpretive link between us and the makers and users of this imagery that stands greatly in need of justification. We will provide the outline of a justification in the following section on Voegelin’s philosophy of consciousness. More generally, the argument is that Voegelin provided a methodological approach to the
question of “politics” and “religion” in the Upper Paleolithic that is missing from the standard archeological and paleoscientific approach to the materials. This is not to say that paleoscientists are unaware that, as Juan Luis Arsuaga said, the development of human or hominid consciousness is “the thorniest problem of human evolution.”25 It does, however, mean that we need to have a comprehensive understanding of what consciousness is. Section three then considers what “politics” might be in the context of Cro-Magnon expansion into Europe and section four discusses what constituted their “religion.”

2. Philosophy of Consciousness

In the first volume of *Order and History* Voegelin listed three principles of interpretation that, he said, would guide his analysis of the “form” of political institutions and experiences of order:

(1) The nature of man is constant
(2) The range of human experience is always present in the fullness of its dimensions
(3) The structure of the range varies from compactness to differentiation (CW, 14:99).

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His philosophy of consciousness engaged all three principles. Depending on
the context, Voegelin emphasized different aspects of this interpretive
approach. Indeed, some of his late formulations used quite different
language compared to the earlier ones.

The first principle, regarding human nature, was summarized in a
critical comment Voegelin directed at Hannah Arendt’s account of the
totalitarian “experiment.” Human nature, Arendt wrote, is “at stake” in the
experience of totalitarian domination even though “it seems that these
experiments succeed not in changing man but only in destroying him.”26

Voegelin wrote:

> When I read this sentence, I could hardly believe my eyes. “Nature” is a philosophical concept; it denotes that which identifies a thing as a thing of this kind and not of another one. A “nature” cannot be changed or transformed; a “change of nature” is a contradiction of terms; tampering with the “nature” of a thing means destroying the thing. To conceive the idea of “changing the nature” of man (or of anything) is a symptom of the intellectual breakdown of Western civilization (CW, 11:21).

In her response, Arendt indicated that what she had in mind by the phrase
“change of nature” was what Voegelin meant by a change in the structure of
the range of human experience.27 In short, human reality or human being is

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27 See Arendt, “A Reply,” Review of Politics 15 (1953), 76-84. See also Voegelin to Dal R. Evans, 18 January, 1974. HI 12/6. “The ‘change’ in the nature of man…is of course real, but a change is precisely
constant. What changes is human consciousness of that reality and the way it is expressed symbolically.

Voegelin’s magisterial opening to the Preface of *Order and History* succinctly expressed the second and third principles: “the order of history emerges from the history of order. Every society is burdened with the task, under its concrete conditions, of creating an order that will endow the fact of its existence with meaning in terms of ends divine and human” (CW, 14:19). By “order” Voegelin meant “not an eternal status of things, but a transition from chaos to cosmos in time. Once created, order requires attention to its precarious existence, or it will relapse into chaos” (CW, 14:348). The acts of “creation” or of “transition” from chaos form an intelligible sequence, a history. The struggle to express the truth regarding the structure of reality needs to be repeated again and again and is continuously undertaken against the background of disorder and chaos. Moreover, by “every society” Voegelin would implicitly include Paleolithic societies.

Second, the equally magisterial opening of the Introduction to the book, titled “The Symbolization of Order,” underlined the precariousness of endowing the fact of social and personal existence with meaning. “God and man, world and society,” he wrote, “form a primordial community of being”

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what is called ‘history’ and the history of the differentiation [of the psyche] is the content of *Order and*
that is a datum of experience “insofar as it is known to man by virtue of his participation in the mystery of its being,” but is not a datum of perception akin to the perception of objects in the world (CW, 14:39). Voegelin then introduced the image of a play with an unknown author and of human being as an actor in the play. Humans are committed to play a part, to take part, to participate simply because they exist. Participation is both unavoidable, because humans do exist, and it is disconcerting because neither the beginning nor the end of the play can be known, nor, indeed, the role of the player or the identity of the playwright.

There may be uncertainty with respect to the play and the role humans are called upon to enact, but not a total ignorance because “man’s participation in being is not blind but is illuminated by consciousness.” In other words, the sentence “human being participates in being or reality” is not a proposition denoting an entity called “human being” that “participates” in “being” the way a human being might or might not participate in a baseball game. Rather, within human being there is something capable of a fundamental act of evocation, literally of calling forth, the experience of itself as participant and of calling this experience “consciousness” and “human being.” But this evocative act “is not itself an act of cognition.”
Why not? Because the experience of participation is one of dependence on a whole that precludes gaining a perspective on the whole in such a way that it can be perceived as an external phenomenon. As a result, both cognitive knowledge of the whole and complete knowledge of the part that experiences the participation, namely the human being, are impossible.

“This situation of ignorance with regard to the decisive core of existence is more than disconcerting: It is profoundly disturbing, for from the depth of this ultimate ignorance wells up the anxiety of existence” (CW, 14:40). And yet, just as uncertainty is not total ignorance, neither does anxiety induce paralysis.

First of all, we do know that we participate in being, even if we don’t know why or whence. At the centre of consciousness is the experience of being in contact with a reality outside oneself. Moreover, we are aware of the “quarternarian structure” of reality – the divine, cosmic, human, and social dimensions or fields of reality. This awareness of participation in reality was fortified, Voegelin said, when he discovered the category of “consubstantiality” used by the Frankforts in their analysis of myth.28 “If man were not consubstantial with the reality that he experiences,” Voegelin wrote, “he could not experience it” (CW, 34:98).
Within that somewhat inchoate awareness of consubstantiality, which Voegelin later called “the primary experience of the cosmos,” one finds, second, “the preoccupation with lasting and passing” of the several partners, which, notwithstanding their consubstantiality, exhibit differing degrees of durability. Individuals perish more quickly than societies; societies more quickly than the world, which in turn may well have been created by the even longer-lasting gods. This hierarchy of durability furnishes additional information about human participation in reality. The more lasting existences “provide by their structure the frame into which the lesser existence must fit” or be extinguished (CW, 14:42). Success in the sense of meaningful existence depends on human beings “attuning” themselves to the more durable realities of society, world, and gods. Anxiety, therefore, is more than fear, which humans share with animals, at least with respect to specific fear-inducing situations. It is not even fear of death because human beings, as other biological creatures, are already bounded by death both as pre-existence and as post-existence. Anxiety amounts to a horror at losing the precarious foothold of meaning that human existence enjoys as a partner in being rather than as a self-created autonomous entity that carries its own origin and meaning within itself. That is, human beings are, to be sure, living

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28 Henri Frankfort et al., Before Philosophy: The Intellectual Adventure of Ancient Man (Baltimore:
beings, but living beings who raise questions about the questionable status of being human.

A third feature of the process of participation in reality is “the creation of symbols that interpret the unknown by analogy with the really, or supposedly, known.” Gradually what is essentially unknowable can be distinguished or, to use a term Voegelin borrowed from biology, “differentiated” from what is knowable. Accordingly, “the history of symbolization is a progression from compact to differentiated experiences and symbols” (CW, 14:43). Two basic forms of symbolization express the meaning of society either as a microcosmos or as a macroanthropos. The first is also historically the earliest “for earth and heaven are so impressively the embracing order” into which human existence must fit itself in order to survive. Thus the cosmos and its order suggests obviously enough the model of all order, including that of human and social existence. Accordingly, “vegetative rhythms and celestial revolutions function as models for the structural and procedural order of society” (CW, 14:43-4).

The second form, society as macroanthropos, tends to emerge when cosmological societies, particularly empires, disintegrate, which undermines trust in the cosmic order. On such occasions symbolization shifts towards

Pelican, 1949), 71-8. They adopted the term from the French philosopher and anthropologist Lucien Lévy-
the origin or the “ground” of the visible world, which is somehow sensed to be more lasting, durable, stable, and ordered, than the visible existing world and its order. The “site” of this experience is the consciousness of a human being who experiences the shift away from the world toward a reality usually symbolized as divine, an “unseen god,” or to use Voegelin’s preferred term, which was commonly used among German philosophers of the early twentieth century (Voegelin likely borrowed it from Scheler) the ground of being. This term, obviously, refers not to “a spatially distant thing but to a divine presence that becomes manifest in the experience of unrest and the desire to know” (CW, 12:271).

A fourth typical feature is an awareness of the analogical character of symbolization and of symbols, along with an awareness that the order of being can be symbolized in several different ways. This “tolerance” ends when the insight is achieved that “no symbolization through analogues of existential order in the world” is adequate to the ground of being or the divine partner on whom the community of being depends (CW, 14:47). Typically the shift is from competition between stronger and weaker gods to an opposition between true and false ones. When such a shift occur, the very order of existence is altered. The symbols based on cosmic analogues, which

Bruhl, who also coined the term participation mystique.
used to be experienced as adequate, are suddenly experienced as “unseemly” as Xenophanes put it (D-K, B16; CW, 15:240ff). Plato likewise spoke in this context of a periagoge, a turning-around or conversion, in his image of the cave near the middle of the Republic (Rep., 518d; CW, 16:169-70). The conversion (and Plato’s was not the only one) is more than an insight into the structure of reality or knowledge of the order of being. “It is a change in the order itself” – because the structure is changed insofar as someone’s consciousness has become aware that its partnership with the divine ground of being has broken with the prior consubstantiality and relegated the mundane participation in the being of the world to a decidedly secondary rank. “The more perfect attunement to being through conversion,” Voegelin said, “is not an increase on the same scale but a qualitative leap.” Moreover, it is experienced not as a consequence of human activity but as a passion, “a response to a revelation of divine being” (CW, 14:48).

Voegelin occasionally referred to this experience as a “leap in being,” which we may provisionally describe as an “epoch-making” break. To the “seemliness” of the new symbols is added the fact that “the leap upward in being is not a leap out of existence” (CW, 14:49). The experience of a historically new partnership with the divine ground of being does not,
because it cannot, abolish the reality of mundane existence, including the
cosmos and society. Accordingly, new conflicts and tensions arise between
the newly experienced and symbolized relation of human being to the
ground of being, and the surrounding context of society and the cosmos.

We have followed Voegelin’s analysis to the point where the
experience of consubstantiality of reality and consciousness is nearing the
breaking point. To be more precise, the term “leap in being” refers to the
experience of divine being as world-transcendent or beyond the being of
society and the cosmos, which in turn acquires the character of
“immanence.” In some of his later essays Voegelin referred to “nonexistent
reality,” by which he meant reality the mode of being of which was not to
have come to be or to have been generated. In that context Voegelin wrote
that “symbols are not concepts referring to objects existing in time and space
but carriers of a truth about nonexistent reality.” This emphatically does not
mean that the symbols are nonexistent. On the contrary, “the symbols exist
in the world, but their truth belongs to the nonexistent experience which by
their means articulates itself” (CW, 12:52-3). The danger of such a
differentiation of immanent and transcendent, or of existent and nonexistent,
reality is that the experience of consubstantiality will simply be lost. To

29 Gregor Sebba, “Prelude and Variations on the Theme of Eric Voegelin,” in Ellis Sandoz, ed., Eric
guard against such an outcome Voegelin spoke of the “tension toward” the ground of being, as distinct from dwelling “in” or “on” it, or even less of “possessing” it.\textsuperscript{30}

Voegelin did not simply expound a systematic philosophy of consciousness but developed it in part by way of textual analysis and in part by way of meditative exegesis. For example, in the \textit{Theatetus} Plato said that philosophy begins in wonder, \textit{thaumazein} (\textit{Theat.}, 155d). In the opening words of the \textit{Metaphysics} Aristotle said that “all human beings” and not just philosophers “desire to know,” where “all human beings” did not imply a head-count but that the philosopher’s response in the \textit{Theatetus} had become representative of the humanity of all human beings. Moreover, Aristotle also pointed out that “the \textit{philomythos} is in a sense a \textit{philosophos}” (\textit{Meta.}, 982b18). Voegelin added by way of commentary: “the philosophers have created a coherent body of language symbols by which they signify the stations of their analysis” (\textit{CW}, 12:269). Voegelin called this class of philosophical experience “noetic.” According to him, “Aristotle clearly grasps the difference of the degree of truth between the primary experience

of a cosmos full of gods and the noetic experience for which the divine is the
ground of the cosmos and man” (CW, 6:356).

However strongly the “epoch-making” experience is felt, the contrast
between the noetic conception of being and the mythical presentation of
reality does not mean that reality has changed but that its structure is more
clearly discerned by the philosopher as compared to the philomyther.
Granted that there is a difference between noetic and mythic symbolization,
it is not one of “reality” versus “image” because the images, of whatever
kind, also express the experiences of participation. “These images are not
more or less correct representations of a reality existing as datum that is
independent of the experience of participation; they are, in fact, more or less
adequate expressions of these experiences” (CW, 6:363).

Voegelin illustrated what might be called the coexistence of
symbolisms with an unusual example. In the first volume of Order and
History he argued that the Israelite “leap in being” took the form of the
historical existence of a people under God or chosen by God; in contrast, in
Hellas, it took the form of personal existence under God. Moreover, as in the
Israelite symbolization, where the conquest of Canaan was called by
Voegelin a “mortgage,” in the sense of a symbolic burden, so in the Hellenic
symbolization philosophy carried the burden or mortgage of the polis. That
is, notwithstanding the universality of the truth of God’s revelation to humanity, the occasion of that revelation was interpreted in terms of a specific concrete event, namely the chosenness of God’s people, the Israelites. When the accent was shifted to the people chosen and away from the divine chooser, the transparency of God’s revelation was burdened, in this instance, by the ethnic and religious articulation of Judaism. Likewise in Hellas, the philosophers remained citizens, \textit{polites}, and Hellenic philosophy became to a considerable degree the articulation of “true political order” within, and in opposition to, the actual political order of the polis. This is most obvious in Socrates’ statement in the \textit{Gorgias} that he is the only statesman in Athens or in the evocation of a philosopher-king in the \textit{Republic}.

Notwithstanding the “mortgage” of the polis, it was clear to Voegelin that philosophy was more than an intellectual exercise practiced with success by a number of clever Greeks: “it was a symbolic form that expressed definite experiences of order in opposition to the polis” (CW, 15:238). That is, the personal order of the individual psyche, in its orientation towards the cosmic-transcendent ground of being, relied not on political or sacerdotal institutions, but on the autonomous individuals who were aware of themselves as representatives of humanity. Philosophy in
Voegelin’s understanding “as a symbolic form is distinguished from myth and history by its reflective self-consciousness” (CW, 15:239). The coexistence of Aristotle’s philosophos and philomythos, no less than his confession late in life that he had become increasingly fond of myths,31 illustrated the coexistence of mythic and noetic symbolizations within the Hellenic order.

Voegelin provided a second example, this time from the Bible. In Romans 7-8 St. Paul differentiated the spirit from the letter of the law and existence in faith from existence in obedience to the letter. He was, said Voegelin, oblivious to the persistence of Judaism because he did not “take into account the problems of compactness and differentiation.” Thus for people who lived in the unbroken Jewish tradition the problems of faith in Christ, the “new law” and so on, did not exist. “The chosenness of Israel does not rest on the observation of the law [by the Jews], but on the act of divine grace, which Saint Paul apparently did not perceive” (CW, 15:78). These “sons of God,” the Jews, had no need for the Son of God for their salvation. Judaism had its own theology expressed in more compact or particular symbols than the more differentiated or universal symbols of

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Christianity. “Nevertheless, every order has its own present under God, as we formulated the principle; and this present is not abolished when it becomes a past in retrospect from a differentiated experience of order” (CW, 15:79). The coexistence of compact and differentiated experiences and symbolizations of order, in short, is part of the mystery of human being in history and cannot be dissolved by postulating a progression from primitive backwardness to sophisticated modernity. Again we would draw attention to the inclusiveness of Voegelin’s argument: “every order has its own present under God” includes the Paleolithic as well as the Hellenic or the Israelite.

This section is called “philosophy of consciousness.” The foregoing remarks should be understood as a preliminary effort at delimiting the subject-matter. What remains to be done is, to present Voegelin’s systematic argument regarding the structure of consciousness and then, to draw a few preliminary conclusions that bear on the analysis of Upper Paleolithic symbols and experience.

We noted above that Anamnesis contained the initial formulation of Voegelin’s philosophy of consciousness. In the Foreword to this volume
Voegelin remarked that he became aware that the defective state of political science could be remedied only by a new philosophy of consciousness “in the 1920s.” Such a new theory could not be “generically valid propositions concerning a pre-given structure” because consciousness is not “given.” Rather it is “an experience of participation in the ground of being” the logos of which can be brought into focus or clarity only by a meditative process (CW, 6:33).

Consciousness, Voegelin said, is a “luminous” center not an “intentional” one, as for example Husserl argued. (We consider the significance of luminosity and intentionality below.) Political philosophy must accordingly deal with the empirical, that is, literally the experiential, centre that illuminates the area of reality we call human being. As was noted above, the centre of political philosophy, namely philosophy of consciousness, entails both a textual exegesis of specific documents, which are understood to be examples of historical evocations of order, and a meditative exegesis of the consciousness that makes them intelligible. In this way philosophy of consciousness illuminates specific empirical studies, and in turn the analysis of specific examples of political order illustrates how a philosophy of consciousness actually develops empirically. Voegelin chose with care the empirical studies he included in this collection – from Aristotle
to the Renaissance historiographers, Mongol constitutional documents, the revolutionary aspirations of Bakunin, John Stuart Mill’s assumptions underlying his defence of free speech, and so on. He then used this analysis of the several “complexes” of problems they brought to light to illustrate the structure of consciousness and of political reality.

He chose the title, *Anamnesis*, with care as well to suggest the necessity of beginning a philosophy of order by remembering what needed to be recollected and not fall into oblivion. “The knowledge of man concerning his tension to the divine ground of being remains the center of consciousness; what is remembered is the origins, the beginnings, and the grounds of order in the present existence of man” (CW, 6:34-8). And when that recollection is articulate it must find expression in the existing language of the world and in the several empirical examples he analyzed.

Furthermore, consciousness is not “a free-floating something but always a concrete consciousness of concrete persons” (CW, 6:398). That observation obviously also applied to Voegelin. This is why he included in the book as well the “anamneses” or “anamnetic experiments” recollected and recorded during the fall of 1943. As he put it later, “An analysis of consciousness…has no instrument other than the concrete consciousness of the analyst” (CW, 12:305). Based on his own experience therefore, Voegelin
rejected Husserl’s “magnificent work” because, although it clarified “the intentionality of consciousness” it did nothing to clarify the significance of a pre-thetic, ante-predicative, pre-intentional reality within which human beings along with their consciousnesses occur. Voegelin called this field “reality-consciousness” and described it with the adjective “luminous” rather than “intentional.” “In brief, Man’s conscious existence is an event within reality, and man’s consciousness is quite conscious of being constituted by the reality of which it is conscious” and thus of not constituting reality in perception as Husserl had argued. Husserl’s intentionality “is a substructure within the comprehensive consciousness of a reality that becomes luminous for its truth in the consciousness of man” (CW, 12:311-2). Human beings, to use the language introduced above, participate in reality and are aware of their participation, though imperfectly. As humans undertake to clarify their participation they are also aware of what Voegelin here called a “luminosity,” not of consciousness but of the reality of which consciousness is aware as “truth.”

Even though the experienced reality of participation is non-intentional, it may be necessary, if we are to analyze the process at all, to use language connected to the intentionality of consciousness. Accordingly, Voegelin concluded, it is more accurate to call these terms – consciousness
of the ground, openness, participation, etc. – “linguistic indices of the meditative movement” (CW, 6:374). This insight carried with it a modification of the position developed in the early volumes of Order and History regarding the differentiation of immanence and transcendence.

“Neither an immanent world nor a transcendent being ‘exists’ as an entity,” he wrote. “Instead, the terms immanent and transcendent are indices that we assign to realms of reality of the primary experience, as noetic experience disassociates the cosmos into existing things and their divine ground of being.” And “man” or “human being” is another of these indices (CW, 6:374).

To the extent that, notwithstanding the experience of participation, philosophical consciousness is also aware of itself as a quest for the ground of reality, it is thereby aware of its own intentionality along with the surrounding reality of which it is a part and within which the quest takes place. “The mystery is the horizon that draws us to advance toward it but withdraws as we advance; it can give direction to the quest of truth but it cannot be reached; and beyond the horizon can fascinate as the ‘extreme’ of truth but it cannot be possessed as truth face to face within this life” (CW, 12:326). The conclusion Voegelin drew was that both intentionality, within the experience of participation in reality, and mystery are constituent
elements or “structures” in the “process of reality becoming luminous” (CW, 12:326).

Before considering directly what Voegelin meant by “luminous” let us take note of a couple of implications. The first and most obvious has already been indirectly indicated. “Neither must the desire to know reality as the intended object of consciousness degenerate to an intentionalist desire to know the mystery of the horizon and its beyond as if it were an object this side of the horizon; nor must the consciousness of the omnipresent mystery thwart the desire to know by assuming objects this side of the horizon to belong to the sphere of mystery” (CW, 12:327). This “structured” quest for truth Voegelin called the balance of consciousness. A second is that a “balanced” quest for truth takes the form of a meditation concerned with an exploration of “the structures of existential consciousness” that is, of consciousness concerned with the grounds of its own existence for which concern there exists no Archimedean point where an intentionalist perceptual consciousness can proceed about its business unconcerned with the mystery of being within which it operates (CW, 6:371).

“The positive starting point for describing the structure of consciousness is to be found in the phenomenon of attention and the focussing of attention” (CW, 6:68). Specifically, concentration of
consciousness reveals that human consciousness does not occur in isolation but as part of an experience based on “animal, vegetative, and inorganic being.” This structure is the “ontic premise” for the human ability “to transcend himself toward the world, for in none of its directions of transcending does consciousness find a level of being that is not also one on which it itself is based. Speaking ontologically, consciousness finds in the order of being of the world no level that it does not also experience as its own foundation” (CW, 12:75).

Humans do not know what this base or foundational experience “really” is because we experience the “levels” of being – physical, vegetative, and animal – as already differentiated. “Even though each level of being is clearly distinguishable with its own structure, there must be something common that makes their continuum in human existence possible” so there can be no doubt that the base-experience of reality, which, to repeat, Voegelin later called the primary experience of the cosmos, is real (CW, 12:76). Moreover, our internal experience of aging indicates that the process of reality is dynamic rather than static. And we can “date” the various phases of this process even though the connection between the present act of dating and the phase so dated may not be entirely clear. And lastly, we are related to the world beyond consciousness and, indeed, to the
beyond of the world. All of this assumes a “substantive identity among the levels of being” that is given comprehensible expression “by interpreting it through the category of process, as a series of phases in the unfolding of the self-identical substance that attains its illumination phase in human consciousness” (CW, 12:77). This last formulation is a more complex account of what was earlier described as “consubstantiality.” Meditation allows the ground of being to reveal itself, which then enables the world-immanent process of consciousness to be grounded as a process within the ground of being by way of images and myths that make the two poles mutually intelligible.

We are now in a position to discuss Voegelin’s image of luminosity directly. To begin with, as we have noted several times, it is not the intentional consciousness experienced in terms of the perception of the things of the world, or of phenomena. In its simplest sense, to say that consciousness is “illuminated” means it is “experienceable from within” (CW, 6:78). Several implications follow. First, from within this experience of consciousness, noetic exegesis is, in a sense, privileged because of its clarity. It “brings the logos of participation into the luminosity of consciousness by interpreting the noetic experience of participation. Therefore noetic knowledge…is a concrete knowledge of participation in
which man’s desire for knowledge is experienced as a being-moved-toward-the-ground by the ground” (CW, 6:381). As we noted above, noesis brings knowledge to consciousness even when it is nothing more than the desire for knowledge and thus is also an awareness of ignorance. This desire-and-awareness engenders the symbols that express the truth regarding the divine ground, humanity, and the world as well as their mutual relationships. Such symbols, in turn, render intelligible “the logos of consciousness” (CW, 6:381).

One could summarize conceptually the “logos of consciousness” as an awareness of ignorance and “unrest” or “questioning unrest” that becomes self-conscious, self-aware, or “luminous to itself as a movement in the [human] psyche toward the ground that is present in the [human] psyche as its mover” (CW, 12:271). That is, human questioning consciousness is aware of itself as movement. As with a “state of ignorance” that is not entirely ignorant, neither is human consciousness entirely self-conscious.

Accordingly, this awareness of participation transforms the consciousness of the knower and the known – namely the divine ground of being – “into the position of tensional poles in a consciousness that we call luminous as far as it engenders the symbols which express the experience of its own structure” (CW, 12:121). And finally, this process of self-reflection by which
consciousness becomes aware of itself as experienced from within or as “luminous” is not “a flight of imagination…. The effort of self-reflection is real” and is intelligibly related to less reflective experiences or less differentiated symbolizations. These relations can be made intelligible through meditative noetic exegesis (CW, 12:121).

Noetic exegesis may be privileged, owing to its clarity, but is hardly unique. On the contrary: “To gain the understanding of his own humanity, and to order his life in the light of insight gained, has been the concern of man in history as far back as the written records go” (CW, 12:116). In fact, as we argue in detail below, human beings have been in search of their own humanity long before there were written records. One could, in this context speak of a “human universality” namely the “desiring and searching participation in the ground.” Such universality, in turn, implies “the equivalence of the symbols in which the consciousness of the ground expresses itself. By equivalence I mean here that all experiences of the ground are in like manner experiences of participation, even though they may differ considerably on the truth scales of compactness and differentiation, of finding and missing the ground” (CW, 6:357). From the equivalence of symbols and experience there ensues “the loving return to the symbols of the past, since they express phases of the very same
consciousness in the presence of which the thinker finds himself” (CW, 6:357). Without attempting to belabour the obvious, the “symbols of the past” are not just expressed in literary texts.

Considered from the side of these “symbols of the past,” one is led from a concern with “equivalent” cults, initiation ceremonies, and so on to consider not the obvious differences in symbolization but the similarity in the experiences that engendered them and so to the conclusion that “what is permanent in the history of mankind is not the symbols, but man himself in search of his humanity and its order” (CW, 12:115). This field of experiences and symbols, which constitutes “the time dimension of existence,” does not present the same appearance to everyone. What is seen or missed, understood or not understood, will depend, as noted above, on the concrete consciousness of the analyst and its openness toward reality meditatively apprehended in participation.

Two conclusions can be drawn from this abbreviated analysis of Voegelin’s philosophy of consciousness. The first is that there is no absolute beginning for a philosophy of consciousness because every specific example of philosophizing presupposes the existence of consciousness as well as the existence of a concrete, living philosopher. Thus, no human, reflecting on consciousness, can make of it an object. Rather it is an “orientation” within
consciousness that “takes” time in the biography of the philosopher to achieve, but also takes the time of his existence in a specific community in the world. All these elements – personal, historical, political – are part of the context of philosophical reflection (CW, 6:81).

A second conclusion is implied in the first: “the truth of reality is always fully present” in human experience and in that sense is a “constant” (CW, 12:195; 6:363). What changes is the degree of differentiation of consciousness of reality and its symbolization. There is certainly no reason in principle why this insight cannot be applied to the earliest examples of human symbolizing. Accordingly, it is an interpretive error of the first magnitude to deprecate the cosmological cultures as “the domain of primitive ‘idolatry,’ ‘polytheism,’ or ‘paganism’.” On the contrary they are “highly sophisticated fields of mythical imagination, quite capable of finding the proper symbols for the concrete or typical case of divine presence in a cosmos in which divine reality is omnipresent” (CW, 12:195-6). In short, the internal logic of Voegelin’s philosophy of consciousness indicates that it can be applied to all symbolism, including that expressed in preliterate ways.

The archaeological and paleoscientific analyses of very early human symbolization usually treat this capability as evidence of the presence and the activity of behaviourally modern human beings. As we will argue in the
following two sections, matters are more complex than that. At the same
time, however, I must note that, having read a considerable number of
studies by archaeologists and paleoanthropologists, and notwithstanding
their occasionally ascerbic disagreements, one certainly can sense that they
are as committed to a search for truth as Plato or Aristotle.

3. “Politics”

Within the often ambiguous context supplied chiefly by archeology and
associated paleosciences, we propose to ask some historical and, indeed,
political questions. Such questions are more obvious when we consider
Neolithic peoples chiefly because they left behind large monuments such as
Stonehenge that required for construction the coordination and organization
of large numbers of human beings, which is prima facie evidence for politics
of some kind. Such questions also arise among Paleolithic peoples when we
reflect on the archeological information that the early cave art at Chauvet
dates from 32KYBP and that traces of later visits can be dated at 23KYBP.32
Even if the site was not in use for this entire period, some nine thousand
years, it was nevertheless preserved for long periods of time before it was

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32 Jean-Marie Chauvet, et. al., Chauvet Cave: The Discovery of the World’s Oldest Paintings (London:
Thames and Hudson, 2001), 121ff.
finally abandoned. Access, in short, was regulated, which means there had to be regulators.

In the first section of this paper, we distinguished chronologically the Mousterian or Middle Paleolithic and the Aurignacian or Upper Paleolithic. These terms refer to lithic cultures, which in turn are conventionally associated with Neanderthal and Cro-Magnon hominids. Realities are more complex than these neat conceptual identifiers. There is no doubt that Mousterian culture was succeeded by Aurignacian and Neanderthals by Cro-Magnons. But how? We begin with an even more preliminary question: who were the Neanderthals? As the editor of a recent symposium noted, the “Neandertal question” has likely produced more research and debate than any other in paleoanthropology.33 The remarks that follow can hardly do justice to the problem, let alone the debate, among specialists. The selection of questions for analysis, however, is guided not by archaeological interpretation of archaeological discovery (though such matters can hardly be ignored) but by the concerns of political philosophy and Voegelinian philosophy of participatory consciousness.

The evolutionary case for separate Neanderthal and Ancestor or H. sapiens lineages, as noted in the first section, rests on the observation that
European fossils show Neanderthal specializations between 600 and 200KYBP that are absent from African fossils of the same dates. After so many years, Neanderthals and H. sapiens looked quite different and, as Ian Tattersall put it:

if morphology means anything at all in our assessment of fossils (and if it doesn’t what are we left with?). The Neanderthals were an evolutionary entity entirely separate from us. And they thus need to be understood on their own terms, not ours, and to be accorded their own separate identity.

For most of the time after the split between the two kinds of humans – perhaps 300K years – Neanderthals lived in Eurasia “untroubled by competition from other hominids.” Considering that fully modern H. sapiens, starting with Cro-Magnons, have been present for about a tenth of that time, the Neanderthals were clearly a “highly successful” biological organism. By around 130KYBP “classic Neanderthals” had colonized Europe and Ancestors were at home in Africa.

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36 Tattersall and Schwartz, Extinct Humans, 204.
38 Klein, Human Career, 242-3.
In fact, matters were never quite so simple. Or rather, contemporary archaeological and paleoanthropological accounts indicate a more complex story. Consider again the Tattersall quote above. He spoke of morphology, of Neanderthals as an “evolutionary entity entirely separate” from “us” and so endowed with “their own separate identity.” Likewise, and in keeping with Tattersall’s ambiguous language, I spoke of “two kinds of humans.” Tattersall did not use the term “species,” for good reason, as we shall see.

In the Introduction I provided a typical “laundry list” of traits that were said to distinguish the Upper Paleolithic from Mousterian culture. Today the traditional association noted above of Cro-Magnons with the Upper Paleolithic and Neanderthals with the Middle Paleolithic industries has been replaced. There are at least three reasons for this change. First, two morphologically distinct hominids, *Homo sapiens* and Neanderthals, used the same Mousterian technology at the same time and in the same place, the Levant. These Levantine Neanderthals, that is, used the same weapons in the same way to hunt the same size game as *H. sapiens*. Moreover, the Neanderthals apparently arrived in the area at least 30KY after the modern humans. However, behavioural differences using the same technology are still possible – specifically, the Levantine modern humans likely used a “circulating residential mobility strategy” whereas the Neanderthals used a
“locally intensive radiating mobility pattern.” The former way of foraging involved seasonal movements from one temporary camp to another; the latter involved a more permanent base camp and less permanent camps positioned near important resources. Why they practiced different strategies using the same tools was less clear, though it likely was a reflection of the higher caloric demands of Neanderthals leading to their more efficient use of space.

There are apparently additional complications as well. Granted that ca. 100KY ago H. sapiens dispersed out of Africa through Egypt into the Levant where, off and on, they coexisted with Neanderthals until around 40KY ago, it does not seem to be clear whether the Africans remained in the area permanently or whether their coexistence with their Neanderthal genetic cousins was intermittent. Nor is it clear whether this coexistence, which may have continued for 60KY, was friendly or hostile. One thing is clear: the Neanderthals could hold their own under climatically difficult circumstances against H. sapiens who at the time were equipped with the same level of technology.40

The first reason why it is no longer acceptable to identify Neanderthals with the Mousterian and \textit{Homo sapiens} with the more advanced Upper Paleolithic, then, is that in the Levant Neanderthals and \textit{H. sapiens} both used the same Mousterian technology; the second is that at a later date they also used the same Upper Paleolithic technology or, to be more specific, a sub-category, the Châtelperronian. Here, however, we encounter one of the many controversies that make up the “Neanderthal question.” There is widespread agreement that Neanderthal occupation at two sites, Grotte du Renne and St.-Césaire, is associated with (early) Upper Paleolithic artifacts.\footnote{Shara E. Bailey, \textit{et al.}, “Who Made the Aurignacian and Other Early Upper Paleolithic Industries?” \textit{Journal of Human Evolution}, 57 (2009), 11-26.} Beyond that, matters are very much in dispute.

Some have argued that the presence of Upper Paleolithic tools in a Neanderthal site simply showed they could copy the sophisticated Cro-Magnons. Others deny that the Neanderthals could be “acculturated” to Cro-Magnon ways and argue that the presence of Upper Paleolithic artifacts resulted from “taphonomic mixing when ‘newcomers’ settle down on top of the garbage left by previous inhabitants.”\footnote{Ofer Bar-Yosef, Jean-Guillaume Bordes, “Who were the Makers of Châtelperronian Culture?” \textit{Journal of Human Evolution}, 59 (2010), 589.} Others, many of whom are of a younger generation of archaeologists, argue that Neanderthals were genuine
innovators and that the Châtelperronian assemblages are proof of it.\textsuperscript{43} We will consider the implications of this argument below.

A third reason to reject the association of Neanderthals and H. sapiens with distinct technologies is because the lithic evidence, which is the basis for distinguishing cultures, is itself suspect. In 2002, G. A. Clark published an analysis of what he called the “metaphysical paradigms” of European and American paleolithic archaeological research. The Europeans, he said, “tend to treat prehistory as a kind of history, projected back into the preliterate past” whereas “from the perspective of US anthropological archaeology, there are major problems with the contention that prehistory is an extension of history.”\textsuperscript{44} Regarding the “replacement” of Neanderthals by Cro-Magnons, which is also sometimes called the Middle-Upper-Paleolithic “transition,” and identifying the hominids involved with Mousterian and Aurignacian lithic cultures assumes that stone tools “represent the remains of quasi-historical, stylistic microtraditions, transmitted from one generation to the next through the medium of culture.” The problem is that roughly similar stone tools are very widely distributed over an enormous period of time for which there would, presumably, have to be a corresponding socio-


cultural unit of similar extent and duration. But there is not. “The whole
approach,” he said,

is predicated on (1) the existence of toolmaking “traditions” manifest in artifact form that are detectable over hundreds of thousands (even millions) of square kilometers, (2) the idea that such “traditions” (ways of making stone tools transmitted in a social context from one generation to the next) persisted unchanged and intact over tens (or, in the case of the Lower Paleolithic, hundreds) of millennia, and (3) the conviction that they are detectable at points in space (e.g., Europe, the Levant) separated by thousand of kilometers.45

Such an argument may be coherent but it is contradicted by the evidence that varieties of tool types are ubiquitous and carry very little temporal or social information because the few ways of chipping stone lead to a convergence of geographically widespread artifacts. That is, the time and space distribution of analytically defined artifacts exceed by orders of magnitude any conceivable time and space distribution of any possible social entity that might have produced them and created a tradition to ensure uniformity. “Thus something other than historical connectivity must account for patterned similarities.”46 What does account for patterned similarities, Clark argued, is not the “replacement” of one lithic technology by another but a gradual and irregular or “mosaic” change that is uncorrelated with any “replacement” of one hominid by another. “In other words, it is beginning to

look like the Middle – Upper Paleolithic transition was a monumental ‘nonevent’ both biologically and culturally.”\textsuperscript{47} We will consider below the details of the “replacement” theory. What seems to be agreed upon today is that it is no longer possible to equate Neanderthals with Mousterian artifacts and Cro-Magnon with Aurignacian and later industries.\textsuperscript{48}

Considered by themselves rather than in the context of a transition to Cro-Magnon culture, the chief characteristic of Neanderthal society, just about everyone who has considered the question agrees, is its “stability.” Because the collections of artifacts and assemblages from Neanderthal sites were homogeneous, at least as compared to the much more variable assemblages from Cro-Magnon sites, one can infer that the culture that continued to produce the same material remains for millennia was highly stable.\textsuperscript{49} “Stability” in the context of evolution, which is to say, in the context of adaptation to alterations in the physical, biological, social, or cultural environment, is not necessarily a blessing when things change.

Regarding the other attributes of Neanderthal society, there also appears to be widespread agreement on several points. Given that the earliest

\textsuperscript{46} Clark, “Neandertal Archaeology,” 63.
\textsuperscript{47} Clark, “Neandertal Archaeology,” 64.
\textsuperscript{49} Klein and Edgar, The Dawn of Human Culture, 190; Fagan, Cro-Magnon, 42, 80; Finlayson, The Humans Who Went Extinct, 152, 219.
domestication of fire, by *H. erectus*, has been dated in the Levant at 790KYBP,\(^{50}\) and in Europe ca. 400KY ago,\(^{51}\) it is not surprising that Neanderthals could as they wished make fires for protection, warmth, and cooking.\(^{52}\) Without being cooked, meat is difficult to digest,\(^{53}\) and meat-eating Neanderthals were hunters of fresh as well as scavengers of “aged” or “naturally cooked,” which is to say, sometimes rotten meat.\(^{54}\) Hunting, moreover, is a cooperative enterprise; most Neanderthal hunts were ambushes of herding animals in open landscapes, which meant they were able to communicate with some accuracy.\(^{55}\) There is even evidence of mass killing; much as North American Indians would stampede bison over cliffs or “buffalo jumps,” Neanderthals could stampede mammoths and rhinoceroses as well as bison.\(^{56}\) They were not, however, as accomplished


“endurance runners” as modern humans and so were less likely to run ungulates, for example, to a standstill before dispatching them.\textsuperscript{57} As a consequence they would have been subjected to greater risk of injury either from prey that was not immobilized or had been immobilized by less effective technique, such as running them into a swamp or a trap.\textsuperscript{58}

Neanderthals also buried their dead, which is one reason for the relative abundance of surviving fossils. And here we encounter another major controversy. After reinterpreting early twentieth-century archaeological reports of Neanderthal burials (though not reexamining the sites) Robert Gargett concluded that “it is evident that processes other than purposeful human behavior may have produced the deposits in question.”\textsuperscript{59} As is the admirable custom of Current Anthropology, Gargett’s paper was circulated to other specialists including such prominent individuals as Clive Gamble, Arlette Leroi-Gourhan, and Erik Trinkaus. His conclusions were largely rejected by these senior archaeologists, sometimes in quite plain
language. Tattersall and Schwartz made the commonsensical observation that perhaps the Neanderthal corpses were buried only for hygenic reasons or to remove them from the attention of animal scavengers. Neanderthals also apparently were cannibals, though it is not clear whether those eaten were dietary sources or participants in a ritual. We will see, particularly when the question of Neanderthal symbolization is considered, that this controversy returns undiminished.

One of the great controversies regarding Neanderthals and Homo sapiens concerns their means of communication, specifically whether Neanderthals had a language. If they did, what was it like compared to that of H. sapiens? If not, how did they communicate? Whatever the neurological requirements for language, Philip Lieberman and his colleagues have long argued that the Neanderthal supralaryngeal vocal tract (SVT), the airway above the vocal cords, was too short for them to produce “quantal vowels” (i, u, and a) so that their speech range was less than that of H. sapiens. Arsuaga argued that Neanderthal speech would have been “nasalized” because they had no way to prevent air from entering the nasal cavity and

60 In addition to the remarks appended to Gargett’s original article, the “et al.” of the citation above, see also the comments in the following issue: L.P. Louwekooijmans et al., “On the Evidence for Neanderthal Burial,” Current Anthropology 30:3 (June, 1989), 322-30.
61 Tattersall and Schwartz, Extinct Humans, 213.
exiting the nostrils. Nasalized sounds are apparently harder to distinguish than non-nasalized sounds. Or at least they are for us. Who knows if Neanderthals found it as difficult to distinguish such sounds as we do? At the same time, some kind of language must have been present in archaic hominids otherwise there would have been no Darwinian advantage to select for a species-specific longer supralaryngeal vocal tract because a shorter SVT makes it more difficult to choke. The reason is that if the larynx is high enough in the neck the epiglottis seals with the soft palate to permit air to pass from the nose to the lungs sealed off from the pharynx, the tube used to swallow food and drink en route to the esophagus. A high larynx means one can swallow and breathe simultaneously. Human babies are born with a high larynx, which is why they seldom choke. But, at around two years of age, the larynx descends and is no longer isolated from the pharynx, which means food or drink can enter the larynx and clog the breathing tube, possibly causing death by asphyxiation. The danger of choking to death or increased morbidity can be balanced on Darwinian grounds only if it confers a strong selective counteradvantage – such as the production of quantal vowels.

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63 The Neanderthal Necklace, 267.
Other research on and analysis of Neanderthal necks has argued that Lieberman and his colleagues (and others) were likely wrong. “We can now consider it a fact, and not a hypothesis,” wrote d’Errico et al., “that the Neandertal larynx was situated low in the throat.” Accordingly, “the bony anatomy of the Neandertals did not prevent them from producing phonemes for articulate speech.”

Central to this re-evaluation of the physical capability of the Neanderthals was the discovery, in the late 1980s, of a Middle Paleolithic (ca. 60KYBP) hyoid bone. The physical ability to produce phonemes does not mean that they could articulate them or order them into speech. There is, however, DNA evidence that both kinds of humans had the gene FOXP2, which is associated with the development of speech. All of these factors, as d’Errico et al. said, make it “difficult to argue that Neandertal language was less complex or less sophisticated than modern language, even if reconstruction of their vocal apparatus and

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auditory systems permit the identification of features that demonstrate a functional inability to produce some of the sounds that AMH can produce.”

One of the more interesting recent discussions of Neanderthal communication, Steven Mithen’s *The Singing Neanderthals*, to which reference has already been made, is, as one might anticipate, an imaginative and controversial argument. His basic assumption is that both language and music are “embedded” in the evolution of human being. The chief attribute of language, he said, is that it is an efficient way to transfer information much as music is an effective way of expressing and inducing (or transferring) emotion. Considered from the perspective of biology (and animals have emotions, as any dog owner knows) emotions are not simply internal, private and personal experiences: “they are critical to human thought and behaviour.” There is, furthermore, no evidence that language and music are derived from one another, though they can be dissociated as happens with various brain pathologies. Mithen’s hypothesis, which he freely admits is to some extent speculative, is that all large-brained hominids

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70 Mithen, *The Singing Neanderthals*, vii. As do so many evolutionary biologists and anthropologists, Mithen commits the “Fallacy of the Unasked Question” discussed above. He did so, moreover, on the grounds of a gratuitous declaration that he was an atheist (p.18). He could be a Buddhist or a gypsy for that matter and it would make no difference to his argument.
experienced complex emotions. In particular, because Neanderthals lived in larger communities than do non-human primates today, cooperation was necessary and this required communication of complex emotions. Even some non-human primates – geladas and gibbons, for example – have musical communication repertoires “in the sense that they make substantial use of rhythm and melody, and involve synchronization and turn-taking.”

Among primates one of the important means of creating and maintaining social bonds and hierarchy is grooming. But physical contact is possible only for comparatively small groups; larger groups, Mithen argued, must rely on vocalization to maintain social order. The most effective vocalizations, he said, would be “holistic” in the sense of being expressions of complete messages rather than words that could be combined and such holistic vocalizations are achieved by singing. Moreover, singing is rhythmic, which was made possible by bipedalism, unlike knuckle-dragging, which is not rhythmic. Free hands can keep time and in a group context communicate intentions, emotions, and information. Instead of language, Mithen argued Neanderthals used a vocalization that was Holistic, Manipulative, Multi-Modal, Musical, and Mimetic, which he cleverly called

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72 Mithen, The Singing Neanderthals, 180; 121.
Such vocalizations, he argued, would be sufficient to maintain bands of more than thirty members. One should add that although the earliest instruments – bone and ivory flutes – date from ca. 35KY ago, they are also evidence of “a well established musical tradition” already in place when Cro-Magnons arrived. As d’Errico et al. observed, such instruments “must, even at around 35,000 years, be several conceptual stages removed from the earliest origins.”

In contrast to the ability of music and song, whether accompanied or not, to preserve social networks of limited size, “compositional language” as Mithen called it can maintain social bonds of practically unlimited numbers. The other great advantage of language over singing is, to use Voegelin’s vocabulary discussed above in section two, that it can symbolize increasingly complex and differentiated experiences. Language can tell stories and stories can convey meanings. In an earlier book, The Prehistory of the Mind, Mithen contrasted what he called the “domain-specific” intelligence of Neanderthals with the ability of language-using humans to switch between the natural world and social interaction, for example, which

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73 Mithen, The Singing Neanderthals, 221.
75 D’Errico et al., “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 46.
he called “cognitive fluidity.” Thus Neanderthals were, for millennia, the equal of *H. sapiens* at making stone spear points or axes. And they no doubt maintained complex social relations, whether by means of *Hmmmmm* vocalization or some other way. “But,” Mithen argued, “they were unable to use their technical skills to make artifacts to mediate those social relationships, in the way that we do all the time by choosing what clothes or jewellery to wear, as do all modern hunter-gatherers through their choice of beads and pendants.” By this argument the chief difference between Neanderthals and Cro-Magnons was the ability of the latter to symbolize experiences.

We will see that this position is also controverted by other evidence. Before considering it, however, it is worth observing that, for Mithen, and so far as I can tell, for most prehistorians, archeologists, and paleoscientists, consciousness is pretty much exhaustively cognitive or perceptual. That is, the problem of participatory consciousness has effectively been ignored. Thus what Mithen called domain-specific thinking or cognition prevented Neanderthals from connecting their cognitive knowledge of a lion with their cognitive knowledge of humans to create a lion-like being with human kinds of thoughts. But supposing we considered Neanderthal singing and dancing

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to be consequences of participatory rather than cognitive consciousness? At
the very least it would prevent Mithen and so many of his colleagues from
advancing gratuitous and in fact critically indefensible opinions regarding
“religion.” This is an issue that is discussed in detail in the following
section. The present point is that if we begin from an understanding of
human consciousness as being first of all participatory rather than cognitive
or perceptual, it would open the possibility that Neanderthal and Cro-
Magnon societies, as is true for all later human societies including our own,
were, as Brendan Purcell said, “burdened with the task of investing the order
of their existence from ever-threatening disorder.” Indeed, one might even
say that the existence of hierarchy in chimpanzee troops, their well
documented practice of coalition-building to support a given hierarchy and
so on, are prima facie evidence that chimpanzee society is similarly required
to maintain order.

Whether one accepts Mithen’s theory of the singing (and we would
add dancing) Neanderthals is less important than acknowledging that, for
one reason or another, Cro-Magnons did, unquestionably, fully develop a
capability of symbolizing, speaking, and creating large-scale and extensive

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78 See, for example, Mithen’s discussion of music as a way of communicating with the gods: The Singing
Neanderthals, 266-71.
social organizations. To address the problem of whether or to what extent and in what way Neanderthals developed a symbolizing capability we will proceed with some indirection by raising a derivative question: how have archaeologists and other paleoscientists accounted for the differences between Neanderthals and Cro-Magnons? As with the widespread view of consciousness as perception and cognition, the conventional explanation is that *Homo sapiens* underwent a genetic change that *Homo neanderthalensis* did not.

The first apparent encounter of Neanderthals and *H. sapiens*, we said above, was in the Middle East ca. 70KY ago, at the onset of the last glaciation. Klein hypothesized that, given their apparently superior bodily adaptation to the cold, this encounter may well have favoured the Neanderthals, though other archaeologists deny Neanderthal robustness gave them an advantage because they had greater caloric demands. In any event, as was noted, there is apparently no evidence that *H. sapiens* had any technical, cultural, or behavioural advantage. There is also widespread agreement that much earlier, ca. 200KY ago by some accounts, *H. sapiens*

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79 Purcell, *The Drama of Humanity*, 53.
had acquired their anatomically modern form in Africa. Prior to forty or fifty thousand years ago, the argument goes, human anatomy and behaviour evolved both slowly and in parallel. After that date human culture changed enormously, but human anatomy hardly at all. Prior to ca. 50KY ago, that is, behavioural and anatomical evolution were two aspects of the same process driven by ordinary Darwinian natural selection for advantageous genetic novelties.82 This “decoupling of modern anatomy and modern behavior,” as Nowell put it, has led to a reformulation of a number of problems dealing with the Neanderthal question: (1) what constitutes modern behaviour? (2) how did it come about? (3) was it sudden or gradual? (4) was it unique to Homo sapiens or shared with Neanderthals?83

In the context of archaeology, “modern behaviour” is almost always connected to the capacity to symbolize. There are no Voegelinian reasons to question this standpoint, as is evident from the argument provided above. We will, however, postpone any discussion of this problem with regard to the Upper Paleolithic to the following section.

For adherents to what might be called the orthodox archeological-genetic account, the second and third questions practically answer themselves: H. sapiens acquired in fairly short order a significant cultural

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advantage over their Eurasian contemporaries so that the last out-of-Africa migration was by “fully” or “culturally” modern *H. sapiens*, the Cro-Magnons. Because Neanderthal brains were, on average, as large as, or larger than those of *H. sapiens*, brain volume was not a factor. Instead, a genetic change to *H. sapiens*, it is hypothesized, led to what Klein called a “neural reformulation” or “restructuring” that turned anatomically modern *H. sapiens* into behaviourally modern Cro-Magnons. The sole difficulty with this account, at least for an archaeologist, is that changes in brain structure leave no traces in the fossil record. Even changes in fossil skull shapes can tell archeologists little about brain structure.

Some paleobiologists would qualify this purely archaeological-genetic position. Philip Gunz and his colleagues examined the neonate braincases of Cro-Magnons and Neanderthals. They are, of course, very similar. But because of different rates of brain growth and growth in different areas of the brain modern humans develop differently shaped brains. Specifically, the “globularization phase seen in the neurocranial development of modern humans after birth” is absent from Neanderthals. Accordingly, “we speculate that a shift away from the ancestral pattern of brain development occurring

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in early **Homo sapiens** underlies brain reorganization and that the associated
cognitive differences made this growth pattern a target of positive selection
in modern humans.**87** Some imaginative paleoanthropologists suggested
that a genetic mutation that caused schizophrenia was responsible for the
cultural creativity of **Homo sapiens.**88

The population history of Eurasian hominids and their replacement by
Africans is complex and in recent years is rewritten practically on an annual
basis. For instance, in the past few years a previously unknown hominid,
**Homo floresiensis,** nicknamed the hobbit because of its small stature, was
discovered to have survived on the Indonesian island of Flores until around
17KY ago.89 More recently still, archaeologists discovered an individual at
Denisova in Siberia whose genetic profile is that of a member of a “sister
group” to the “classic” Neanderthals.90

Complex population history aside, one important implication of
Klein’s “neural hypothesis” is that such a genetic change as he postulated

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86 Klein and Edgar, The Dawn of Human Culture, 146.
87 Gunz, et al., “Brain Development After Birth Differs between Neanderthals and Modern Humans,”
88 Camilo J. Cela-Conde et al., “Creativity and Evolution,” International Congress Series, 1296 (2006), 95-
105.
89 P. Brown et al., “A New Small-bodied Hominin from the Late Pleistocene in Flores, Indonesia,” Nature, 
of Human Evolution, 57 (2009), 437-9.
90 David Reich et al., “Genetic History of an Archaic Hominin Group from Denisova Cave in Siberia,”
Nature 468 (23 Dec. 2010), 1053-1060; Reich et al., confirmed an earlier DNA sequencing of Neanderthal
remains from Uzbekistan and the Altai region of Siberia. See Johannes Krause et al., “Neanderthals in
might have happened to Neanderthals as easily as to *H. sapiens*. “If it had, the argument here implies that living humans would be fully modern Neanderthals contemplating the strange nonmodern people who used to live in Africa.”\(^9\) A second implication is that the effects of genetic changes (or of exaptation) were expressed in the *H. sapiens* population fairly quickly. Together these two implications constitute what may be termed the rapid replacement narrative. As Bar-Yosef said, it is the “easiest answer” to the question of behavioural transition into the Upper Paleolithic.\(^9\) Howells called this the “Noah’s Ark” hypothesis because it envisaged “a single origin, outward migration of separate stirps [biological groups], like the sons of Noah, and an empty world to occupy, with no significant threat of adulteration by other gene pools or even evaporating gene puddles.”\(^9\) It is no doubt correct to say that the Noah’s Ark hypothesis does provide the easiest answer. Unfortunately there are good reasons to think it does not provide the right answer.

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In 2000, Sally McBrearty and Alison S. Brooks published what April Nowell called a “seminal paper” that took direct aim at the rapid replacement narrative or the “revolutionary” transition from the Middle to the Upper Paleolithic, from the Mousterian to the Aurignacian, from Neanderthal to Cro-Magnon. What they called the “human revolution” model proposed a genetically driven and dramatic alteration at around 40KY ago that embraced language, the ability to symbolize, and increased cognitive abilities. The fatal flaw of this model, they showed, was its Eurocentrism and a corresponding “failure to appreciate the depth and breadth of the African archaeological record.” Many of the components of the “human revolution” model took place in Africa tens of thousands of years earlier at widely dispersed sites. “This suggests a gradual assembling of the package of modern human behaviors in Africa, and its later export to other regions of the Old World.” That is, the change to modern human behavior was driven not by a genetic mutation but by a cultural “accretionary process” in a part of the world that most Eurocentric archaeologists considered a “cultural backwater” (456-7). Part of the reason

95 See also McBrearty, “The Origins of Modern Humans,” Man, N.S. 25 (1990), 133.
96 McBrearty and Brooks, “The Revolution that Wasn’t,” 453. Subsequent page numbers are given in the text.”
for ignoring Africa in favour of France, besides the food and other amenities, is because East Africa, to say nothing of the rest of the continent, is 1.6M square kilometers with 10 excavated sites; southwestern France is 21K square kilometers and has over a hundred excavated sites. Accordingly, White wrote, “it is not an exaggeration to state that just a few square meters at certain Aurignacian sites have yielded more representational objects than are known for the entire planet in the period before 40,000 years ago.” This is another reason why it supplied the easiest answer.

McBrearty and Brooks presented evidence from the fossil and archaeological record that demonstrated a stepwise accrual of novel human behaviour in Africa. It is to the late Acheulean and early African Middle Stone Age (MSA) that one needs to look to understand the circumstances surrounding the origin of *H. sapiens*, a fact that “is consistently overlooked because Europe’s earliest modern human inhabitants, about 150,000 years later, were makers of Upper Paleolithic technology. Thus the origin of *H. sapiens* has been conflated with the origin of the Upper Paleolithic” (484-5). Their argument is that modern behaviour may have preceded the appearance of *H. sapiens* during the MSA so that behaviour, not genetics, may have driven anatomical changes evident in the fossil record. By way of

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illustration: primates are occasionally bipedal, but when our remote ancestors decided to venture out of the trees they began a process of natural selection that favoured those who were better at walking and running. That is, behaviour – bipedalism – led to anatomical changes in hominid feet, ankles, knees, etc. Their argument also contains the implication that the experience and symbolization of participation in the cosmos may have preceded the appearance of anatomically modern humans.

They also propose that equating the African MSA with the European or Eurasian Middle Paleolithic needs revision. Blades appeared in Africa tens of thousands of years prior to their appearance in Europe and, because blade production requires “the cognitive skills to perceive artifact forms not preordained by the raw material and to visualize the manufacturing process in three dimensions in addition to the dexterity to carry out a complex series of operations and corrections as the process advances” (495), the consciousness of African MSA hominids was similarly more differentiated than their Middle Paleolithic European contemporaries. The same is true with African’s use of composite projectiles and bone-working, with the use of different areas of a cave site for different purposes at a time when contemporary Europeans were simply “denning” in caves, with body
ornamentation and the use of pigment, with long-distance trade maintained by ritual exchange, and so on.

The conclusion, shocking to those with a Eurocentric focus on the rapid replacement of Neanderthals by Cro-Magnons, was “that the main behavioral shift leading to modernity lies at the Acheulean-MSA boundary about 250-300KY, not at the MSA-LSA boundary at 50-40KY as many assume” (529). If one considers the acquisition of modern behaviour to be a cultural rather than a neurological process, there is no reason to think it would be relatively quick. This is, indeed, what the African record shows: “the new behaviors do not appear suddenly together, but rather are found at points separated by sometimes great geographical and temporal distances…. Early modern human populations in late Middle Pleistocene Africa were relatively small and dispersed, change was episodic, and contact among groups intermittent. This resulted in a stepwise progress, a gradual assembling of the modern human adaptation” (529).

The European replacement was a local event; African evolution of H. sapiens was also an in situ affair. Gordon Childe may not have been the first to apply the notion of “revolution” to human affairs, but his 1930s Marxism
has certainly been influential in archaeology and paleoanthropology. One of the consequences that follows from insisting upon revolutions, particularly in archaeology and paleoanthropology, is that “researchers, perhaps unwittingly, create a gulf separating humans from the rest of the biological world” (533). As we will argue in section four, understanding the relationship of human being to the rest of the biological world is a complex problem in philosophical anthropology. Insisting on a “revolution” of one kind or another, in paleoanthropology or politics, is one way of eclipsing any awareness of the questions raised by philosophical anthropology. It is also, as McBrearty and Brooks showed, bad science. As Nowell said, the European “human revolution” ca. 40KY ago is “effectively dead.”

Even prior to the demise of the genetic mutation/rapid replacement narrative, Francesco d’Errico had proposed a more complex and unquestionably more interesting argument based on the evidence of Neanderthal manufacture of Châtelperronian industry, which, as was noted above, is a kind of Upper Paleolithic assemblage. He argued not only that the Neanderthals created their own Upper Paleolithic technology in France

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without help from the Cro-Magnons, but that Neanderthals may have been
“the producers of all the pre-Aurignacian Upper Paleolithic
technocomplexes of Western and Central Europe.” He argued, in effect,
against the entire European “replacement narrative” because it relied on an
unjustified assumption of biological determinism. Because of their different
biological constitution and morphology, it is argued (wrongly in d’Errico’s
view), that “Neanderthals did not possess the intellectual capabilities to
develop the behaviors traditionally considered characteristic of the ‘Upper
Paleolithic.’” By this argument, whatever Upper Paleolithic features are
present in the archeological record “represent imitation without
understanding, since Neanderthals were incapable of symbolic behavior,
probably because of the lack of the requisite sophisticated speech skills.”

Since language and cognitive abilities do not fossilize, it is necessary
to make arguments based on archaeological evidence, which is always
construed within a theoretical context. For example, it is true that the
Neanderthals did not produce spears with bone points, though they were able
to haft stone. Why no bone-tipped spears? Were they too stupid to figure out

100 Francesco d’Errico et al., “Neanderthal Acculturation in Western Europe? A Critical Review of the
Evidence and Its Interpretation,” Current Anthropology 39 (No. 51 Special Issue: The Neanderthal Problem
and the Evolution of Human Behaviour) (1998), S.1-44 at s.2. See also Jean-Jacques Hublin et al., “A Late
Neanderthal Associated with Upper Paleolithic Artefacts,” Nature, 381 (16 May, 1996), 224-6, and J.
Hahn, “L’Origine du Paléolithique supérieure en Europe centrale: Les Datations C¹⁴” in Cabrerra Valdés,
ed., El Origen del Hombre moderno en el Suroeste de Europe (Madrid: Universidad Nacionale d’Educación
a Distancia, 1993), 61-80.
how to do the trick? Or did they simply use a hunting strategy that did not require bone? Since stone-tipped spears have some obvious advantages in sharpness and penetrating power, though they are not a stand-off weapon and so are more dangerous to employ, “it is difficult to choose between these two contrasting interpretations,” though they have quite distinct implications for our understanding of Neanderthal consciousness, intelligence and cognitive capabilities.102

We already noted the discovery of a Neanderthal hyoid bone cast doubt on their inability to speak but d’Errico’s argument was based on other evidence as well. For example, the notion that Neanderthals imitated but did not understand the significance of Cro-Magnon use of ornamentation was contradicted by the evidence at the Grotte du Renne that he and his colleagues reassessed and concluded that “Châtelperronian Neandertals were the makers of a wealth of personal ornaments and bone tools,” including rather delicate awls, which suggested they made tailored clothing.103 Moreover, these “late Neanderthals” also used new knapping techniques developed from the local Mousterian and distinct from the Aurignacian imported with the Cro-Magnons; they excavated graves, positioned corpses in graves, and offered funerary goods, none of which is likely without some

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kind of verbal exchange to organize the ritual and provide some sort of account of the posthumous fate of the one buried. In short, “the archeological record of the Middle-to-Upper Paleolithic transition in Western Europe provides no material support for the … notion of ‘Neanderthal inferiority’.” Instead, he said, the evidence points to “an original and independent cultural evolution of Western Europe’s late Neanderthals.”

Or, in his more cautious later formulation, “the hypothesis of separate but converging cultural trajectories for archaic hominids in Europe and anatomically modern Homo sapiens before the Middle/Upper Paleolithic transition is not proven, but cannot be rejected.”

In a similar vein, Clark argued that “taphonomically informed approaches” such as undertaken by d’Errico and his colleagues “show unequivocally that Upper Pleistocene hominids could adapt to changing environmental circumstances without necessarily becoming modern humans and that the Middle Paleolithic could show patterned change without

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necessarily becoming Upper Paleolithic,” which goes a long way to “debunking most of the stereotypical characteristics of Neandertals invoked by archaeological ‘replacement’ advocates to account for their demise.”

The population history of the European Neanderthals is suitably complex, a question to which we shall return below. The standard explanation of Neanderthal movements over the millennia – and 95% of the past 500KY have been significantly colder than the present day, with only two interglacial exceptions – is that they would migrate south when it grew very cold and north when things warmed up. But Hublin and Roebroeks raised an obvious question: “were the southern regions accessible for the northern populations? After all, there were already Neandertals living in the south.” The alternative was that northern populations were extirpated, an option that they considered likely because of the limited carrying capacity of a cold-stressed environment for such high-cost organisms. This same question was raised by d’Errico and Goni: “Did climate play a role in the extinction of the Neandertals?” they asked. Despite the sketchy data set dealing with paleoclimatic sequences and the difficulty correlating it with

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107 Clark, “Neandertal Archaeology,” 61.
108 Hublin and Roebroeks, “Ebb and Flow,” 504-5. On the other hand, if migratory herds moved south during periods of environmental degradation, the hunters could follow them thus increasing the local carrying capacity.
the archaeological record, it seemed to them that a 1500-year cold snap (40-38.5KYBP) called the Heinrich 4 event and caused by Arctic ice rafts drifting south into the Bay of Biscay and the eastern Atlantic,\textsuperscript{110} saw the Neanderthals retreat to southern Iberia where the relatively inhospitable climate discouraged the Cro-Magnons from following them. They tarried in France. But a northern migration of Neanderthals, according to Hublin and Roebroeks, led to their perishing. In other words, Cro-Magnon “subsistence strategies were probably ill-adapted to cope with the arid and poor environments that characterized this area [the Iberian peninsula] during the H4 event.” So modern Cro-Magnons went south only after it warmed up and by then the Neanderthal communities had been weakened by the very cold H4. In contrast, “Neanderthals seem to disappear rather quickly in France after the arrival of the Aurignacian Moderns,” the Cro-Magnons.\textsuperscript{111} As Arsuaga observed, there is something ironic, if not paradoxical, that “a group of humans who had evolved and adapted to the cold as a continent far from the equator were replaced by other humans recently arrived from Africa.”\textsuperscript{112}

\textsuperscript{111} D’Errico and Goni, “Neandertal Extinction,” 781-4.
\textsuperscript{112} The Neanderthal’s Necklace, 284.
Even more specifically, d’Errico and his colleagues argued that south of the Ebro river “the two [populations] were contemporary for at least 5,000 and probably for 10,000 years, during which, inevitably, some form of contact must have taken place.” But nothing fundamental changed in the material culture of the Iberian Neanderthals, which challenges the hypothesis of the biological superiority of Cro-Magnons that led to acculturation of Neanderthals. It would therefore seem that the Ebro was “a major biocultural frontier;” to the north Europe was occupied between 40KY and 38KYBP by Cro-Magnons. To the south “the rest of Iberia continued to be occupied, until ca. 30,000 – 25,000 years B.P. by Neanderthals with a Middle Paleolithic material culture. And then, in a relatively short period, ca. 2KY, “replacement seems to have taken place quite suddenly” following the H4 event.113

The reason for the Ebro frontier was still “unclear,” though several theories were available – it was more heavily wooded in the south, for example, or the relatively warm climate in the north provided plenty of space for the Cro-Magnons. In any event, at least 5,000 years of possible contact, which was plenty of time for “acculturation” to occur, saw no changes in Neanderthal culture south of the Ebro. Interestingly enough, on

the south shore of the Mediterranean *H. sapiens* did not attain the cultural achievements of the Upper Paleolithic until well after 30KYBP. In other words, d’Errico *et al.* argue in favour of greater independence of biological and cultural classification. Adopting such an approach they said would treat the contact between Neanderthals and Cro-Magnons “as a traditional problem of contact between populations with different cultural trajectories; in this case, as has often been documented in both the historical and the ethnographic record, the long-term outcome of contact was that one of those trajectories was truncated and the corresponding genetic lineage became extinct.”

We will consider the implications of this extinction of Neanderthal genetic lineage below.

Added to the Eurocentric prejudice documented by McBrearty and Brooks is what d’Errico called an “anti-Neanderthal prejudice.” Combined they led archaeologists to overlook or downplay the gradual changes to *H. sapiens* during the African MSA and marginalize evidence of modern “symbolic behaviour” found at Blombos Cave and other sites in South Africa.

D’Errico reiterated his argument regarding the similarity of

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Neanderthal and Cro-Magnon hunting techniques, which later studies showed included marine resources such as mollusks, seal, dolphins, and fish as well as birds such as the Great Auk, and other cultural practices. He added that Neanderthals were changing during the Upper Paleolithic before H. sapiens showed up in Europe. And then, “it was precisely the new situation involving contact between anatomically modern people and Neandertals and the consequent problems of cultural and biological identity that stimulated an explosion in the production of symbolic objects on both sides.” Included here as evidence of “modern” Neanderthal culture was their use of colourants, “representations” and engravings, “personal ornaments and decorated bone tools with sets of notches” that show no dramatic differences with similar “depictional … representations” produced by H. sapiens. The significance of Paleolithic ornamentation can hardly be exaggerated. It represents “a profound shift in technologies for encoding

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and transmitting information.”\textsuperscript{119} With contemporary humans, decorations can indicate marital status, ethnicity, religion, wealth, and other marks of social identity. Why should Neanderthals be exempt from such concerns?

In any event Zilhao and colleagues recently discovered evidence of Neanderthal use of body decoration in southern Spain. He began with the uncontroversial statement that so far as \textit{Homo sapiens} are concerned body decoration in Africa and southwest Asia is widely accepted as evidence of symbolic thinking. But when the same kind of evidence is found at Neanderthal sites in Europe, claims that they, too, engaged in symbolic behaviour “are disregarded on different grounds,” such as poor recording techniques, uncertain or ambiguous interpretation, imitation of Cro-Magnons and so on. “Here, we report secure evidence that approximately 50KY cal B.P., 10 millennia before modern humans are first recorded in Europe, the behavior of Neandertals was symbolically organized and continued to be so until the very end of their evolutionary trajectory.”\textsuperscript{120} What made the evidence secure was that it was found at a brecciated remnant of a site 50KY old so that “the association of this material with the Neandertals is, literally,


\textsuperscript{120} Joao Zilhao, \textit{et al.}, “Symbolic Use of Marine Shells and Mineral Pigments by Iberian Neandertals,” \textit{Proceedings of the National Academy of Science of the USA}, 107 (19 Jan. 2010), 1023. Incidentally, d’Errico was part of this research team.
rock-solid.”¹²¹ He drew the conclusion that body-painting and the use of shells for decoration at about the same time in Iberia and South Africa “among two different lineages… is inconsistent with cognitive-genetic explanations and implies that these innovations were fulfilling a need – aiding in the personal or social identification of people – that did not exist in the preceding two million years of human evolution.”¹²²

D’Errico’s conclusion, bluntly stated, was that behavioural modernity was not confined exclusively to H. sapiens. This led him to raise a final question: how to account for such a novel interpretation of the archaeological record? He proposed two hypotheses: “The first is that the two populations reacted in comparable ways to comparable ecological pressures. The other is that, as their similar lithic technology in the Near East suggests, cultural barriers, and perhaps biological ones, between these populations were permeable.”¹²³ We have presented his evidence to support the first hypothesis; now let us consider the second.

Until very recently, the biological barrier between H. sapiens and H. neanderthalensis was assumed to be impermeable.¹²⁴ The theoretical

¹²¹ Zilhao et al., “Symbolic Use of Marine Shells,” 1027. Brecciated archaeological sites contain artifacts that are surrounded by minerals or rock fragments that cement the artifact in place, making it “literally rock-solid.”
¹²² Zilhao et al., “Symbolic Use of Marine Shells,” 1027
possibility of interbreeding would sometimes be raised, but because most of the argument was based on morphological features of Neanderthals and Cro-Magnons, the results were inconclusive. The conventional biology, briefly noted in the Introduction, was formalized as “rules” (Bergman’s Rule and Allen’s Rule) according to which, “if Neanderthals and modern humans are separate species, they cannot be compared reliably” in terms of morphology because such “rules” permit comparisons only among members of the same species. On the other hand, “if they are the same species, then the comparison would be appropriate, but then … the Neanderthals, … would not be extinct.” It was not until 2010 that an international team of paleogeneticists, led by Svante Pääbo of the Max Planck Institute for Evolutionary Anthropology in Leipzig, published a paper showing that both Europeans and Asians shared between 1% and 4% of their nuclear (not mitochondrial) DNA with Neanderthals, but Africans did not share any. This finding suggested “that gene flow from Neandertals into the ancestors of non-Africans occurred before the divergence of Eurasian groups from each

125 See for example, Howells, “Explaining Modern Man,” 492; Bar-Yosef, “The Role of Western Asia,” 198.
127 J. R. Stewart, “The Ecology and Adaptation of Neanderthals During the Non-Analogue Environment of Oxygen Isotope Stage 3,” Quaternary International, 137 (2005), 42. See also Stewart, “Neanderthal-modern Human Competition?: A Comparison Between the Mammals Associated with Middle and Upper
other.” Genetic theory would predict what the Pääbo team found: “gene flow from Neandertals into modern humans but no reciprocal flow from modern humans into Neandertals.” Moreover genetic theory would also predict that a relatively small number of events of interbreeding can have appreciable frequencies of Neanderthal alleles in modern populations. As Gibbons said, the estimated frequency, around 2%, is “not trivial” but not “wholesale” either. The most likely site for initial interbreeding was the Levant, as noted above. Moreover genome comparisons suggest a date between 45KY and 80KY ago, well within the period when Neanderthals and H. sapiens shared the same ranges.

Even before Pääbo and his colleagues provided compelling evidence for genetic exchanges between the two types of humans, Gregory Cochran and Henry Harpending wrote a rather breezy account, based on population genetics theory, arguing that “introgression,” which is to say, “the transfer of alleles from another species,” namely Neanderthals, “generated rapid genetic


changes that conferred new capabilities.” But we have seen that for many biologists, if alleles can be viably transferred, both donor and recipient ex definitione belong to the same species whatever their morphological – or apparent morphological – distinctiveness. This issue either highlights the already-made point regarding the inevitability of judgement regarding species, or it is inclusion of an organism in a compelling argument against the view that Neanderthals and H. sapiens were different species. Either way, it has some significant “political” and “religious” implications, as is argued below.

Moreover, if we ask why from the beginning Neanderthals were considered a species or, if not a species, a type or category of human, we encounter an interesting problem in archeological intellectual history that we should at least mention. According to Henneberg, a series of chance factors combined to constitute Neanderthals as a distinct group: (1) the discovery of Neanderthal fossils in nineteenth-century Europe; (2) that because of European climate during the Pleistocene, humans developed in a particular way that (3) did not look like contemporary Europeans. “Thus, about 100 years ago a separate taxonomic category for Neandertals was created” and

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new fossil discoveries were categorized in light of it.\textsuperscript{134} Since the self-understanding of archeology and the various paleosciences is both incremental and positivist, once the category “Neanderthal” was created it remained unquestioned as a taxonomic unit. Thus, to repeat an earlier observation, the prescientific choice of narrative is central to subsequent scientific accounts.

This prescientific issue appears as well in the geneticists’ argument that beneficial Neanderthal alleles would, on conventional Darwinian grounds, provide a selective “fitness” advantage to carriers. Moreover, by the standard statistical theory of population genetics it would not have taken much: “even a few dozen half-Neanderthal babies over thousands of years would have allowed modern humans to acquire most of the Neanderthal’s genetic strengths.”\textsuperscript{135} The discoveries by the Pääbo team may not put to rest the disputes between the “rapid replacement” theory and the “slow assimilation” theory,\textsuperscript{136} but they do certainly favour the latter.

The obvious next question is: what might have been the Darwinian benefit conferred by Neanderthal genes? Taking their clues from other areas


\textsuperscript{135} Cochran and Harpending, The 10,000 Year Explosion, 42.
of population genetics rather than DNA analysis, Cochrane and Harpending argued that, since both Neanderthals and *H. sapiens* had big brains, they were likely solving the same problems in slightly different ways, much as Tibetans and Amerindians solved the problem of high altitude living in slightly different ways. They also suggested that the sheer increase in genetic variation may prove to be beneficial simply in terms of future exaptation, whatever the short-term effects on natural selection may have been.\textsuperscript{137}

For example, we noted above that Neanderthals and *H. sapiens* shared the so-called language gene, **FOXP2**. Around 42KY ago a new version appeared in *H. sapiens*.\textsuperscript{138} In terms of evolution, this is remarkably recent, which opens the possibility that the modern human variant of **FOXP2** was acquired from Neanderthals on their northeastern out-of-Africa migration. If this is true, then the Neanderthal version is older and would show more variation than that of *H. sapiens*. This argument, if correct, carried an interesting implication.


\textsuperscript{137} Again Erik Trinkus offered a note of caution: whatever the adaptive advantages were for Cro-Magnons “they were subtle and will be difficult to tease from the human paleontological record and the complex associations of human biology with technotypological phases of the Late Pleistocene archeological record.” “Early Modern Humans,” *Annual Review of Anthropology*, 34 (2005), 22.

It is widely agreed that the Late Paleolithic out-of-Africa migration ca. 50KY ago took (at least) two routes. The earlier dispersal path, across what is now the Gulf of Aden, along the south coast of the Arabian peninsula, and across the Strait of Hormuz, eventually reached Australia, New Guinea, and Oceania. This southeasterly dispersal “retained Neanderthal-grade technology,” whereas the northwesterly one, through the Levant, where the migrants were more likely to encounter Neanderthals, developed much more innovative technologies.\(^{139}\) The implication is that Cro-Magnon creativity was a consequence of gene flow from Neanderthals. By this account, the presence of Neanderthal DNA among Papuans would have to be explained by some other as yet unspecified means.\(^{140}\)

Before recalling the significance of the change from Mousterian to Late Paleolithic culture let us summarize the argument so far. First, Neanderthal “stability,” evident chiefly in the retention of Mousterian or modified Mousterian technology, lasted from the “classical” period around 230KY ago to extinction some 8,000 generations later. Neanderthals and \(H.\) sapiens shared a number of cultural as well as technological practices. Things changed, sometime after 50KY ago for which several different


\(^{140}\) Green et al., “A Draft Sequence,” 721.
theories have been developed by way of explanation. The orthodox “rapid replacement” archeological-genetic account (Richard Klein was the exemplar) was called into question first by McBrearty and Brooks and then by the “long-term assimilationist” account of Francesco d’Errico and his colleagues; this empirically more adequate, not to say more commonsensical account was followed by the purely genetic and rather heterodox account of Cochran and Harpending. The significance of gene flow between Neanderthals and *Homo sapiens*, it seems to me, is not so much genetic nor the creation of “hybrid vigour” as in cattle breeding. Rather it provides clear evidence that Neanderthals and Cro-Magnons interacted in physical proximity. This is significant for the question of Upper Paleolithic politics not because it tells us much about Neanderthals but because of what we know about Cro-Magnons. As Ian Tattersall put it, “the Cro-Magnons were just like us, with all the mental equipment that we bring to bear on our own interactions with each other and the world today. By 40,000 years ago, then, modern humans were already around, with a vengeance.”

Even if the biological changes were the subject of scientific consensus (and we have just seen that they are not), no biological explanation, not even the ingenuity of exaptation, can account for an innovation. That is, if

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humans did something that was truly new, it was, biologically speaking, uncaused. It was creative, a genuine beginning or initiative.\textsuperscript{142} By and large biologists and paleoanthropologists avoid the theoretical or philosophical error of reducing life to matter or of biology to physics. This is why, for example, they argued that the difference between Neanderthals and Cro-Magnons is not a matter of brain size – and this argument was not simply because Neanderthal brains, on average, were larger.

In the language of philosophical anthropology, one would say that life and life-forms transcend the chemical or material constituents of which they are composed. Likewise, the discourse of biology transcends that of physics and chemistry. By the same argument, the human capacity to act transcends the biological organism by which an action is initiated. Biologists and paleontologists seem to be quite properly sensitive to the first problem of avoiding the reduction of life to matter but are less sensitive to the equally important problem, at least in philosophical anthropology, of not reducing action and cultural innovation to biological changes. This problem recurs, as we shall see, in connection with “religion” and other “symbolizing behaviour.”

\textsuperscript{142} This human capacity, as Hannah Arendt has argued, is the basis for politics. It constitutes a “second birth” following the biological birth that constitutes our natality. For a discussion, which we cannot even summarize here, see Arendt, \textit{The Human Condition} (Chicago: University of Chicago Press, 1958), 8-9, 62-
As a result paleoscientists often speak of a “cultural stimulus” that somehow caused *H. sapiens* to turn into Cro-Magnons or, as noted above, of an unspecified (and unspecifiable) cause of “language” or a capability of symbolization that had the same effect. In its simplified Darwinian form, one finds an almost *a priori* assertion that “interspecies competition” resulted in the extinction of the Neanderthals. The causes have been variously identified, as climate change, poor diet leading to high infant mortality, especially a dearth of micronutrients (they did not eat enough veggies), lengthy breast feeding, leading to longer average birth-spacing than Cro-Magnons, and, finally, bad luck. But one way or another, “the Neanderthals lagged their modern successors, and their more primitive behavior limited their ability to compete for game and other shared

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resources.” As a result, the Neanderthals were “an evolutionary dead-end.”\textsuperscript{149}

The limitations of this account from the perspective of philosophical anthropology are self-evident. They were alluded to earlier in d’Errico’s notion of “anti-Neanderthal prejudice.” But they also appear from within, so to speak, the “rapid replacement” argument as well as within the longer term “assimilationist” one. Let us then consider more closely the language of “replacement” or of “emergence” whereby the Cro-Magnons “replaced” the Neanderthals or (with or without exaptation, allelo exchange and so on) Cro-Magnons “emerged” from their exodus from Africa with or without contact with Levantine Neanderthals. For example, the “invention of language” and the associated ability to symbolize, Tattersall argued, depended on “emergence, whereby a chance combination of preexisting elements results in something totally unexpected,” much as water “emerged from hydrogen and oxygen.”\textsuperscript{150}

It seems to me that such language obscures the reality of new capacities by reducing a genuine novelty to its antecedent conditions. Of course, water can be both analyzed and synthesized in terms of $\text{H}_2\text{O}$; the


\textsuperscript{150} Tattersall, \textit{The Monkey in the Mirror}, 161.
same cannot be said of any account of how life “emerged” from matter, to say nothing of how Cro-Magnons “emerged” from what looks to be an increasingly probable encounter with Neanderthals. Of course, one can analyze Cro-Magnons in terms of their brain functions and “cognitive mechanism,” but as Tattersall said himself, how it all happened must remain “obscure” because, in his words, we do not know “how the brain converts a mass of electrical and chemical signals into what we are individually familiar with as consciousness and thought patterns.”

But here again Tattersall’s language is systematically misleading. The reason, quite simply, is because consciousness is not in reality electrical and chemical activity, notwithstanding the fact that by an act of reductivist imagination it can be cast that way. The only thing lost by undertaking such an intellectual slight of hand is an awareness of what consciousness is. Moreover, to say that how this “cognitive mechanism” works is “obscure” is equally misleading: First, because it is not a mechanism; second, because “obscurities,” as distinct from mysteries, can be cleared up if enough light is shone upon the obscure cognitive mechanisms. Extensive meditation on a

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152 Incidentally, we are analyzing Tattersall’s argument not because it is simplistic and dogmatic; quite the contrary. He is a sensitive, sophisticated and imaginative writer compared to many of his colleagues whose materialist reductionism he would cheerfully repudiate.
mystery does not render it less mysterious; rather its mystery is
apperceptively enhanced.

The language of “replacement” is scarcely less of a problem. It is not
simply wrong to say, for example, that cattle “replaced” buffalo on the great
plains of North America, but it does obscure the political and human
dimension whereby a European culture extinguished or suppressed or
subordinated an indigenous one. The means of doing so may have varied
north and south of the border between Canada and the United States (or so
Canadians like to think) but the result was pretty much the same: the
“replacement” of wild buffalo with domestic cattle. It might be useful to
think of the “replacement” of Neanderthals in the same way. This has the
important implication that the biological process involved, whether the agent
of replacement was a hybrid H. sapiens – Neanderthal hominid, a purebred
H. sapiens with a random genetic mutation that conferred some sort of
Darwinian advantage, or a H. sapiens that endured some other kind of
neuroplastic alteration, is secondary.

Whatever the genesis of Cro-Magnons following the exodus of H.
sapiens from Africa, it is clear they had an amazing new capacity to
innovate. In this context much of the discussion among archeologists and
paleoanthropologists is focussed on “symbolization.” There is undoubtedly
an enormous literature discussing the locales where artifacts bearing
symbols of various kinds have been found, but less discussion of what these
symbols may mean. This is a problem to which we shall return in the next
section. For the present it is sufficient to note that there is a widespread
identification of the production of symbolism with the “invention” of
language. In many respects, this discussion is similar to the discussion of
genetic factors in the emergence or evolution that produced Cro-Magnon
humans. Instead of reiterating a critical analysis of the assumptions of this
discourse or discussing its logical and empirical limits, let us simply
summarize the conclusion on its own terms. Whatever its “basis” or
antecedent conditions, once acquired, invented, or created, language enabled
(and enables) humans to distinguish meaning from material form, to replace
a “domain-specific” consciousness, as Mithen put it, with a “cognitive
fluidity” that enabled humans to endow material realities with new and
arbitrary meanings.

But here again one must note some additional complexities. We noted
above the evidence presented by d’Errico et al. for the argument that
Neanderthals were as capable of symbolization as contemporary Cro-
Magnons, and by Zilhao et al. that they did in fact use personal
ornamentation. In that context Martin Byers has introduced an argument that
bears directly on this question. As noted, the argument that the ability of humans to symbolize experiences, which Byers and other paleoscientists often shorten to “symboling,” was said to have been manifest initially in the transition from the Middle to the Upper Paleolithic (ca. 50KY – 30KYBP). Notwithstanding the much earlier dates now accepted for the South African materials and the extension of symboling behaviour to European Neanderthals ca. 50KY ago, the argument would still apply. According to Byers, all the activities of a symboling population are rule-governed and that all their material culture has a rule-governed style. In contrast, non-symboling behaviour is directed by ends or goals, not rules, which guide (rather than direct) actions (as distinct from behaviour). For example, consider two observably different stone tools, both of which are capable of slicing and cutting, which is to say both can be used to perform the same material behaviour. But one is used only for sacrifice and the other only for butchering – two rule-guided actions. Accordingly, “non-symboling human populations perform only material behaviors, symboling human populations material actions.” This distinction between behaviour and action, which Byers borrowed from the contemporary language philosopher, John Searle,

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is practically identical with that of Hannah Arendt.\textsuperscript{155} The “rules” governing distinct actions are surplus to the material behavior and they endow the actions with meaning – as sacrifice or butchery, for example. The ability to symbolize, moreover, rests on our ability to monitor what we are doing – to monitor our monitoring, which Byers (and Searle) call “reflexivity.” In other words, the ability to engage in symbolic action is self-conscious as well as “effortless.”\textsuperscript{156}

As noted above, the editors of \textit{Current Anthropology} (where Byers published this article) invite critical comments from other scholars and give the author an opportunity to reply. Much of the criticism in this instance does not bear on the questions we are concerned with. Michael Shanks, however, made the highly pertinent remark that Byers’ “real topic is the sudden emergence of \textit{social} order and the character of this order; indeed, he is writing of the origins of society and morality. This is, of course, a traditional interest of political philosophy.”\textsuperscript{157} Shanks was, in my view, correct. In his response to the critical remarks of several distinguished anthropologists and archaeologists, Byers concluded with an observation that a political scientist would find quite comforting:

\textsuperscript{155} See fn 137 above.
\textsuperscript{156} Byers, “Symboling.” 372.
\textsuperscript{157} Shanks, “Comment” on “Symboling,” 390.
Paleolithic archaeology, in particular, has a great responsibility, for in claiming a sort of scientific monopoly on the evolutionary history of humanity it has willy nilly taken on the obligation of becoming familiar with what philosophy, anthropology, sociology, psychology, and the other human sciences have to say about the nature of humanity. To state the obvious, humans are animals, and as such we are subject to the same range of constraints in nature as are other animals. But we are not quite like any other animals, for as effortlessly reflexive beings we are responsible for the conditions of our life in ways that cannot be claimed for any other species we know.  

However language and the capacity to symbolize were acquired, there is no doubt that it took place. When we look at the population dynamics of Neanderthals and Cro-Magnons, we are apparently on firmer historical or empirical grounds. In some respects the accounts of the “replacement” of Neanderthals echoed accounts of the replacement of buffalo. Let us begin with Tattersall and Schwartz: Upper Paleolithic Cro-Magnons, 

were us: humans with all the attributes, appalling as well as admirable …. we only have to know one side of the equation to realize that encounters between Neanderthals and modern humans cannot always have been happy ones…. it seems highly unlikely that they usually brought out the best in the strangers who invaded their territory …. it is staying well within the bounds of science to suggest that the extinction of the Neanderthals involved at least a certain amount of direct conflict as well as of more generalized economic competition. Clearly this was not a simple process, for after all it took thirteen thousand years to complete. Indeed, it was

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probably every bit as murky and complicated as human nature itself.\textsuperscript{159}

In a similar vein, Nicholas Wade asked:

\begin{quote}
What does it mean to say that the Aurignacian culture was succeeded by the Gravettian? … when the last Glacial Maximum made northern latitudes uninhabitable and the glaciers pushed their populations south, is it likely that they were welcomed with open arms by the southerners whose territory they invaded? If warfare was the normal style of affairs, it would have shaped almost every aspect of early human societies.\textsuperscript{160}
\end{quote}

In other words, the first “population dynamics” option can be called conflict, war, even genocide. In this context, the implication regarding gene flow would be equally stark.

In contrast to a simple assault, others have argued for simple avoidance. Notwithstanding the perception that Neanderthals and Cro-Magnons were rivals for global ecological dominion, Shea was of the view that both kinds of humans would have considered “direct competition or fighting” to be “probably too risky.”\textsuperscript{161} In support of the “peaceful competition leading to extinction” narrative, Zubrow offers the observation that an increase in mortality rates of Neanderthals of only 2\% would

\textsuperscript{159} Tattersall and Schwartz, \textit{Extinct Humans}, 221.
\textsuperscript{160} Wade, \textit{Before the Dawn}, 157. Emphasis added.
extinguish the population in a millennium.\textsuperscript{162} Other accounts speak of “absorption” or “blending” without specifying in detail what such metaphors might mean.\textsuperscript{163}

Let us consider some evidence. Exhibit A: much to her surprise, indeed horror, Jane Goodall observed what she called chimpanzee warfare in Gombe.\textsuperscript{164} In fact, monkey wars have almost become a subfield in primatology.\textsuperscript{165} It would probably be prudent, therefore, to expect that warfare, which is to say, organized and collective violence, to be an attribute of primate and so of human existence. To be more anthropologically precise: a predisposition to kill is present in nonhuman animals, especially when they are in conditions that stimulate aggressive behavior, anger, self-protection, jealousy, and so on, any of which may lead to violence. This does not mean that the death of another is sought even in primates. As Vijender Bhalla pointed out, baboons treat a dead companion “as if the latter were

\begin{footnotes}
\item[163] An exception is Pierre-Yves Demars who noted in response to d’Errico’s paper on “Neanderthal Acculturation” that “none of the definitions” of “assimilation” or “acculturation” assumes “the ‘inferiority’ of a population, except perhaps in war technology.” D’Errico, “Neanderthal Acculturation,” 24.
\item[164] Goodall, Through a Window: My Thirty Years with the Chimpanzees of Gombe (Boston: Houghton Mifflin Company, 1990), 98-111.
\end{footnotes}
The purpose of animal fights, according to Bhalla was not necessarily to kill but to threaten, inflict pain, frighten, etc. He went on to speculate that, for animals, killing “is not the result of any intelligent apprehension of the nature of the situation, but a spontaneous response to the stimulus. If death occurs, it is only incidental. On the contrary, in man the violent action is related, more often than not, to a faculty of mind called ‘memory.’ The response is not ‘blind’; it emanates from contemplative thinking. Here, then lies the fundamental difference between intra-specific killing in man and in the sub-human animals.” Whether the faculty of “memory” or “contemplative thinking” was in fact the essential difference we need not at present decide. For humans at least it is likely true, as Azar Ghat said, “fighting was probably an integral part of hunter-gatherers’ existence throughout the genus Homo’s evolutionary history.”

We noted Neanderthal cannibalism above. Eudald Carbonell and his colleagues presented evidence of cannibalism by H. antecessor, ca. 800KY ago, which Keith F. Otterbein took to be evidence of the earliest evidence for warfare. Even if cannibalism is not the result of homicide, there is

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strong circumstantial evidence of Neanderthal homicide – one could hardly expect interrogation to result in a confession. During the 1950s, excavation of Shanidar Cave in the Zagros mountains of northeastern Iraq produced partial skeletons of nine Neanderthals. Four of the six reasonably complete skeletons show some form of “trauma-related abnormality.”¹⁷⁰ The most interesting individual was likely Shanidar 1, who was at least 45KY old. All his injuries were described in great detail, including head trauma that crushed his left eye orbit, “probably causing blindness in the left eye.” Three scenarios were advanced to account for his other injuries including “a penetrating wound to the shoulder” that eventually resulted in an infection of the clavicle.¹⁷¹ Equally interesting was Shanidar 3, also an adult male. He was injured on the ninth rib leaving a parallel-sided groove “caused by a penetrating wound between the eighth and ninth ribs” that punctured the lung. “The angle and precision of the wound make it unlikely that the injury was self-inflicted.” Indeed, it was just what one would expect if a right-handed individual stabbed Shanidar 3 while standing face-to-face. It could, of course, have been an accident; and in any event, Shanidar 3 was nursed

¹⁷¹ Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 69.
for several weeks and then buried.\footnote{Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 71-2.} Shanidar 5, of which little remains, was scarred on the head and suffered a scalp wound deep enough to impact the periostium.\footnote{Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 75.}

In 1979 a partial skeleton of a “classic” meat-eating Neanderthal was discovered near the village of St. Césaire, Charente Maritime, France. It was about 36KY old and provided “the first direct evidence for the association of Neanderthals with Châtelperronian implements.” As noted above, the Châtelperronian period is dated between 45 and 36KYBP and overlapped with the late Mousterian and early Aurignacian; these fossils constituted the material basis for the discussion about the relationship of Neanderthals and Cro-Magnons during the early Upper Paleolithic. What is interesting about this fossil for our present purposes is that the skull was reconstructed using computer-assisted imagery. It revealed a healed fracture in the cranial vault. “When paleopathological diagnostic standards are applied, this bony scar bears direct evidence for the impact of a sharp implement, which may have been directed toward the individual during an act of interpersonal violence” followed by an intentional burial.\footnote{Christopher P. E. Zollikofer et al., “Evidence for Interpersonal Violence in the St. Césaire Neanderthal,” Proceedings of the National Academy of Sciences of the United States of America, 99:9 (April 30, 2002), 6444.} If we accept that blades are “a marker
of the Upper Paleolithic culture complex,” this Neanderthal may have been killed by one of his Cro-Magnon contemporaries. The direction of the slash indicated that he suffered a blow or thrust that was intentional and was accomplished by an implement, not a natural object. “To attain the kinetic energy necessary to penetrate bone, considerable acceleration, probably through hafting, would have been essential.” The immediate effects were probably serious, with heavy bleeding and temporary impairment. He did however survive for several months, which meant the trauma was not fatal. Both Cro-Magnons and Neanderthals were capable of hafting.

Both the St. Césaire and Shanidar 3 individuals indicate that Neanderthals were capable of using tools as weapons – unless both Neanderthals were killed by Cro-Magnons, which seems unlikely. It seems more plausible that Neanderthals knew how to use an implement in a context other than that for which it was originally designed. The relative dearth of direct evidence of weapons may reflect the low frequency of such aggressive actions or it may “reflect the limits of paleopathological diagnosis.” If it is the latter, a reexamination of Neanderthal fossils with weapons-induced

175 Klein, The Human Career, 489.
trauma in mind, might produce a more violent picture of “replacement,” especially if we bear in mind that face-to-face a person’s skeleton occupies a little over half the target area that a body presents to an attacker. “This means about half the time a projectile randomly shot at a person would not impact bone. Thus we can safely assume that the frequency of injuries detected in ancient skeletal remains is just the ‘tip of the iceberg’ in terms of the actual incidence of injuries.”

Studies of arrow wounds to US Army personnel during the Indian wars indicated that “fewer than a third of the arrows struck bone and that 61% of fatal arrow wounds were to the abdomen.” Possibly the same percentage would obtain with spear thrusts, since bow and arrows were no invented until the Neanderthals were long gone.

In any event, two things seem clear: first, the use of hunting or food-processing tools as weapons in interpersonal violence increased the potential for intergroup damage. More interesting for our concerns, Zollikofer wrote, with this use of weapons “no major ‘transition’ from Neanderthal to EMH-specific [i.e., Cro-Magnon] behavioral patterns during the Upper

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181 In this context Straus used the image of an “arms race” to describe intergroup competition around the last Glacial Maximum (ca. 25KYBP). “The Upper Paleolithic in Europe,” 10
Paleolithic took place.” That is, Neanderthals and Cro-Magnons were “largely similar” in their ability “to balance between aggressive and cooperative tool-mediated behavioral patterns.”\textsuperscript{182} In short, both Neanderthals and Cro-Magnons were capable of using weapons and practicing warfare of some kind.

In addition, there is some indirect evidence of Neanderthal war-making capability. Their elevated frequencies of head and neck trauma, which have been compared in its distribution to that of injuries sustained by rough-stock rodeo cowboys, may reflect their high-risk hunting of medium- and large-size game using thrusting spears, “given the tendency of ungulates to react strongly to being impaled.”\textsuperscript{183} Elevated trauma rates may also reflect a lot of fighting.

The historical environmental context for the “replacement” of Neanderthals by Cro-Magnon was one of deteriorating climate. Increasing cold between 50KY and 30KY ago brought tundra ahead of advancing northern ice sheets. It is no doubt true, as Tattersall and Schwartz said, that for hunters, cold times are not necessarily hard times because pursuing herding ungulates in a more or less open landscape is a lot easier than killing

\textsuperscript{182} Zollikofer et al., “Evidence for Interpersonal Violence,” 6448.
boar in an oak forest. But there is a limit to the benefits of cold weather and gradually the Neanderthals were driven south toward the Mediterranean and Black Seas. In addition to an increasingly inhospitable climate, Neanderthals would have run into pioneer Cro-Magnons. Or rather, let us make the assumption there was some contact between these two kinds of hominids.

The evidence for such contact is admittedly thin because Neanderthal populations, already small at their maximum, were under climate-induced stress, as were Cro-Magnons. Accordingly, as noted above, some archeologists and paleoanthropologists argue quite reasonably that it is highly unlikely that they ever met. Table One provides an estimate of population sizes.

Table One

<table>
<thead>
<tr>
<th>Culture</th>
<th>Year KYBP</th>
<th>Ave. Population</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurignacian</td>
<td>40-29</td>
<td>4424</td>
<td>1738</td>
<td>28,359</td>
</tr>
<tr>
<td>Gravettian</td>
<td>29-22</td>
<td>4776</td>
<td>1879</td>
<td>30,589</td>
</tr>
</tbody>
</table>

| Glacial Max | 22-16.5 | 5885 | 2313 | 37,693 |
| Late Glacial| 16.5-11.5|28,736|11,343|72,635 |

On the other hand, tenure in historical hunter-gatherer societies is not a matter of controlling a surface area but of controlling sites and pathways within a surface landscape, which is to say that boundaries clearly exist, but they are connected to the use of specific sites and paths, not to specific real estate or a general surface area.\(^{188}\) Moreover, the examples of Inuit, Australian Aborigines, or North American plains Indians indicate low population densities and mobility over low-yield terrain does not mean no or little conflict and competition. All it means is that larger low-yield territories are needed to survive. Even in Tasmania, before the modern European settlers murdered the inhabitants, the combination of low population density and primitive military and hunting technology (Tasmanians lacked even the stand-off weapon of a boomerang) did not prevent the maintenance of territorial frontiers and lethal raiding—warfare.\(^{189}\)

At the very least, all the elements for Neanderthal-Cro-Magnon conflict were in place. In this context, as with the problem of choosing a narrative, we must note that, historically, contemporary anthropologists and

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archaeologists have, until fairly recently, typically overlooked or de-emphasized violence. Partly this is because “annihilation of a population through war … is only scarcely manifested in archaeology by direct traces of violence,” but also because of pre-scientific commitment to peaceful primitives. In what has become a kind of minor classic, War Before Civilization, Lawrence H. Keeley offered an explanation for the comparative understudying of prehistoric conflict: “archeologists of the postwar period had artificially ‘pacified the past’ and shared a pervasive bias against the possibility of prehistoric warfare.”

Partly because of the impact of Keeley’s book in changing the minds of archeologists, Steven A. LeBlanc was able to undertake an extensive survey of conflict among hunter-gatherers, including prehistoric humans. “One common thread” of hunter-gatherer conflict, he said, was that it was correlated with human beings exceeding the carrying capacity of the area in which they live. In this respect war is an alternative to starvation and population control by disease or predators. The logic of LeBlanc’s argument is entirely compatible with the Darwinian logic widely followed by

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archaeologists and paleoanthropologists. Before summarizing his discussion we might reiterate the point that Darwinian accounts are not determinist. To use the language of Arnold Toynbee, the same challenge need not evoke the same response. The story, the narrative, might have been different – not least of all because of the great importance of chance in influencing the outcome of conflicts.

LeBlanc’s basic hypothesis is that, if resource stress is the normal human condition, then warfare is also likely to be endemic. The historical absence of “ecological balance” means that the Rousseauian myth of peaceful savages living in harmony with nature can be summarily dismissed. “The human inability to live in stable resource balance almost guarantees warfare.”194 There are two large reasons why ecological balance, stable resource balance, or living in harmony with nature is a dream. First, societies have always lived in a changing environment and they always have had neighbours. “The best way to survive in such a milieu is not to live in ecological balance with slow growth, but to grow rapidly and be able to fend off competitors as well as take resources from others.”195 Stealing resources of others is likely to be resisted and the consequence is conflict.

193 LeBlanc, Constant Battles: The Myth of the Peaceful Noble Savage (New York: St. Martin’s, 2003), 69.  
194 LeBlanc, Constant Battles, 76.  
195 LeBlanc, Constant Battles, 73.
LeBlanc mentions two other considerations directly relevant to our speculative notion of conflict between Neanderthals and Cro-Magnons. The first is an apparent desire to dominate other males that may be innate to primates and certainly is present among chimps. This is a significant consideration because it lies outside the conventional assumptions that raiding and stealing resources of one’s neighbours is economically rational. Of course one can reduce observations to a “selfish gene” model, which is basically economic, but that is not where the phenomenal evidence leads a normal observer. Chimps, said LeBlanc, “seem to enjoy dominating other males of their own group, but they usually do this in ways that are not lethal. They extend this behavior by attacking and killing the males of other groups.” Among humans one would speak, by analogy, about a desire for recognition or the enjoyment of thymos, pride and self-respect, or even manliness. At the very least, the notion that either modern hunter-gatherers or Neanderthals and Cro-Magnons did not fight because they had few possessions and so nothing to fight about or could easily decline confrontation and wander away rests on the assumption that all conflict is over territory or possessions. A moment’s reflection indicates that this is not so. All wars, even chimpanzee wars, are dangerous, and the chimps know it.

196 LeBlanc, *Constant Battles*, 85.
Indeed, the ability to face danger looks to be part of all primate conflict. Bands or societies that avoid danger, especially the danger of confrontation and conflict (and this applies equally to chimps as to contemporary humans), lose. As Winston Churchill said, every country has an army; either its own or somebody else’s.

Another equally significant consideration concerns hunting. “There seems to be a correlation between group hunting and group fighting, which I believe is an important aspect of how we became human.”¹⁹⁷ Stalking, attacking a target in a coordinated way, being able to throw things accurately or to stab and thrust a spear with force and precision are all useful hunting arts. “And they are useful when executing an ambush on an unsuspecting camp of nearby humans.” Moreover, generally speaking big-game hunting is a “specialized male activity the world over. With very few exceptions, it is these same men who engage in warfare.”¹⁹⁸ There is practically unanimous agreement that Neanderthals were skilled big-game hunters and we have seen that the change from a hunting tool to a weapon is entirely within the imaginative capability of Neanderthals.

A third consideration concerns emotion, which is involved in facing danger and self-respect or thymos. Fighting, battle, and even war are all at

¹⁹⁷ LeBlanc, Constant Battles, 84.
least as much an emotional experience as a calculative or cognitively rational one. Like territorial chimps, surely Neanderthals would take offence and become angry at the migration of these other humans into “their” home range, even if it is only sites and pathways, not real estate. Indeed, if Mithen’s account of the singing Neanderthals is at all accurate, the emotional power of music might lead us to anticipate greater emotional intensity among them than among Cro-Magnons capable of more articulate speech as well as song.

Peaceful accounts of the extinction of the Neanderthals defy commonsense. If the rather gruesome accounts reconstructed by Keeley of scalping and weapons trauma were not sufficiently persuasive, consider again the analogy of the replacement of wild buffalo with domestic cattle across the prairies of North America. For political science, the notion that Neanderthals would be incapable of fighting Cro-Magnons is simply naïve. The process of Cro-Magnon replacement, we have no reason to expect, was some sort of unarmed peaceful migration. In short, humans, whether Neanderthal or Cro-Magnon, will fight before they agree to starve, even though fighting increases the chance of starvation. Given that the carrying capacity of the land of the European Neanderthals was already strained by

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199 LeBlanc, *Constant Battles*, 90-1.
persistent cold, the invading Cro-Magnons would be seen as adding to the problem, even if questions of difference and the inherent danger of dealing with strangers can be ignored. Perhaps William Golding’s *The Inheritors* better describes the process of “replacement” than does paleoanthropological orthodoxy.

There is a strong tradition in anthropology and archaeology that has not considered “primitive warfare” to be an adaptive Darwinian strategy. Indeed, in a rather odd reversal of the usual evolutionary rationale, the argument has been made (and we have quoted several instances) that warfare is inherently non-adaptive, at least until the invention of agriculture and the founding of cosmological empires. It seems to me that Azar Gat is correct to argue that warfare is not really a social mechanism for regulating population but one of the strategies that human beings use “to gain the upper hand in response to increase competition that may arise from demographic growth” or other sources of stress.²⁰⁰ It is not necessarily connected either to agriculture or to empire.

This brief account of recent contemporary intellectual history regarding the allegedly peaceful hunter-gatherers, as distinct form the actual historical subject-matter of Upper Paleolithic conflict and war has a bearing.

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¹⁹⁹ See *War Before Civilization*, 36-9.
on the question raised in this section on Upper Paleolithic “politics.” Taking some comfort in the fact that “chimpanzee politics” is an intelligible notion,\footnote{Frans de Waal, 	extit{Chimpanzee Politics: Power and Sex Among Apes}, rev. ed. (Baltimore: Johns Hopkins University Press, 1998).} in principle there is no reason, apart from always sparse and sometimes ambiguous evidence, why Paleolithic politics is impossible. That is my first and relatively straightforward point. As a corollary, one would expect there to be a means by which these conflicts came to an end. The obvious candidate is massacre but given the existence of “peacemaking” among chimpanzees, one might expect that negotiations would also be possible.\footnote{See De Waal, 	extit{Peacemaking Among Primates}.} And negotiations, one need hardly add, are possible only on the basis of some shared understanding of the rules of the game.\footnote{See Johan Huizinga, 	extit{Homo Ludens: A Study of the Play Element in Culture} (Boston: Beacon Press, 1950), ch. 1, 6.}

A second point is more elaborate. Often in the paleoanthropological literature scholars draw parallels and analogies between historical hunter-gatherer societies and prehistoric ones. Usually this exercise is undertaken with an abundance of caution since the evidence is so widely separated in time. There is a large anthropological literature on what might be called the politics of small-scale societies. I have not discussed this material here, and no one is more aware than I am of this lacuna in the full argument that needs
to be made. However, the evidence for Upper Paleolithic warfare seems to me to be compelling, given the widespread agreement regarding what Cro-Magnon and Neanderthal humans were like. Accordingly I would propose as a hypothesis or as a heuristic, and not simply as evidence of admiration for Clausewitz, that war constituted a major element of politics during the Upper Paleolithic, especially during the period of “replacement” of Neanderthals by Cro-Magnons.

This second, more contentious point leads to a third that is even less secure. If an analogy with much later human activity might be permitted, one might say that the “victory” of the Cro-Magnons in the long wars against the Neanderthals was the basis for the sustained creative outburst in technology and art during the Mousterian. This is not to imply that there was no conflict among Cro-Magnons, no war and no violent politics. Unquestionably there was plenty. Nor is there any suggestion that, with the “victory” of the Cro-Magnons, evolution came to a stop. On the contrary. But it is to suggest that the rules of the game had become more explicit when politics and war did not have to cross a divide (however characterized) that separated two kinds of human beings. Let us then consider Upper Paleolithic “religion.”
4. “Religion”

Inter- and intra-species primate and hominid conflict, which without too much distortion can be called “war” and even “politics,” can be understood well enough within the categories of Darwinian competition, fitness, evolution, and so on. The politics of Darwinian survival, however, are not particularly interesting, noble, elevating, or meaningful. This characterization applies even more strongly when it is focused on the question of “religion” and associated questions of human spirituality. As noted in the previous section such questions are conventionally discussed in terms of the ability of humans to symbolize (or to “symbol”) or engage in what is often referred to as symbolic behaviour (though we have seen on the basis of Byers’ argument that “behaviour” is probably not le mot juste). The archaeological and paleoscientific reasons why a Darwinian account of the human ability to symbolize is unsuccessful centres chiefly on the ambiguity of the data and the apparent inability of paleosciences to overcome it. This may be why, as Foster said, “empirically oriented anthropologists, and perhaps this includes most archaeologists, still view symbolic analysis with distrust.” In fact, the problem, as was true for human as distinct from chimpanzee or baboon wars, is philosophical, not biological. This is not to
say that the ability to symbolize or rather the actualization of that ability did
not have positive implications for Darwinian fitness (because it did, as we
shall see) but that symbolic activity carries greater significance than can be
properly rather than reductively understood within Darwinian categories.

Let us, however, begin the analysis by considering the question of
symbolization from the context of paleoscience. As with the enormous
literature of recent decades dealing with Neanderthals, there is an equally
extensive, if not more extensive, literature dealing with the “symbolic
explosion” that arrived in Europe with *Homo sapiens* ca.50KY ago. As with
the Neanderthal materials, I do not claim to have read it all. Much of the
argument regarding this “explosion” was a variation on the argument
regarding the “human revolution” allegedly initiated by the Cro-Magnons.
For example, “symbolic reasoning” according to Tattersall, “appears to be
qualitatively different from all other forms of cognition, including its own
immediate predecessor.”205 One can find many similar expressions
elsewhere in the literature. But what is the meaning to be accorded terms
such as “quantum change,” or “an entirely unprecedented entity” or
“qualitatively different.” Other paleoscientists use metaphors such as “leap

204 Mary Lecron Foster, “Symbolic Origins and Transitions in the Paleolithic,” in Paul Mellars, ed., The
forward,” or “discontinuity” or “gulf” to indicate the same problem. But what is it that is being indicated?

A brief analysis of Ian Tattersall’s recently elaborated version can clarify the problem. “It is important to distinguish between ‘symbolic’ behaviors and those that are merely ‘intelligent,’” he began, because symbolic behaviour is “qualitatively different, operating on a different algorithm,” which unfortunately Tattersall does not further describe or define. The capacity to symbolize, he continued, is “a generalized and apparently inexhaustible capacity for generating new behaviors when presented with new stimuli.” But because *H. sapiens* was descended from a hominid without this capacity, where did it come from? As we noted in the previous section, there is no fossil evidence to illustrate or explain any brain reorganization, and the genetic evidence is inconclusive. Accordingly, he argued, we have to look for “proxies,” which is to say, indirect evidence and argument.

The argument, which was touched upon briefly in the previous section, is elegant and straightforward. First, the biological history of hominids is not a “simple but dogged slog from primitiveness to perfection.” On the contrary, “from the beginning, many species and lineages have

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typically been out there” so that having Homo sapiens alone on earth is very much an exception. Second, “technological innovations are not associated with the emergence of new kinds of hominid” for the obvious reason that inventions are made by individuals who can never be very different from their parents or offspring. Third, the fossil record reaching back 600KY indicates that “intuitive, nondeclarative reasoning processes,” or intelligence, “can apparently underpin impressively complex behaviors,” and can do so in the absence of symbolism. The only apparent exceptions, based on fossil evidence from the Klassies River estuary in South Africa and then at Blombos Cave ca.100KY to 70KY ago was, Tattersall said, a “cultural experiment” that had no significant consequences, not least of all, he suggests, because of thousands of years of African drought and depopulation. Finally there was the Cro-Magnon “replacement” of Neanderthals that, by this argument, “was linked to the fact that they [the Neanderthals] perceived and related to the environment around them very differently than Cro-Magnons did – and that we do today.”

In other words, the cause of the “replacement” was a novel way of perceiving and relating to the environment – such, as we saw, is the

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conventional, even orthodox, account. So the next obvious question is: how did the Cro-Magnons acquire this ability? How did it come about that Cro-Magnon intelligence became “different” than Neanderthal intelligence? As indicated in the previous section, the answer is exaptation. “After all, the origin of biological novelty is essentially a random affair involving genetic copying error, and as a result no novelty can ever arise for anything.”

Necessarily, therefore, the osteological and morphological differences between Cro-Magnons and Neanderthals, along with other, unspecifiable changes, resulted from “a short-term genetic/developmental reorganization” with major implications. This “developmental reorganization” might have been facilitated by a population crash and an ensuing “genetic bottleneck” that would greatly amplify the impact of mutation, but, if related to cognition, would leave no fossil record, as we have already seen. On the other hand, if it was a cultural rather than a biological reorganization, the obvious candidate is the acquisition of language. But a “cultural reorganization” such as language acquisition raises precisely the same question: what caused that outcome? How did Cro-Magnons acquire language? Tattersall’s solution to the problem was, essentially, to say there was no solution. “It is possible to see that the origin of modern human consciousness must have been an emergent event, whereby an entirely
unanticipated level of complexity was achieved by a sheer chance coincidence of acquisitions.”²⁰⁹ What this “chance coincidence” actually was remains unknown, notwithstanding the extensive speculation regarding possible neural mechanisms.²¹⁰ Nor is it clear what an “emergent event” may be.

We encountered this problem in the previous section. It is more pressing this time around because symbolization, symboling, or symbolic behaviour appears to have no analogue outside human beings. Hence the metaphors of gap and gulf. In the example of Tattersall just summarized the problem, which is in many respects symptomatic of all efforts at accounting for modern human behaviour by accounting for its antecedents, is that he is trying to square a circle. He is fully aware that the human capability of symbolizing is new, if not utterly new then certainly orders of magnitude more frequent, in the Upper Paleolithic, which is to say the frequency is new. One of the implications is that Upper Paleolithic cave and mobile art may constitute the culmination of a long cultural tradition, in which case the question of the initial symbolization remains even if it is pushed back to an

earlier date. How far back is far enough? Whatever the date of the notionally “first” symbolization, it amounted to an unprecedented actualization of a capacity that of necessity was already there. And if the actualization of a capacity was, in fact, unprecedented it makes no sense to look for precedents.

This means that when dealing with modern humans, the ambiguity regarding the human species that is implicit in Tattersall’s “Evolutionary Framework,” whether in the form of Darwinian gradualism or the revised standard version of punctuated equilibrium, needs to be dealt with directly. We are, to be sure, animals, but as Nietzsche said in Zarathustra, we are animals with red cheeks. The real threshold between humans and every other being on the planet, past and present, is that we are as much discontinuous with other beings as we are continuous with them. We are biologically continuous, which is why it makes sense to speak of the genus Homo as being divided into several species. The discontinuities, however, are not so much biological as ontological in the sense that human being, H. sapiens,

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constitutes a different kind of being. To understand the real problem, as Socrates once said, we must make a second sailing.

Tattersall indicated this change (but did not account for it) with his introduction of the term “emergent event,” a notion that, as noted, was regrettably undeveloped. It is possible he had in mind something akin to Bernard Lonergan’s concept of “emergent probability,” which is an element of his philosophical anthropology. We can provide no more than a hint of Lonergan’s argument here. By way of illustration Lonergan considered the dietary schemes of animals:

All carnivorous animals cannot live off other carnivorous animals. Hence, a carnivorous, dietary scheme supposes another herbivorous, dietary scheme but, inversely, there could be herbivorous animals without any carnivorous animals. Again, plants cannot in general live off animals; the scheme of their nourishment involves chemical processes; and that scheme can function apart from the existence of any animals. Finally, chemical cycles are not independent of physical laws yet, inversely, the laws of physics can be combined into schemes of recurrence that are independent of chemical processes.

Each “level” provides the “materials” for the one above it, rather akin to Aristotle’s distinction of form and matter, and with a similar kind of irreversibility. In De Anima, for example, Aristotle argued for a similar

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212 Insight, 121ff; 132ff.
213 Insight, 119.
hierarchy of being: there is no eu zen or “good,” which is to say, fully actualized, life without zen, life.\textsuperscript{214}

Moreover, according to Lonergan, there is a sequence of sciences corresponding to the several “levels” of reality. Again, by way of illustration:

if the laws of subatomic elements have to regard the regular behaviour of atoms as mere patterns of happy coincidences, then there is an autonomous science of chemistry. If the laws of chemistry have to regard the metabolism and division of cells as mere patterns of happy coincidences, then there is an autonomous science of biology. If the laws of biology have to regard the behaviour of animals as mere patterns of happy coincidences, then there is an autonomous science of sensitive [or animal] psychology. If the laws of sensitive psychology have to regard the operations of mathematicians and scientists as mere patterns of happy coincidences, then there is an autonomous science of rational psychology [or philosophical anthropology]. Nor does the introduction of the higher autonomous science interfere with the autonomy of the lower; for the higher enters into the field of the lower only in so far as it makes systematic on the lower level what otherwise would be merely coincidental.\textsuperscript{215}

That is, the higher sciences explain what, to the lower ones, is inexplicable.

Now, applying this understanding of “emergence” to the accounts of the paleoscientists that are compelled either to insist on continuity (so that human beings are simply part of a hominid sequence) or on discontinuity (so that human beings are brand new and so unconnected with the hominid

\textsuperscript{214} See Voegelin, CW, 6: 407.
sequence), it seems clear we will have to make a theoretical or philosophical
distinction between the zoology of the hominid sequence and anthropology.
In short, if we are searching for “human origins” we must already have a
clear understanding of the kind of being humans are so we will have an idea
of what we are looking for. That is to say, from the perspective of
philosophical anthropology, the use of the term Homo with respect to other
species in the hominid sequence is a categorical error even though,
considered biologically, such usage is acceptable.216

The problem is illustrated rather whimsically by a book by a
geneticist, Jonathan Marks: What It Means to be 98% Chimpanzee: Apes,
People and their Genes.217 He began by noting that the physical and
chemical structure of DNA means that no particular DNA sequence can be
more than 75% different than any other. But the fact that human DNA is
more than 25% similar to that of a dandelion does not make us over a quarter
dandelion or, for that matter, 35% daffodil. When we look at chimps, where
our and their DNA is over 99% similar to ours, the interesting question is
why we think that matters, or at least matters so much more than our

215 Insight, 256.
216 This point has been made in similar fashion by Brendan Purcell in From Big Bang to Big Mystery:
Human Origins in the Light of Creation and Evolution (Dublin: Veritas, 2011), and also by such well
known philosophers and philosophical anthropologists as Hans Jonas, Adolf Portmann, and Max Scheler as
well as Eric Voegelin.
anatomical similarity, which has been known from the moment we set eyes on them. The answer, Marks says, lies in the history of biology – specifically in the development of molecular biology in the 1960s. In this context, he told the story of Emile Zuckerandl, who argued on the grounds that gorillas and humans had very similar hemoglobin that, “from the point of view of hemoglobin structure, it appears that the gorilla is just an abnormal human, or a man an abnormal gorilla, and the two species form actually one continuous population.” By a similar argument a daffodil is just a very, very abnormal gorilla or a somewhat less abnormal dandelion. Marks reported the response to Zuckerandl made by George Gaylord Simpson, a distinguished paleontologist: “a gorilla is not an abnormal man; it’s a gorilla.”

When we consider the question of why archaeologists and other paleoscientists who study the hominid sequence do so, the reason seems to be that they assume, one way or another, that their studies will lead them to an understanding of human emergence, which is to say, human being. As Purcell put it, “the point is that all inquirers into the hominid sequence are themselves human and they just can’t keep their humanity in brackets.”

This means that, when we are dealing with the problem of symbolization, or “religion” broadly considered, we need to make a kind of reversal in

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218 Marks, What it Means.
perspective so that, in order “to understand our brains, we have to work back from what we know about human knowledge and freedom: only then can we grasp how the brain is the launching pad from which our most human activities take off.”

In Lonergan’s philosophical language, biological evolution – the hominid sequence – constitutes an emergent reality that is non-biological, namely a specifically human reality. Even though they are often philosophically unreflective regarding the significance of human “symboling” capabilities, even though they may attempt to reduce “symboling behaviour” to something else – often an “expression” of sexuality or neural structures that have somehow been rearranged – archaeologists and associated paleoscientists almost invariably understand the achievement of symbolization as evidence of a new kind of hominid behaviour. As we have just argued, when we are considering genuine innovation we need to discuss philosophical issues. Accordingly, the obvious next question, “what’s so special about the capability of symbolizing?” is a philosophical, not a biological question.

We must, therefore, consult a philosopher, preferably one who has considered the issue directly. In The Phenomenon of Life, Hans Jonas made

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219 Purcell, From Big Bang to Big Mystery, 74.
a mental experiment and assumed he was an extra-terrestrial explorer seeking to determine “man’s ‘specific difference’ in the animal kingdom.” He argued that images, not hearths, tools, language, or tombs, provided evidence of this difference. Using his heuristic, our hypothetical explorer enters a cave and observes lines on the wall that were artificially produced and serve no pragmatic purpose but provide “a likeness to one or another of the living forms encountered outside.” This, he said, provided evidence of human being. Why? Because it is not an artifact connected to Edwards’ biological needs – food, reproduction and anything similar – but serves some other kind of purpose.

The cave drawings, in a word, are images, not imitations. This means actual lines on the wall, the colours, size, position, and so on can represent an indefinite number of objects.221 This is why, as we shall argue, the aurochs and mammoths painted in the caves of Franco-Cantabria, to say nothing of the dots, spirals, and grids, are not just portraits of wild animals or dots, spirals, and grids. This is why, as Tattersall said of the famous Vogelherd horse figurine, which did not resemble the actual equines hunted by humans 34KY ago, that it was “an elegant evocation of the abstract

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220 Purcell, From Big Bang to Big Mystery, 90.
essence of the horse.” Moreover, the “essence of the horse” is distinct from the physical figure and from the act of perception of it. An act of imagination is also involved. In Jonas’ words:

the principle here involved on the part of the subject is the mental separation of form from matter. It is this that makes possible the vicarious presence of the physically absent at once with the self-effacement of the physically present. Here we have a specifically human fact, and the reason why we expect neither making nor understanding of images from animals. The animal deals with the present object itself.223

There is, Jonas said, a “metaphysical gap” between human and animal perception. This explains why scarecrows and goose decoys work.

In section two above we provided a summary analysis of Voegelin’s philosophy of consciousness, a central element of which was the question of the compactness and differentiation of experiences and symbolization. The relevant aspect of his argument in the present context is that symbols are inseparable from the experienced reality they express. The truth – of cosmic order, of human being, of divine being, etc. – is not something attached to symbols, but is experienced or, as we said above, is participated in, by way of symbols. In Voegelin’s words:

as a consequence, when the experience engendering the symbols ceases to be a presence located in the man who has it, the reality from which the symbols derive their meaning

222 Tattersall, The World from Beginnings to 4000 BCE, 98-9.
has disappeared. The symbols ... are left as traces in the world of sense perception, but their meaning can be understood only if they evoke, and through evocation reconstitute the engendering reality in the listener or reader (CW, 12:52).

The implication of Voegelin’s hermeneutic strategy is this: we cannot claim to have understood the significance of the Upper Paleolithic symbolism unless it evokes in us an experience equivalent to that of the original artist. Jonas made essentially the same point when he remarked that making and beholding an image are two conditions of possibility of human being.

Making an image involves the ability to behold something as an image; and to behold something as an image and not merely as an object means also to be able to produce one. This is a statement of essence. It does not mean that he who appreciates a painting by Rembrandt is therefore able to produce its like. But it does mean that whoever can perceive a pictorial representation as such is the kind of being to whose nature the representational faculty belongs, regardless of special gifts, actual exercise, and degrees of proficiency attained.224

In an earlier paper,225 I criticized some interpretations of rock-art and Franco-Cantabrian cave art that plausibly interpreted the cave imagery as shamanic, but then argued that shamanic experience was simply the product of a neurological disturbance or disorder. As Steven Mithen pointed out,

such reductionist explanations “simply enables archaeologists to avoid asking questions about the human imagination, creative thought, and the symbolism of prehistoric art.”

Even so sophisticated and prominent a paleoanthropologist as Jean Clottes argued that:

> the geometric signs in the painted caves … are devoid of any real meaning. Though their makers must have used them as symbols, the absence of any syntax means that these signs constituted neither a language nor a script. The ideas and perhaps the stories and religious practices behind them will always elude us.

To which position Purcell responded: “but that would be like rejecting, say a Constantin Brancusi sculpture or a Barnett Newman painting on the basis that it was non-representational, when in fact both artists were trying to convey the essence beyond the appearance.”

Besides, there are methods available that are capable of furnishing intelligible interpretations of Brancusi and Newman and of the great images of aurochs and mastodons as well as of the “geometric signs” that are so often dismissed by paleoanthropologists of far less stature than Clottes.

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227 Clottes, Cave Art (London: Phaedon Press, 2010), 25. Clottes is hardly alone in declaring that the meaning of cave art is forever out of reach; he is, however, one of the most prominent.

228 Purcell, From Big Bang to Big Mystery, 98.

229 Among the paleoscientists who have developed ways of interpreting the Paleolithic symbols we need simply indicate the names of Andre Leroi-Gourhan or Annette Laming-Emperaire, Margaret Conkey or Ian Hodder. We cannot review this extensive and insightful literature here. See, however, two special issues of the Journal of Archaeological Method and Theory, 13-14 (2006-07) and the introduction by April Nowell, “From a Paleolithic Art to Pleistocene Visual cultures)Introduction to two Special Issues of ‘Advances in
Before considering a couple of accounts of what the cave and other imagery might mean, we would note that, as with the discussion of Neanderthal survival in Spain, climate provided an important element of context. The great parietal art of Franco-Cantabria was centred on the last Glacial Maximum, though not confined to it. Glaciation obviously imparted considerable stress on the population;\(^{230}\) likewise the “Venus” figurines seem to have been produced within a fairly narrow time horizon (ca. 25-23KY ago), also during a period of extensive glaciation.\(^{231}\) This is significant simply because, historically, periods of social, economic, ecological and political crisis are often marked by responses of great spiritual creativity and insight --or so the history of political philosophy unequivocally indicates.

Context aside, we begin with a consideration of the commonsensical account of Bruce Dickson.\(^{232}\) Dickson’s premises are straightforward: (1) all human beings have basically similar “psychological processes” and capabilities so that societies are not infinitely variable but regular and

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\(^{231}\) Gamble, The Paleolithic Settlement of Europe, 324-5.

patterned; and (2) the patterns of human culture are reflected more or less in the material aspects of life – art and architecture, settlement, mortuary debris, and other assemblages. From these assumptions Dickson drew three corollaries that guided his inquiry. It is permissible (1) to draw analogies from existing societies to non-existent ones; (2) to use patterns of ancient material to infer something of nonmaterial behaviour that produced them; and (3) to discover in the external arrangement of prehistoric imagery and symbol clues to the cosmology they express. Because, in fact, next to nothing can be known of Upper Paleolithic religious practices from observation or participation it was necessary to use the imagination to draw plausible analogies and inferences. One could, he said, learn something about the general outline of meaning of Christianity by examining the remains of Christian ceremonial buildings even though it would not provide much insight into Christian dogmatics.233

In the Introduction to this paper we summarized the conventional archaeological arguments regarding the material and technical changes of the Upper Paleolithic. Notwithstanding the limitations of lithic technologies to shed light on such decisive human attributes as language acquisition234 or

the ability to symbolize, the traditional summary of Upper Paleolithic technical innovations – the Aurignacian – looks as impressive as the painted caves of Franco-Cantabria. Even so it is still far from evident how much of this material and artistic evidence is “religious” in the sense of constituting an imaginatively engaging or even persuasive expression of a very ancient hierophany. Dickson argued, on the basis of the analogies just indicated, that by the end of the nineteenth century most archaeologists and paleoscientists had concluded that Upper Paleolithic humans were hunter-gatherers for which considerable modern ethnographic evidence was available even then.

From this ethnographic evidence they constructed what Dickson called the “basic model” of Upper Paleolithic life. Technology was simple, population densities were low and largely regulated by the availability of seasonal plants. The social organization was a kinship-based band with great equality and little specialization; there was feuding and raiding, but no large-scale warfare. The limitations to the applicability of this basic ethnographic model to the Upper Paleolithic are pretty obvious. Many hunter-gatherer societies have disappeared so the data source is limited but the limits cannot be known. Environmental conditions have changed a great deal since the late Pleistocene so contemporary wild fauna are quite different.

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for modern hunter-gatherers than they were at the end of the last Ice Age. It is also assumed that modern hunter-gatherers have preserved the behavioural and spiritual practices of their Upper Paleolithic predecessors.

Notwithstanding these limitations or qualifications, Dickson drew several equally commonsensical conclusions regarding Upper Paleolithic religious practices. Occasional shamanic trances did not amount to practices by regular, full-time specialists or “priests.” There were rites of passage both for marking the transition from adolescence to adulthood and from life to death that also reflected an increase in sedentary life. The rules and rituals governing hunting and treatment of game reflected both the social organization of a subsistence economy and the seasonal migration of animals.

He also drew some commonsensical conclusions (or, more cautiously, suggestions) regarding the painted caves of Franco-Cantabria. The most obvious attribute of parietal art was that it juxtaposed great beauty and effort to produce it with relative inaccessibility and that it succeeded in transforming the natural environment into a culturally meaningful milieu. The caves, he concluded, were, therefore, ceremonial centres and served as the sites of rites of various kinds as well as what archaeologists and

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236 Dickson, The Dawn of Belief, 159-66.
paleoanthropologists call “aggregation” centres. The series of paired motifs so important to structuralist interpretations of cave art began with the contrast between living space above ground and sacred space below (and growing ever more sacred the more remote and dangerous the site is). The rock face itself constituted a luminal membrane between the sacred space of the cave and the spirit world.

The most detailed interpretations of the painted caves have been given by structuralists – Leroi-Gourhan in particular. As is customary, structuralists look for various kinds of pairs and in the example of Leroi-Gourhan the dualities expressed were sexual. Other pairs have been advanced: left-right, positive or negative hand images, red or black ochre, and so on. The heuristic point of these interpretations of cave art is that they indicate unambiguously the expression of a complex spiritual experience.

We will not add to or criticize existing interpretations of Franco-Cantabrian parietal art on this occasion. We will consider instead the careful, indeed painstaking analysis of personal, portable or mobilary art undertaken by Alexander Marshack. Marshack is unusual for having argued in favour of a definable meaning to a wide range of artifacts. As we will see, his work

\[237 \text{ Dickson, The Dawn of Belief, 190-216.} \]
\[239 \text{ I have discussed some of these problems in “The First Mystics?”} \]
has also been controversial, not least of all because he has argued the way he
has.

Marshack began his major work by making explicit his assumption
regarding Upper Paleolithic humans: “the basic functioning of the brain was
the same then as now.” On the basis of this assumption, “man before history
and in the Ice Age was not much different from what he is now. What
differed primarily were the facts, ideas, and relationships with which this
brain was educated and with which it worked, not the manner of its
functioning, its ability, or its capacity and intelligence.” In spite of its
philosophical crudeness, which in this respect is similar to Dickson’s
evocation of basic “psychological processes” being the same for modern and
Upper Paleolithic humans, let us accept this formula as equivalent to
Voegelin’s statement on the constancy of human nature.

Marshack was likely the first mathematically sophisticated scholar to
examine incised bones, bone fragments, antlers, and so on, which
archaeologists refer to as “plaques,” on the basis of the assumption that they
were both intelligible and sophisticated. Moreover he did so by using a
microscope to examine the incisions. His research brought to light data that
“have revealed an unexpected tradition, not merely of making images and
compositions but of periodic, repetitive use and accumulation of certain classes of images and symbols.” Specifically, he said, “the tradition of accumulating marks with changes in the engraving point, the style of the stroke, and the angle and pressure of engraving, and with a spatial separation of sets … suggested that such sets were neither random nor decorative but had been intentionally accumulated over a period.” He dismissed out of hand the notion that these incised artifacts were “hunting tallies,” echoing an earlier observation of Leroi-Gourhan, that “the idea of the hunter consistently making a notch on his small stick every time he brought down a mammoth is more entertaining than plausible.” What, then, were these “documents” with scratches and lines and notches?

As early as 1964 Marshack speculated that they were “notations” that constituted lunar calendars. He was apparently led to this conclusion from a commonsensical inference that the later, Neolithic “calendric tradition,” as expressed for example in Stonehenge, was the result of a cultural evolution over several millennia that may have begun in the Mesolithic and certainly

took several millennia to come to fruition. He later specified that this “tradition of notation and animal imagery began in the Aurignacian, ca. 32,000 BC among the early Cro-Magnon hunters.” But what did he mean by “notation”?

Physically we are concerned with pieces of bone, antler, stone, or ivory – plaques – around 10 to 30 cm (4-12 inches) in length. They are notched or scratched or have received some other kind of engraving. These physical marks are “notations” because they are ordered. The markings “are not random, accidental, decorative, or artistic. Instead they are intentional, with a complex system of visual-kinesthetic and spatial differentiations for the sets, subsets, and larger superordinate groupings.” The notations, moreover, are sequential and cumulative and constitute what he called a “time-factored seriation” by which he meant “they are always used at the proper place and time within the cultural continuum and they always mark or refer to concepts that persist and are maintained or reported in time.”

As he maintained in his 1964 article in *Science*, Marshack many times

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reaffirmed his interpretation “that they often represent an observational lunar notation.”

In several places Marshack remarked on the complexity of this notational system, from which a number of implications followed. The first was that, unlike language or arithmetic there is no formal structure to the “system.” Rather, “Upper Paleolithic notations represent an informal tradition whose basic system is the accumulation of sets and subsets, but the precise form or style of the accumulation was not culturally determined except in general terms,” namely that lines or dots or chevrons would be used. The markings were, he said, by “sets” or “sub-sets” and almost never by means of marks added one at a time. His term for this kind of cumulative but non-interval notation was “non-arithmetical.” There was not, in other words, “a count of the number of days in a lunar month or a count of the number of days in the lunar or solar year, at least not as clearly defined arithmetical sums.” Accordingly, a month could be three or four counted periods of eight or ten days and a year could be ten to thirteen months. Obviously translating the notations into arithmetical form is possible, as the previous sentence indicates; Marshack’s point, however, is that the

249 Marshack, “Upper Paleolithic Notation,” 824-5.
arithmetical homogeneity of a numerical sequence is not likely to have been what the creators of these notations had in mind.251

Before considering what Marshack thinks they did have in mind, there are a few additional implications and features of this mobilary art to note. The first is that engraved bone and stone “appear in all the cultures of the Upper Paleolithic in Europe,” which is to say from 34KY to 12KY ago, “though they are not present at every site. The decorated caves and rock walls of the period are regional and specialized aspects of the more general, widespread traditions of symbol usage represented by the mobilary materials.”252 As might be expected with such widespread distribution, over time distinctive local “styles” developed, which is a matter of some importance inasmuch as cave art or parietal images are often distinguished in terms of style. Moreover, because considerable skill is involved in creating these notations, it is reasonable to infer that the artisans or artists learned their skills by “working in a sophisticated and evolved tradition” that also transmitted more or less stable meaning.253 In addition, he said, “we can, perhaps, tentatively speculate that the examples of notation presented would be of less value to an isolated, barely subsisting nuclear family than to specialized groups of persons involved in storied, traditional, recurrent

\[251\] Marshack, “Upper Paleolithic Notation,” 825.
interrelations and interactions.” They are, accordingly, a “measure of the complexity of that life.” 254 Finally, Marshack concluded, that notwithstanding the fact that the notations often represent lunar observations, “the body of mobilary materials documents the presence of other forms of symbolic marking, including nonlunar notations, and these were apparently used in their own specialized contexts.” 255

Given the large number of artifacts available, any interpreter can choose the ones that best illustrate his theory. Marshack is, therefore, no more than prudent in noting that the significance of these notations is polyvalent. Accordingly, several meanings can be expressed in the same image. We will consider this conclusion in more detail below.

Accepting Marshack’s interpretation that a large class of Upper Paleolithic mobilary art deals with lunar calendars as well as other nonspecified matters, the next question is obvious: “why … should a hunter-gatherer maintain a lunar notation which is not arithmetically structured or precise and which does not visually and symbolically mark off set months?” 256 To answer this question Marshack made reference to ethnographic evidence. This procedure is certainly a time-honoured

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253 Marshack, “Cognitive Aspects,” 447; see also 461.
heuristic. As he wrote, “early interpretations of Upper Paleolithic symbolic materials were based on comparisons with the practices and images of historic primitive peoples. Such comparisons have validity, at a distance of thousands of years, only if they are comparisons of cognitive processes rather than attempts to explain the semantic meanings of the Upper Paleolithic.”

Notwithstanding his caution against interpreting “the semantic meanings” of these notations, Marshack, as is true for nearly everyone else, does advance a proposal based on ethnographic analogies with Siberians and North American Indians who occasionally begin a sequence with “the moon of the flood” or of break-up and move on to the “moon of freeze-up.” That is, they represented in their “calendars” “seasonal sequences of regional phenomena, economic activities or ceremonies.” Marshack applied this approach to notations on bone fragments discovered at La Marche, France and dating from 15KYBP, and found a seven-and-a-half month sequence that (arguably) commenced with the March thaw and extended to November, with the first frost or snow. In other words, the La Marche bone notations might have been a device to connect annual changes in the seasons with

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256 Marshack, “Upper Paleolithic Notation,” 827.
258 Marshack, “Upper Paleolithic Notation,” 827.
“economic activities or ceremonies.” Indeed, one might suggest that these bone notations mediated the order of society with that of the seasons.

Marshack provided additional evidence that tended to undermine his own position that we can know next to nothing about the meaning or “semantic meaning” of these artifacts. We noted above Marshack’s observation regarding the polyvalence of meaning in mobilary art. The La Marche bone, for example, displayed the engraving of a horse, but it had been reused or touched up with the addition of other parts of the horse’s body that happened to be engraved in different “styles.”

Likewise when Marshack applied his microscope to the famous Vogelherd figurines, every one of them “including a crude human figure, showed evidence either of long-term handling or of an applied symbolic marking.”

In other words, artifacts and figurines from as early as 32KYBP show evidence of what he called “symbolic overmarking” and use. On the one hand this observation confirmed his contention that long-term use might well have different meanings at different times. “One can assume therefore that the animal or human images we recognize were almost never representational; they were made for use with other classes of symbols as part of a complex interrelated tradition. This, of course, is the way diverse symbol systems are used.

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259 Marshack, “Upper Paleolithic Notation,” 823.
today.” But on the other hand the fact of use, extensive handling and so on is prima facie evidence of ritual activity, which has its own experiential structure.

In a later paper, Marshack drew out some of the implications of this insight, this time in connection with the Franco-Cantabrian painted caves. This early historical development, he said, was also to be understood in terms of the use rather than the depiction of animal images. The cave images, he said, were not “merely referential, representational, and informational but, along with beads, pendants, ochre, and burials, often represented specialized aspects of visual ‘nonlinguistic,’ enactive, symbolic, ritual and participatory behavior.” The focus on participation, for reasons discussed in section two above, can hardly be overstated.

Often participation in ritual, i.e., the mere act of participatory marking, resulted in the production of dots, lines, fingermarks, and even hand prints. These marks were not necessarily depictive, representational, referential, or even intended to be seen by or to communicate with others, but often the by-product or end product of a symbolic process in which the ritual act was the semantic and relevant behavior.

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For this reason, Marshack argued, many mobilary artifacts were hidden in the sanctuary caves for ritual purposes. Their cultural value, therefore, lay in the fact that they were hidden, and by being hidden, sanctified. This conclusion, which began from premises quite different than those of Jean Clottes or David Lewis-Williams, confirmed their contention that there was likely a shamanic component to the use and thus the significance of the Franco-Cantabrian caves.264

Marshack’s reflections on the tradition that lay behind some of the most well known Paleolithic figurines such as the Vogelherd horse (32KYBP) mentioned above led him to draw some very significant inferences. His microscopic examination of the horse indicated, as noted, that it had been handled and polished for a very long time. Thus it was less a crude precursor to Leroi-Gourhan’s contemporary Paleolithic Style I than the end-product of an extended tradition. Likewise a lion-headed anthropomorph or therianthrope found near the Vogelherd horse was the result of a long tradition. It was dated from the early Aurignacian, “and there is nothing approaching this level of symbolic complexity and sophistication during this period either in the Near East or Africa.”265 One reason these items have been misinterpreted, he said, is because “it was difficult early in

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264 See Cooper, “The First Mystics?” for further details.
the century to believe that the Neanderthals were capable of working bone or of making beads or items of personal decoration.” The problem, as Marshack saw it, with the aid of his microscope, was that “the available evidence for complex problem-solving and symboling at what I would term an evolved ‘human’ level is greater among the Neanderthals during the Mousterian period than it is during this same period in areas outside of Europe.”

In light of subsequent discoveries in South Africa and the imprecision of the metaphor of an “evolved ‘human’ level,” Marshack’s appraisal may have to be modified.

Nevertheless, these observations and inferential arguments constituted a “profound theoretical problem,” namely that the “symbolic explosion” that present-day observers have detected in the painted caves may have been somehow connected to the Neanderthals. “When the Upper Paleolithic ‘creative explosion’ does occur,” he wrote, “it occurs only in this region of prior Neanderthal habitation.” Accordingly, it amounts to “a regional historical development that was constrained to the area of prior Neanderthal habitation and culture,” notwithstanding the conventional interpretation that the parietal art of the Franco-Cantabrian Magdelenian constitutes the origin of art per se. For Marshack, however, “it seems that the Franco-Cantabrian

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phenomenon was a historical, cultural development, occurring within a particular and unique regional context. It was not related to a biological, evolutionary, or speciation event.” Nor was it a beginning of art or a universal measure of *Homo sapiens*, “but a measure only of a certain range of that capacity expressed and developed under certain historical, demographic and ecological conditions.”

This was, it seems to me, a challenge to conventional interpretations.

In a later paper he reported some even more startling findings. By convention the Middle Paleolithic or Mousterian has been considered to be a period of “generic” symboling; the dead were buried and red ochre was used for decoration, but there were no images. However, Marshack’s microscopic analysis has revealed “a later Middle Paleolithic incised composition from the Levant ca. 54,000 B.P.” which is usually referred to as the Quneitra cortex (or outer layer of rock), that documented “a complexity and level of symbolic production fundamentally different from the generic modes that have been suggested for this period.”

This piece contains a series of nested semi-circles, which meant it was the product of both careful planning

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and a deliberate centering as the stone was turned and the lines incised. Moreover, it was clearly nonutilitarian.

Marshack then related this artifact to an even earlier one, “an exquisite nonutilitarian oval plaque [carved] from the lamella [crown ridge] of a compound mammoth molar” found at Tata, Hungary and dated ca. 100 KYBP. Following Durkheim’s terminology, this is often referred to as the Tata “churinga.” The two-handed skill required for that carving “exceeds any yet known for anatomically modern humans during this period,” which raised an interesting question: was the Quneitra composition made by Neanderthals or anatomically modern humans? This is a meaningful question because, as we noted, both kinds of humans inhabited the Levant at this time. He then proposed a rather bold interpretation of the relationship of the Hungarian Tata plaque and the Levantine Quneitra cortex. First, the Quneitra engraving “represents a shift to the creation of far more complex potentially variable and perhaps ritually used abstract and schematic images and referents” than the “gross symboling processes” such as red ochre or the Tata plaque. These two artifacts thus may be part of a long preparation that preceded the later “symbolic explosion.” If so, Marshack has provided additional evidence against a sudden genetic shift in symboling capacity
discussed in the previous section and in favour of a regional cultural shift from the Levant to Franco-Cantabria.

According to Marshack’s argument, then, the “symbolic explosion,” which, according to the now obsolete argument, discussed in the previous section, was held to have begun the Aurignacian some 20KY after the production of the Quneitra cortex, marks the terminus ad quem of a highly evolved and sophisticated tradition of symbolizing that relied on the long-term transmission of specific skills in image-making as well as working ivory, bone, and antler as well as stone. Marshack suggested that these various traditions might well have been carried to Europe from the Levant by anatomically modern humans. One thing is certainly clear from the Levantine evidence: the so-called “transition” between the Middle and Upper Paleolithic took place in the Levant thousands of years before it occurred in Europe. Moreover, Marshack made this argument from within the “Eurocentric” tradition at a time when the African materials were not well known outside the community of African archaeological specialists.

It is a plausible but startling interpretation to suggest, finally, that the Neanderthals may have been crucial agents in this transition. Even before the genetic evidence was available regarding Levantine hybridization.

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269 L. Vertes, “Churinga de Tata (Hongrie),” Bulletin de la Société prehistorique francaise, 56 (1959), 604-
summarized in section three above, the archaeological evidence indicated that the Neanderthals moved into the Levant around 70KYB, “some 30,000 years after the Tata plaque was carved in Europe and before the Quneitra composition was incised.” Moreover, the Neanderthals either occupied or shared territory inhabited by *H. sapiens* migrants from Africa. Perhaps, Marshack said, the Neanderthals carried to the Levant “their symboling traditions and skills. Later, anatomically modern humans apparently moved into Europe, perhaps carrying Near Eastern symboling traditions and skills” that had been developed in Europe by Neanderthals thousands of years earlier. In short, the symbolic explosion of the Upper Paleolithic undertaken by the Cro-Magnons may have owed a great deal to their prior Levantine encounter with the Neanderthals.

There is one final aspect of Marshack’s argument that needs to be noted. Most archaeological reports are filled with data and descriptive statistics. Sometimes more elaborate statistical analyses are undertaken. Now, bones and stones “do not speak for themselves” and neither do data derived from them. As M.H. Wolpoff once observed, “I have been in rooms

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with data and listened very carefully. The data never said a word.”

Marshack’s point is that even a unique instance, with no statistical value, can be meaningful. As he put it: “statistically insignificant examples from the earlier Paleolithic record are crucial for an understanding of the evolution of the potentially variable human capacity for problem-solving and symboling.” The reason for attributing significance to the statistically insignificant or even unique instance or event is a consequence of what he called a “variable human capacity” and what we referred to in section two as the capacity to innovate or to act. This is why, in Marshack’s words, “the isolated and rare case may be as important for the study of hominid capacity as the statistically relevant.” Thus, even though instances of Neanderthal symbolic behaviour are unique, they do document a potential variable capacity that is clearly related to the range of symbolic capacity found among the anatomically modern ‘Cro-Magnons’ who followed them. What remains interesting and perhaps significant, is that the burial evidence is more complex and numerous among the Neanderthals than it is among evolving anatomically modern humans in other areas during the same period. We are, therefore, once again faced with the evolutionary problem raised earlier in this paper,

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272 Marshack, “Evolution of the Human Capacity,” 16. For a more orthodox archaeologist such as Mellars, the Tata plaque simply remains “enigmatic” as well as unusual. Mellars, *The Neanderthal Legacy*, 375.
namely that European Neanderthals had a superior capacity to symbolize than contemporary Homo sapiens in Africa. Marshack then drew the following conclusion: “Bit by bit, the accumulating data seem to be suggesting that despite morphological and historical, cultural differences, the range of potential capacity for problem-solving and symboling among the two hominid groups was similar and comparable, if not precisely ‘equal.’”

No account of Marshack’s work, however brief, would be complete if it did not mention the criticism that has been directed his way. Interestingly enough, one of his most persistent critics has been Francesco d’Errico, who is far from uncontroversial. In 1989 he published the first of several criticisms. First of all, he began, the criteria for Marshack’s method “have never been described or validated experimentally.” That is, Marshack simply looked at the microscopic evidence and said what it appeared to him to signify. In contrast, d’Errico demonstrated through experimental replication of incisions on the Paleolithic material that the microscopic signs that are held to be so important “are not a constant feature. In addition, they apply only to incisions made in rapid succession. This finding is of particular importance, since it allows the time variable to be included in the interpretation process.” As a consequence, d’Errico said, the lunar calendar

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interpretations “are devoid of practical foundation, since their creation would require several distinct operations over a relatively long period and in all probability the use of more than one tool.”

Marshack responded by saying first that d’Errico had misconstrued his work. “The primary test for the presence of ‘notation’,” he said, is “that they be carefully made and accumulated sequentially.” Here he made reference, as he did on other occasions to his own papers. He concluded with the following remark:

Verifying notation is never simple. It requires some theoretical understanding of symbolling modes and strategies and, if one is dealing with a possible lunar notation, of astronomical periodicities. It also requires some knowledge of the diversity in the traditions of marking present within the period and culture being studied. The mere use of a microscope, without an understanding of the theoretical and methodological problems involved in notational and symbolic analysis, can never be adequately informative.

What Marshack was referring to in this passage, it seems to me, is what Michael Polanyi called “connoisseurship.” What d’Errico took him to mean is: “I know what I’m doing.”

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In consequence, his reply to Marshack was unambiguous. “For more than 20 years,” he said, “we have awaited a precise description of the criteria that constitute [the] foundation” of Marshack’s microscopic analysis, and none has been forthcoming. “It is only by reproducing the engraving experimentally under known conditions similar to those surrounding the prehistoric engraver that we can demonstrate the links between the engraving, the tool, and the engraver’s actions. Marshack has never even attempted such a demonstration. His error, then, is that from the beginning he has used a method that has not been established experimentally.” And yet Marshack had the effrontery to claim that d’Errico’s work had merely confirmed what he had established. This was too much: “he is placing microscopic evidence that has been demonstrated experimentally … on a par with simple intuitions deduced from comparative observation of engraved lines on archaeological objects.” Such a procedure “has nothing to do with scientific research.” In contrast, d’Errico said, “my work is based not on opinions but on demonstration.”277 Not surprisingly, this somewhat ascerbic exchange in a premier scholarly journal was quickly reported to the wider scientific community.278 Over the years Marshack and d’Errico continued to

express their frank views of one another’s work. Since by and large they talked past one another, they could hardly be said to have disagreed.279

In 1996 Marshack was criticized from an entirely different quarter by James Elkins, an art historian at the Art Institute of Chicago.280 The genealogy of “close reading” by which he means “close examination” or “purposive, vigilant scrutiny of the particularities” of a text or observed artifact, began when art history began, with the “antiquarianism and connoisseurship” of the Enlightenment. In literary studies, “close reading” was practiced in the UK by critics such as I. A. Richards and William Empson and in the US by the “New Critics” such as John Crowe Ransome, Cleanth Brooks, and Robert Penn Warren. according to Elkins, whatever it may be in practice, it is conceptually “nearly intangible;” it “is too much, and yet it is never enough.”281 In a sense, Elkins reiterated d’Errico’s argument regarding criteria, though not from d’Errico’s standpoint regarding “science.” Close reading may be desirable, Elkins said, but “the ‘closest’

281 Elkins, “On the Impossibility of Close Reading,” 185, 198. He elaborated the theory behind his application of it to Marshack, his “reading of Marshack’s reading” (186) that is even closer than
reading would depend on how the community of interpreters perceived the disposition of meaningless marks and meaningful signs and how it chose to understand ‘mark’ and ‘sign’.” Elkins’ implication is that Marshack’s interpretations, while unconventional still depend on the conventions of his unconventional hermeneutical community. “Marshack,” Elkins said, “never addresses the appropriateness of his chosen level of close reading, except by saying that he studied every significant mark.” As a consequence “his critics have usually been quick to find alternative readings but hard-pressed to say why their readings should be preferred to his.”

In this context Elkins wrote of d’Errico that even though his readings were “physically closer” because he used instruments that achieved greater magnification than Marshack’s optical microscope, and so extracted different kinds of data, the problem remained: how close is close enough? As one of the “Comments” noted, “a reader who gets too close, focussing on minor points, is unable to get what, speaking metaphorically, we call the ‘big picture’.” Marshack replied with a vigorous defence of connoisseurship that might also be taken for an ad hominem response. “When a novice viewer such as Elkins, and one unfamiliar with notations as a problem

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Marshack’s reading of artifacts, can be found in Elkins, On Pictures and the Words that Fail Them (Cambridge: Cambridge University Press, 1998).


283 David Carrier, “Comment,” 202. Elkins’ remark on d’Errico is at 197; d’Errico’s response is at 207-8.
solving mode,” he wrote, examines the material, he is bound to find it “perplexing.” Marshack was capable of distinguishing between a mere mark and a meaningful “sign” as “a result of long years of inquiry into modes of problem-solving and notation.” Whatever problems there may be with close reading or “close seeing,” they cannot be solved by even “closer seeing” but only by “intelligent, expert seeing.”

There are, it seems to me, two conclusions to be drawn from Marshack’s remarkable work. The first is that we are able to understand more of the history and of the “semantic context” of both the notations and other mobiliary art and of the parietal art of the caves than his explicitly cautious remarks would suggest. That is, where Marshack wrote of “an evolving capacity for visual-spatial and time-factored interrelational inference,” needed to produce the “notations,” we would translate his words to mean not so much a capacity as a new, unprecedented and biologically uncaused or, in Lonergan’s language, an “emergent” underlying experience of cosmic order, which Voegelin came to call “the primary experience of the cosmos.” Moreover, Marshack has presented unambiguous evidence and a persuasive if not statistically compelling argument that such experiences were well within Neanderthal capability.

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284 Marshack, “Comment,” 212.
Randall White called Marshack’s photographs “visual arguments” and Elkins said his “photomicrographs can be coercive ‘visual arguments’.” Neither comment was to be understood as praise.

A second conclusion is that the proper response by a connoisseur to the criticism that he is arbitrary, unscientific, unverifiable, and so on, would be to provide a defence of connoisseurship along the lines of Polanyi or a contextualizing argument that explained his lunar calendars in terms of fundamental experiences of reality along the lines of Lonergan or Voegelin. He did neither. One reason, it seems to me, is that he remained within the common understanding that consciousness was chiefly to be understood as cognition rather than participation. As a result, the question of relevance and interpretation, which to Marshack looked self-evident, looked to his critics and detractors as subjective and arbitrary.

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A second person to offer an interpretation of these very early examples of human symbolization, Marie König, was much less reluctant than Marshack to discuss directly the “semantic context” and meaning of

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Upper Paleolithic images, including the dots and grids and lines that many paleoanthropologists considered unintelligible or uninteresting. Where Marshack was considered to be highly controversial in his interpretations. König, so far as I can tell, has largely been ignored. Voegelin however found her work useful for his own partly because she began from a kind of inarticulate sense of participatory consciousness but also because she was willing to account in a coherent way for Aurignacian as well as earlier Mousterian “art,” that is, for the very earliest examples of symbolic activity.

Let us recapitulate the problem. Ever since Upper Paleolithic parietal art was recognized as a visual product of the Pleistocene, it was interpreted as having religious and cultural significance. The “classical” theories of the early twentieth century, especially those of Abbé Henri Breuil, assumed the validity of the category of “primitiveness” derived from the work of Frazer and Durkheim and drew analogies between Paleolithic and “primitive” human being. Accordingly, this art was seen as being totemic, an expression of a rite of passage, hunting magic, or inspired by shamanism. All of these “classical” theories may be true or at least partly true, but they are difficult to verify.
to test either with reference to archaeological evidence or to judge in light of
the criteria of philosophical anthropology. Even the highly qualified
arguments in favour of using modern ethnographic evidence of hunter-
gatherers as an analogy to Paleolithic hunter-gatherers had to deal with two
obvious objections: first, the modern hunter-gatherers are as remote from our
common Paleolithic predecessors as we are; and second, the notion that
“primitive” is equivalent to inferior is little more than a left over prejudice
from the Enlightenment. Indeed, these problems are just what Voegelin’s
concepts of compactness and differentiation and of equivalences of
experience and symbolization were designed to overcome.

In her most significant book, On the Beginning of Culture: The Sign-
Language of Early Human Beings, Marie König, as Voegelin, began from
the assumption that the spiritual experience expressed in the symbolism of
early historical peoples was no less human, in the sense that the individuals
involved had access to the full amplitude of reality, than contemporary
people. Though she had never heard of Voegelin when she began her work,
like him she approached the materials as expressions of a basic and common
human search for attunement with the order of reality. Her participatory
rather than a perceptual understanding of human consciousness led her to

“Paleolithic Art,” Journal of Field Archaeology 14 (1987), 413-30; Amir D. Aczel, The Cave and the
approach parietal and mobilary art as if it was a religious image or even a
document that can be understood only on the basis of imaginative
participation in its meaning. As an illustration she said, just as the painting
of a dove ceased to symbolize the Holy Spirit outside a church, and becomes
simply the picture of a bird, so too the “paintings” in the caves lost their
significance when viewed outside that context.289 One must, therefore,
endeavour to participate imaginatively in the context of the Upper
Paleolithic (or earlier) art in order to understand reflectively its meaning.

König was perfectly well aware of the danger of reading in arbitrary
meanings based on contemporary prejudices, assumptions, or beliefs. But
this is a perennial problem in any hermeneutics. This is why König began
her analysis with a brief survey of prior interpretations of cave imagery,
from Abbé Breuil to André Leroi-Gourhan and came to the conclusion that,
for them as for other interpretations that do not aim at grand syntheses such
as Leroi-Gourhan achieved, “whatever we find in our excavations is always
the external consequence and never an internal cause. Since the causes are
spiritual processes, which lead to visible results, large areas of reality are
excluded from historical research.”290 It is true that Leroi-Gourhan saw
“religious” significance in the cave images, but he confined it to fertility

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288 Renfrew, Prehistory, 135.
rites. König, however, argued that fertility symbolism is always a subordinate symbolism within a primary image of the world, which is where she began.291

Just as the early multi-purpose Aechulean choppers and hand axes were replaced by more specialized Mousterian scrapers, burins, and knives, so did symbols develop from the simplest and most abstract – a circle or a sphere – to more complex. She schematically represented this version of Voegelin’s concept of compactness and differentiation by way of a “cultural pyramid” with the most compact symbol (or tool) at the top, which corresponded to the oldest and most fundamental experiences (Grunderfahrungen). When we try to describe the oldest and most fundamental experiences, much as when we try to describe the first tools, we are compelled to speculate, but we can be certain there actually was a “first” tool. As we saw in section two of this paper, Voegelin remarked that human existence was precarious not simply in physical terms but was spiritually precarious as well.

König provided a brief illustration of what she meant – a kind of speculative philosophical anthropology, starting with physical or biological

290 König, Am Anfang, 19.
291 König, Am Anfang, 22.
precariousness. The experience of hunger and cold quickly informs anyone of the physical basis of their existence. Hunting and control of fire answer the anxieties contained in that experience: if you do not eat or keep warm, you die. But, she said, the early humans, like all humans, experienced realities for which there was no answer. Even if you keep warm and have plenty to eat, you still die. This is a mystery and it is every bit as real an experience as is avoiding freezing or starving to death, but it is of an entirely different kind. There were many things that, even in the best of times, when the weather was pleasant and game was plentiful, could not be influenced, let alone controlled: the rhythms of day and night, the seasons, the circulation of the sky, the changes in the moon, volcanoes, the wind, tides – and, of course, birth and death. But these things could be observed and thought about.

In other words, the primordial experience of the world was that it was mysterious and dangerous and that existence was limited and precarious. Even when humans are relatively comfortable, we are still surrounded by great mystery. Early humans no doubt wondered why the sun came up in the east or why constellations disappeared over the horizon at different places in the night sky at different times. Such highly concrete questions were summarized much later in human history by Liebniz’ famous formula: why
is there something rather than nothing? and why are things the way they are and not some other way? König’s expression of this basic experience was that human participation in reality is one of dependency, but also that humans can reflect on that dependency and so feel connected to the world and grateful for their connection. As Voegelin remarked, precariousness is not chaos and order can be wrested from disorder. The invisible forces that are manifest in diurnal rhythms, the seasons, and so on can be made if not visible then intelligible by being represented to human consciousness symbolically, as a sacred image.

The oldest objects to have been found that were not tools, “which raised the question of their cultic purpose, were spheroids.” They dated from the Acheulean, ca. 300KYBP, are about the size of a softball, and could be held in the palm of the hand. “The spheroid,” König said, “was the ideal shape (Gestalt) for the as yet undifferentiated fundamental concept (Grundbegriff), because alone it is the perfectly uniform figure (Figur),” The spheroid held in one’s hand confirmed the spherical nature of the cosmos made visible in the night sky and the curvilinear course of the constellations.

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König, Am Anfang, 34.
The homogeneity of the cosmos expressed as a sphere was succeeded, König said, by the first structure: above and below – a sacred spring, for example, or a cave. An additional organization of the cosmos was expressed in Neanderthal burials arranged on an east-west axis or along two “cardinal points.” Such an orientation can be achieved only after a precise observation of the stars or the sun and the variability of the rising and setting of these celestial bodies. Later in the book she discussed “one-man” rock-shelters in the Ile-de-France, usually situated at a high point where one can recline and observe the passing sky. That is, these places were astronomical observatories.  

The discovery of the east-west axis was followed by an act of the imagination, perhaps based on the observation of what we still call the pole star, that brought the consciousness of a north-south axis as well. This discovery further structured the cosmos into imaginative quarters along four cardinal points. Unlike the undifferentiated spherical (or hollow) cosmos, the more structured, quartered, cosmos required the addition of straight lines to represent the new insight. In 1964, L. Vértes found a rounded nummulite shell about an inch in diameter, also at Tata, Hungary. Here he detected an

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294 König, *Am Anfang*, 60. For the record, I have reclined in one of these shallow caves: they are reasonably comfortable shelters from the elements from which, at night, the sky would appear to revolve, constellations rise and set, and so on.
engraved line crossing a natural one to form a cross at right angles. Thus, König concluded, the discovery of “a more meaningful order of the world” (die prägnantere Weltordnung) could also be dated to ca. 100KYBP or earlier, if the Tata nummulite carving was also part of a long tradition. In any event, it seems to have been a Neanderthal innovation or achievement and not something to be explained as being gradually derived from a sphere. Moreover, König argued that “the four” also became “an unwritten law” for the “spiritual-moral conduct” of Neanderthals – such as burial in a four-sided pit.

From these reflections on Neanderthal symbolization or symboling, König considered the ideograms in the rock-shelters and cult caves of the Ile-de-France, which she said also dated from the Mousterian and consisted chiefly of straight lines and hollows or “cup-marks” and various kinds of combinations. König considered these caves and rock-shelters to have provided the fundamental principles (Grundprinzipien) for all subsequent culture. Her argument was based on her sensitivity to form rather than the compelling evidence of data. As she remarked to Gabriele Meixner, “I don’t

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295 Tata: Eine Mittlepaläolithische Travertin Siedlung in Ungarn (Budapest: Akadémiai Kiadó, 1964), 141.
296 König, Am Anfang, 42-3.
297 See also Gilles Tassé, Pétroglyphes du Bassin Parisien (Paris: CNRS, 1982).
dig and date; I interpret.”\textsuperscript{298} Hers was not an approach designed to receive the approbation of archaeologists though he actual interpretations did appeal to Voegelin.

It is not necessary in the present context to analyze König’s interpretations in detail. The principle was straightforward: later ideograms provided additional detail to the basic quartered structure of the Tata nummulite. In place of a simple cross we find a lattice or a grid or a net, a symbol transmitted into much later periods, connecting the several imaginary cardinal points, sometimes, like the Tata nummulite, bounded by a circle, or a square, sometimes not. By König’s interpretation these ideographs all express the order of the cosmos. In Marshack’s language, the four was not an arithmetic integer but “notation.” Accordingly, König argued, the meaning of a square with or without a diagonal or a vertical/horizontal cross was the same as four dots on a stone or four lines scratched on a bone. They appear later in the Hall of the Bulls at Lascaux in front of the largest image of an auroch (number 18 in the Windels series). These are, König argued, equivalent signs of cosmic order.\textsuperscript{299} Moreover, when the intersection of the lines representing the axes of the world is added

\textsuperscript{298} Meixner, Auf der Suche nach dem Anfang der Kultur: Marie E.P. König, Eine Biographie (Munich: Frauenoffensiv, 1999), 95.
\textsuperscript{299} König, Am Anfang, 134.
to the four we have five cardinal points, the last representing the centre of
the cosmos.\footnote{König, Am Anfang, 145.}

Following her analysis of early human orientation in space, she
discussed orientation in time. The fundamental human orientation in time
stretched between birth and death, before and after which there was only
mystery. The moon, according to König, provided a visible manifestation of
growth from darkness to a full moon to darkness again. Over and over the
moon waxed and waned, died and was reborn. The “great clock of heaven,”
she said, expressed both the anxieties of death and the hope of rebirth and
thus a cosmic rhythm into which humans had to integrate their lives.\footnote{König, Am Anfang, 145.}

König relied on Marshack’s account of the early human calendars and,
following her language of symbolization or notation, added the three to the
cosmic form as the notation of space.

As Voegelin pointed out in the first volume of Order and History, this
integration proceeded by analogy between heavenly and earthly things. But
which earthly things? According to König the earthly objects were variable,
which was her version of Voegelin’s principle of equivalence of experience
and symbolization. Accordingly, the three could be symbolized in a pair of
auroch’s horns with the full moon between them as an empty space, as a
triangle or double triangle, to the Cretan double axe familiar to clacississts, to three dots or inscribed lines and so on. Thus, she said, “any number of symbolic images that bore no external relationship to one another” might yet be responses to the same experience. This was especially true with the new moon and its “answer” to the anxieties of life and death. And then, if we examine the “documents” with this perspective in mind it becomes clear that the earliest cultures, perhaps even including the Neanderthals, have a complex spiritual existence.\footnote{König, Am Anfang, 216.}

König’s apparent admiration for Marshack’s discovery of lunar calendars was not reciprocated. In an article in Current Anthropology, Marshack adopted the then orthodox view that genetic selection can explain the parallel development of language and the ability to symbolize. “If,” he said, “we assume the presence of certain regularities in the phenomenological and relational worlds of early man,” which in more commonsensical language means: if we assume that early man experienced the reality of a cosmos, then “similarities in the symbolic products referring to these [regularities] may not be surprising,” for the obvious reason that experiences of the cosmos can be expected to be expressed in broadly equivalent ways. “But,” Marshack continued in this same sentence, “this
does not solve the problem of a possible dispersal of cultural strategies and modes.”

No, it does not. But that is a historical problem distinct from the theoretical or interpretative question of equivalence of experience and symbolization – in this case, of the cosmos.

Jesper Christensen commented on Marshack’s paper and introduced the two, the three, and the four “notations” of König. The three and four, we saw, were symbols of temporal and spatial order. As for the two, Christensen wrote, it marks “precisely … the point where the visitor loses sight of daylight” at Bayol cave.

Thus, “the ‘two’ signs here mark the boundary between the realms of light and darkness, between sky and earth.”

Moreover, he said, the repetition of designs and of use studied by Marshack indicated the creation of the cosmos can be reproduced, which was Eliade’s version of the eternal return. Accordingly, he concluded: “the symbolic numbers of the Paleolithic material are readily explained on the basis of this idea,” namely that ‘two’ and ‘four’ signify the events whereby the present world order was constituted: the separation of sky and earth and the fixing of the cardinal points” and since, for König, “three” indicates a cyclical

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302 König, Am Anfang, 238
305 Christensen, “Comment,” 297.
renewal of time evident in the phases of the moon, then the repetitive act that constitutes the beginning of the cosmos also begins time (again). That is, the numerical symbols or what Marshack called notations were a means of representing the ritual repetition of primordial creation.

In his “Reply” Marshack reiterated his objection to using either contemporary ethnographic material or contemporary theories of human beings such as that developed by Eliade or, presumably by Voegelin and Lonergan or anyone else. All we can do is “make certain determinations concerning the strategies involved in their accumulation and use.” Anything further would require a linguistic reference or knowledge of context, and these are both closed to contemporary scholars. But, if we begin from an experiential or participatory understanding of consciousness are things necessarily so bleak? Is it in fact true that we lack contextual referents? After all, all these symbols express the experience of participation in reality and as another of his commentators, Arne Johansen, observed, we have to start somewhere.

König would agree with Marshack that “it was a fundamental error of early attempts at interpretation of Upper Paleolithic image and symbol to assume that if the image was recognizable it could be compared analytically

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to images known ethnographically.”309 Thus the interpretation of the cave paintings as hunting magic and fertility magic was wrong. In Marshack’s opinion, this error was repeated by König in that her discussion of the two, the three, the four, and so on are examples of “numeration.” But this is not what König or Christensen, for that matter, said. The two is a symbol of, for example, night and day, light and dark, etc.; the three of the rhythmic changes of time as measured by the moon, etc. and, obviously, one would not use the two to represent the phases of the moon since there are three of them, the Neanderthals were buried in four-sided graves, not triangles, and so on.

For Marshack, however, “the road to even partial understanding of early symbol is difficult and requires systematic methodical firsthand study of the materials and the traditions of which they are a part, in terms both of contemporaneous complexity and of regional developments and changes in the traditions.”310 In other words, it is acceptable to trace traditions and styles but we have no way of knowing or even guessing intelligently what they mean. König disagreed.

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307 Christensen, “Comment,” 298.
310 Marshack, “Reply,” 304.
These two highly imaginative scholars did, however, agree on one thing: “The traditions under study are all late examples of symboling capacities whose origins are far earlier than any of the artifacts or materials that will be available for study.” By relying on something like a philosophical anthropology König and certainly Voegelin were not simply interpreting images “on the basis of what they look like to us,” as Marshack believed. It is true that König did not simply note the existence of calendrial “notations” as did Marshack; she also integrated his work into a wider scientific enterprise. It is no more a criticism of Marshack’s work to move beyond his achievement than Marshack diminished the significance of the orthodox archaeologists and paleoscientists. That is simply how science progresses.

5. Conclusions

Even at the risk of exemplifying the old proverb, “the mountains have laboured to bring forth a mouse,” our conclusions will be brief. First of all, as Thomas Hollweck observed in his introduction to his selection of Voegelin’s later correspondence, Marie König “opened up for him the depth of the unwritten human past that occupied him during a major part of the last

311 Marshack, “Reply,” 308.
decade and a half of his life” (CW, 30:5). In Voegelin’s words, her work shows that an historical picture can indeed be crystalized out of the most diverse special prehistoric archaeological sciences that goes back at least to the beginnings of Homo sapiens” (CW, 30:576).

Second, a philosophical anthropology is as necessary as the use of orthodox archaeological data to understand very early human history. The chief reason, as noted above, is that, if we are looking for early evidence of human being, we need to have an idea of what it is we are looking for. And here the major problem with archaeological and paleoscientific orthodoxy is evident enough. König told her biographer that the prehistorians were not very philosophical and “the philosophers were unwilling to be forced to climb into rock-shelters and caves with me.”312 In this respect Voegelin was an exception since, well into his eight decade, he accompanied König in examining some of the sites in the Ile-de-France.

On the basis of the material presented and summarized in this paper it seems to me there are two areas in need of closer investigation and analysis. The first is the “transition” from the Mousterian to the Upper Paleolithic. If the implications of Marshack’s and König’s arguments are correct, that the “tradition,” as Marshack called it, of art that found such a rich expression in

312 Meixner, Auf der Suche, 74.
the Upper Paleolithic is as lengthy as it seems, then a reconsideration of relations between Neanderthals and Cro-Magnons is very much in order. Only a beginning has been made to date, so far as I can tell.

Second, it will be necessary to examine the literature on paleoastronomy to see its connection to the Upper Paleolithic symbolism. And then there is the entire Neolithic to consider. It is unlikely that political scientists will run out of new and very early material to examine any time soon.  

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313 I would like to thank Joe Donner and the Donner Canadian Foundation for supporting this project.