

Chapter IV

Part 1

4/1 Proccessual Archaeology

Archaeologists have used evolving terms for identifying and classifying distinct records of stone tool-making *Homo erectus* populations; (1) the “Acheulian” in Africa; 2) “Middle Paleolithic” in Asia and Europe and; 3) “Mousterian” for later Industries of Europe. Modern tool types, in contrast, associated with the Upper-Paleolithic presence of fully modern humans, did not appear until after 40,000 years ago and, as I have articulated, these tools did not begin their own evolution until after *Homo sapiens* began their exploration of the Old World. Discounting the role American pre-Clovis may have had in the evolution of Old World tool-types has left “problems” associated with the evolution of one set of Old World tools into another (see Binford’s description of the “Mousterian Problem” 1983). That is, the Middle to Upper Paleolithic Transition is a perplexing issue, as difficult for many scholars to explain as the anatomical transition separating *Homo erectus* and modern *Homo sapiens*. In fact, the relative stability of *Homo erectus* (both behaviorally and anatomically), is identified in his inability to develop hafting technologies, (i.e. attached wood arrows to stone points or handles to stone axe blades), suggesting that did not plan ahead or use stone tools in the same manners as succeeding, *Homo sapiens* populations. Anatomically, *Homo erectus* paleontological fossil finds, starting in Africa nearly two million years and ending with their his extinction just 32,000 years ago, suggest only gradual changes in their evolving hominid locomotion, with little change in anatomical morphology. The relative stability, anatomically, of the morphological evolution to *Homo erectus*’s bipedalism reaches back to before the time *Homo erectus* first left Africa to colonize the Old World (1,200,000 - 600,000 years ago).

The idea of “missing links” occurs, for-the-first-time, with a supposed behavioral transition from *Homo erectus* to *Homo sapiens*. Lewis R. Binford identifies the “Mousterian Problem” (described in his 1983 book *Working at Archaeology*), as a transition in the archaeological record that is difficult to define as a procession from one behavior to another. For Binford the “Mousterian Problem” lies not in just defining that a transition to modern behavior is difficult to articulate, but that this enigma needs (still) to find an explanation. That there is not, as yet, a final agreement as to the source for modern humans, either behaviorally or anatomically, and since this debate remains unresolved, perhaps looking for untested alternatives leaves open the inclusion of an ancestral American Indian presence predating the Upper Paleolithic emergence of modern man in the Eastern Hemisphere. By bringing the pre-Clovis behaviors into the evolutionary picture the Old World emergence of *Homo sapiens* hunter/gatherer cultures would be a product of invention, the result of processes that brought them to first exit the Americas and then encounter advanced stone age manufacture associated with *Homo erectus* populations they came in contact with. The interchange, between the first *Homo sapiens* to exit the Americas and the first Neandertals they encountered in southwestern Siberia, could have hastened the use of stone tools for hunting by modern humans. It is not coincidence that the earliest dates for the onset of the Upper Paleolithic are dated in

Siberia from archaeological contexts that lie directly above the last Middle Paleolithic occupations left of the Neandertals.¹

Multi-regional Evolution: The Missing Links Hypothesis

The concepts of today's theory of a Multi-regional Evolution can be traced to the turn-of-the-century where, especially in Europe, Neandertals were assumed to be transitional forms that later became modern humans (Hrdlicka 1912). Evidence suggesting that transitional forms suddenly became modern was and continues to be seen as controversial while the main alternative, replacement of the Neandertals, requires a separate origin for modern mankind outside of Europe.

Clearly, replacement from the Americas and an autochthonous origin for the American Indian was lost in the emergence of Western European perspectives following the dawn of this 'anthropological theory.' After 1912 the British school attended to the adoption of Piltdown Man as the ancestor of all modern humans and any further concerns regarding an Amerindian contribution to modern human origins were dismissed. The virtual elimination of any theory suggesting an American Indian contribution to human origins was never fully entertained by European scholars. Yet, there were North American researchers who did entertain this evolutionary concept including Chamberlain, Lummis, Whitney, and, as well, Ameghino who died in 1912 shortly after Hrdlicka visited him in Argentina. Their concerns have not been redressed to this day.²

The hypothesis that modern humans evolved from an as yet unknown nuclear DNA source is advanced by many molecular anthropologists who contend that *Homo erectus* of Africa and his migratory descendants in Europe and Asia did not genetically contribute to the emergence of *Homo sapiens sapiens*. Although there are ongoing arguments for a Multi-regional evolution where Asian, European, and African hominid each separately evolved into modern humans, there is growing genetic evidence indicating a rapid replacement of the first intercontinental Old World hominid by anatomically modern humans, descendants of a separate progenitor population that may have been specifically unrelated to *H. erectus*. What many molecular anthropologists are asking us to accept is that our recent ancestors were waiting in one isolated location, (predetermining the exclusion of the New World), to populate the world well after descendants of Africa's *Homo erectus* had previously been colonizing the entire eastern hemisphere for 600,000 to 1,500,000 years.

Replacement: An American Wellspring

There is today warranting evidence to support this contention as genetic (Ward et al. 1991; Chakraborty and Weiss 1991) and linguistic (Chamberlain 1912; Sapir 1916; Campbell in review of Greenberg et al. 1986; Nichols 1990), assessments promote the residence of a significantly large "pre-Clovis" population in the Americas. A developed

¹ Dates for the earliest encounter are the oldest documented sites of their kind, 38,000 to 43,000 ybp.

² Carbon 14 Dating (AMS) of the human remains and the stratigraphy they came from that was shown Hrdlicka prove today that Ameghino was correct in dating them into the Late Pliocene (10,050 ybp).

theory supporting pre-Clovis habitation could ally itself with the conservative analysis of the age of modern human Replacement of Old World hominid. This analysis could find warranting validation of a New World Paleoarchaic origin by, in-itself, challenging today's "conventional wisdom," assigned to liberal definitions purporting a greater than 50,000 year old ancestry of man (be it out of Africa or Asia). A new "warranted" perspective must follow the prospect of determining what should or should not be found in the earliest New World archaeological record (Swanson 1959; Dillehay and Meltzer editors and authors there-in 1989). The corollary linking Amerindian mid-Pleistocene subsistence behaviors and the problems many anthropologists have in accepting them could be breached in the valid interpretation of an Old World origin for earlier well-developed stone tool industries, be they Middle Paleolithic or Upper Paleolithic.

Despite sometimes argumentative correspondence between Ameghino and Hrdlicka (and others), an evolutionary exclusion of the ancestral capacities of the American Indian was established, following Ameghino's death in 1911. Unfortunately, the controversy remains today with the prospect of properly interpreting the significance of a pre-Clovis Ice Age presence of mankind in the Americas being constrained by this exclusion. Because of this, evolutionary implications such a presence offers remain, untested. Similarly, the abandonment of the autochthonous origin hypothesis and an in situ origin of the American Indian were made long before the acceptance of "Folsom" or "Clovis man" in the northern Americas in 1935. Perhaps today's philosophical anthropological observations should bring into question the foreordained hypothesis that there was an Old World source for our own kind. Certainly, Old World based evolutionary models logically suggest that American Indians could not have been present in the Americas when Neandertals were roaming Europe (Fagan 1990).

As Paleoarchaic habitations gain acceptance a compatible rethinking of research strategies must be called for. The fact is there remains a persistent problem in finding a common consensus be it about the first peopling of the Americas or the first modern peopling of the Old World (Owen 1984; Howell 1984). I am attempting to promote an inquiry into an old theory through the incorporation of an interdisciplinary inter-hemispherical approach to the study of human evolutionary history by including ALL the members of the Higher Primate Family. Speculation and the philosophical capacity to predetermine that the American Indian could not, or should not, or will not be included in the search for modern human origins is at issue. This predetermination may be at the root of today's ongoing search for a resolution to the Human origins debate and with it the answer to such Old World problems as, the Mousterian enigma. I am asking anthropologists to openly investigate this as an evolutionary alternative and to welcome the presentation of evidence that has yet to be brought to the attention of the anthropological community at large. Science is founded in the relentless search for clearer knowledge. It is time to explore untested alternatives that present themselves in a clear and orderly fashion.

The threshold in the Old World for either modern human 'cultured' behavior and, as well, fully modern human forms has been suggested to support a very sudden and recent replacement of *Homo erectus* and their Middle Paleolithic behaviors. This virtually contemporaneous Replacement can be identified at less than 45,000 years ago and span in time less than 15,000 years. The following assessment of the Old World archaeological evidence will address this more recent appraisal of the timing of the replacement of

Homo erectus populations. The "Out of Asia" replacement hypothesis provides an alternative to the "Multi-Regional" and recent "Out-of-Africa" origin models for modern humans while embracing well established archaeological based C-14 dates from Siberia, Europe, Australia, and southern Africa for the timing of Homo *sapiens* arrivals.

4/1 Amerindian Exodus and the Arrival of Homo *Sapiens* to the Old World

In a letter to this author, David Meltzer suggested that I might pay more attention to the Old World when applying New World concepts to evolutionary theory. As promised, I will now identify limitations from the Old World regarding frequently cited presumptive evidence of modern humans there beyond the 50,000-year threshold.

tiff Neandertal and Cro-Magnon skulls

The Conservative view held by a polarity of Old World archaeologists continues to challenge the well published consensus view that the rising tide that led to sapient man began 90, 70, or even 50 thousand years ago. That is, the very limited evidence of an earlier than 45,000 year presence for fully modern humans (either behaviorally or anatomically) has fallen in favor because many, but not all, researchers making these finds want it to be so. Simply, the testimony used to promote pre-Upper Paleolithic Homo *sapien* activities 60,000 - 90,000 years ago should be shouted down. In addition, while many have done so their voices are difficult to hear over the clamoring of the general media that know that, "older is better" especially when talking anthropology. These untenable time depths are seen as controversial yet are published be that as it may, while, time constraints applied to the Americas have long been publicized as less than 12,000 years ago. All the research and money poured into the Old World has led many to conclude that Homo *sapiens* were not in attendance before 45,000 years ago.³

When I first began to explore my hypothesis I chose to examine the evidence and the Old World discoveries that are used to define the earlier than 45,000 year implications. The proponents suggest that somehow there must be earlier evidence of an evolutionary stage for the transition to modern human behaviors and anatomy. They site discoveries from southern Africa at Klaisies River mouth, east African fossil specimens from Border Cave, and less robust forms of Homo *erectus* from the Lavant in the Middle East, as the most likely sources for this sudden transition into modern humanness. I am not afraid to address these earlier than 45,000 years claims, especially since, conservative estimates have already identified problems at each and every site. I need only articulate their valued concerns. If these conservative voices, experts from the Old World, are correct in their assessment, that these earlier sites are highly problematic, then the time frames outlined for the arrival Homo *sapiens*, in each and every continent of the Eastern Hemisphere, would ratify that Replacement of Homo *erectus* populations began 45,000 years ago and was completed by 31,000.

When I first looked for the evidence I found, without prompting, conservative voices who were examining the implications themselves. After reading views, believer and skeptic's, I found the conclusions that this "was just not so", more convincing the evidence itself. These issues are paramount in defining limitations to what is often

³ Jelinek 1992

promoted by geneticists and other specialists who ignore the problematic nature of these early finds in order to gain favor with researchers, helping define a consensus. As we have come to see from the Americas scene (that Clovis First is now an also ran, though it ran hard and heavy, and has been put away wet) is; that consensus does not mean it is so. The public who reads anthropology from *Discovery* or *Scientific American* and the *like* is given to believe what is most often published. I am not saying that public forums including *Nova*, *The Learning Channel*, or the *like* are not balanced. Yet, repetitiveness leads to hypnosis, especially if all the choices, the one's science seeks to either illuminate and eliminate, are not fully addressed. Often times, but not always, alternative reasoning (especially the just ain't so interpretations), must be found in more specialized scientific Journals dedicated to a specific discipline. These annals are rarely available at the newsstand and are so expensive that professionals and College libraries remain the best sources in finding the "bottom line." We all want answers while we do not want explanations that would make them more difficult to comprehend. Mainstream periodicals and educationally oriented television aim is to appeal to us by offering solutions. What we are sometimes left with (less often than not) are half-truths, compatible with mainstream theories that are used to guide scientific observations. Science is science because it is dedicating to understanding what has yet to be fully comprehended. If it were understood, it would be an applied science. An applied science is not driven by competitive theories but by the demonstration that it is working for us.

We do not send astronauts into space to test the rocket, we send them their to explore the edge. The rocket already works. It is for this reason that I will and must address the choices that are not often enough delineated when it comes to the presentation of certain aspects of anthropological data. Since there remains competitive theories with little resolution in sight, despite over 160 years of research, it might do us one better to identify the limitations each theory holds over the other. From this, we might find pieces of the puzzle that have been discarded, offshoots of the fundamental question. If Our-kind has, as a matter of fact, been present in the Old World less then 45,000 years then we need to send anthropologists into space on this ship in order to test what this means, both the limitations and the possibilities. If our conclusions are correct we will not only survive but we might return home with a revelation. Simply, if we continue to debate the issue as to when we became modern, by looking only at one of the Earth's two worlds, we will never know if the other world truly flies. Relative to the solar system the Earth does fly, and we are all astronauts on Spaceship Earth. It all depends on how we say it, view it, and gain from it, for in opening our eyes to limits and limitations we are better able to assess the observations of obstacles and how to overcome them.

Tiff Neandertals and Cro-Magnon sharing the campfire

Old World conservatives argue that our first appearance was not anything more then a very sudden event. That is, this new species—be it anatomical or behavioral—can not be traced much beyond the timing of the last Ice Age in Europe, Asia, or Africa. I have long been finding that consensus opinions are not always garnered to be what general knowledge portrays them to be. Many might tell you that modern humans can be

traced earlier in southern Africa, the Lavant, or as once believed, Piltdown England.⁴ Let's now examine what other's have come to believe, conservative voices from academia that see half-baked theories, based on insufficient evidence, that is used to sell us on some remote aspect of an out of context dimension that is not very convincing when examined objectively.

Tiff Map of Asia

Tiff Bowdler and Flood

What we have separating the Upper Paleolithic from the Middle Paleolithic is a replacement of one species with another, plain and simple. This reality must be measured against what we are now establishing in pre-Clovis contexts. As Fagan notes; the "international significance" of archaeological signatures defining mid-Pleistocene America (and later arrivals of precursors to Paleoindian Traditions), require that we test these fundamental differences too, with evolutionary theories. Replacement in the Old World has implications of Transition in the New World when *Homo sapiens* returned from their journey and introduced advancements, gained from the experience, into more ancient pre-Clovis American Cultures.

tiff Overhead from Level M from NM

If we are going to just dismiss preserved remnants of purportedly humanly created hearths in Pleistocene America then we should then ask why more of these formations are not found in Middle Paleolithic Europe. By comparison, if these New World hearths are the works of nature then nature should be providing us with the same evidence from archaic hominoid occupations of the Old World. Conversely, if these palm and hand prints are intrusive along with the rest of the matrix forming New World mid-Pleistocene hearths, then why isn't this kind of intrusion characterized in the Middle Paleolithic? Certainly, the fraternity of Old World conservatives have argued for intrusion when articulating how fragments of modern human bones end up in Middle Paleolithic levels while progressive journals and imaginative biologists continue to portray these fragmentary pieces as the stuff to build theories from.

tiff overheads mtDNA out of Africa

tiff out of Asia

tiff Pedra Ferada

Tiff Slide New World Language map

In jumping all over the globe I cannot help but believe that somehow we might find, as our Indian brothers and sisters would put it, everything is related. That is, there must be a place in space and time, an explanation if you will, for the type of archaeological signatures coming from the New World Pleistocene record. But how long

⁴ By comparison, New World archaeologists with propertied finds 30, 40, or even 50 thousand years old are given little more than lip service. Contrastingly, modern human contexts from the Old World of 70, 90, or 100 thousand years are given tons of positive press, much more than the limited weight that they are drawn from should supply evolutionary theory.

has this record been in place or would we believe in Monte Verde if it wasn't preserved below a bed of peat. Certainly, the lithics alone would not have been buoyant enough to wade the criticism that other less articulated mid-Pleistocene remains must continue to bear. What Monte Verde provides is a comparison to test other less preserved evidence of Pleistocene occupation too.

In an attempt to bring order in place and time to mid-Pleistocene American archaeology, we must integrate evolutionary theory. My investigation into what researchers are finding in the Old World Middle Paleolithic and beyond suggests to me that it's evolutionary terms may be nothing more than a dead end, having nothing to do with modern human evolution—excepting for the possible contribution by *Homo erectus* to modern human developments in lithic tool production.

Alternatively, mid-Pleistocene habitations from the Americas could provide a viable backdrop for later Upper Paleolithic habitation if we were to apply evolutionary theory to the behaviors sustaining archaeological production. What came first, Monte Verde has “learned economies” or “Paleoindian Traditions”? Learned economies. Certainly, it should not be supposed that Paleoindian Traditions developed from New World “learned economies” at least without a major influence from Paleolithic Asia! The transition from “learned economies” to “Paleoindian” Hunter/gatherers was more a revolution resulting from foreign influence. This has parallels in the Peoples Revolution in Russia and China that was by example, initiated from what Marx and Engels learned from Henry Morgan's exemplar of Native American Societies.⁵ Since archaeologists have come to see these habitations as verifiable, should not the task be to explain the infusion of specialized hunting traditions into pre-existing Amerindian populations. When we compare the “international significance” of Replacement in the Old World with what was a Transition to specialized hunter/gatherers in the New World (30,000 years later or just 12,000 years ago), a new dictum of “points of order” comes into the picture. Here the evolution of Old World hunter/gatherers influences the preceding character of “learned economies”. This should lead us to question “what came first”.

Contrarily, shouldn't we find a new term for pre-Clovis since Clovis-like technologies did not evolve from mid-Pleistocene Native Americans but Old World Paleolithic cultures? This is an invisible connection since pre-Clovis did not influence the development of Clovis. Precursors to Clovis Technologies and Paleoindian Industries came from the Old World, when the remnants of last Ice Age, separating the first Americans to leave the New World from antecedents who remained behind, were removed by the melting of Glacial barriers. Thus, another scientific definition is called for in describing Amerindian mid-Pleistocene habitations as “pre-Clovis”. The archaeological society's community decision to sanction the existence of people in the Americas before 12,000 years ago is the first step in determine the significance such a presence offers the study of human pre-history.

RETHINKING HOMO SAPIEN ORIGINS IN THE AMERICAS:

A Working Hypothesis

⁵ Unfortunately, nothing is as pure as the original state it chooses to emanate.

Is it time for the modern human origins “debate” to include the Western Hemisphere and the American Indian in the search for the “wellspring” for *Homo sapiens*? This chapter will contrast Old World anthropological observations of a “sudden replacement” of *Homo erectus* with interpretations advanced by looking to the Americas as a place to start in the search for *Homo sapien* origins. This chapter is designed to adapt into world prehistory the anthropological and archaeological significance of evaluating “pre-Clovis” New World Pleistocene forager/gatherer systems as, the forerunner of an evolutionary process that led to the emergence of the first true hunter/gatherer Cultures during the course of discovering the Old World. The accompanying dialogue will advance the idea that modern humans originated in the Americas from pre-Clovis Cultures and replaced Old World *Homo erectus* populations as they integrated Middle Paleolithic systems into what was to become, the modern Upper Paleolithic.

I am deeply appreciative of having had the opportunity to share these perspectives with others and that they have encouraged me to express some new engaging ideas, in essence, reinterpretations of basic concepts presupposing the directionality of anthropological research.⁶ This analysis, will combine geographic, linguistic, genetic, dental, and archaeological studies to reinforce an untested turn of the century assessment of an autochthonous (truly indigenous) origin for the American Indians of the Western Hemisphere and the idea of the relative stability of the modern human form (see Alfred Wallace 1887, 1889; Arthur Keith 1911; J. D. Whitney 1879; Florintino Ameghino 1911, 1915; and Alexander Chamberlain 1912). This multidisciplinary approach is sanctioned by several archaeological and anthropological perspectives that, in-and-of-themselves, identify evolutionary principals for the origin of modern man that justifiably position the Americas, and it’s Higher Primate Family, as the source for this genesis. The goal is to demonstrate that the New World offers a viable alternate higher primate source for *Homo sapien’s* derivation. Moreover, this model offers solutions to interpretations of “missing links” drawn from the archaeological and paleontological record of the Old World. The present impasse has directed anthropologists to adopt two differing theories that, in-and-of-themselves, are incompatible with the other’s view, as Willamette and Clark observe:

“Despite the considerable efforts of many well-informed investigators, however, no resolution of the controversy is in sight. We think that the slow progress to resolution of the debate can be attributed to differences in metaphysical paradigms of modern origins researchers that in turn result in a biased selection of specimens and/or variables used in analysis.

How selectively biased are researchers? An extensive literature review of published multivariate data invoked in support of “continuity” and “replacement” positions produced some dramatic results (Willamette, 1993, 1994). A total of 680 data points were collected, representing 61 variables on 55 fossils. Of these, only 72 variables on 11 fossils, or 11% of the reported database, were common to both paradigms This

⁶ I wish to express my appreciation to the professional scholars who have helped guide this effort. Their opinions and concerns have been instrumental in the development of this idea. They are however, not to be ascribed with any inconsistencies. These contributors include John Bengston, Lyle Campbell, Theodore Schurr, Ruth Gruhn, Stephen Zegura, George Carter, Alan Bryan, Harold Fleming, Tom Dillehay, Lewis Binford, and the late Bruce Raemsch, and others. Their valuable opinions and guidance has been pivotal in providing critical reinforcement. My friend, Lanning Kaufer, and the editors of *this journal* have improved the read-ability of the present work.

means that in the sample, 89% of the data collected were used by members of only one paradigm (p. 488).

The authors further contend;

In light of the plethora of articles and books that have appeared in the last 10 years, it is worth asking ourselves whether we are any closer to solving the question of our origins than we were a century ago. If there is a lesson to be learned from the debate, it is that students of human evolution must begin to confront the inferential basis for their knowledge claims. So far, they have not been much concerned to do so. The result is an interminable debate, now well into its second century, with no resolution in sight (p. 489-489).⁷

As the preceding quote reiterates there are two primary theories emanating from the Old World data; “continuity” and “replacement”.

1) **“Multiregional Evolution”** (Wolpoff et al. 1984) with an accompanying transition that both anatomically and behaviorally, theoretically, led *Homo erectus* to become *Homo sapiens*. This “hypothesized” metamorphous occurred spontaneously (in Africa, Asia, or Europe), coinciding in time with archaeological and anatomical variance that identifies a 45,000-31,000 year accession of *Homo erectus* to *Homo sapiens*.⁸ Wolpoff, Wu and Thorne best represent the Multiregional Evolution Theory in Smith Spencer (1984 pg. 471),

“We contend that this is the normal pattern of evolution in *Homo*. It is in situ in the only sense that gradual evolution in a polytypic species can ever be in situ, and it involves gene flow in a manner that evolution in a polytypic species always must. The origins of modern *Homo sapiens* are to be found in the evolutionary process we have described as multiregional evolution, and not in Noah’s Ark.”

Multiregional evolution in theory has its strongest case in Northern China, finding its initial support in the late 1930, 40 and early 50’s work of F. Weidenreich. C. S. Coon drew further attention to this idea with Milford H. Wolpoff, Wu Xin Zhi, and Alan G. Thorne best representing the concept of local regional continuity in Smith, Spencer (1984 pages 411-483). It is Wolpoff, Wu, and Thorne’s contention that hominid evolution in Northern China is evidenced of “local regional continuity.” However, an increased regional similarity of Northern Asian hominids to modern humans can be contrasted with W.W. Howells’s evidence supporting the “Rapid Replacement Theory.”

“Apart from the interpretive scheme advanced by Weidenreich, and following him Coon, prior to the 1980s only Howells (especially 1967) has dealt with the east Asian

⁷ Willamet, C. M., and G. A. Clark. Paradigm crisis in modern human origins research *Journal of Human Evolution* (1995) 29, 487-490. 1995

⁸ 'Multiregional Evolution' champions include; Weidenreich F. "The 'Neanderthal Man' and the Origins of Modern Humans," *Am. Anthro.* 1943a 42:375-383; Wolpoff, W.H., Wu X.Z, Thorne A.G., 1984 "Modern *Homo sapiens* Origins: A General Theory of Hominid Evolution Involving the Fossil Evidence from East Asia," pp 411-483 and other authors in Smith FH, Spencer F eds. *The Origins of Modern Humans: A World Survey of the Fossil Evidence*. Liss, New York 1984; Wolproff M. H., "The place of the Neandertals in human evolution," in *The Emergence of Modern Humans* ed. by Eric Trinkaus, Cambridge University Press 1989, pg. 97-141.

region as a whole. Howells's ideas, discussed in more detail below, are quite different in that he envisions no connection between the archaic and modern populations in any part of the region, although admitting considerable antiquity for the regional differentiation of east Asia's modern populations (1976c, p. 648). To the south, Ngandong is interpreted as a perhaps slightly more advanced form of *Homo erectus*, lacking any clear connection to the early modern specimens from Wajak (Wadjak) and Niah (although in later publications Kow Swamp and other similarly robust Pleistocene Australians are found to be somewhat problematic). To the north, no special connection is recognized between the Middle Pleistocene Zhoukoudian people and later Asians (1983, p 298): 'because of their basic similarities, all modern men have a common ancestor who was later than Peking man. 'Maba is regarded as a 'faraway Neanderthal '(1967, p 204), lacking clear connection to (what he regarded as) the undifferentiated early Chinese specimens from Ziyang, Liujiang, and the Upper Cave at Zhoukoudian. It has remained Howells's conviction that modern populations have a single recent origin.' from Wolpoff, Wu, Thorne 1984 in Smith, Spencer 1984 pg. 424

The lower cave levels at Liujiang, Kwangxi; Zhoukoudian, and Choukoutian contain *H. erectus* while Upper Paleolithic levels contrastingly contain *Homo sapiens sapiens*.

“Seemingly similar depressions in the Zhoukoudian Lower Cave crania are not equivalent; in the Lower Cave specimens only one of these appears on each side of the squama, and they are associated with the frontal keel (a structure absent in Upper Cave cranium no. 102). We believe that the morphology of the no. 102 cranium corresponds to the lateral depressions described by Magitot (1885) as marking the mechanism of deformation in artificially deformed European crania. Other features indicating artificial deformation (see Brown, 1981) in no. 102 include the long, flat frontal, the marked parietal curvature in the sagittal plane, the great cranial height, and the flattened occiput with its lack of angulation at the superior nuchal line. We are certain that the no. 102 vault shows the effects of artificial deformation.” (id pg. 430, S&S 1984)

2) **“Sudden Replacement”** finds its most recent support in mitochondrial DNA (mtDNA) studies. The most often sighted genetic origin evidence supporting the “Eve hypothesis” is “replacement” by *Homo sapiens* resulting from a recent migration out of Africa (Cann, et al. 1987).⁹ Alternatively, an “out of Asia” cladistic analysis (see Johnson et al. 1983) represents another line of descent and birthplace for the Old World's mtDNA descendants of Eve.¹⁰

4/1 Untested in the search for human origins is the following assessment:

3) **“An American Wellspring”** for *Homo sapiens* followed by the inevitable discovery of un-known worlds beyond American shores, into a then unexplored, *new* Old World. By incorporating “replacement ‘from the Americas’” what we find when we look back to the European (re) discovery of the Americas is, that the “New” World was, in

⁹ Cann, Rebecca L., M. Stoneking, and A. C. Wilson "Mitochondrial DNA and Human Evolution," 1987 *Nature* 325:31-36.

¹⁰ Johnson, M.J.; D.C. Wallace, S.D. Ferris, M.C. Rattazi, and L.L. Cavalli-Sforza, "Radiation of Human Mitochondrial DNA Types Analyzed by Restriction Endonuclease Cleavage Patterns," *Journal Molecular Evolution* 1983, 19:255-271. A cladistic tree demonstrates that mtDNA affinities in the Old World have an Asian origin. In fact, only one mtDNA type identified in this initial study was found in the American Indian sample (30 Warao from Venezuela). Moreover, this was considered, the "ancestral type."

reality, mankind's long forgotten Wellspring, inhabited by human ancestors who, (as Native Americans have long asserted), "have always been here." Analyses of Native Americans as the source for Old World *Homo sapiens* will be assessed in this chapter by combining evolutionary and archaeologically based chronologies with implications supporting "pre-Clovis" occupation of the Americas.

"Replacement from the Americas" removes the anomaly of a "missing link" between *Homo erectus* and *Homo sapiens*. Sudden encounters between species, once isolated in separate "worlds", also helps explain the difficulties archaeologists have in interpreting evidence of a behavioral "transition" accompanying a changing Old World Paleolithic record. The Middle/Upper Paleolithic transition identified from European archaeological studies as the "Mousterian Problem" was, in deference to a "transition", an adoption of lithic tools by modern humans/Amerindians after first encountering Old World Middle Paleolithic Industries used by Neandertals.

An Invitation to Dawn a New Jacket

The first two alternatives identify that fossil evidence of our own modern human species *Homo sapiens* (*sapiens*) is difficult to identify or classify beyond the 40,000 year old boundary, strongly suggesting that our species are recent arrivals to the Old World (Binford 1983, Eldredge and Tattersal 1982, Tattersal 1992). While New World early "early man" finds and their associated implications remain unresolved, and as a result, poorly investigated, so to is the pending scenario that provides for evolutionary isolation, with-in the Americas, and a recent arrival into the Old World, for *Homo sapiens sapiens*. An open invitation waits an archaeologically based theory to conform the evidence of a contemporary modern human mid-Pleistocene occupation in the New World with the dawn of the Old World Upper Paleolithic (Jelinek 1992). The pending hypothesis conveys that Native American *Homo sapiens* progenitors migrated into the Old World from the New World. In this, the New World's pre-Clovis "learned economies" were evolutionary derived while Upper Paleolithic advancements gained in the "pilgrimage" to the Old World were not only shaped by the journey itself, but, modified after encountering *Homo erectus* and their own archetypes comprising Middle Paleolithic stone age tools. By this, archaeologically based explanations must accompany this rendering. Theories are born from observation, as are the paradigms that drive them.¹¹

¹¹ "Drawing from memory, [Thomas] Jefferson postulated in 1816 that the diversity of Native American languages was such, '... that the tribes speaking them could not possibly understand one another.' From this observation, he estimated that Native Americans had lived long enough in the Americas to be the parent stock of Asian peoples!" in Lipscomb, Andrew A. and Albert E. Bergh, eds., *The Writing of Jefferson*, Washington: The Thomas Jefferson Memorial Association, 1903-1904, XIV, p. 402. Evaluations of the New World fossil finds led European evolutionists Alfred R. Wallace (in the "Antiquity of Man in America," *The Nineteenth Cent.* Nov. 1887, pp. 667-679, and "Darwinism." London, Macmillan 1889); and Sir Arthur Keith (in *Ancient Types of Man*. New York: Harper, 1911 and "Problems Relating to the Teeth of the Earlier Forms of Prehistoric Man," *Proc R Soc Exp Biol Med* 1913, 6:103-104), to contend that the human skeletal form extended back into Tertiary times, then estimated at 500,000 y.b.p. Ancient finds including hearths found in the silver mines of 16th century Spanish America prompted Bartolome de Las Casas in the 16th century, (*Apologética Historia de las Indias*, in M. Serrano y Sanz, ed. Madrid: Bailliere 1909), and others later on (see Abbott, Charles C., "Evidences of the antiquity of man in Eastern North America," *Proceedings of the American Association of Science* 1889, 37:293-315; Cook, H. J., "New geological and paleontological evidence bearing on the antiquity of man in America." *Natural*

Part 2 SPELLING

4/2 Wolpoff, Wu and Thorne best represent the Multiregional Evolution Theory in Smith Spencer (1984 pg. 471),

“We contend that this is the normal pattern of evolution in *Homo*. It is in situ in the only sense that gradual evolution in a polytypic species can ever be in situ, and it involves gene flow in a manner that evolution in a polytypic species always must. The origins of modern *Homo sapiens* are to be found in the evolutionary process we have described as multiregional evolution, and not in Noah’s Ark.”

Multiregional evolution in theory has its strongest case in Northern China, finding its initial support in the late 1930s, 40s and early 50’s work of F. Weidenreich. C. S. Coon drew further attention to this idea with Milford H. Wolpoff, Wu Xin Zhi, and Alan G. Thorne best representing the concept of local regional continuity in Smith, Spencer (1984 pages 411-483). It is Wolpoff, Wu, and Thorne’s contention that hominid evolution in Northern China is evidenced of “local regional continuity.” However, an increased regional similarity of Northern Asian hominids to modern humans can be contrasted with W.W. Howells’s evidence supporting the “Rapid Replacement Theory.”

“Apart from the interpretive scheme advanced by Weidenreich, and following him Coon, prior to the 1980s only Howells (especially 1967) has dealt with the east Asian region as a whole. Howells’s ideas, discussed in more detail below, are quite different in that he envisions no connection between the archaic and modern populations in any part of the region, although admitting considerable antiquity for the regional differentiation of east Asia’s modern populations (1976c, p. 648). To the south, Ngandong is interpreted as a perhaps slightly more advanced form of *Homo erectus*, lacking any clear connection to the early modern specimens from Wajak (Wadjak) and Niah (although in later publications Kow Swamp and other similarly robust Pleistocene Australians are found to be somewhat problematic). To the north, no special connection is recognized between the Middle Pleistocene Zhoukoudian people and later Asians (1983, p 298): ‘because of their basic similarities, all modern men have a common ancestor who was later than Peking man. ‘Maba is regarded as a ‘faraway Neanderthal ‘(1967, p 204), lacking clear connection to (what he regarded as) the undifferentiated early Chinese specimens from Ziyang, Liujiang, and the Upper Cave at Zhoukoudian. It has remained Howells’s conviction that modern populations have a single recent origin.” from Wolpoff, Wu, Thorne 1984 in Smith, Spencer 1984 pg. 424

The lower cave levels at Liujiang, Kwangxi; Zhoukoudian, and Choukoutian contain *H. erectus* while Upper Paleolithic levels contrastingly contain *Homo sapiens sapiens*.

“Seemingly similar depressions in the Zhoukoudian Lower Cave crania are not equivalent; in the Lower Cave specimens only one of these appears on each side of the squama, and they are associated with the frontal keel (a structure absent in Upper Cave cranium no. 102). We believe that the morphology of the no. 102 cranium corresponds to

History 1927, 27:240-247), to question both the antiquity of mankind and, as well, the indigenous antecedents of the Americans.

the lateral depressions described by Magitot (1885) as marking the mechanism of deformation in artificially deformed European crania. Other features indicating artificial deformation (see Brown, 1981) in no. 102 include the long, flat frontal, the marked parietal curvature in the sagittal plane, the great cranial height, and the flattened occiput with its lack of angulation at the superior nuchal line. We are certain that the no. 102 vault shows the effects of artificial deformation.” (id pg. 430, S&S 1984)

Part 3

4/3 An Archaeological Perspective

The aim of this chapter is to digest the anthropological significance of defining and accepting the unique character of the New World’s Pleistocene forager/gatherer systems as intimately linked to Old World pre-history. Should our earliest ancestors have originated in the Americas, then they surely could not have been methodical stone tool industrialists. The archaeological record simply would not support this interpretation nor, to my knowledge, do any New World anthropologists or archaeologists convinced of a mid-Pleistocene (>12,000 y.b.p.) presence of man in the Americas. However, the interpretations and evaluations, I believe, require us not to pre-suppose an Asian origin for the earliest New World human activities. The evidence of simplistic stone tool types and reliance on bone and wood tools should not unduly reflect against the presence of “paleoarchaic” plant based subsistence strategies or that the ‘proposed’ archaeological remains could not be interpreted as evidence of a strictly “primitive” (prime force) equatorially forged subsistence behavior and definition. The principal concerns in evaluating these New World sites and the difficulty scientists have in accepting their human properties suggests to me that the mythological trickster is competing with archaeologists in their attempt to investigate what is indeed a very limited archaeological production. Building from archaeological observations from the Old World Binford suggests;

“Although it is true that we frequently acknowledge that we would like to know what life was like in the past, it should have been clear that we sought to understand processes, particularly the processes that brought into being the facts of the archaeological record. In our view these processes were much more complicated than previously thought (or imagined)”.¹²

American Pleistocene activities could perhaps be better understood through a definition that would not forsake the ambiguous nature of these ‘archaic’ subsistence strategies. They have required scientists who are familiar with them to advocate a level of environmental livelihood that in itself challenges the hypothesis that the earliest occupants of the Americas were once successful Arctic hunters who should have maintained vast realms of knowledge gained through the colonization of a new uncharted Hemisphere. Clearly, the Upper or Late Paleolithic colonization of the Old

¹² Binford 1983b, p. 6

World *does* support these types of advancements indicative of the migration propensities that would have been gained had mankind been first engendered to subsistence activities akin to mid-Pleistocene New World forager/gatherer activities.

Timing the “Sudden Replacement”

The distinguishable differences separating cranial and skeletal traits in Old World hominids and the earliest anatomically modern humans coincides with an archaeological evolution of tool types and with it the first indications of “sapien” behavior. Verified interpretations imply that a vast physical and cultural change occurred virtually simultaneously (spanning < 5,000-10,000 years), throughout the Eastern Hemisphere (Binford 1972 and 1983; Klein 1989; White 1992). The time frame, measured by chronological/archaeological association and Carbon-14 dating procedures, denotes that modern humans began their initial domination of the Eastern Hemisphere at a time marked in European terms as the Upper Paleolithic beginning less than 45,000 years ago.

While physical anthropologists (Keith 1915; Tattersal 1992) and molecular biologists question our presumed relationship to ‘archaic’ fossil hominid forms (Svante Pääbo; and M. Jackie Johnson, personal communication), those leading to the intercontinental descendants of *Homo erectus*, or that past and present academic scholars have presented other alternatives that could represent viable possibilities, (Wallace 1887; Chamberlain 1912; Keith 1912; Ameghino 1915; and Stringer 1982, 1989) it must be left to archaeological data to provide the basis for any kind of interpretation that would isolate a singular location for an ancestral human origin (Cavalli-Sforza pers. correspondence). Although some molecular anthropology and blood polymorphism studies indicate and promote interpretations for an earlier presence for isolated modern *Homo sapiens* in Africa 50,000 to 200,000 y.b.p. (Stringer 1986; Cann et al. 1987; Vigilant et al. 1991; see Templeton (1993) for a “reanalyzes” and rebuttal of a recent... “Out of Africa” hypothesis¹³), there is no commonly accepted archaeological evidence that supports a modern human physical and cultural presence anywhere in the Old World beyond the beginning of the European Upper Paleolithic (Mellars and authors therein 1991) the Asian Late Paleolithic, (Howell, 1957, 1984) and the Later Stone Age of Africa (Parkington 1991). Archaeological and Anthropological both strongly support the definition of “sudden replacement” (beginning ~40 thousand years ago) through-out the Eastern Hemisphere, period!

Scientific justification of the inference that modern *Homo sapiens* were not present in the Eastern Hemisphere prior to the sudden appearance <45,000 y.b.p. has been maintained by ongoing evaluations of the Middle Paleolithic/Upper Paleolithic record and has been sustained by conservative interpretations correlating to the ‘archaic’ hominid/modern human boundary and the onset of contemporary ‘human’ forms and behavior. The definitions affording this sudden transformation of human achievements and the attainment of “cultured behavior” and the explanation of the significance of this achievement is a testament to the principles of “the new archaeology”. Theirs is a demonstration of the ability of science to change philosophical principles condoning

¹³ Templeton Alan R., in "The 'Eve' Hypotheses: A Genetic Critique and Reanalysis" in *American Anthropologist* 1993, 95(1):51-72

accepted givens. The inference of differing perspectives implied from the archaeological record, that being the dividing line between ‘archaic’ hominid behavior and modern ‘sapient’ behavior, cannot be resolved by simply determining their proper alignments. An attempt will be made to address the cause for this “transition,” defined in European terms by Binford (1983b) as “the Mousterian Problem.” This book will continue to borrow references from Binford’s same 1983 work titled “Working at Archaeology” and, by so doing, examine the cumbersome traditional beliefs that have archaeologists countering the evidence supporting proposed Pleistocene New World habitations.

Innovation and the appearance of “cultured behavior”

The spread of Trimmed Core Tool Traditions into Japan and Australia (Bowdler 1977; Dragoo 1980) and eventually southern Africa (Singer and Wymer 1982) may indicate that these technologies were the result of ongoing adaptations and refinements to new environments.¹⁴ Rapid coastal migrations could be implied, especially into southern Africa, and promote the interpretation that this was an important modern human endeavor not isolated to Australia (Bowdler 1990; Bednarick 1989). The coincidental presence of Trimmed Core Tool Traditions in northern Asia in the Aldan (Tang and Gai 1986) and in Australia at Swan River (Pearce and Barbetti 1981) and then prismatic flakes at Klaisies River Mouth in southern Africa are all dated within the limits of C-14 methods, an analysis compatible with a separate emergence of stone projectile points found in the early (“Aurignacian”) Upper Paleolithic industries of Europe. The point I wish to make here is that perhaps many of the advancements found in Upper Paleolithic Europe were not diffused from there into Australia or southern Africa but rather; that independently evolving stone tool complexes were being refined as fully modern humans expanded throughout the Eastern Hemisphere.

Richard Klein’s, (1976, 1977) Lewis Binford’s, (1984) and others (Mellars and authors there-in 1991) extensive studies of faunal remains associated with archaic hominid activities in the Eastern Hemisphere have been pivotal in addressing the presence, or non-presence, of modern human behavior and “cultural development.” Their strict analysis and subsequent conclusions have led to an *unacceptable* confirmation for the evidence of a *90,000 year old* presence of fully modern behavior aligned with the Howieson Poort Assemblages at Klaisies River Mouth in Southern Africa (Singer and Wymer 1982). The valid archaeological presence of sapient behavior associated with the Howieson Poort Industry at Klaisies has been reliably C-14 dated at between 38,600 and 26,800 y.b.p. (Singer and Wymer 1982) while similar opinions offering evidence of “replacement” can be drawn from other African Later Stone Age sites including Border Cave and Diekloof (Parkington 1991). Parkington further underscores the African skeletal evidence concluding that;

“These observations are consistent with the view that most human remains at BC [Border Cave] are buried into older levels and are not likely to be older than 40,000 years” (1991 p. 51).

¹⁴ Dragoo, D.W. 1980. "The Trimmed-Core Tradition in Asiatic-American Contacts," in *Early Native Americans*, editor D. Browman, The Hague New York Mouton. Singer, R., Wymer J., *The Middle Stone Age at Klasies River Mouth in South Africa*. Chicago: University of Chicago Press 1982.

The propensity for stone tool manufacture was, for these first modern humans of the Old World, a process perhaps developed from mimicking the archaic *Homo erectus* and their own Mousterian or Middle Paleolithic tool manufacturing methods. By refining and deploying these stone tools into the new evolving subsistence strategies, some akin to large game and later megafaunal hunting technologies, fully modern humans altered the known archaeological production defining earlier “Mousterian” Middle Paleolithic contexts. Frayer makes this point in Smith Spencer 1984:

“Probably the single most characteristic that is associated with the appearance of post-Mousterian groups is the wide usage of blade production techniques [Bordes, 1968]. Although blade tools are not absent in earlier periods, in the Upper Paleolithic and Mesolithic the prismatic core forms the nearly universal first step in stone tool production. Tools derived from these cores are a significant improvement over the earlier flake tools. Blade tools have extremely thin cross-sections and sharp edges, providing more effective cutting and scraping surfaces [Bordes, 1970; Semenov, 1964]. In some cases, the nonworking edge was even dulled before usage, presumably so that the implement could be used without damaging the hand. The significant feature of blade tools is that they can be modified into a variety of forms, designed for specific purposes. This specificity of tool function is a cumulative trend within the Upper Paleolithic. For example:

““Before the Solutrean, the evolution of lithic assemblages seems to lead to the more efficient adaptation of different kinds of tools to different kinds of primary operations (slicers become better slicers, crushers better for crushing, and so on) regardless of the nature of the specific resource on which the operation was performed. From the Solutrean onward, we have increasing evidence for the special tailoring of specific tools to particular resources [Freeman, 1981, p. 153].”

Although this conclusion is based only on archaeological sequences in Cantabrian Spain, the generalization is probably applicable to overall lithic trends in the sequence of Upper Paleolithic and Mesolithic industries. Through time, the variety of tool types increases [Issac, 1972] and more and more control over the intended form occurs. These innovations include thermal pre-treatment that facilitates better-controlled knapping [Bordes, 1969], progressive “microlithization” of tools [Semenov, 1964], and by the Mesolithic, regional tool types that are specifically designed for local ecosystems and subsistence/exploitive patterns [Rozoy, 1978].”¹⁵

That modern humans, after encountering the Asian or European hominids, would adapt their own uses - including refined hunting and gathering techniques - to readily observable stone knapping technologies - is a plausible alternative for the cause of the “problems” underlining changing behaviors defining the “Middle/Upper Paleolithic transition”. Encounters between *Homo erectus* and *Homo sapiens sapiens* must have occurred and could have led to Old World advancements in small stone tool industries and improvements in technologies demonstrated by Upper and Late Paleolithic human curation indicative of planned subsistence strategies. The ability to differentiate between modern human behavior and archaic hominid subsistence strategies is clearly demonstrated in the archaeological record. Simply, the capacity to anticipate resource

¹⁵ Frayer 1984, pp. 213-214

availability and to plan ahead, sometimes months in advance, is clearly distinguished by the presence of the first modern humans. The ability to find both archaic hominid and modern human habitations in the Old World are enhanced by the prospects of finding *preserved lithic remains* (Toth 1991; Lynch 1991) and the substantiation of a human presence commonly diagnosed by the existence of stone tools.

Stone tools can be seen to act as aids for archaeologists in finding other less distinguished materials including artifacts of bone and other organic material. If bone was chosen before stone or if human habitations are allied with bone and wood tools as the initial medium then archaeologist should be wary of descriptions offering evidence of human habitations that do not include stone tools. Ancestral behaviors imply that humans occupied the Americas in mid-Pleistocene times, while archaeological correlates can-not be confirmed by the same factors determined as evidence associated with stone tool industries in the Old World. Human occupations in the Old World (readily defined by the presence of stone tools; i.e. Paleolithic), should not unduly reflect against the “paleoarchaic” or pre-Clovis Pleistocene evidence in the New World if the human definitions were characterized by wood and bone tool industries and not elaborate stone tool technologies.¹⁶

Adaptation and Subsistence Behavior; the Course of Human Achievement

Could the propensity to manufacture stone into elaborate tools have eluded the earliest evolving “Amerindians” *isolated* in the New World as I am proposing? The earliest archaeological record of the Yukon, (Morlan 1980; Cinq-Mars 1979) Siberia, (Tang and Gai 1986; Mochanov 1980) and the southern Americas (Adovasio 1986; Dillehay 1989 and others) does not challenge this view. Could human understanding of stone tool manufacture (the applications applied to hunting large game animals), have simply remained culturally shallow during the Wisconsin glaciation in the ‘southern’ Americas? The message emanating from the present archaeological record of the Yukon indicates that although stone core tool traditions are found in Asia and Australia,⁵ they are missing at Old Crow (Irving 1987) and Bluefish Caves (Cinq-Mars 1979) before the onset of the last Pleistocene Epoch. Could evolving stone tool industries have been independently developed or markedly refined within the confines of the Eastern Hemisphere alone? Simply, the initiation of stone knapping techniques - be they African Acheulian, European Mousterian, or Asian Middle Paleolithic Industries were undoubtedly founded in the Old World by *Homo erectus*.

What should the archaeological sequence be telling us in regards to advances in human cultural behavior and adaptations at the beginning of the Wurm Glaciation 40,000 years ago? The archaeological associations leading to an influence of shared adaptive responses and cultural borrowing is difficult to define in the early or late hominid record of the Old World (Binford 1981; White 1983; Klein 1989; Mellars 1991 and authors therein). Could the propensity to learn and apply stone knapping technologies have been acquired by the modern newcomers from the New World, possibly as a result of observing the Neanderthal’s “Mousterian” or Asian *Homo erectus*’ Middle Paleolithic

¹⁶ Future research should attempt to investigate the indigenous alternative. A analysis of current research strategies can be found in Dillehay Tom D. and David J. Meltzer eds., *The First Americans: Search and Research*. CRC Press, Boca Raton, Florida 1991.

stone tool making techniques? The Perigord of France would not counter this perspective (Simek and Price 1990), although it is implied there in response to evidence that Neandertals applied small tool traditions, and hafting technologies into their own Mousterian tool kits after encountering *Homo sapiens* who were just beginning, themselves, to invent modern stone tool kits defining the Upper and Late Paleolithic. These archaeological interpretations are relevant to the basic theory offering evidence of a “rapid replacement” and are instrumental in accepting the time frame (< 45,000 y.b.p.) for this widespread technological revolution.¹⁷

Explanation begins for the archaeologist when observations made on the archaeological record are linked through laws of cultural or behavior functioning to past conditions on events [Binford 1968c:270]. If we... appeal to unstated perceptual propositions in explaining observations we can have little confidence in the historical reconstructions offered.... If the propositions appealed to in explaining our observations of the archaeological record are correct, then we will have gained knowledge of the past [L.R. Binford 1968b:1].¹⁸

Could the propensities for modern humans to adapt, share, and refine their cultural ideals and independently “progress” as a result of environmental, geographic, and climatic conditions? In modeling this with migration “out the backdoor of the Americas” would not technical reevaluations have been wrought from sub-Arctic urgency into a new reliance on hunting game for survival? To conclude that humans in the sub-Arctic later colonized the Americas either during or before the onset of Wisconsin Glaciation only to diminish previously known lithic stone tool making propensities is demonstrative of the problems associated with the theory of an Asian origin. Pre-Clovis archaeology runs counter to the Clovis First model, in that, what is not found in the Pleistocene New World archaeological record (Dillehay and Meltzer and authors therein 1991) is evidence that these first migrants were ever in the Old World.

Alternatives must be found to characterize the limited definitions related to the presence of a “pre-Clovis” or “paleoarchaic” New World archaeological record and the reality of a preceding reliance to foraging, trapping, and gathering and *not* hunting large game animals. I am implying that the interpretations of the New World archaeological record can be resolved to definitions supporting “equatorial subsistence strategies” and that these archaic systems pre-date innovations made by modern hunter/gatherer “cultures” as they began to populate the Old World 45,000 years ago. Simply, archaeological validation of pre-Clovis behaviors lies in accepting mid-Pleistocene New World People as uncomplicated gatherers and foragers. Accepting that these systems did not change until 12,000 years ago is the defining line of a new paradigm; (i) that modern Paleolithic Industries were initiated by Old World hunter/gatherer societies while (ii) geographic

¹⁷ The Middle Paleolithic archaeological record defines the presence of *Homo erectus* populations. These occupations are primarily identified by stone tool industries with these industries dating back to the initial “Acheulian” occupations in Africa nearly 2 million years ago. Middle Paleolithic industries are vastly different than the refined tool specific technologies associated with modern humans of the Upper or Late Paleolithic. see *Before Lascaux: The complex Record of the Early Upper Paleolithic*, edited by Knecht, Heidi; Anne Pike-Tay; and Randall White; and Bordes, F. and D. de Sonneville-Bordes, “The Significance of Variability in Paleolithic assemblages.” *World Archaeology* 1970, 2(1):61-73

¹⁸ Binford, 1983, p. 9

isolation, resulting from the Wisconsin Glaciation, prevented Paleolithic hunters from returning until Ice Age barriers retreated.

Clearly, there are valuable interpretations to be drawn from the uniquely diminished definitions validating Pleistocene New World sites. An attempt to explain the past is simply warranted. Moreover, pre-Clovis site verification should address what we have now come to expect and dismiss the limitations that would have us discount them as problematic. The solution requires that we define a new direction of achievement, this being, outside of the Americas. It is vital that we assign the measure of “Paradigmatic Growth and Theory Building” (see Binford 1983b) to the problems associated within the framework of the archaeological definitions offering evidence of a contemporaneous, yet unrelated, human presence in both hemispheres during the last Ice Age. Clearly, new theories must be addressed as academia validates the presence of New World Pleistocene forager/gatherer systems (especially at some of the extreme dates being reported > 50,000 y.b.p.; Guidon 1987; MacNeish 1992). By so doing, researchers might encounter and eventually endorse the accompanying implications that “Amerindians” may have maintained plant based subsistence strategies, a preference for wood and bone as tools, the basic propensities distinguishing the earliest contexts comprising pre-Clovis archaeology.

“Given a theoretical vacuum left by the shaking of traditional archaeological ideas and conventions, we must seek new ideas, concepts, and their theoretical integration with reference to how the world works, why man behaves the way he does at different times and places, and how we may understand recognized patterns of changes and diversity in organized human behavior. Only to such theories may the scientific method be properly addressed. Thus, today’s challenge is in theory building, and thus far little progress has been made, although many persons have seen the challenge and accepted it”.¹⁹

Speculation, Observation, Explanation: Casual Links to pre-Historic Reconstruction

Deductive reasoning should and can be applied to the anthropological implications arising from the presence of unique archaeological definitions and perspectives that offer puzzling yet, unmistakable evidence (Dillehay 1989; Aodovasio 1986) of simple plant based subsistence strategies in the American Pleistocene. These activities have found both justifiable support and skeptical inquiry and remain, at least, unconventional evidence of human habitations during the Wisconsin/Wurm Glaciations. The purpose of this chapter is not to just define the essence of Pleistocene New World industries but to also place them in their proper perspective. Comparing them to archaeological definitions of well-developed subsistence activities found in the Upper or Late Paleolithic of the Old World is perhaps the most challenging endeavor awaiting both archaeologists and anthropologists. The corresponding interpretation is however based on the assumption that we first analytically accept their presence and, by so doing, define their implications with respect to the comparisons drawn from the intimacy

¹⁹ Binford, 1983b, p. 36 Binford is identifying the need to define theories to guide observation, here with the acceptance of the Mousterian Problem or the Middle/ Upper Paleolithic Transition. Similar problems in theory building apply to the Americas and the relevance of accepting pre-Clovis and the theories that must be built in doing so.

archaeologists have to the contexts found in Old World Middle and Upper Paleolithic archaeological sites.

The earliest New World wood, bone and simple flaked stone industries are not, however, to be insinuated as proto-*sapien* in that cultural lifestyles can be defined (Cinq-Mars 1979; Adovasio 1986; Dillehay 1989; Guidon 1987). My intention is to imply that human behavior as defined by the Upper Paleolithic of Europe and as evidenced by the production of re-touched stone tools, has left behind for today's archaeologists a pronounced indication of their living space and, as a result, a definable archaeological record that has led many anthropologists to believe that human habitation most certainly must have occurred earlier in the Old World. Could the changing character and the need and ability to leave a detailed record and offerings as evidence of these achievements have been confirmed in this new way of life gained from the colonization of a *new* Old World. Clearly, the replacement of previous archaeological evidence supporting archaic hominid behavior has found archaeologists contending that a deeper understanding and cultured human presence is initiated in the Upper and Late Paleolithic and Later Stone Age of the Old World.²⁰

Part 4

4/4 *HOMO SAPIENS AND THE PEOPLING OF AFRICA

This chapter will focus on the conservative analyses that fully illustrate that replacement of *Homo erectus* by *Homo sapiens* was only slightly later in Africa and just as complete. The proscribed evolutionary hypothesis of "Replacement" of Old World hominids (*H. erectus*) by New World *Homo sapiens* must appropriate from the Old World paleontological and archaeological evidence the timing of their arrival. The threshold in the Old World - for either modern human 'cultured' behavior and, as well, fully modern human forms - does in fact support a very sudden replacement, including in Africa. In fact, Africa fits into the picture of continental replacement with dates, coastal no less, only slightly younger than the dates from Siberia, Asia and Australia. This point must be established and I will do so in this chapter. The Peopling of Africa begins < 37,000 years ago and spans perhaps more than 15,000 years for the ultimate extinction of truly indigenous *Homo erectus* Populations. A conservative assessment of the Old World paleontologic and archaeological evidence will be identified in this chapter, helping cast a new light on evidence supporting a recent arrival of humans into interior-Africa, with inland settlement emanating from the coast.

There are serious challenges to the archaeological and paleontological data used to indicate that modern man dates back in Africa any earlier than 36,500 years ago. Those advocating a modern human paleontological and/or archaeological presence beyond

²⁰ There is a consensus that the archaeological remains associated with either 'archaic' *Homo sapiens* or pre-modern humans indicates that these hominids are missing key elements including the borrowing or sharing of ideas and social interaction characteristic of fully modern humans. "There is a lack of evidence for geographic patterning to variability in habitat or adaptations resulting from environmental change despite occupations in Europe lasting 80,000 years and spanning two interglacials" (Binford pers. comm.). The archaeological record of the Upper and Late Paleolithic and the development of refined task specific stone tool industries marks the beginning of "fully cultured behavior" directly and specifically associated with "fully modern humans."

40,000 years in the Old World can find only a handful of sites to make these claims, and few, if any, from the African Continent. Great antiquity for *Homo sapiens* in the Old World spans less than 45,000 years as we will examine. We will use conservative archaeologically based assessments to evaluate the timing of our own species arrival in Africa since it was the greatest distance from the Bering Strait (and the Americas), most certainly making it the last region of the Eastern Hemisphere to be settled. Perhaps there is more to learn from adopting cautiously drawn archaeologically based assessments outlining both a recent and sudden replacement of *Homo erectus* following the Modern Peopling of Africa. Finally, analyses characterizing support for the Out-of-Africa hypothesis must be addressed if we are to examine the Americas as an alternative source for Old World Colonization.

Unsettled Archaeological and Paleontological Observations

There are significant challenges to want-it-to-be-so consensus views advocating a modern human paleontological and or archaeological presence more than 45,000 years ago anywhere in the Old World. The just-ain't-so conservative opinions counter liberal rationales (promoting an earlier presence) by critiquing anthropometric data as presumptive when identifying transitional relationships linking *Homo erectus* with anatomically modern *Homo sapiens*. By casting doubt on unsubstantiated assessments, scientists have properly interpreted the timing of the arrival of *Homo sapiens* in Africa as part of a Hemisphere-wide event encompassing the "sudden and total replacement" of well established *Homo erectus* Populations. In speaking to the evidence from Africa, advocates of "replacement" have succinctly challenged the methodology of inference of both archaeological and paleontological data used in linking true *Homo sapiens* with archaic hominid behavior and/or fossil specimens.

Lewis R. Binford, John Parkington, Richard G. Klein's and extensive studies of faunal remains in association with scavenger/forager activities have only widened the gap separating earlier Old World hominid subsistence tactics and fully modern sapient behavior. As seen throughout the Eastern Hemisphere and into Africa, conservative analyses have been pivotal in addressing the initial presence of human "culture", and with this, the arrival of *Homo sapiens*, as a sudden and complete "replacement" of earlier *erectus* groups. Their disciplined investigations into Bordes' earlier association of "scavenger" systems and the sudden perceptiveness accompanying the arrival of modern human "hunter/gatherers" has led them to identify "problems" in linking the behaviors of *Homo erectus* and *Homo sapiens*. In Europe the procession, or lack of one, from one behavioral pattern to another has been defined by Binford as the "Mousterian problem" (see *Working at Archaeology*, 1983). His strict analysis and subsequent conclusions suggests that the "transition" from one species behavior to another remains unexplainable. His own evaluation of faunal remains from Klaisies River Mouth (1984) further identifies that "problems" exist in linking the Middle Paleolithic with the Late Stone Age in Africa as well. Simply, studies of faunal remains confirm that earlier scavenging behaviors have little to do with the processes that led to the sudden shift accompanying true "hunter/gatherers" cultures. Accordingly dating the end of the Middle Paleolithic in Africa with the dawn of the Late Stone Age, "replacement" can be properly

understood. This 'Peopling of the African Continent' can be judged as contemporary with that of Upper Paleolithic Europe and the rest of the Old World.²¹

For over twenty years scientists have adopted processual methodology in archaeology using this method to promote anthropological observations through "paradigm growth and theory building (Binford 1983)." This principal will be applied here in an effort to accommodate archaeological observations with anthropological explanations. Separate episodes of "time and space", one isolation, the other arrival, best explains the physical evidence depicting differing ways hominids and humans behaved in the past. Logical resolutions to many archaeological and paleontological "problems" are dynamically related to definitions supporting the timing and character of *Homo sapiens* occupations according a PEOPLING of the OLD WORLD. My own research strategies have led us to adopt the most conservative paleontological perspectives and archaeological time-frames. We should accept that there remains unresolved "Problems" in linking proposed "early modern" forms and/or their behaviors with *Homo sapiens* (Corruccini 1993; Binford 1984). This observation, compliments the America-wellspring hypothesis by casting doubt on conflicting models used to support the two prevailing Old World human-evolution theories, Multi-Regional Evolution and Sudden Replacement "Out of Africa".

"Given the construal of the paradigm just outlined, theories (more accurately the hypotheses deduced from them), can only be confirmed or disconfirmed according to the tenets of the metaphysic (the construal of "reality" defined by the biases and preconceptions of the paradigm). Outside a particular paradigm, its constituent theories ("hypotheses") might appear nonsensical.

Despite assertions to the contrary (e.g. Klein, 1989), the venerable history of the debate suggests that simply acquiring more data will not help us choose between opposing paradigms. The reason is that data have no meaning or existence independent of a paradigm that defines and contextualizes them. In light of the plethora of articles and books that have appeared in the last 10 years, it is worth asking ourselves whether we are any closer to solving the question of our origins than we were a century ago. If there is a lesson to be learned from the debate, it is that students of human evolution must begin to confront the inferential basis for their knowledge claims. So far, they have not been much concerned to do so. The result is an interminable debate, now well into its second century, with no resolution in sight (p. 489-489)."²²

Widely promoted archaeological and paleontological evidence is, more often than not, theory specific. What is clear to many conservative researchers is that the data used to guide the two prevailing human evolutionary theories - Multi-Regional Evolution and Sudden Replacement does not exist. Theories drawn from the Old World have, for over a hundred years, offered little more today than irreconcilable observations.

Not surprisingly, African Middle Paleolithic occupations accompanying evidence of *Homo erectus*, predate by two million years "cultured" modern human occupations marking the dawn of Africa's Late Paleolithic ~35,000 years ago (Parkington 1990,

²¹ Only in pre-Clovis America do worldwide human Pleistocene habitations fail to incorporate any Paleo- "lithic" stage. Bone Age to Stone Age?

²² Willarmet, C. M., and G. A. Clark. Paradigm crisis in modern human origins research *Journal of Human Evolution* (1995) 29, 487-490. 1995

Mellars 1991). In Africa, as in Europe, there is archaeological evidence of a sudden shift to core tools²³ and an accompanying displacement of *Homo erectus* occupations. Simply, the Amerindians arrival in Africa is accompanied by the “replacement” of *Homo erectus* populations accommodating manifestations of archaeological definitions from Europe and Asia. The arrival of the Late Paleolithic allied with 'modern *Homo sapiens*' archaeological sites of Africa are virtually contemporaneous, (even, if perhaps only a couple thousand years later), with the first human habitation of Australia or eastern Siberia 43,000 years ago. Moreover, it is from coastal east African locations that the initial late Paleolithic begins. Could it be assumed that the ancestors to Africa's first *Homo sapiens* practiced coastal navigation in route from southeast Asia. This inference is consistent with the timing of the Later Stone Age (LSA) archaeological evidence from central Africa since few, if any, LSA sites from the interior pre-date the coastal locations.

The African “Late Stone Age”

In Africa as well as Asia and Europe "something different" begins to appear with a new patterning of modern human behaviors (L.R. Binford 1983). While this revolution in behavior is not limited to Europe, where it's best evidence can be archaeologically documented, the timing of the shift accompanying *Homo sapiens* arrivals is no-less dramatic and certainly no earlier in Africa then it was anywhere in the Old World. Simply, the appearance of the Aurignacian Culture in France nearly ~38,000 years ago is indicative of a revolution of stylistic assemblages accompanying a contemporary shift in behaviors throughout the Eastern Hemisphere. Moreover, true evidence of “culture”, and all that this encompasses, is not found in the Middle Paleolithic habitations associated with *Homo erectus* populations in Africa and Asia, including their European brethren, the Neandertals. The differences intel specific evidence of an advanced cultural tool kit which included graphic decoration and painting, art and notation, personal ornamentation, core tool traditions including the importation of lithic materials exotic to the site area, fishing and hunting of both small and large game, the storage of food, banked fire pits for cooking and heat, and as agreed for the colinization of Australia, use of boats for coastal travel and migration.

The first Late Stone Age settlement of Klaisies River Mouth in South Africa by *Homo sapiens* (Howieson Poort Industry) must have been initiated by coastal migration since archaeological sites from the interior at this time belong to *Homo erectus* alone. Here as in Europe there is archaeological evidence of a sudden shift to core tools and an accompanying displacement of earlier hominid occupations.

Moreover, the implications that are drawn from the study of hominid scavenger/forager systems now widen the gap separating modern man from the *Homo erectus* forms he so readily replaced. This is most profound in Africa.

Previous hominid occupation and later human settlement at Klaisies River Mouth in South Africa represents a classic example of the sudden shift from hominid systems with their "alternation of 'Mousterian' industries," (F.H. Bordes, 1968), to a 'truly fascinating" and "culturally" rich hunter/gatherer society, characterized in Africa by the

²³ Crescent stones were inserted into bone or wood shafts. Included in these tools are harpoons arrows and knives with handles.

Howieson Poort Industry (Binford 1984). This is evidenced by the displacement of the scavengers' Middle Paleolithic tools and the incorporation of modern Aurignacian-like tool kits. Lewis Binford (1984) in *Faunal Remains from Klaisies River Mouth*, is able to explain the role of early scavenger behaviors, identifying them as part of a long-enduring behavioral strategy employed by *Homo erectus* populations. His work with faunal remains found in association with hominid site occupation has led to a better understanding of the archaeological relationships distinguishing forager systems found throughout the Old World. Drawing from evidence in Europe and Asia, Binford is able to demonstrate that all Old World hominids, going back 1,800,000 years to Africa's Olduvai Gorge, were scavenging food from kills by non-hominid predators, and not hunting.

What distinguishes the African "Middle Paleolithic" from the modern "Late Stone Age"? Faunal remains²⁴ found at Middle Stone Age sites at Klaisies River Mouth (as well as those from ancient Neandertal living sites in Europe), are all characterized by "head-and-lower-leg" anatomical assemblages from primarily large to moderate ungulates. Robert Blumenshine, in his 1988 studies of lion kills in Africa's Serengeti Plains, demonstrates the parallels of *Homo erectus* scavenger systems together with their association with "head and lower leg" assemblages. His examination of over 250 lion kills confirms that lion prides commonly leave only the head and lower leg appendages intact because they have difficulty extracting the limited food (brain and marrow) available from these skeletal parts. Blumenshine's observations help us accept the archaeological evidence of hominid behavior as that of a scavenger. The data from Klaisies River Mouth Cave 1, Border Cave, and Nelson Bay Caves all strongly suggest that African hominids regularly used sites near water sources also generally used by other animals, including predators. There they scavenged animals parts, which were sometimes introduced into their living sites. Binford (1984) suggests:

"The hominids at the Olduvai sites were probably scavenging the same range of anatomical parts as indicated at Klaisies River Mouth Cave 1; the only differences are that they were processing them 'in the field' at a Midday Rest location near a water source."

Numerous remains of scavenged animals, as well as very young ungulates, are found in Middle Stone Age deposits. In Africa, the "prey" was 20 to 30 pound grysbok and bushbuck left unattended by their mothers. The "hide a baby" strategy of grysbok and bushbuck provided Middle Paleolithic hominids at Klaisies with their only live kills, that of stationary game. "What they hunted then, were opportunities to kill" (Binford 1984 pg. 217). In contrast to evidence of specialized tools for hunting is a lack of remains of "walk along" young (wildebeest, hartebeest, topi and other) who follow their mother as she forages.

"The tactics summarized here, of scavengers coupled with opportunistic killing of small animals, were the basic carnivorous tactics of hominids living at Klaisies as

²⁴ "Faunal remains" are the bone residue found at hominid processing areas. What was a revolution in interpretation was the alternative explanation of scavaging rather than hunting in accounting for evidence of bones in archaeological deposits. "Man the Hunter" no longer applied to hominid behaviors if they were actually scavenging the bones from earlier kill sites made by animal predators.

recently as sometime before 35,000 to 40,000 years ago. This is the period of time contemporary with the Mousterian of Europe and the Near East." (Binford 1984, pg. 248)

An Archaeological Correlate

Lewis R. Binford (1984), John Parkington 199), and other archaeologists are finding increasing evidence that Old World hominid forms dating into the Acheulean nearly 2 million years ago in Africa, were scavenging food from non-human predatory kills and not hunting. The portentous implications that are drawn from the study of hominid scavenger/forager systems have widened the gap that separates modern man from the descendants of *Homo erectus* forms he so readily replaced (Stringer 1989). Here as in the rest of the Old World *Homo erectus* lived in close proximity to the newcomers only to die off shortly after the arrival of the *Homo sapiens*.

Previous hominid (*Homo erectus*) occupation and later modern human settlement at Klaisies River Mouth in southern Africa represent a classic example of the sudden shift from Middle Paleolithic hominid behavior to the 'truly fascinating" and "culturally" rich hunter/gatherer society, characterized in coastal southern Africa by the Howieson Poort Industry (Singer and Wymer 1982; Binford 1984). This change is evidenced by the displacement of the scavengers' Acheulean tools with the modern, Aurignacian like, tool kits of the Howieson Poort Industry. "A critique of the censuses view of the Age of the Howieson Poort Industry" suggests that a sudden shift to planned activities dawns throughout the Old World, including Africa, less than 40,000 years ago while the liberal consensus continues to endorse a more ancient presence of *Homo sapiens* that has little if any real archaeological support. Binford suggests that *Homo erectus* survived in Africa as long as they did in Europe:

"The tactics summarized here, of scavengers coupled with opportunistic killing of small animals, were the basic carnivorous tactics of hominids living at Klaisies as recently as sometime before 35,000 to 40,000 years ago. This is the period of time contemporary with the Mousterian of Europe and the Near East." (Binford 1984, pg. 248)

Two separate time frames are drawn for the initial appearance of the Howieson Poort Industry at Klaisies River Mouth in South Africa. The incorrect conclusion, one that is often cited when arguing for premature dates for modern man in Africa, suggests an extremely early date for *Homo sapiens* in Africa, that of 125,000 to 70,000 years B.P. (R. Singer J. Wymer 1982). These very early dates are assumed from isotope (0-18) values from 4 shells found in Middle and 2 shells found in Recent Stone Age levels and from the high concentration of sand found in Howieson Poort levels. The early dates for Howieson Poort Industry [H.P.I.] levels are used to draw together theories of an earlier presence for the first modern Africans despite 9 of 10 Carbon 14 dates ranging from 36,180 to 30,050 B.P. \pm 320 years Before the Present. The outlying date is even younger at 26,350 B.P. Unfortunately, geneticists continue to cite the work of Singer and Wymer (1982), without fully appreciating reanalyzes that continue to cast doubt on claims for modern human presence before 36,180 years ago.

There is agreement that modern human hunting techniques suddenly appear in Howieson Poort Industry levels at Klaisies River Mouth in Southern Africa. Binford

however specifically contests the conclusions that modern hunter/gatherer societies at Klaisies River Mouth can be dated back 70,000 to 125,000 years. I believe their very early dating of modern man in southern Africa relies on assumptions that best represent rhetorical archaeological attitudes that continue to grope for an Old World birthplace for *Homo sapiens sapiens*. Binford offers his own censure.

I have commented earlier on the archaeologist's tendency to build models and then argue that the data from the past can be accommodated to whichever model the archaeologist prefers. *Certainly with such a methodology we will never learn what the past was like.* (Binford 1984; emphasis mine)

This profound statement - by the 'Messiah' of "New Archaeology" - can immediately be directed to Robert Singer and John Wymer who imply in *The Middle Stone Age at Klaisies River Mouth in South Africa* that the heavy concentration of sand found in Howieson Poort Industry levels could have been deposited by the increased foot traffic implying an ongoing human presence the result of a high-water mark during the Riss-Wurm (70-125 B.P.) interglacial period. Transporting sand into the caves at Klaisies is indicative of *Homo sapiens* activities where permanent occupation incorporates a living area within the cave that is of their own making. This upgrading is identical to the types of improvements associated with Cro-Magnon Peoples of Europe as they too transported sand and other raw materials into the caves of France along what is today, the French Riviera.

Singer and Wymer's assumptions for both when and how the sand found it's way into the cave specifically contradict their own dating of C-14 samples found in association with Howieson Poort Industry deposits and, moreover, the relationship these kinds of behaviors transcend in accurately determine the boundaries of the arrival of *Homo sapiens* and/or their farsighted activities. For C-14 to remain in these samples over 70,000 and beyond that to 125,000 years is absurd. Should this kind of accretion for such early dates have been attributed to sites in pre-Clovis America they would be categorically refuted. Since they emanate from Africa, where most anthropologists believe earlier dates must exist, they have received a plethora of favorable press. Moreover, the inaccurate assessments of the age of the Howieson Poort Industry are used unwittingly, to draw support for a greater time frame for the genetic diversity geneticists intimate their DNA evidence indicates. Here, geneticists need examine the conservative analyses of the true age of the Howieson Poort Industry before they derive theories of greater antiquity for *Homo sapiens* in Africa.

Singer, Wymer, and Binford (and others) all support the interrelationship of the Howieson Poort Industry with the contemporary emergence of specialized Old World hunter/gatherer societies. Binford contrasts the "dull and uninteresting character of the Middle Stone Age lithics" - those of a scavenger society, - with the "truly fascinating" *sapiens* behavior of Africa's Late Paleolithic' Howieson Poort Industry. If the C-14 dates for modern man in Southern Africa are accurate, then the occurrence of sand in the caves of the Klaisies River Mouth must be attributed to human device. Could these early African colonists have preferred a level, clean floor, and could they have already invented rope or basketry to carry sand into their permanent residence, as the early *Cro Magnons* of France? Directly related to such an idea is the archaeological association of Howieson Poort Industries and the shaping of stones for use as weights for nets and

snares. The high concentration of small game in their middens correlates with another H.P.I., stone barbs of imported quartz that were most likely inserted into wooden shafts, indicating the use of arrows and/or small harpoons. There are numerous comparisons made of the Aurignacian tool kits and of *Howieson Poort* and *Cro-Magnon* industries. Among these are:

"A general reduction in size of tools, an increase in use of raw material exotic to the site area, and systematic presence of crescents (backed pieces in European terms) . . . There is a marked increase in evidence of personal ornaments in the form of ostrich eggshell beads as well as a correlated increase in pigments, particularly red ocher" (Binford, 1984).

Hunting and fishing skills would have allowed for localized resource procurement as associated with faunal remains of small game found in middens sanitarly contained away from the caves. The use of ropes or lined nets or basketry to carry sand to level and maintain cave floors would not seem out of the ordinary, for a modern man. Evidence of sand in the caves at Klaisies River Mouth does not dictate that modern humans were in southern Africa during the Riss? Wurm interglacial (70-125 B.P.).

Two separate time frames are drawn for the initial appearance of the Howieson Poort Industry at Klaisies River Mouth. These divergent conclusions are drawn for Howieson Poort Industry levels even though 9 of 10 Carbon 14 dates range from 36,180 to 30,050 B.P. \pm 320 years B. P. There is agreement that modern human hunting technologies suddenly appear in Howieson Poort Industry levels but what is the true age of these occupations? Binford specifically contests the conclusions of the original investigators that modern hunter/gatherer societies at Klaisies River Mouth can be dated back 70,000 to 125,000 years. We believe the early date of modern man in southern Africa relies on assumptions that best represent liberal archaeological interpretations. For C-14 to remain in these samples over 70,000 and beyond that to 125,000 years, does not warranted the conclusions made by Singer and Wymer. Researchers often hope that they will make discovery of the earliest this-or-that and this seems to be the case here with Singer and Wymer 1982. The evidence does not date to 90 thousand for several reasons. For a thorough discussion contrasting the presence of modern human behavior at Klaisies River Mouth (greater than 40,000) I would refer the reader to Binford 1984, and John Parkington "A Critique of the Consensus View on the Age of the Howieson's Poort Assemblages in South Africa, in Mellars EDT. (1991). These modern industries have been C-14 dated between 36 and 26 ky by Singer and Wymer (1982), directly contrasting the 90,000 year old presence the authors have been supporting for H.P.I. levels. The 90,000 year assignation attributed to the Howieson's Poort Industry at Klaisies has been shown to be, rather, a younger or at most, perhaps, a contemporary of Upper Paleolithic Europe (Binford 1984).

There are numerous comparisons made of the Aurignacian tool kits and of *Howieson Poort* and *Cro-Magnon* industries. Among these are:

"A general reduction in size of tools, an increase in use of raw material exotic to the site area, and systematic presence of crescents (backed pieces in European terms) . . . There is a marked increase in evidence of personal ornaments in the form of ostrich eggshell beads as well as a correlated increase in pigments, particularly red ocher" (Binford, 1984).

The conservative opinions outlined here are aimed at identifying that the "Out of Africa" argument should address the presumed archaeological support for great antiquity for modern humans, cautiously. The most important concerns many have regarding the Out of Africa assessments are (i) do hominoid specimens associated with 60-90,000 year old claims from the Lavant and Border Cave truly belong themselves with anatomically modern *Homo sapiens*, (ii) were the archaic Lavant hominids later displaced by Neandertals themselves (iii), how old really is the archaeological evidence associated with the Howieson Poort Industry at Klasies River Mouth and what are these conclusion based on; and (iv) the widely publicized but un-published 1995 finds of harpoons and other modern tools mark the African arrival of *Homo sapiens* as no more than contemporary with widespread manifestations from the rest of the Old World.

Paleontological Links(?) and Their Limitations

Conservative opinions continue to successfully challenge earlier than 45,000 - 40,000 year African allusion of transitional forms linking archaic Hominids and anatomically modern *Homo sapiens*, either behaviorally or anatomically. The liberal portraying of the paleontological data, outlining a 90,000+ year transition from 'archaic' *Homo sapiens*, used to support of the "out-of-Africa" or "Eve Hypothesis" (Cann et al. 1987; Stringer 1989), remains problematic. The fossil hominid candidates identified as offering great antiquity are the 'archaic' *Homo sapiens* Skhul skulls IV, V and IX, the Qafzeh 6 skull from the Lavant, and Border Cave 1 in east Africa. All offer relatively reliably dated ages of between 90 ky and 60 ky (Schwarcz et al. 1988). The question, however, does not specifically rest on the age of these skulls *but* on linking their anatomical affinity with fully modern *Homo sapiens*. Robert Corruccini in the April 1992 edition of the AJPA finds that;

"Skhul IV and IX, meanwhile, ...join the cluster of supposedly early African/Mideastern AMHS (my "pre-sapiens"), and then the above-described, increasingly heterogeneous Neandertal grouping. The Upper Paleolithic true AMHS exclusively cluster with one another, relatively far removed from these other groupings. Thus, the picture is one of overriding affinity among all the crania earlier than the European Upper Paleolithic, whether they be considered Classic Neandertal, Progressive Neandertal, early AMHS, presapiens, or whatever." (Corruccini 1992 pg. 437)

Regarding the Border Cave specimens, Corruccini state's;

The Border Cave cranium, so central to the course of "out-of-Africa" thinking despite its uncertain age, can support no special relationship to living African *Homo sapiens*. (pg. 441)

Corruccini continues, citing Kidder et al. (in press);

"Qafzeh 6 as well as Skhul IV and V are well separated from later European AMHS. This calls into question blithe assumptions that Skhul and Qafzeh are, cranially, anatomical moderns." (ibid. pg. 441)

Corruccini, in the end states that;

"Continued facile reference to Skhul and Qafzeh as craniometrically "fully anatomically modern" is not responsible to the craniometric data" (ibid. pg. 444). Clearly, chronological analysis identifies an alternative assessment by questioning whether that any special relationship between Qafzeh 6 as well as Skhul IV and V Levant, or Border Cave and anatomically modern *Homo sapiens* - used by the proponents of a recent "out of Africa" replacement - are "not responsible to the craniometric data".

The most important points of contention identified by the conservative assessments of the Old World data are (i) hominoid specimens associated with 60-90,000 year old finds from the Lavant and Border Cave are not anatomically modern *Homo sapiens*, while (ii), the archaeological evidence depicting modern human cultural behavior, associated with the Howieson Poort Industry at Klasies River Mouth in southern Africa, is contemporary in both space and time with that of Europe and elsewhere.

Despite the considerable efforts of many well-informed investigators, however, no resolution of the controversy is in sight. We think that the slow progress to resolution of the debate can be attributed to differences in metaphysical paradigms of modern origins researchers that in turn result in a biased selection of specimens and/or variables used in analysis.

How selectively biased are researchers? An extensive literature review of published multivariate data invoked in support of "continuity" and "replacement" positions produced some dramatic results (Willamette, 1993, 1994). A total of 680 data points were collected, representing 61 variables on 55 fossils. Of these, only 72 variables on 11 fossils, or 11% of the reported database, were common to both paradigms. This means that in the sample, 89% of the data collected were used by members of only one paradigm (p. 488).²⁵

The well established timing of the first arrival of *Homo sapiens* also coincides with the eventual total replacement of the Neandertals in Europe and *Homo erectus* populations of Africa (~31,000 ybp). The assessment the Howieson's Poort Industry at Klasies River Mouth in southern Africa attributing dates to 125,000 year old have been shown to be, rather, younger than those from Upper Paleolithic Europe (Binford 1984).²⁶

4/4 When Man First Was

A major problem confronting late 19th century human evolutionists was the incipient argument for the relative stability of the human form. From accumulating skeletal evidence it appeared as if the modern human skeleton extended far back in time, an apparent fact which led many workers to either abandon or modify their views on human evolution. One such apostate was Alfred Russell Wallace (1823-1913). In 1887, Wallace examined the evidence for early "early man" in the New World, and, like the German anatomist Julian Kollman (1834-1918) who three years earlier had made a

²⁵ Willarmet, C. M., and G. A. Clark. Paradigm crisis in modern human origins research *Journal of Human Evolution* (1995) 29, 487-490. 1995

²⁶ If these deposits had been found in the New World conservative archaeologists would automatically call into question the age of the contexts. Binford identifies context mixing of the coastal cave deposits at Klasies River Mouth in southern Africa as a problem in attributing modern human archaeological and/or paleontological evidence to beyond 35,000 - 40,000 years ago.

similar survey, found not only considerable evidence of antiquity from the available specimens, but also, a continuity of type through time. In an effort to explain this, Wallace [1889, pp 454-461] suggested that once man had become morphologically differentiated from his apish kin (during the mid-Tertiary period), he had remained physically stable (Frank Spencer 1984 pg. 7).

As we can see from the preceding quote, many anthropologists were willing to argue that our modern human form has remained relatively stable, far longer than any relationship Europeans might have had with Neandertals. The turn-of-the-century debate centered on the same alternative promoted by today's, a rapid replacement by modern humans of *Homo erectus* populations, who are now known now to have evolved in Africa (Johanson and Edey 1981). Evidence suggesting that transitional forms suddenly became modern was and continues to be seen as controversial while the main alternative, replacement of the Neandertals, requires a separate origin for modern mankind outside of Europe. The Multi-regional Evolution Hypothesis can be traced to the turn of the century also, especially in Europe, where Neandertals were assumed to be transitional forms that later became modern humans (Hrdlicka 1912). Clearly, replacement from the Americas conforming with an autochthonous origin for the American Indian was lost in the emergence of Western European perspectives following the dawn of 'anthropological theory.' Accordingly, the British school attended to the adoption of Piltdown Man as the ancestor of all modern humans and any further concerns regarding an Amerindian contribution to modern human origins were dismissed. I accept that some anthropologists have little problem conceiving that they were once "brutish" Neandertals. So be it for them. I prefer to look elsewhere for my own human ancestors as predilection consumes the scientific search for alternatives.

Part 5

4/5 Science as Explanation

By example, Continental Drift was once scoffed as a simple explanation of the Earth's seemingly puzzle-like attributes. The conservative analysis found that numerous examples and/or interpretations could be drawn to challenge the idea that there was at once time one single set of continents. The idea set time frames and geological links that verify the existence 290 million years ago of Pangaea, a single Continent that separated to form in the north, Laurasia, and to the south, Gondwana. Despite the attempts to verify the migration of continents, distracting opinions prevailed, until in 1960, the apportioning of the continents was proven to not be just coincidence.

The consensus was wrong, staying an open investigation that would support the paragon verifying this ancient link. In 1960, before the concept of a two unique but separate dispersal of the continents gained credence, students who herd of this emerging paradigm were chastised by professors who had long been teaching something else (I know not what). This slow march to understanding truth beset the efforts of scientists with alternative ways of viewing the earth and our understanding of natural processes. Random arbitrary explanation for the similarities identified nearly 100 years before they were proven helps us understand the superficial character of Chaos theory. Natural

processes are not as difficult to interpret as we have become accustomed to believing. The example accompanying the verification of Continental drift remains a glaring example of the problems science creates by just-ain't-so apostates. The accompanying map outlines the importance of properly interpreting the history of Continental Drift.

pg. 27 THE BOOK OF LIFE

Geologic time frames help us interpret the Earth's past and the evolution of life forms that are bound to this relationship. These geological time-frames encompass three Eras when life, as we know it, began to take form and leave fossil evidence of its existence. The last three Eras began with the Paleozoic, lasting between 550 to 245 million years ago; continues through the Mesozoic to 65 million years ago; arriving at the era that we live in today, the Cenozoic. These three eras are broken down into epochs. The Paleozoic era witnessed the dawn of the first shellfish marked by the Cambrian 550-505 My (My, million years ago); the first fishes, Ordovician to 438 My; the first land plants, Silurian to 408 My; the first insects and tetrapods, Devonian to 360 My; the first reptiles, Carboniferous to 286 My; mammal-like reptiles, Permian to 245 My. The second era found the first dinosaurs and true mammals, Triassic to 208 My; the first birds, Jurassic to 144 My; the first flowering plants, Cretaceous to 65 My. The Cenozoic era is accompanied by the ascent of larger mammals, Paleocene to 57 My; the early horse, the first whales and the first monkeys, Eocene to 34 My; apes, Oligocene to 34 My; the first hominids, Miocene to 5 My; the Pliocene beginning 1.8 My; and the Ice Ages of the Pleistocene with the most recent glaciation just 40,000 thousand years ago when modern man began to explore the continents of both hemispheres. The culmination of these evolving life forms found in the preceding geological eras peaks 65 million years ago with the dawn of the Period in which we became human, the Tertiary. Most importantly, the Tertiary Period marks the end of the reign of the dinosaurs and the dawn of higher mammals with humankind its most transcendent member.

The sudden extinction of the dinosaurs remains a perplexing issue. The cause of the abrupt extinction of this profoundly dominant reptile group remains unresolved while a meteor impact seems to help explain this unexpected shift in life-forms that leaves higher mammals as the dominant species. Whatever their case, their extinction allowed the evolution of placental mammal groups to become the larger dominant forms we are today. By giving birth to live young they may have endured the cataclysm that befell the survival of larger egg laying reptiles that perished at the end of the Mesozoic era. Or did some survive only to be outclassed by the new dominant group, mammals?

Could these competitive evolutionary forms have contributed and/or even caused the extinction of the largest reptiles? The food sources (including eggs) of the early mammals were diverse while many paleontologists argued that survival of the fittest ultimately brought about the extinction of the dinosaurs. In this case mammals may have evolved into niches that became increasingly deleterious to non-mammalian forms. Perhaps, a symbiotic relationship where dinosaur populations were held in check by egg-eating mammals may have existed for tens of millions of years. In spite of the small size of the early mammals, their sheer numbers and their own ability to give birth to live young may have threatened the larger reptiles that had themselves come to dominate the landscapes of earth. This is one of the options, to a cataclysmic event, for the sudden extinction marking the dawn of the Cenozoic era. Whatever the cause, the present

domination of the Earth by mammals began with the decline and extinction of the Dinosaurs. From this time the mammals have had the run of the place we call Earth. We humans have carried this to our own majesty. We are the first to comprehend the history of the Earth's past, although all life shares the memory of the journey in their genes. It is we who have become the dominant species. We must garner the lessons revealed in our understanding of the Earth's past if we are to prevail in balance with the natural order that has brought us to the top of the mountain. We are the most extraordinary living entity and have found our destiny in summoning both Earthly and Universal power. Our journey will continue if we can overcome indifference to the Earth Mother, the womb of life's creation. We must apply our higher being in a resolve to make sense of science, to apply what we know of the past in making a better future. We are a social animal and are bound to natural order. This requires that we recognize that "all things are related". We must care for our relations in order to consummate our own achievements. Otherwise we will advance our own cataclysmic event.

The prevailing paradigm today suggests that a single cataclysmic event, the Yucatan Meteor, may have led directly to the extinction of not only the dinosaurs, but many other life forms. Evidence continues to build supporting this cataclysmic event as the single, most powerful force that led, not only, to the extinction of the dinosaurs, but to, the opening of traditional niches held by them to mammalian forms. Perhaps a combination of the two events, Yucatan Meteor and mammalian competition, brought about the end of the Tertiary Period. At any event, the end of the Cretaceous Period ushered in the family of man with the dawn of the earliest primate forms.

Part 6

Part 7

4/7 Theoretical Implications and the True Origins of the Circum-Arctic People

The British School and anthropological interpretations, born from this Euro-centric view of the world, must be placed in a new framework. Their interpretations offering one-directional movements (into the Americas) attributes the formation of Athapascan, Inuit/Eskimo, and other Circum-arctic tribal entities to another later (post-Ice Age or Holocene) arrival of Asians. Perhaps, we might profess that links to the formation of the world's Circumpolar Populations emanated in the Americas, from preexisting Amerindian populations. But this belief is also taboo in anthropological circles. We must reexamine these and other "givens" promoting academic orthodoxy. This will be done in an effort to define alternatives that might sustain themselves in the academic world, as viable discretion's. With this interpretation in hand, a scientific summons of the Hopi interpretation of a "backdoor out of the Americas" can be defined.

The best way to serve this end is to justify contentions held by Northwest Pacific Coast Indians that they emanated from the Americas, not Asia (as told to Franz Boas). The direction of migration, and with this, the location of the ancestral population, is key to understanding similarities between far ranging populations. Migrations out of the Americas into Siberia at the end of the last Ice Age holds profound implications in contrasting ongoing studies implying that Siberian Populations are (when they are not)

the ancestors of the Native Americans. Boas contention that Amerindian migrations took them “out the backdoor of the Americas” (the unpublished results of the Jesup Expedition), challenged turn-of-the-Century opinions. In fact, the rift between Boas and Jesup prevented jointly held “definitive results” from being published. Yet, to this day, anthropologists seem unaware of Boas’s (the father of American anthropology) contention²⁷ by misdiagnosing similarities between Siberians and Native Americans as evidence of “founding effects” when they in fact represent back migration from the Americas. This bias sustains the “status-quo’s” inconclusive evidence of “founding effects” from Northeast Asia as they continue to be unmoved by the possibility of having Native American migrations out of the Americas, even just 11,200 years ago.

Certainly, the presence of Circumpolar Populations cannot predate the existence of glacial ice. By this, it must be assumed that the present populations of the sub-Arctic must have migrated into their present habitations after the removal of glacial ice. Archeological reconstruction’s of the movement of people with Paleoindian Traditions - and their distinctive fluted Clovis points - demonstrate that Ice Age Mammoth Hunters migrated from the central High Plains into the Brooks Range to the edge of the Arctic Ocean. Could the formation of the Inuit and Athapascan tribes be attributed to explorations and migrations of southern Amerindian populations, perhaps the Cheyenne, Sioux, or Navajo? Genetic, morphological, and archeological can be used to link the northernmost Amerindians to Plains Indians of central North America.

The time frames associated with this archeologically verifiable movement confirms that the present inhabitants of the American Circumpolar region may have originated from the south.²⁸ This archeological correlate—where earlier dates for the existence of Clovis hunting technologies are found—can find collaboration in the Sundance Origin Myth and a migration north by the first people to adopt hunting strategies into their lifeways. The descendants of these migrating Amerindians; the Athapascans, can be traced back into the Americas and is maintained in historical translations of Athapascan origin myths. Yet, the science of anthropology continues to advocate an Asian Origin for these northernmost Amerindian Cultures. This is troubling because definitive genetic correlates demonstrate that they are closely linked to southern Amerindian tribes, not Asians. The people themselves claim to have distinct ties to their Amerindian brethren. These beliefs led Franz Boas to adopt their origin myths as accurate as he found many other indications to support the Native’s contention. The presence of a taboo in anthropology is evident here as it has long been seen as unacceptable to believe that migrations into Asia could have been accomplished by Native Americas, not just before the last Ice Age but also after the last Ice Age.

The linguistic similarities linking Na-Dene speakers of the north with Dene speaking people to the south can find affirmation in mtDNA studies. In fact, genetic and linguistic correlates in Asia and North America might be seen to validate the subsequent movement south of Athapascan people into the lower regions of both of the worlds northern Hemisphere.²⁹ Mitochondria DNA (mtDNA) studies demonstrate that northeast Asians share many common markers with Native Americans. Circumpolar People inhabiting the Arctic would, if recent data is applied to Boas’s contention, be descendants

²⁷ Franz Boas 1905 and 1910

²⁸ Dixon 1993

²⁹ Bengston 1999, Hicks 1999

of nomadic American Indians who continued their migrations west into Mongolia and Tibet admixing with the earliest modern people of Asia who migrated from the Americas 35,000 years earlier. This would substantiate earlier linguistic studies that have linked Dene speaking people in Tibet with the earliest Athapascan speakers of the Americas.³⁰ Historically linking all three southern Dene speaking groups (Asia's Tibetans and America's Navajo and Apache), can now be made by adjoining recent genetic findings with earlier linguistic studies. It might turn out that the Navajo were always in the Americas and, as retold in myth, were the founding population for the Northern Athapascan speakers who later migrated into northeast Asia. The argument attributing a post Ice Age movement of Paleoindians (e. g. Athapascans) into the north must now be entertained, especially since it is now accepted that "pre-Clovis People" were here during the last Ice Age.

Historical reconstruction of the origins of the people who live in the Arctic North demonstrate that an Amerindian source for these populations can be implied and that mythic translations offer valid representations of the distant past. Yet, anthropological givens, beginning with the "British school of thought" have mistakenly attributed the most recently formed populations of the Americas—those living in deglaciated Canada and the Arctic North—with a second or third migration from Asia. The argument that pre-Clovis Amerindian populations existed for tens of thousands of years (south of the Wisconsin Glacial Expanse) must now be used in articulating a more recent (post Ice Age) demic contribution to population formation in deglaciated North America. Simply, this book will identify Amerindian migrations "out the backdoor of the Americas" as the source for both the first Old World *Homo sapiens* and more recent Holocene Populations living in deglaciated North America and Siberia. MtDNA studies can and will be used to support this interpretation in concordance with mythical translation that will be assessed in the chapters ahead.

³⁰ Sapir 1917; Bengston 1998