

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

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“Politics” and “Religion” in the Upper Paleolithic

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-

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

² Geertz, Life Among the Anthros, ed. Fred Inglis (Princeton: Princeton University Press, 2010), 224.

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.³ 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

³ See Brian Fagan, 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 than 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,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

⁴ 3rd 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.”⁵ 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

⁵ Darwin’s Dangerous Idea (London: Allen Lane, 1995), 310.

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

⁶ Brendan M. Purcell, The Drama of Humanity: Towards a Philosophy of Humanity in History (Frankfurt: Peter Lang, 1996), 28-29. See also Bernard J.F. Lonergan, Insight: A Study of Human Understanding (New York: Philosophical Library, 1958), 115ff, 454f. More broadly, see Voegelin, “The Origins of Scientism,” CW, 10:168-96.

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.

⁸ Ian Tattersall, The World from Beginning to 4000 BCE (Oxford: Oxford University Press, 2008), 4.

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?”⁹ 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.”¹⁰ The invocation of the guidance of a higher

⁹ Charles Darwin, The Descent of Man (New York: Appleton, 1871), vol. II, 153.

¹⁰ Wallace, Contributions to a Theory of Natural Selection (London: Macmillan, 1870), 359; Tattersall, “An Evolutionary Framework for the Acquisition of Symbolic Cognition by Homo sapiens,” Comparative Cognition and Behavior Reviews, 3 (2008), 108.

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."¹¹ 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.”¹² 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

¹¹ Tattersall, *The World from Beginning to 4000 BCE*, 102. See also Stephen Jay Gould and Elizabeth S. Vrba, “Exaptation: A Missing Term in the Science of Form,” *Paleobiology* 8 (1982), 4-15.

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.¹³ 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.”¹⁴

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

¹² Tattersall, *The World from Beginning to 4000 BCE*, 11.

¹³ See Misia Landau, *Narratives of Human Evolution* (New Haven: Yale University Press, 1991).

¹⁴ Maciej Henneberg, “Comment” to Trinkaus, “Modern Human versus Neandertal Evolutionary Distinctions,” 610.

horses.”¹⁵ 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.”¹⁶ 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.¹⁷ 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.¹⁸ The interaction of Neanderthals and Cro-Magnons provides much of the subject-matter of section 3.

¹⁵ Ian Tattersall and Jeffrey H. Schwartz, Extinct Humans (Boulder: Westview, 2000), 8.

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?¹⁹

There is widespread agreement that the common ancestor of both Neanderthals and H. sapiens was 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 H. neanderthalensis and 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.²⁰ There is one additional piece of archaeological information to

¹⁸ Clive Finlayson, The Humans who Went Extinct: Why Neanderthals Died Out and We Survived (Oxford: Oxford University Press, 2009).

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

²⁰ Phillip Endicott, et al., "Using Genetic Evidence to Evaluate Four Paleoanthropological Hypotheses for the Timing of Neanderthal and Modern Human Origins," Journal of Human Evolution, 59 (2010), 87-95; For a discussion of the archeological evidence, and a slightly different time for separation of the two kinds of humans, see J.J. Hublin, "The Origin of Neanderthals," Proceedings of the National Academy of Sciences of the United States of America, 106:38 (22 September, 2009), 16022-27. Similar estimates of the

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.

Richard E. Green, et al., “A Draft Sequence of the Neanderthal Genome,” Science, 328 (7 May, 2010), 718.

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.

²² Klein, The Human Career, 658.

sapiens “is not simply an extrapolation or improvement of what went before” but “an entirely unprecedented entity in the living world.”²³ 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,

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 “mobiliary” 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.²⁴ 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).

²⁴ Margaret W. Conkey, “New Approaches in the Search for Meaning? A Review of Research in ‘Paleolithic Art’,” *Journal of Field Archaeology*, 14 (1987), 413.

²⁵ The Neanderthal’s Necklace: In Search of the First Thinkers, tr. Andy Klatt, (New York, Four Walls Eight Windows, 2002). 280.

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

²⁶ Arendt, *The Origins of Totalitarianism*, New edition (New York: Harcourt, Brace and World, 1966), 459.

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"

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

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 occurs, 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.²⁹ 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.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 Theatetus Plato said that philosophy begins in wonder, thaumazein (Theat., 155d). In the opening words of the 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 Theatetus had become representative of the humanity of all human beings. Moreover, Aristotle also pointed out that “the philomythos is in a sense a philosophos” (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” (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

Voegelin’s Thought: A Critical Appraisal (Durham: Duke University Press, 1982), 31.

³⁰ The use of the preposition “toward” was the source of some confusion. See the letters of Robert Heilman to Voegelin, 8 October, 1974 and 24 May, 1976 and Voegelin’s response 3 June 1976 in Charles R. Embry, ed., Robert B. Heilman and Eric Voegelin: A Friendship in Letters, 1944-1984 (Columbia: University of Missouri Press, 2004), 270, 278, 281.

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, 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 Gorgias that he is the only statesman in Athens or in the evocation of a philosopher-king in the 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

³¹ CW, 6:356; see also Werner Jaeger, Aristotle: Fundamentals of the History of his Development (Oxford: Oxford University Press, 1962), 321 fn1. The original is found in Valentin Rose, ed. Aristotelis qui Ferebantur Librorum, Fragmenta (Leipzig: Teubner, 1886), Frg.668, and another translation in The Complete Works of Aristotle, ed. Jonathan Barnes (Princeton: Bollingen, 1984), vol II, 2461-2.

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

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.³⁴ 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.³⁵

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.”³⁶ 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.³⁷ By around 130KYBP “classic Neanderthals” had colonized Europe and Ancestors were at home in Africa.³⁸

³³ Lawrence Guy Straus, “Editorial: On the Demise of the Neandertals,” Quaternary International, 137 (2005), 1.

³⁴ Klein, The Human Career, 331; Timothy D. Weaver, et. al., “Close Correspondence Between Quantitative- and Molecular-Genetic Divergence Times for Neandertals and Modern Humans,” Proceedings of the National Academy of the United States of America, 105 (2008), 4645-9; Weaver, “The Meaning of Neandertal Skeletal Morphology,” Proceedings of the National Academy of the United States of America 106:38 (2009), 16028-33. DNA analysis narrowed the time of separation to ca. 410-440 KYBP. No more than political science is archaeological science exact.

³⁵ Tattersall, The World, 79.

³⁶ Tattersall and Schwartz, Extinct Humans, 204.

³⁷ Finlayson, The Humans Who Went Extinct, 2.

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.”³⁹ 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

³⁹ Daniel E. Lieberman and John J. Shea, “Behavioural Differences Between Archaic and Modern Humans: the Levantine Mousterian,” American Anthropologist 96 (1994), 304.

⁴⁰ For details, see: Tattersall and Schwartz, Extinct Humans, 232; Fagan, Cro-Magnon, 108; Nicholas Wade, Before the Dawn: Recovering the Lost History of Our Ancestors (New York: Penguin, 2006), 29, 91; Klein, Human Career, 606-7; John J. Shea, “Neanderthals, Competition and the Origin of Modern Human Behaviour in the Levant,” Evolutionary Anthropology, 12 (2003), 173-87; and Shea, “The Middle Paleolithic of the East Mediterranean Levant,” Journal of World Prehistory, 17 (2003), 313-94.. See also

The first reason why it is no longer acceptable to identify Neanderthals with the Mousterian and Homo sapiens with the more advanced Upper Paleolithic, then, is that in the Levant Neanderthals and 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.⁴¹ 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.”⁴² Others, many of whom are of a younger generation of archaeologists, argue that Neanderthals were genuine

the relevant papers in Takeru Akazawa, Kenichi Aoki, Ofer Bar-Yosef, eds., Neanderthals and Modern Humans in Western Asia (New York: Plenum, 1998) and in Donald O. Henry, ed., Neanderthals in the Levant: Behavioral Organization and the Beginnings of Human Modernity (London: Continuum, 2003).

⁴¹ Shara E. Bailey, et al., “Who Made the Aurignacian and Other Early Upper Paleolithic Industries?” Journal of Human Evolution, 57 (2009), 11-26.

⁴² Ofer Bar-Yosef, Jean-Guillaume Bordes, “Who were the Makers of Châtelperronian Culture?” Journal of Human Evolution, 59 (2010), 589.

innovators and that the Châtelperronian assemblages are proof of it.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.”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-

⁴³ Francesco d’Errico et al., “Archaeological Evidence for the Emergence of Language, Symbolism, and Music – An Alternative Multidisciplinary Perspective,” Journal of World Prehistory, 17 (2003), 25.

⁴⁴ G. A. Clark, “Neandertal Archaeology: Implications for our Origins,” American Anthropologist, N. S. 104:1 (Mar. 2002), 52.

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

⁴⁵ Clark, “Neandertal Archaeology,” 53, 62.

look like the Middle – Upper Paleolithic transition was a monumental ‘nonevent’ both biologically and culturally.”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.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.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

⁴⁶ Clark, “Neandertal Archaeology,” 63.

⁴⁷ Clark, “Neandertal Archaeology,” 64.

⁴⁸ April Nowell, “Defining Behavioral Modernity in the Context of Neandertal and Anatomically Modern Human Populations,” *Annual Review of Anthropology*, 39 (2010), 438.

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

⁵⁰ Naama Goren-Inbar, et al., “Evidence of Hominin Control of Fire at Benot Ya’aqov, Israel,” Science 304 no. 5671 (2004), 725-7.

⁵¹ John Gowlett, “The Early Settlement of Northern Europe: Fire History in the Context of Climate Change and the Social Brain,” Comptes Rendus Palevol, 5 (1/2), (2006), 299-310.

⁵² Steven Mithen, The Singing Neanderthals: The Origins of Music, Language, Mind and Body (London: Phoenix, 2006), 223ff; Finlayson, The Humans Who Went Extinct, 57ff.

⁵³ Rachel Carmody and Richard Wrangham, “The Energetic Significance of Cooking,” Journal of Human Evolution, 57 (2009), 379-91.

⁵⁴ Klein and Edgar, The Dawn of Human Culture, 156-7; see also Curtis W. Mavean and Soo Yeun Kim, “Mousterian Large Mammal Remains from Kobeh Cave: Behavioral Implications for Neanderthals and Early Modern Humans,” Current Anthropology 39, SI (Special Issue, The Neanderthal Problem and the Evolution of Human Behavior), (June, 1998), S79-114.

⁵⁵ M.P. Richards, et al., “Isotopic Dietary Analysis of a Neanderthal and Associated Fauna from the Site of Jonzac (Charente-Maritime, France),” Journal of Human Evolution 55 (2008), 179-85; Hervé Bocheres et al., “Isotopic Evidence for Diet and Subsistence Pattern of the Saint-Césaire I Neanderthal: Review and Use of a Multi-Source Mixing Model,” Journal of Human Evolution 49 (2005), 71-87; Fagan, Cro-Magnon, 61-2.

⁵⁶ Katharine Scott, “Two Hunting Episodes of the Middle Paleolithic Age at La Cotte Saint-Brelade, Jersey (Channel Islands),” World Archeology 12 (1980), 137-52; Paul Mellars, The Neanderthal Legacy (Princeton; Princeton University Press, 1996); C. Farizy et al., “Hommes et bison du paléolithique moyen à Maura (Haute-Garonne),” Gallia Préhistoire (Paris, CNRS, 1994), supp.30; A.J. Jelinek et al., “A

“endurance runners” as modern humans and so were less likely to run ungulates, for example, to a standstill before dispatching them.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.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.”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

Preliminary Report on Evidence Related to the Interpretation of Economic and Social Activities of Neanderthals at the Site of La Quina (Charente), France,” in M. Otte, ed., L’Homme de Neandertal: Actes du Colloque International (Liège: Université de Liège, 1986), vol. 6, 99-106.

⁵⁷ “Endurance running” is a hunting technique that relies on the inability of quadrupeds to run and pant at the same time. Since panting is a way of cooling off and since humans sweat to cool off, humans can run some game quadrupeds to a standstill and then kill them as they stand panting from hyperthermia.

⁵⁸ For details, see D. R. Carrier, “The Energetic Paradox of Human Running and Hominid Evolution,” Current Anthropology 25 (1984), 483-95; Dennis M. Bramble and Daniel E. Lieberman, “Endurance Running and the Evolution of Homo” Nature 432 (18 November, 2004), 345-52; David A. Raichlen *et al.*, “Calcaneus Length Determines Running Economy: Implications for Endurance Running Performance in Modern Humans and Neanderthals,” Journal of Human Evolution 60 (2011), 299-308.

language.⁶⁰ Tattersall and Schwartz made the commonsensical observation that perhaps the Neanderthal corpses were buried only for hygienic reasons or to remove them from the attention of animal scavengers.⁶¹ Neanderthals also apparently were cannibals,⁶² 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

⁵⁹ Gargett, “Grave Shortcomings: The Evidence for Neandertal Burial,” Current Anthropology 30:2 (Apr. 1989), 157-90.

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 Neandertal 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?⁶³ 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.⁶⁴

⁶² Alban Defleur *et al.*, “Neanderthal Cannibalism at Moula-Guercy, Ardèche, France,” *Science*, 286 (1 October, 1999), 128-31.

⁶³ *The Neanderthal Necklace*, 267.

⁶⁴ See Philip Lieberman and Edmund S. Crelin, “On the Speech of Neanderthal Man,” *Linguistic Inquiry*, 2 (1971), 203-22; Lieberman and Robert McCarthy, “Tracking the Evolution of Language and Speech,” *Expedition*, 49:2 (2007), 15-20; Lieberman, “The Evolution of Human Speech: Its Anatomical and Neural

Other research on and analysis of Neanderthal necks has argued that Lieberman and his colleagues (and others)⁶⁵ 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.”⁶⁶ 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.⁶⁷ 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.⁶⁸ 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

Basis,” *Current Anthropology*, 48 (2007), 52; Philip G. Chase, *The Emergence of Culture: The Evolution of a Uniquely Human Way of Life* (New York: Springer, 2006), 83ff.

⁶⁵ J. T. Lartman and J. S. Reidenberg, “Advances in Understanding the Relationship Between the Skull Base and Larynx with Comments on the Origins of Speech,” *Human Evolution* 3 (1988), 99-109; Lartman *et al.*, “The Language Capability of Neanderthal Man,” *American Journal of Physical Anthropology*, 42 (1975), 9-14.

⁶⁶ D’Errico *et al.*, “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 29-30.

⁶⁷ The hyoid bone is necessary for human speech because it allows for the required variation in movements of the tongue and throat muscles. For a discussion of its importance for Neanderthals see B. Arensburg, *et al.*, “A Middle Paleolithic Human Hyoid Bone,” *Nature*, 338 (27 April, 1989), 758-60; B. Arensburg and Anne-Marie Tillier, “Speech and the Neanderthals,” *Endeavour*, N.S., 15:1 (1991), 26-8.

⁶⁸ J. Krause, *et al.*, “The Derived FOXP2 Variant of Modern Humans was shared with Neanderthals,” *Current Biology* 17 (2007), 1908-12.

auditory systems permit the identification of features that demonstrate a functional inability to produce some of the sounds that AMH can produce.”⁶⁹

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.⁷⁰ 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.⁷¹ Mithen’s hypothesis, which he freely admits is to some extent speculative, is that all large-brained hominids

⁶⁹ D’Errico et al., “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 31.

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.”⁷²

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

⁷¹ Mithen, *The Singing Neanderthals*, 24, 62. The distinctive sources of language and music is confirmed by Daniel J. Levitin, *This is Your Brain on Music: The Science of a Human Obsession* (New York: Penguin, 2006), 127.

⁷² Mithen, *The Singing Neanderthals*, 180; 121.

Hmmmmmm.⁷³ 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.⁷⁴ As d’Errico et al. observed, such instruments “must, even at around 35,000 years, be several conceptual stages removed from the earliest origins.”⁷⁵

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

⁷³ Mithen, The Singing Neanderthals, 221.

⁷⁴ Nicholas J. Conard et al., “New Flutes Document the Earliest Musical Tradition in Southwestern Germany,” Nature, 460 (6 August, 2006), 737.

⁷⁵ D’Errico et al., “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 46.

he called “cognitive fluidity.”⁷⁶ 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.”⁷⁷ 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

⁷⁶ Mithen, The Prehistory of the Mind: The Cognitive Origins of Art, Religion, and Science (London:

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.”⁷⁸ 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.”⁷⁹ 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

Thames and Hudson, 1996), ch. 6-8.

⁷⁷ Mithen, The Singing Neanderthals, 232-3.

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.⁸⁰ In any event, as was noted, there is apparently no evidence that H. sapiens had any technical, cultural, or behavioural advantage.⁸¹ There is also widespread agreement that much earlier, ca. 200KY ago by some accounts, H. sapiens

⁷⁹ Purcell, The Drama of Humanity, 53.

⁸⁰ C.B. Rutt et al., "Body Mass and Encephalization in Pleistocene Homo," Nature, 387 (1997), 173-6; see also S. E. Churchill, "Bioenergetic Perspectives on Neanderthal Thermoregulatory and Activity Budgets," in K. Harvati and T. Harrison, eds., Neanderthals Revisited: New Approaches and Perspectives (Dordrecht: Springer, 2006), 113-34; M. V. Sorensen and W.R. Leonard, "Neandertal Energetics and Foraging Efficiency," Journal of Human Evolution, 40 (2001), 483-95.

⁸¹ Klein, The Human Career, 606-7.

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

⁸² Klein, “Archeology and the Evolution of Human Behavior,” Evolutionary Anthropology 9 (2000), 17.

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.⁸⁴ 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.⁸⁵ 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.⁸⁶

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

⁸³ April Nowell, “Defining Behavioral Modernity in the Context of Neandertal and Anatomically Modern Human Populations,” *Annual Review of Anthropology*, 39 (2010), 437-52.

⁸⁴ Klein, *Human Career*, 445; Tattersall, *The Monkey in the Mirror*, 148-9.

⁸⁵ Klein, “Archeology and the Evolution of Human Behavior,” 27; *Human Career*, 613-15.

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

⁸⁶ Klein and Edgar, The Dawn of Human Culture, 146.

⁸⁷ Gunz, et al., “Brain Development After Birth Differs between Neanderthals and Modern Humans,” Current Biology 20:21 (9 Nov. 2010), pp. R 921-2.

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, 4312 (2004), 1055-61; M.J. Morwood, et al., “Preface: Research at Liang Bua, Flores, Indonesia,” Journal 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 Central Asia and Siberia,” Nature, 449 (18 October, 2007), 902-4.

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.”⁹¹ 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.⁹² 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.”⁹³ 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.

⁹¹ Klein, “Archeology and the Evolution of Human Behavior,” 27; Human Career, 650-1. See also Klein, “Darwin and the Recent African Origin of Modern Humans,” Proceedings of the National Academy of the United States of America, 106 (22 Sept. 2009), 16007-09.

⁹² O. Bar-Yosef, “The Role of Western Asia in Modern Human Origins,” Philosophical Transactions of the Royal Society, London: Biological Sciences, 1 337, No. 1280 (29 Aug. 1992), 198.

⁹³ W. W. Howells, “Explaining Modern Man: Evolutionists versus Migrationists,” Journal of Human Evolution, 5 (1976), 480. See also Giorgio Manzi and Pietro Passarelli, “At the Archaic/Modern Boundary of the Genus Homo: The Neanderthals from the Grotta Breuil,” Current Anthropology, 36:2 (1995), 355-66.

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.⁹⁴ 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.”⁹⁵ 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.”⁹⁶ 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

⁹⁴ Nowell, “Defining Behavioral Modernity,” 440; McBrearty and Brooks, “The Revolution that Wasn’t: A New Interpretation of the Origin of Modern Human Behavior,” Journal of Human Evolution, 39 (2000), 453-563.

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.”⁹⁷ 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

⁹⁷ R. White, Prehistoric Art: The symbolic Journey of Humankind, (New York, Harry N. Abrams, 2003),

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.⁹⁸ 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.”⁹⁹ R. I. P.

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

⁹⁸ Bruce G. Trigger, *A History of Archaeological Thought*, 2nd. ed. (Cambridge: Cambridge University Press, 2009), 241ff; 322ff; G. Clark, “Prehistory since Childe,” *Bulletin of the Institute of Archaeology* 13 (1976), 1-21; Kevin Greene, “V. Gordon Childe and the Vocabulary of Revolutionary Change,” *Antiquity* 73 (1999), 97-106; P. Gathercole, “Patterns in Prehistory?: An Examination of the Later Thinking of V. Gordon Childe,” *World Archaeology* 3 (1971), 225-32.

⁹⁹ Nowell, “Defining Behavioral Modernity,” 441.

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.”¹⁰⁰ 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.”¹⁰¹

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 Cabrera Valdés, ed., *El Origen del Hombre moderno en el Suroeste de Europa* (Madrid: Universidad Nacional 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

¹⁰¹ D’Errico, *et al.*, “Neanderthal Acculturation,” 3.

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.”¹⁰⁴ 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.”¹⁰⁵

In a similar vein, Clark argued that “taphonomically informed approaches” such as undertaken by d’Errico and his colleagues¹⁰⁶ “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

¹⁰² D’Errico, “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 13.

¹⁰³ D’Errico, “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 22-4.

¹⁰⁴ D’Errico, *et al.*, “Neanderthal Acculturation,” 3-4.

¹⁰⁵ D’Errico, “Archaeological Evidence for the Emergence of Language, Symbolism and Music,” 19. This argument did not convince those who held the orthodox or traditional views regarding acculturation of Neanderthals by superior Cro-Magnons. See P. Mellars, “The Impossible Coincidence: A Single Species Model for the Origins of Modern Human Behavior in Europe,” *Evolutionary Anthropology*, 14 (2005), 12-27. See also P.G. Chase, “The Significance of Acculturation Depends on the Meaning of Culture,” in Mellars *et al.*, eds., *Rethinking the Human Revolution* (Cambridge: McDonald Institute, 2007), 55-66.

¹⁰⁶ See April Nowell and Francesco d’Errico, “The Art of Taphonomy and the Taphonomy of Art: Layer IV, Moldova I, Ukraine,” *Journal of Archaeological Method and Theory*, 14 (2007), 1-26. Taphonomy considers the process by which organisms fossilize as well as the results.

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.”¹⁰⁷

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.¹⁰⁸ This same question was raised by d’Errico and Goni: “Did climate play a role in the extinction of the Neandertals?” they asked.¹⁰⁹ Despite the sketchy data set dealing with paleoclimatic sequences and the difficulty correlating it with

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.

¹⁰⁹ Francesco d’Errico and Maria Fernanda Sanchez Goni, “Neandertal Extinction and the Millennial Scale Climatic Variability of OIS 3,” *Quaternary Science Reviews*, 22 (2003), 769.

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,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.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.”¹¹²

¹¹⁰ See H. Heinrich, “Origin and Consequences of Cyclic Ice Rafting in the Northeast Atlantic Ocean During the Past 130,000 Years,” *Quaternary Research*, 29 (1988), 142-52; G. Bond *et al.*, “Correlations Between Climate Records from North Atlantic Sediments and Greenland Ice,” *Nature*, 365 (1993), 143-7.

¹¹¹ D’Errico and Goni, “Neandertal Extinction,” 781-4.

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

¹¹³ D’Errico, *et al.*, “Neanderthal Acculturation,” 19; D’Errico and Goni, “Neandertal Extinction,” 784.

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.”¹¹⁴ 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.¹¹⁵ D’Errico reiterated his argument regarding the similarity of

¹¹⁴ D’Errico, et al., “Neanderthal Acculturation,” 21-2.

¹¹⁵ D’Errico, “The Invisible Frontier: A Multiple Species Model for the Origin of Behavioral Modernity,” *Evolutionary Anthropology* 12 (2003), 188-202. See also C. S. Henshilwood et al., “Emergence of Modern Human Behavior: Middle Stone Age Engravings from South Africa,” *Science*, 295 (2002), 1278-80; D’Errico et al., “An Engraved Bone Fragment from 70,000-year-old Middle Stone Age Levels at Blombos Cave, South Africa: Implications for the Origins of Symbolism and Language,” *Antiquity*, 75 (2001), 309-18. As early as 1995, Lawrence Guy Straus argued that a “Francocentric” approach became obsolete during

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.¹¹⁶ 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.”¹¹⁷ 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.¹¹⁸ The significance of Paleolithic ornamentation can hardly be exaggerated. It represents “a profound shift in technologies for encoding

the 1980s and by 1995 was simply wrong. Straus, “The Upper Paleolithic of Europe: An Overview,” Evolutionary Anthropology, 4 (1995), 4.

¹¹⁶ C.B. Stringer, et al., “Neanderthal Exploitation of Marine Mammals in Gibraltar,” Proceedings of the National Academy of the United States of America, 105:38 (28 Sep. 2008), 14319-24.

¹¹⁷ D’Errico, “The Invisible Frontier,” 196.

¹¹⁸ D’Errico, “The Invisible Frontier,” 199. Whether animated by “anti-Neanderthal prejudice” or not, Eric Trinkus downplayed the Southern African evidence as presenting “few distinctively modern human features,” notwithstanding evidence of modern human symbolic behavior dating from a very early period. See C.W. Mavean, et al., “Early Human Use of Marine Resources and Pigment in South Africa during the Middle Pleistocene,” Science, 449 (18 October, 2007), 905-09; Trinkus, “European Early Modern Humans and the Fate of the Neandertals,” Proceedings of the National Academy of Sciences of the United States of America 104:18 (1 May, 2007), 7368.

and transmitting information.”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 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.”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,

¹¹⁹ Steven L. Kuhn and Mary C. Stiner, “Paleolithic Ornaments: Implications for Cognition, Demography and Identity,” Diogenes, 214 (2007), 41.

¹²⁰ Joao Zilhao, et al., “Symbolic Use of Marine Shells and Mineral Pigments by Iberian Neandertals,” 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

¹²³ D’Errico, “The Invisible Frontier,” 200.

¹²⁴ Klein, “Archeology and the Evolution of Human Behavior,” 24; Klein, Human Career, 627, 741; Fagan, Cro-Magnon, 12.

possibility of interbreeding would sometimes be raised,¹²⁵ but because most of the argument was based on morphological features of Neanderthals and Cro-Magnons, the results were inconclusive.¹²⁶ 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.”¹²⁷ 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.

¹²⁶ See, on the pro-interbreeding side, Erik Trinkaus *et al.*, “An Early Modern Human from Peșteracu Oase, Romania,” *Proceedings of the National Academy of the United States of America*, 100:20 (30 Sept. 2003), 11231-6; and on the anti-interbreeding side, Shara E. Bailey *et al.*, “Who Made the Aurignacian and Other Upper Paleolithic Industries?” *Journal of Human Evolution*, 57 (2009), 11-26.

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.”¹²⁸ Genetic theory¹²⁹ would predict what the Pääbo team found: “gene flow from Neandertals into modern humans but no reciprocal flow from modern humans into Neandertals.”¹³⁰ 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.¹³¹ As Gibbons said, the estimated frequency, around 2%, is “not trivial” but not “wholesale” either.¹³² 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

Paleolithic Industries in Europe During OIS 3,” International Journal of Osteoarchaeology, 14 (2004), 178-89.

¹²⁸ Green et al., “A Draft Sequence,” 710. See also Ann Gibbons’ introduction, “Close Encounters of the Prehistoric Kind,” Science 328 (7 May, 2010), 680-84; and Rex Dalton, “Ancient DNA set to Rewrite Human History,” Nature, 465 (13 May, 2010), 148-49.

¹²⁹ Mathias Currat et al., “The Hidden Side of Invasions: Massive Introgressions by Local Genes,” Evolution 62 (2008), 1908-20.

¹³⁰ Green et al., “A Draft Sequence,” 721.

¹³¹ John Hawkes et al., “A Genetic Legacy from Archaic Homo,” Trends in Genetics 24:1 (2007), 14-20.

¹³² Gibbons, “Close Encounters,” 681.

changes that conferred new capabilities.”¹³³ 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

¹³³ Cochran and Harpending, The 10,000 Year Explosion: How Civilization Accelerated Human Evolution (New York: Basic Books, 2009), 36. See also Hawks, “A Genetic Legacy,” 20.

new fossil discoveries were categorized in light of it.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.”¹³⁵ The discoveries by the Pääbo team may not put to rest the disputes between the “rapid replacement” theory and the “slow assimilation” theory,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

¹³⁴ Henneberg, “Comments” to Trinkaus, “Modern Human versus Neandertal Evolutionary Distinctiveness,” 610-11. See also M. Henneberg and C. de Miguel, “Hominins are a Single Lineage: Brain and Body Size Variability does not reflect Postulated Taxonomic Diversity of Hominins,” Homo: Journal of Comparative Human Biology 55 (2004), 21-37.

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.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.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.

¹³⁶ For a clear and pre-Pääbo statement of the problem, see John F. Hoffecker, "The Spread of Modern Humans in Europe," Proceedings of the National Academy of Sciences of the United States of America, 106:38 (22 September, 2009), 16040-45.

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.

¹³⁸ Graham K. Coop *et al.*, "The Timing of Selection at the Human FOXP2 Gene," Molecular Biology and Evolution 25 (2008), 1257-9.

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

¹³⁹ Cochran and Harpending, The 10,000 Year Explosion, 63. See also James O’Connell and James Allen, “Dating the Colonization of Sahul (Pleistocene Australia-New Guinea): A Review of Recent Research,” Journal of Archaeological Science 31 (2004), 835-53.

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.”¹⁴¹

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

¹⁴¹ Tattersall, The World, 99.

humans did something that was truly new, it was, biologically speaking, uncaused. It was creative, a genuine beginning or initiative.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.”

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, 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.¹⁴³ 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,¹⁴⁴ poor diet leading to high infant mortality,¹⁴⁵ especially a dearth of micronutrients (they did not eat enough veggies),¹⁴⁶ lengthy breast feeding, leading to longer average birth-spacing than Cro-Magnons,¹⁴⁷ and, finally, bad luck.¹⁴⁸ 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

3, 96-7, 177-8; and Tilo Schabert, Die zweite Geburt des Menschen: Von der politischen Anfängen menschlicher Existenz (Freiburg: Verlag Karl Alber, 2009), 21-4.

¹⁴³ Tattersall, The Monkey in the Mirror, 160-1.

¹⁴⁴ Paul Mellars, “A New Radiocarbon Revolution and the Dispersal of Modern Humans in Eurasia,” Nature, 439 (23 Feb., 2006), 931-5; Jean-Jacques Hublin and Wil Roebroeks, “Ebb and Flow or Regional Extinctions? On the Character of Neandertal Occupation of Northern Environments,” Comptes Rendus Palevol, 9 (2009), 503; Bert Sørensen, “Demography and the Extinction of European Neanderthals,” Journal of Anthropological Archeology, 30 (2011), 17.

¹⁴⁵ Bryan Hockett and Jonathan A. Haws, “Nutritional Ecology and Diachronic Trends in Paleolithic Diet and Health,” Evolutionary Anthropology, 12 (2003), 211-16.

¹⁴⁶ Hackett and Haws, “Nutritional Ecology and the Human Demography of Neandertal Extinction,” Quaternary International, 137 (2005), 21-4.

¹⁴⁷ P. Pettitt, “Neanderthal Lifecycles: Development and Social Phases in the Lives of the Last Archaics,” World Archaeology, 31 (2000), 354-5.

¹⁴⁸ Finlayson, The Humans Who went Extinct, 102, 218.

resources.” As a result, the Neanderthals were “an evolutionary dead-end.”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, allele exchanges 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.”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 H₂O; the

¹⁴⁹ Klein, *The Human Career*, 586, 436, 748. See also Paul Mellars, “A New Radiocarbon Revolution and the Dispersal of Modern Humans in Eurasia,” *Nature*, 439: 7049 (23 Feb., 2006), 931-5; Finlayson, *The Humans Who went Extinct*, 92, 102, 116-19; Tattersall, *The World*, 108.

¹⁵⁰ Tattersall, *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.”¹⁵¹

But here again Tattersall’s language is systematically misleading.¹⁵² The reason, quite simply, is because consciousness is not in reality electrical and chemical activity, notwithstanding the fact that by an act of reductionist 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

¹⁵¹ Tattersall, *The Monkey in the Mirror*, 151.

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).¹⁵³ 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.”¹⁵⁴ This distinction between behaviour and action, which Byers borrowed from the contemporary language philosopher, John Searle,

¹⁵³ Martin Byers, “Symboling and the Middle-Upper Paleolithic Transition: A Theoretical and Methodological Critique,” *Current Anthropology* 35:4 (1994), 369-99.

¹⁵⁴ Byers, “Symboling,” 370.

is practically identical with that of Hannah Arendt.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.”¹⁵⁶

As noted above, the editors of 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 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.”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:

¹⁵⁵ See fn 137 above.

¹⁵⁶ Byers, “Symboling,” 372.

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.¹⁵⁸

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

¹⁵⁸ Byers, “Symboling,” 397.

probably every bit as murky and complicated as human nature itself.¹⁵⁹

In a similar vein, Nicholas Wade asked:

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.¹⁶⁰

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.”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

¹⁵⁹ Tattersall and Schwartz, *Extinct Humans*, 221.

¹⁶⁰ Wade, *Before the Dawn*, 157. Emphasis added.

¹⁶¹ John J. Shea, “Neanderthals, Competition and the Origin of Modern Human Behavior in the Levant,” *Evolutionary Anthropology*, 12 (2003), 184, 187. See also Sørensen, “Demography and the Extinction of European Neanderthals,” 25.

extinguish the population in a millennium.¹⁶² Other accounts speak of “absorption” or “blending” without specifying in detail what such metaphors might mean.¹⁶³

Let us consider some evidence. Exhibit A: much to her surprise, indeed horror, Jane Goodall observed what she called chimpanzee warfare in Gombe.¹⁶⁴ In fact, monkey wars have almost become a subfield in primatology.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

¹⁶² E. Zubrow, “The Demographic Modelling of Neanderthal Extinction,” in P. Mellars and C. Stringer, eds., The Human Revolution: Behavioural and Biological Perspectives on the Origins of Modern Humans (Edinburgh: Edinburgh University Press, 1989), 212-31.

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.

¹⁶⁴ Goodall, Through a Window: My Thirty Years with the Chimpanzees of Gombe (Boston: Houghton Mifflin Company, 1990), 98-111.

¹⁶⁵ See Michael P. Ghiglieri, The Dark Side of Man: Tracing the Origins of Male Violence (Cambridge: Perseus Books, 1999), 156-204; R. W. Wrangham and D. Peterson, Demonic Males: Apes and the Origins of Human Violence (Boston: Houghton Mifflin, 1996); see also Frans de Waal, Peacemaking among Primates (Cambridge: Harvard University Press, 1989).

alive but passive.”¹⁶⁶ 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.”¹⁶⁷ 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.”¹⁶⁸

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.¹⁶⁹ Even if cannibalism is not the result of homicide, there is

¹⁶⁶ Bhalla, “Comments” to Marilyn Keyes Roper, “A Survey of the Evidence for Intrahuman Killing in the Pleistocene,” Current Anthropology, 10:4 (Oct. 1969), 450.

¹⁶⁷ Bhalla, “Comments,” 451.

¹⁶⁸ Gat, War in Human Civilization (Oxford: Oxford University Press, 2006), 25.

¹⁶⁹ Carbonell, et al., “Cultural Cannibalism as a Paleoeconomic System in the European Lower Pleistocene,” Current Anthropology 51 (2010), 439; Carbonell et al., “A Reply to Otterbein,” Current Anthropology 52 (2011), 441.

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

¹⁷⁰ Erik Trinkaus and M. R. Zimmerman, “Trauma Among Shanidar Neandertals,” American Journal of Physical Anthropology, 57 (1982), 61. See the complete report as well, Trinkaus, The Shanidar Neandertals (New York: Academic Press, 1983), esp. pp. 206, 414ff.

¹⁷¹ Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 69.

for several weeks and then buried.¹⁷² Shanidar 5, of which little remains, was scarred on the head and suffered a scalp wound deep enough to impact the periostium.¹⁷³

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.¹⁷⁴ If we accept that blades are “a marker

¹⁷² Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 71-2.

¹⁷³ Trinkaus and Zimmerman, “Trauma Among Shanidar Neandertals,” 75.

¹⁷⁴ 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.

of the Upper Paleolithic culture complex,”¹⁷⁵ 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.¹⁷⁶ Both Cro-Magnons and Neanderthals were capable of hafting.¹⁷⁷

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.”¹⁷⁸ If it is the latter, a reexamination of Neanderthal fossils with weapons-induced

¹⁷⁵ Klein, *The Human Career*, 489.

¹⁷⁶ Zollikofer *et al.*, “Evidence for Interpersonal Violence,” 6447. Hafting, that is attaching a handle to a point, dates from the Mousterian about 40KYBP. See Eric Boëda *et al.*, “Bitumen as a Hafting Material on Middle Paleolithic Artefacts,” *Nature* 380 (28 March, 1996), 336-8.

¹⁷⁷ Johann Koller *et al.*, “High-Tech in the Middle Paleolithic: Neanderthal- Neandertal-Manufactured Pitch Identified,” *European Journal of Archaeology*, 4 (3), (2001), 385-97.

¹⁷⁸ Zollikofer *et al.*, “Evidence for Interpersonal Violence,” 6647.

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.”¹⁷⁹ 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.”¹⁸⁰ Possibly the same percentage would obtain with spear thrusts, since bow and arrows were not 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.¹⁸¹ 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

¹⁷⁹ Phillip L. Walker, “A Bioarcheological Perspective on the History of Violence,” *Annual Review of Anthropology* 30 (2001), 584.

¹⁸⁰ Samuel Bowles, “Did Warfare Among Ancestral Hunter-Gatherers Affect the Evolution of Human Social Behavior?” *Science*, 324 (5 June 2009), 1296. See also Ruth Mace, “On Becoming Modern,” *Science*, 324 (5 June 2009), 1280-1.

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.”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.”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

¹⁸² Zollikofer *et al.*, “Evidence for Interpersonal Violence,” 6448.

¹⁸³ Thomas D. Berger and Erik Trinkaus, “Patterns of Trauma among the Neanderthals,” *Journal of Archaeological Science*, 22 (1995), 8489. See also the earlier survey by Marilyn Keyes Roper, “A Survey of the Evidence for Intrahuman Killing in the Pleistocene,” 427ff.

boar in an oak forest.¹⁸⁴ But there is a limit to the benefits of cold weather and gradually the Neanderthals were driven south toward the Mediterranean and Black Seas.¹⁸⁵ 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.¹⁸⁶ Table One provides an estimate of population sizes.

Table One

Estimates of Upper Paleolithic Meta-Populations¹⁸⁷

Culture	Year KYBP	Ave. Population	Min.	Max.
Aurignacian	40-29	4424	1738	28,359
Gravettian	29-22	4776	1879	30,589

¹⁸⁴ Tattersall and Schwartz, *Extinct Humans*, 205.

¹⁸⁵ Finlayson, *The Humans Who Went Extinct*, 125ff.

¹⁸⁶ Sørensen, "Demography and the Extinction of European Neanderthals," 25; Jean-Pierre Bocquet-Appel, et al., "Estimates of Upper Paleolithic Meta-Population Size in Europe from Archeological Data," *Journal of Archeological Science*, 32 (2005), 1556-68.

¹⁸⁷ Source: Tables 2 and 5, Jean-Pierre Bocquet-Appel, et al., "Estimates of Upper Paleolithic Meta-Population Size in Europe from Archaeological Data," *Journal of Archaeological Science*, 32 (2005), 1663-4. A meta-population is a population that is geographically dispersed or isolated but of the same species.

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

¹⁸⁸ See Tim Ingold, Territoriality and Tenure: The Appropriation of Space in Hunting and Gathering Societies (Iowa City: University of Iowa Press, 1986), 153.

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,”¹⁹⁰ but also because of pre-scientific commitment to peaceful primitives.¹⁹¹ 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.”¹⁹²

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.¹⁹³ 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

¹⁸⁹ W. Lloyd Warner, A Black Civilization: A Social Study of an Australian Tribe (New York: Harper [1937] 1958), 155-90.

¹⁹⁰ S. L. Vencl, “War and Warfare in Archaeology,” Journal of Anthropological Archaeology 3 (1984), 124.

¹⁹¹ Carol R. Ember, “Myths about Hunter-Gatherers,” Ethnology, 17 (1978), 439-38; V. Gordon Childe, “War in Prehistoric Societies,” The Sociological Review, 33 (1941), 126-38.

¹⁹² Keeley, War Before Civilization (New York: Oxford University Press, 1996), vii.

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."¹⁹⁶ 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,¹⁹⁹ 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

¹⁹⁸ 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 from the actual historical subject-matter of Upper Paleolithic conflict and war has a bearing

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,²⁰¹ 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.²⁰² And negotiations, one need hardly add, are possible only on the basis of some shared understanding of the rules of the game.²⁰³

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

²⁰⁰ Gat, *War in Human Civilization*, 143.

²⁰¹ Frans de Waal, *Chimpanzee Politics: Power and Sex Among Apes*, rev. ed. (Baltimore: Johns Hopkins University Press, 1998).

²⁰² See De Waal, *Peacemaking Among Primates*.

²⁰³ See Johan Huizinga, *Homo Ludens: A Study of the Play Element in Culture* (Boston: Beacon Press, 1950), ch. 1, 6.

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.”²⁰⁴ 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.”²⁰⁴ 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 Emergence of Modern Humans: An Archaeological Perspective (Ithaca: Cornell University Press, 1990), 519.

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.²⁰⁶ 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

²⁰⁵ Tattersall, “Human Origins: Out of Africa,” Proceedings of the National Academy of Sciences of the United States of America, 106 (22 Sept. 2009), 16020.

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.²⁰⁷ 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.”²⁰⁸

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

²⁰⁶ Tattersall, “An Evolutionary Framework,” 99.

²⁰⁷ Tattersall, “An Evolutionary Framework,” 102-3.

²⁰⁸ Tattersall, “An Evolutionary Framework,” 108.

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

²⁰⁹ Tattersall, “An Evolutionary Framework,” 111.

²¹⁰ See, for example: Stanley H. Ambrose, “Paleolithic Technology and Human Evolution,” *Science* 291 (2 March, 2009), 1748-53; Clive Gamble *et al.*, “The Social Brain and the Shape of the Paleolithic,” *Cambridge Archaeological Journal* 21:1 (2011), 115-35; R. I. M. Dunbar, “Mind the Gap: Or Why Humans Aren’t Just Great Apes,” *Proceedings of the British Academy*, 154 (2009), 403-23; and the series of papers by Frederick L. Coolidge and Thomas Wynn; for example, “Working Memory, Its Executive Functions and

earlier date.²¹¹ 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,

the Emergence of Modern Thinking,” Cambridge Archaeological Journal 15:1 (2005), 5-26; “The Expert Neandertal Mind,” Journal of Human Evolution 46 (2004), 467-87.

²¹¹ See Stephen W. Edwards, “Nonutilitarian Activities in the Lower Paleolithic: A Look at Two Kinds of Evidence,” Current Anthropology 19:1 (March, 1978), 135-7, who argues that evidence for activities transcending biological needs can be attributed to Acheulean peoples ca.700KYBP. See also Klein, The Human Career, 407ff; and Marshack, “On Paleolithic Ochre and the Early Uses of Color and Symbol,” Current Anthropology, 22 (1981), 188-90.

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.²¹² 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.²¹³

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

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.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.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

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.

²¹⁷ Berkeley and Los Angeles: University of California Press, 2002.

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 Zuckerkandl, 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 Zuckerkandl made by George Gaylord Simpson, a distinguished paleontologist: “a gorilla is not an abnormal man; it’s a gorilla.”²¹⁸

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.”²¹⁹ 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

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.”²²⁰

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

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.²²⁰ 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

²²⁰ Purcell, *From Big Bang to Big Mystery*, 90.

²²¹ Jonas, *The Phenomenon of Life: Toward a Philosophical Biology* (Chicago: University of Chicago Press, 1982), 161-5.

essence of the horse.”²²² 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.

²²³ Jonas, *The Phenomenon of Life*, 167.

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,

²²⁴ Jonas, *The Phenomenon of Life*, 165.

²²⁵ Barry Cooper, "The First Mystics? Some Recent Accounts of Upper Paleolithic Shamanism," paper presented at the APSA, Annual Meeting, Washington, DC, September, 2010.

such reductionist explanations “simply enables archaeologists to avoid asking questions about the human imagination, creative thought, and the symbolism of prehistoric art.”²²⁶ 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.²²⁷

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.”²²⁸ 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.²²⁹

²²⁶ Mithen, “Introduction,” in Mithen, ed., Creativity in Human Evolution and Prehistory (London: Routledge, 1998), 7-8.

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

the Study of Pleistocene Imagery and symbol Use’),” *Journal of Archaeological Method and Theory*, 13 (2006), 239-49.

²³⁰ Clark, “Neandertal Archaeology,” 60; M. A. Joachim, “Paleological Cave Art in Ecological Perspective,” in G. N. Bailey, ed., *Hunter-Gatherer Economy in Prehistory* (Cambridge; Cambridge University Press, 1983), 215.

²³¹ Gamble, *The Paleolithic Settlement of Europe*, 324-5.

²³² Dickson, *The Dawn of Belief: Religion in the Upper Paleolithic of Southwestern Europe* (Tucson: The University of Arizona Press, 1990), 15-17. See, however, Margaret Visser, *The Geometry of Love: Space, Time, Mystery, and Meaning in an Ordinary Church* (Toronto: Harper Collins, 2000).

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

²³³ Dickson, *The Dawn of Belief*, 15-17.

²³⁴ D'Errico *et al.*, "Archaeological Evidence for the Emergence of Language, Symbolism and Music," 2, 54.

the ability to symbolize,²³⁵ 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.²³⁶ 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

²³⁵ Clark, “Neandertal Archaeology,” 53ff.

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.²³⁷ 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

²³⁶ Dickson, *The Dawn of Belief*, 159-66.

paleoanthropologists call “aggregation” centres.²³⁸ 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.²³⁹

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 mobiliary 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 Dickson, *The Dawn of Belief*, 190-216.

²³⁸ Margaret W. Conkey, “The Identification of Prehistoric Hunter-gatherer Aggregation Sites: The Case of Altamira,” *Current Anthropology*, 21 (1980), 609-30.

²³⁹ 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.”²⁴⁰ 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.”²⁴¹ 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.”²⁴² 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.”²⁴³ 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

²⁴⁰ Alexander Marshack, The Roots of Civilization: The Cognitive Beginnings of Man’s First Art, Symbol and Notation (New York: McGraw-Hill, 1972), 24.

²⁴¹ Alexander Marshack, “Upper Paleolithic Notation and Symbol,” Science N.S. 178. No.4063 (24 Nov. 1972), 817.

²⁴² Alexander Marshack, “Upper Paleolithic Notation,” 818.

²⁴³ André Leroi-Gourhan, Treasures of Prehistoric Art, tr. Norbert Guterman, (New York: Harry N. Abrams, Publishers, 1965), 40. See also Marshack, “Response” to “On Upper Paleolithic Engraving,” Current Anthropology, 15 (1974), 327-32.

took several millennia to come to fruition.²⁴⁴ 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.”²⁴⁵ 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.”²⁴⁶ 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.”²⁴⁷

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

²⁴⁴ See Marshack, “Lunar Notations on Upper Paleolithic Remains,” Science, 146 (6 November, 1964), 743-5.

²⁴⁵ Alexander Marshack, “Upper Paleolithic Notation and Symbol,” 817.

²⁴⁶ Marshack, “Cognitive Aspects of Upper Paleolithic Engraving,” Current Anthropology 13:3/4 (1972), 449.

²⁴⁷ Marshack, “Upper Paleolithic Engraved Pieces in the British Museum: A Comparative Analysis of Two Fragments by New Methods,” in G. de G. Sieveking, ed., Prehistoric and Roman Studies: Commemorating the Opening of the Department of Prehistoric and Romano-British Antiquities (London: British Museum, 1971), 143; Marshack, “Evolution of the Human Capacity: The Symbolic Evidence,” Yearbook of Physical Anthropology, 32 (1989), 14.

reaffirmed his interpretation “that they often represent an observational lunar notation.”²⁴⁸

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.²⁴⁹ 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.”²⁵⁰ 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

²⁴⁸ Marshack, “Cognitive Aspects,” 456.

²⁴⁹ Marshack, “Upper Paleolithic Notation,” 824-5.

²⁵⁰ Marshack, “A Lunar-Solar Year Calendar Stick from North America,” American Antiquity 50 (1985), 51, fn.4.

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 mobiliary 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 mobiliary 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 mobiliary 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 mobiliary 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

²⁵² Marshack, “Cognitive Aspects of Upper Paleolithic Engraving,” 445.

²⁵³ Marshack, “Cognitive Aspects,” 447; see also 461.

²⁵⁴ Marshack, “Cognitive Aspects,” 460.

²⁵⁵ Marshack, “Cognitive Aspects,” 457; “Upper Paleolithic Notation,” 825.

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.”²⁵⁷

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.²⁵⁸ In other words, the La Marche bone notations might have been a device to connect annual changes in the seasons with

²⁵⁶ Marshack, “Upper Paleolithic Notation,” 827.

²⁵⁷ Marshack, “Cognitive Aspects,” 455.

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 mobiliary 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.”²⁵⁹ 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.”²⁶⁰ 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

²⁵⁹ Marshack, “Upper Paleolithic Notation,” 823.

today.”²⁶¹ 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.”²⁶² 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.²⁶³

²⁶⁰ Marshack, “Implications of the Paleolithic Symbolic Evidence for the Origin of Language,” American Scientist, 64 (March-April, 1976), 137.

²⁶¹ Marshack, “Implications,” 138.

²⁶² Marshack, “On Depiction and Language,” Current Anthropology, 30:3 (June 1989), 334.

²⁶³ Marshack, “On Depiction and Language,” 334.

For this reason, Marshack argued, many mobiliary 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

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.”²⁶⁶ 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 Magdalenian constitutes the origin of art per se. For Marshack, however, “it seems that the Franco-Cantabrian

²⁶⁵ Marshack, “Evolution of the Human Capacity,” 5-6.

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.”²⁶⁷ 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.”²⁶⁸ This piece contains a series of nested semi-circles, which meant it was the product of both careful planning

²⁶⁶ Marshack, “Evolution of the Human Capacity,” 7, 2.

²⁶⁷ Marshack, “Evolution of the Human Capacity,” 4.

²⁶⁸ Marshack, “A Middle Paleolithic Symbolic Composition From the Golan Heights: The Earliest Known Depictive Image,” Current Anthropology 37:2 (Apr. 1996), 357.

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.”²⁶⁹ 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

²⁶⁹ L. Vertes, "Churinga de Tata (Hongrie)," *Bulletin de la Société préhistorique française*, 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”²⁷⁰ and neither do data derived from them. As M.H. Wolpoff once observed, “I have been in rooms

11. See also H.P. Schwarcz and I. Skoflek, “New Dates for the Tata, Hungary Archaeological Site,” Nature, 295 (18 Feb. 1982), 590-1.

²⁷⁰ Nowell, “Defining Behavioral Modernity,” 447.

with data and listened very carefully. The data never said a word.”²⁷¹

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.”²⁷² 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,

²⁷¹ Wolpoff, “Discussion,” in R. H. Tuttle, ed., Paleoanthropology, Morphology, and Paleoecology (The Hague: Mouton, 1975), 15.

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.’”²⁷³

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

²⁷³ Marshack, “Evolution of the Human Symboling Capacity,” 21-4.

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.”²⁷⁴

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 symboling 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.²⁷⁵

What Marshack was referring to in this passage, it seems to me, is what Michael Polanyi called “connoisseurship.”²⁷⁶ What d’Errico took him to mean is: “I know what I’m doing.”

²⁷⁴ D’Errico, “Paleolithic Lunar Calendars: A Case of Wishful Thinking?” *Current Anthropology*, 30 (1) (1989), 117-18.

²⁷⁵ Marshack and d’Errico, “On Wishful Thinking and Lunar ‘Calendars’,” *Current Anthropology* 30 (4), 1989, 494.

²⁷⁶ Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1958), 54-5.

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

²⁷⁷ “On Wishful Thinking,” 494-8.

²⁷⁸ Roger Lewin, “Ice Age Art Idea Toppled,” *Science*, 243 (17 March, 1989), 1435; Paul Bahn, “Getting into the Groove,” *Nature*, 339 (8 June, 1989), 429-30.

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'

²⁷⁹ See, for example, d'Errico and Carmen Cacho, "Notation versus Decoration in the Upper Paleolithic: A Case-Study from Tossal de la Roca, Alicante, Spain," *Journal of Archaeological Science*, 21 (1994), 185-200; Marshack then reviewed d'Errico's revised PhD thesis, *L'Art gravé azilien: "Methodology and the Search for Notations Among Engraved Pebbles of the European Late Paleolithic,"* *Antiquity*, 69 (1995), 1049-51; D'Errico and April Nowell, "A New Look at the Berekhat Ram Figurine: Implications for the Origins of Symbolism," *Cambridge Archaeological Journal*, 10:1 (2000), 127ff followed by Marshack's comments on their paper, 152ff, and their reply, 157.

²⁸⁰ Elkins, "On the Impossibility of Close Reading: the Case of Alexander Marshack," *Current Anthropology*, 37 (1996), 185-226.

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.”²⁸²

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’.”²⁸³ 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

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

²⁸² Elkins, “On the Impossibility of Close Reading,” 198-9.

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.”²⁸⁴

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,”²⁸⁵ 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.

²⁸⁴ Marshack, “Comment,” 212.

Randall White called Marshack's photographs "visual arguments" and Elkins said his "photomicrographs can be coercive 'visual arguments'."²⁸⁶ 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

²⁸⁵ Marshack, "Cognitive Aspects," 460.

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.²⁸⁷ 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

²⁸⁶ “Comments,” 219, 223.

²⁸⁷ Of course one would have to add Voegelin to these two along with scholars such as Eliade as well as specialist studies of particular cave or other sites. Norbert Aujoulat’s *Lascaux: Movement, Space and Time* (New York: Harry N. Abrams, 2005) is an example of the latter. See also Georges Bataille, *Prehistoric Painting: Lascaux or the Birth of Art* (Lausanne: Skira, 1955); for a somewhat dated review of the problem see Margaret W. Conkey, “New Approaches in the Search for Meaning? A Review of Research in

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;²⁸⁸ 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 Cathedral (Hoboken: Wiley, 2009).

approach parietal and mobiliary 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

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

²⁸⁹ König, Am Anfang der Kultur, 13.

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 Leibniz' 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.”²⁹² 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).”²⁹³ 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.

²⁹² König, Am Anfang, 32; cf. Edwards, “Nonutilitarian Activities in the Lower Paleolithic,” 137.

²⁹³ 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.²⁹⁴

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

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.²⁹⁵ 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.²⁹⁶

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.²⁹⁷ 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

²⁹⁵ Tata: Eine Mittelpaläolithische 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.”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.²⁹⁹ Moreover, when the intersection of the lines representing the axes of the world is added

²⁹⁸ Meixner, *Auf der Suche nach dem Anfang der Kultur: Marie E.P. König, Eine Biographie* (Munich: Frauenoffensiv, 1999), 95.

²⁹⁹ König, *Am Anfang*, 134.

to the four we have five cardinal points, the last representing the centre of the cosmos.³⁰⁰

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.³⁰¹ 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

³⁰⁰ König, Am Anfang, 145.

triangle or double triangle, to the Cretan double axe familiar to clacissists, 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.³⁰²

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

³⁰¹ König, Am Anfang, 216.

does not solve the problem of a possible dispersal of cultural strategies and modes.”³⁰³ 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.³⁰⁴ Thus, “the ‘two’ signs here mark the boundary between the realms of light and darkness, between sky and earth.”³⁰⁵ 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.³⁰⁶ 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

³⁰² König, *Am Anfang*, 238

³⁰³ Marshack, “Upper Paleolithic Symbol Systems of the Russian Plain: Cognitive and Comparative Analysis,” *Current Anthropology* 20:2 (Jul 1979), 274. His use of the term “phenomenological” had nothing to do with Husserl. In this sentence it simply meant “apparent.”

³⁰⁴ André Leroi-Gourhan, *The Art of Prehistoric Man in Western Europe*, tr. N. Guterman (London: Thames & Hudson, 1968), 392.

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).³⁰⁷ 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.”³⁰⁸ 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

³⁰⁶ Mircea Eliade, *Patterns in Comparative Religion*, tr. Rosemary Sheed (New York: World, 1967), 412.

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.

³⁰⁷ Christensen, “Comment,” 298.

³⁰⁸ Marshack, “Reply,” 304.

³⁰⁹ Marshack, “Reply,” 304.

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.”³¹¹ 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.³¹³

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