

CHAPTER II

“OUT THE BACKDOOR OF THE AMERICAS”

PART 7: Geographic Constraints and the Sapient Peopling of the Old World

Pre-human/primate origins were initially bound to tropical equatorial-like regions of the Earth. Pleistocene migration beyond this primal ecosystem has required hominid species to meet with and adapt to new environments. As hominids expanded in the direction of Pleistocene environments both physical and behavioral, adaptations were made. How difficult was this exploration and settlement presented by the Pleistocene conference of recurring Ice Ages? What role did adaptation play in the evolution of Middle Paleolithic and Mousterian Industries and in later technologies associated with modern Upper Paleolithic cultures?

Fossil finds in the Old World of *Homo erectus* suggest that the movement of African hominids into Europe and Asia occurred during the last million and a half years being confined to the southern rim of glacial advance. Glacial boundaries in the Old World and the inability to create (but not capture) fire may have precluded *Homo erectus* from settling the northern most regions of Europe, Asia, and Siberia even during deglaciated conditions. However, the dispersal of African *Homo erectus* populations into Eurasia were *not* encumbered by Pleistocene expansions of Ice Sheets. This and other behavioral advancements, the atlatl, controlled fire technologies incorporating banked hearths, and evidence of boats (verified by the AMHS settlement of Australia) are attributed to later modern adaptations. Without these technologies the migration of *Homo erectus* into or beyond the Bering Strait must be weighed.

In the New World fluctuating glacial conditions repeatedly isolated Beringia from the Americas southern expanse beyond the Great Lakes and southern reaches of present day Canada. What role could this have played in interpreting a crossing from one hemisphere to the other or *from the Americas into Siberia as we are examining?* Lewis Binford once asked me to explain, (in challenging my contention that *Homo sapiens* were autochthonous to the Americas), why would they have even attempted to migrate out of the Americas given the difficulties presented by recurring Pleistocene epochs? The North he explained, even during deglaciation, presented a foreboding habitat and a challenging obstacle given our primordial equatorial based niche. I had been contemplating myself another problem directly related to his inquiry; why man was isolated so long within the Americas(?). Put in an Old World evolutionary framework; why did the first Old World *Homo sapiens* appear just 45,000 years ago and not earlier (?). My answer was immediate, as I had been seeking a cause as to the delay in, what seems now an inevitable crossing of the Bering Strait/Land Bridge and why it had not occurred earlier. I suggested to him his interrogate best answered my own inquiry; why was it only ~45,000 years ago that *Homo sapiens* initiated their settlement of the Old World (?).

It would seem to be an inevitable, that *Homo sapiens* would eventually breach, during deglaciated conditions, North Americas' Cordilleran and Laurentide Ice Sheets to explore Beringia even though we represent a tropically adapted animal (although recent adaptations have altered this perspective). Just as man now tempts the fate of inter-planetary exploration, so too did we muster the capacity to explore unknown worlds once before. Yet, the perspective that the New World was once the only world we knew, seems hidden in the ageless wandering's of the past and anthropologists difficulty in

determining our roots or addressing the potential the Americas may hold. Have we forgotten what was once unexplored, what was the first world, or when we first crossed a frozen north to explore a then, unknown world? In rediscovering when man first was we must remember that the initial journey contained every bit of this knowledge, if it was an American heritage. The Buddha confutation reasons' that man came from a "rift in the Ice" to the North. Can they actually remember this part of the journey or was this awareness part of an even more recent Holocene migration out of the Americas (re: Franz Boas, 1905 and 1910 as discussed in Part 23 of Chapter IV)?

The Pleistocene Epoch (Ice Age) began, in earnest, three million years ago. Climatic events associated with the Pleistocene demonstrate that recurring Ice Ages have continued an ebb and wane of sea-levels, 30-40 times during the last 3 million years. There are believed to be three shifts that cause fluctuations in glaciation. They include periodic events, two that span 40,000 years and another, every 100,000 years. The most dominant characteristics contributing to glaciation are, (i) the elliptical orbit of planet Earth relative to the distance the from the sun, (ii) the axis of the earth relative to the sun, and (iii) heat generated by the sun. These cycles lead ocean temperatures to rise or fall creating fluctuations of glacial expanse and successions of emergence and inundation of continental shelves. The shifts in climatic acceleration that results in the depositing of nearly 100 to 300 hundred feet of ocean water onto the continents is often very sudden, occurring in less than 500-1,000 years. The ice sheets that are formed in intervening Pleistocene epochs often last 30,000 years or more, with ocean levels occasionally reaching states as high as that of today. Since the dawn of the Pleistocene Era, three million years ago, these dramatic fluctuations in sea levels have been the norm. In fact, if the water locked in Ice Sheets contained in the Arctic North and Antarctica were to fully melt, the sea levels of today could rise another two to three hundred feet. This would mirror the sea levels that spanned every preceding Geologic Epoch, that is, only in the last 3 million years have Ice Ages reached their present regularly cyclic deviations.

Looking Out from the Americas

New World issues, questions, and theories concerning the initial peopling of the Americas must eventually investigate the Indigenous Amerindian perspective commonly maintained in their myths, their languages, and in their way of life. Perhaps the best way to promote "pre-Clovis" research strategies might be; to investigate, as several turn-of-the-century scientists did, the possibility that modern humans (*Homo sapiens sapiens*) originated in the Americas.

Let's look at this from another angle. It would be selfish to deny that life exists beyond our Earth in some other infinitesimal area of this universe. However, if we were to trace our own human origin outside of our own solar system then we must also trace our creation to an evolutionary stage, on some other planet. In so doing, the proponents of an extraterrestrial origin are identifying that the host planet was able to generate a surprisingly-like organism that is (or was) capable of finding the earth as compatible as it once found its initial world. Advocates of an extraterrestrial source for life on this world must question the hierarchy and the evolutionary source for that planet's own life forms. For life on Earth to have come from another planet requires the most open minded and fanciful directives. This concept provides *only* an analogy, we am not going there in looking out from the Americas.

The analogy we wish to convey follows; that another “world” offer’s anthropologists an alternative explanation for our Earthly origins. This world lies separated, not by a journey of light years but by a vast set of oceans enter-twined with recurring Ice Ages and changes in sea levels. The Western Hemisphere remains unexplored in the search for human origins by the complications anthropologists have created in relying on the interpretations of evolutionary terms from one hemisphere. The sea of influence that has led researchers to eliminate the Americas from this search has miss-placed the truth the trickster has revealed detailing the origins of separate earthly evolutionary progeny, *Homo erectus* and *Homo sapiens*. The Trickster would even lead us to accept that chaos-theory guides the missing links of our own *sapient* evolution when we accept the limitations used in deriving an ancestral relationship to *Homo erectus*. Chaos theory is for science, an unexplainable observation, it is random and arbitrary and leads away from the search for real truth.

The previous analogy of an extraterrestrial origin for the diversity of life found on this planet is complicated by light years of travel and an evolution that must have accompanied a symbiotic relationship, there, with our world, here. Yet, the argument that we are forwarding in this book also identifies that an unknown world gave rise to the life forms we identify as having originated in the Old World. The unknown world that we are supposing modern man originated in has long been identified, from the time of Columbus’s discovery, as a New World. This is not an extra-terrestrial world or a world that has not made its own contributions to life forms in the Old. The camel is the descendant of New World alpacas and the horse can be traced back to the Americas several times over. Could the modern human species identified as the most recent mammalian arrival to the Old World?

A recent exodus out of the Americas supports “warranting evidence” of New World isolation complimenting the archaeological *fiat-accompl*i that *Homo sapiens*, as a species, have been both physically and behaviorally in the Old World less then 45,000 years. There have been many other indigenous American animal species that have made there way into Asia. They too must have found the northern regions of the Western Hemisphere an extremely hostile environment, one that must have accompanied their own, more physical than behavioral, adaptation. One factor shared by both animal and human species alike is the reality that northern North America was most certainly impassable during episodes of glaciation. It should be of no wonder that, for these reasons alone, the arrival of *Homo sapiens* (American Indians) into the Old World was not accomplished at an earlier date. Accepting this alternative direction for human migration carries with it the relevant geologic and geographic perimeters isolating the Americas from the Old World. Not until the Age of European exploration did, by its own fate, the rediscovery of humanities original wellspring come to pass. We are unable to reconcile the events from our past because we have left untested a scientific inquiry into the possibility of this ancient connection. Anthropologists are ignoring what the indigenous have long been telling them because accepted “origin theories” have their “philosophical givens” based in the Old World.

The first American Indians to migrate beyond deglaciated North America may have developed new adaptations to coastal and interior resource procurement in geographically isolated sub-Arctic habitats with these strategies spurred on by environmental pressures related to this migration. The sudden depositing of Wisconsin I

Ice Sheets, beginning ~40,000 years ago, would have isolated these new evolving hunting strategies from antecedents to the south. This interpretation helps explain the delay in the diffusion of Paleolithic hunting skills archaeologically sustaining evidence of America's first Paleolithic Cultures, Paleoindian Traditions. But, these were not the first People of the Americas although they "Paleoindians" have come to depict what archaeologists have long championed as the only sustainable model compatible with a Paleolithic "Peopling of the Americas".

Reverse Migration and the Crossing of the Bering Strait

Archaeologists have long anticipated that the first Amerindians came from the Old World. It was also expected that archaeological verification of Paleolithic technologies would help distinguish the timing and course of migration from Northeast Asia into the Americas. After more than 130 years of research the anticipated proof remains despairingly inexplicable. Clearly, a lack of evidence for Paleoindian precursors in northeast Asia has become another enigma in deciphering the origins of the first Americans. Today archaeologists are beginning to trace the origins of Paleoindian Traditions directly to Europe, when Ice Sheets stretched across the North Atlantic. Here an Ice-bridge or coastal Ice-shelf is proposed to link the arrival of Solutrean-like Upper Paleolithic technologies to earlier forbears in Late Ice Age Europe. There are strong indications, based on genetic surveys that hint that this connection may indeed be accurate. What is most important in my assessment is the issue as to whether pre-Clovis People invented the Paleoindian Traditions without the aid of outside influences. Clues to the answer can be found in understanding the evolution of the European Upper Paleolithic itself as these "cultural Traditions" date back to rudimentary sources that mark the dawn of *Homo sapiens* first arrival in Europe. Since these "cultural" advancements spanned nearly 30 millenniums themselves it seems unlikely that pre-Clovis Amerindians would suddenly independently develop full-fledged Solutrean-like Paleolithic knowledge without diffusion from an earlier culture endowed with such technologies.

In contrast, the maintenance of less refined technologies throughout the pre-Clovis foreshadows that the first Americans to cross Beringia into northeast Asia would have enjoyed the advantages of Paleolithic technologies. Simply, stone tools, similar to those defining the Old World Upper/Late Paleolithic, were not produced in the Americas until the end of the last glacial (Krieger 1958; Jelinek 1992; Hanyes 1987a). These repertoires were devised in the Old World during and following our colonization of habitats once occupied by *Homo erectus* groups. The Paleolithic couldn't have been part of the original instructions as pre-Clovis cultures are non-endowed when it comes to measuring them as a Paleolithic-based culture. This scenario could account for the lack of evidence of specialized Paleolithic activities that make pre-Clovis sites accordingly difficult to diagnose, interpret, and/or accept. Simply, since there are few similarities to link the Old World Paleolithic with the pre-Clovis, these Industries couldn't have been carried out of the Americas with the First Amerindians (*Homo sapiens*) as we colonized the Old World. Alternatively, if pre-Clovis or paleoarchaic mid-Pleistocene ancestors originated in northeast Asia these "first Americans" would have to have abandoned Asian Late Paleolithic subsistence activities, having found them of little use in crossing from the Old World to the New (a very unlikely scenario). A "peopling of the Americas" in pre-Clovis times must account for the dearth of Paleolithic technologies, a compelling

argument used to dismiss most, if not all, proposed mid-Pleistocene sites in the Americas (Dincauze 1984, Lynch 1991, and others).

'Pre-Clovis' sites offer little, if any, equivalent Paleolithic signatures of human occupation and, as a result, are difficult to find, identify, and/or verify when using this as an archaeological prerequisite. Yet, all New World mid-Pleistocene or pre-Clovis finds are diagnostically similar with lithic tools (or even simple manuports) appearing to be of a similarly, unrefined nature. Should the presence or semblance, of refined stone tools, be used as the sole criteria for accepting or dismissing New World mid-Pleistocene occupations? Perhaps Amerindians did not, in mid-Pleistocene times at least, leave behind refined stone tools to aid archaeologists in their search for human occupations (Krieger 1958; and others). Clearly, the verification of archaeological evidence supporting mid-Pleistocene equatorial subsistence behaviors in the Americas continues encumbered by adamant academic censure of archaeological discoveries supporting Paleoarchaic and pre-Clovis habitations. Is this because it has been established that an advanced Paleolithic record exists earlier in the Old World? Since pre-Clovis sites in the Americas defy relationships of descent from the Old World, shouldn't we now be attempting to identify the significance of the direction of innovation. As for the evolution of Upper/Late Paleolithic technologies, the earliest *Homo sapiens* to migrate "out the backdoor to the Americas", inaugurated Paleolithic propensities in the Old World beyond those advanced in pre-Clovis activities. It's cause, the need to secure food from animal sources through hunting techniques, issued forth through the adaptation to sub-Arctic biomes attending migration "out the backdoor to the Americas." Ultimately, encounters with Old World *Homo erectus* groups would have hastened our understanding of the advantages of Paleolithic tools as Old World hominids utilized highly proficient Middle Paleolithic tools.

The Sapient Peopling of the Old World

A central pedestal to all later investigations is the framework that *Homo sapiens* "Peopled the Americas by crossing the Bering Land Bridge". Since all skeletal remains from the Americas are of anatomically modern humans, it is argued, that man's initial arrival into the Americas could not be predate the Cro-Magnon arrival and subsequent Neandertal replacement in Europe. This perspective continues unabated while we must trace the study of Amerindian origins to the philosophical conclusions that ignored the alternative of "the stability of the modern human anatomy over time". Simply, if *Homo sapiens* originated in the Americas they and their anatomical features may have evolved long before *Homo erectus* became a hominid. This is the only logical way to begin to examine unequivocally a separate NW primate base for our evolutionary source.

Most geneticists, linguists and, other non-archaeologist-anthropologists contend that people entered the Americas before the end of the last Ice Age even though the pre-Clovis provides scant archaeological evidence. This quandary is vitally relevant in anticipating what came first in human behavioral evolution. We must compare the nature of pre-Clovis habitation of the Americas against the backdrop of a later Paleolithic signature defining human behaviors drawn into the archaeological framework of the Old World during the last Ice Age. While genetic and linguistic data vividly supports that there must have been a sizable human population in the Americas in pre-Clovis times the limited archaeological assurance has cast a pale on these assertions.

What is difficult for many archaeologists to understand is why pre-Clovis sites are so difficult to find when, in the Old World, people were using Upper Paleolithic stone tools for hunting small and large game much earlier. Could the American Indian ancestors, those who remained behind the Ice Sheets that formed at the beginning of the last Ice Age, have continued to rely on less specialized pre-Clovis subsistence behaviors?¹ The virtual absence of refined stone tool industries must conform to a theory, especially when what we expect to find in the archaeological record indicates we need to shift from; Clovis-First to; pre-Clovis before Clovis. Why does pre-Clovis occupation appear less refined than more evolved Old World subsistence behaviors marking the last Ice Age when the first systematic hunting of large game is known to occur? Could mankind's explorations of the Eastern Hemisphere have led to new adaptations not found in the hemisphere of our origins? There is no reason to dismiss the evidence that lithic tools recovered from the Upper Paleolithic demonstrate evidence of advanced hunter/gatherers groups in Europe, long before humankind employed them in the Americas. What is needed is a theory to guide the archaeological observation that accompanies the missing lithic elements defining the nature of pre-Clovis habitation.

Certainly, the Ice Age would have been a formidable barrier isolating those left behind in the Americas from the refinements gained during the colonization by the first *Homo sapiens* to exit the Americas into 'a new' "Old World". Yet, this alternative has never been addressed by archaeologists entrenched in sustaining the Clovis-first consensus who have long dismissed pre-Clovis as an archaeological phase. The paradigm that supported "Clovis-first" has long directed that mankind must have been a formidable hunter *before* he entered the 'New' World. But, with new evidence emerging and acceptance of pre-Clovis sites now a valid forerunner, this pre-requisite no longer defines the prevailing ingenuity.² It is for this reason that a new evolutionary theory must weave itself an Archaeo-logically based explanation.

The missing link between pre-Clovis and Clovis First theories is the behaviors alienated with "learned economies" in the Americas before the end of the last Ice age that demonstrate little, if any, evidence of stone tools for hunting. By comparing Monte Verde with impressions from other pre-Clovis habitations archaeologists are beginning to find that Pleistocene "early Man" populations from the Americas left behind few, if any, indications of stone-age hunting propensities. In fact, these pre-Paleolithic habitations have long complicated their own validation as all pre-Clovis habitations lack the basic implements used to conform the Clovis-first model with an earlier Old World affinity associated with Upper/Late Paleolithic hunting industries. This new time-depth is gaining wide acceptance while we must create a design to fit an evolutionary framework. Accepting, what we have difficulty explaining, is part-and-parcel to accommodating alternative explanations. What can we explain about the past if the "givens" we start with are flawed? The trickster is playing his hand out. Perhaps we could find in a new deck and way to remove the jokers.

As I have explained the "pre-Clovis" or "Clovis First" debate has long divided archaeologists into two camps. Archaeological evidence goes beyond the implied weight of greater linguistic and/or genetic diversity estimates that by themselves, suggest that

¹ the Wisconsin began 38,000 years ago and ended 12,000 years ago

² "Learned economies" could be identified as our "original instructions", as they pre-date Old World Paleolithic advancement.

people have inhabited the Americas a very long time. Archaeology usually offers unambiguous answers to when or if there is evidence of a human presence. But, this is not the case in pre-Clovis America. What *substantiates* a human occupation and what *should be expected* in validating pre-Clovis archaeological occupations are at the core of this debate. In this, what is now logically confirmed is not what was archaeo-logically³ expected. If the ancestors to the Native American entered before the end of the last Ice Age they should have brought with them some sibilance of an Upper/Late Paleolithic equivalent, stone engendered hunting technologies.” An Old World origin for pre-Clovis Amerindians challenges this directive.

The primary focus of what archaeologists have long used in defining human occupations in the Old World-modified stone for tools-and why they are *not* found in abundance in pre-Clovis times, is a central issue dividing Clovis-First and pre-Clovis advocates. A resolution might lie in an open investigation into the capacities of humans to have evolved from with-in the Americas. The ‘Amerindian Eve’ hypothesis implies that the sophistication gained in the exploration of a new world, the Old World, would have remained isolated from the original people who remained behind. Could the diffusion of technologies invented earlier in a new Old World have led Amerindians to develop Paleoindian Traditions beginning 11,200 years ago? Certainly, isolated Amerindian populations were not exploiting large game before this time. This is supported by the fact that until just recently most archaeologists were contending that there was no sustainable evidence for pre-Clovis habitation by humans of the Americas in the first place. The “Clovis-First” model for the initial settlement of the Americas no longer holds water because it can’t explain why pre-Clovis Amerindians didn’t leave evidence of Paleolithic hunting tools. Could the limited archaeological production depicting a forager/gatherer subsistence behavior associated with pre-Clovis occupation of the Americas, sustain an evolutionary relationship predating the Stone Age advancements found earlier in the Old World? Is the cart before the horse!

Pleistocene Barriers: Understanding the scope of Amerindian Isolation

Geneticists advocating the “replacement model” for a recent African or Asian source for the origin of *Homo sapiens sapiens* are unsuccessful in addressing geological factors that would isolate separate hominid species during the Middle Paleolithic. Perhaps proponents of “Sudden Replacement” need additional proviso in determining a geographical barrier attributed to pre-contact isolation of what were separate hominid species. Archaeological based evidence of the timing of our initial appearance (and subsequent colonization of the Old World ~40,000 years ago), indicates that we developed specialized technologies *during* the settlement of the Eastern Hemisphere. We believe the Old World fails to offer the necessary geographic constraints advocates of “replacement” by modern humans need in identifying a specific location for our earthly origins. The Americas offers an untested starting gate for the proverbial “flag to drop”. The starting-gate represents the first successful migration through a waning Wisconsin Pleistocene barrier with the outcome a

³ Dena Dincauze, a longtime critique of Pleistocene occupation of the Americas, made the point that pre-Clovis occupations defy a logical explanation (An Archaeo-logical Evaluation of the case for Pre-Clovis Occupations. in *Advances in World Archaeology*, edited by Fred Wendorf and Angela E. Close, Academic Press, 1984). Since she now accepts pre-Clovis occupation she needs to redefine what is no longer logical, the basis for interpreting the model that was, “Clovis First”.

sudden widespread settlement of the Old World and Australia beginning 45,000 years ago. *Homo erectus* was certainly unaware of the ensuing doom, given this scenario.

Here, we propose that Pleistocene epochs would have delayed a migration of modern humans out of the Americas through Beringia and into the Old World. The geographic constraints (30 glacial expanses during the past 3 million years) imply that an exit “out the backdoor of the Americas” would have been an ‘mammoth’ accomplishment. A recent exit, during a Wisconsin I inter-Glacial period, (between 60,000 to 38,000 y.b.p.), could find warranting archaeological evidence in the discovery of bone and antler tool kits, dating 40 - 50 thousand years ago in the Yukon (Richard Morlan; 1970, 1980, 1983, 1987). Could Bone-points have been used for hunting in the Yukon at Old Crow well before man encounter *Homo erectus* in southern Siberia? The earliest migration of *Homo sapiens* “out the backdoor of the Americas” suggests few, if any, links to stone spear-points. Since stone tools defining an Upper Paleolithic component are found only *after* we encountered Neandertals (*He*) in southwestern Siberia, the Yukon evidence could link this tool preference to an earlier pre-Clovis predecessor. This archaeological conformity suggests that man relied on bone and ivory tools, even as we exited the Americas. *Homo sapiens* inevitable rendezvous with *Homo erectus* may have altered the archaeological component marking the dawn of what would become in European terms, the Upper Paleolithic.⁴

Glacial expanse in the Western Hemisphere was a formidable barrier south of the Alaskan Frontier.⁵ By looking at this obstacle - in reverse - glacial expanses across North America must have delayed ancestral populations of Amerindians from leaving the Americas any earlier than an interglacial-interval coinciding with the last Ice Age. The ability to secure meat could have led to specialized sub-arctic-based adaptations from bone, antler, and ivory resources dating to the initiation of modern hunting technologies. These behaviors continued to evolve with the dispersal of modern man throughout the Eastern Hemisphere become a lithic based system following encounters with Middle Paleolithic *Homo erectus* groups (Tang and Gia 1986). Clearly, the recurring Pleistocene epochs across the North American continent would have made an exit for “Amerindian” populations a difficult endeavor. Although glacial advancements may have delayed the initial discovery of the Eastern Hemisphere, these events also exposed the previously submerged Bering Land Bridge ultimately revealing the existence of a new hemisphere. Perhaps the earliest arriving *Homo sapiens* of the Old World would have had to endure the onset of the Wisconsin I glaciation in Alaska before crossing the previously submerged Bering Land Bridge. This crossing parallels the subsequent sapient crossing of the Timor Strait that, during glaciation, required only a sixty mile crossing providing the first human settlement of Australia.

⁴ See Otte and Derevianko 1996; Cohen and Stepanchuk 1999

⁵ It remains uncertain as to whether man or the animals he would have needed to rely on would have attempted to migrate into the Americas by way of the ice free 'Mackenzie corridor.' Gruhn, Ruth. "Linguistic Evidence in Support of the Coastal Route of Earliest Entry into the New World," *Man*. 1988a, 23:77-100; Fladmark, Knut R. "Routes: Alternative Migration Corridors for Early Man in North America," *American Antiquity*, 1979, vol. 44, 55-69; Easton, N. Alexander, "Mal De Mar Above Terra Incognita, or, 'What Ails the Coastal Migration Theory?'" in *Arctic Anthropology* 1992, Vol. 29, No. 2, pg. 28-42. Fladmark op. cit.; Easton op cit. 1992

We believe the initiation and deployment of specialized hunting practices were first made in the Alaskan and Bering biomes from bone, antler, and ivory, not stone,⁶ as a result of selective environmental pressures brought on by the onset of the Wisconsin Glaciation. These changing climatic pressures may have led to new adaptations and survival skills that enabled mankind to secure food, shelter, and clothing from primarily animal resources. Simply, sub-Arctic habitation would have necessitated the adoption of hunting technologies. Pre-Paleolithic hunting technologies – indicative of the bone and ivory industries of the earliest Alaskan and Yukon refuge pre-date the earliest east Asian Late Paleolithic. Could hunting technologies emanate from sub-Arctic adaptation as the first Amerindians/*Homo sapiens* crossed into northeast Asia?

In the Arctic north investigators have uncovered bone and ivory tools that could be precursors to later stone tool types associated with modern Old World “Upper/Late Paleolithic” habitations. These markedly sapient technologies, invented as recently as the beginning of the Wisconsin Glacial, were forerunners of what would become, in Europe, Upper Paleolithic Industries. These new functionally specialized stone, wood and bone tool kits aids archaeologists in defining the presence *Homo sapiens sapiens* in the Eastern Hemisphere, beginning ~40,000 y.b.p.

Interdisciplinary work of the highest caliber in the Old Crow region has recovered, as of 1980, over 251 specimens of fractured or apparently cut, grooved, faceted, scraped, polished, or butchered elephant bone and ivory believed to have been worked by ancient humans [Morlan, 1978, 1980; Morlan and Cinq-Mars, 1982, p. 360; Irving, 1978; Bonnichsen, 1978; Bonnichsen and Young, 1980]. The researchers believe these apparently modified bones to comprise an ancient tool kit, perhaps of mid-Pleistocene age, but one totally lacking stone tools. As one investigator expressed: “. . . data for man’s presence found in these beds of Illinoian age are meager in number, but to our minds compelling” [Irving, 1982, p. 78]. Large numbers of microflakes of cherts and quartzites have been found in samples of soil and sand; Morlan proposes that they might be “microdebitage” from an as yet undiscovered lithic technology [Morlan, 1981, pp. 13-16].⁷

The subsequent invention, refinement and deployment of bone, ivory, and later stone tool industries may have been isolated from southern American populations. This would be result from the greatest glacial phase of the Wisconsin Ice Age. The eventual melting, of the final Wisconsin glacial expanse by 11,200 BP has been proposed (Stanford 1979; Hoffecker et al. 1993) to have coincidentally brought with its retreat new, highly modified stone tool complexes that became Paleoindian Traditions. With this technology pre-Clovis Amerindians became Paleoindians, hunting larger game, some many archaeologists believe, into extinction.⁸ This could be assumed, as Upper Paleolithic tools are associated with extinction’s that occurred earlier in the Old World. It was believed that the Nenana stone tool complex, with its own links to northeast Asia,

⁶ Irving, William N., "New Dates from Old Bones: Twisted Fractures in Mammoth Bones and Some Flaked Bone Tools Suggest that Humans Occupied the Yukon More than 40,000 Years Ago." *Natural History*. February 1987; Cinq-Mars, Jacques, "Bluefish Cave 1: a Late Pleistocene Eastern Beringian Cave Deposit in the Northern Yukon," *Canadian Journal of Archaeology*, 1979, vol. 3, 1-32; Adovasio and Carlisle op. cit.

⁷ Owen Roger, in the chapter "The Americas: The Case Against an Ice Age Human Population" in Smith/Spencer, eds. op. cit., pgs. 535-538.

⁸ R. E. Taylor 1996

would prove precursory to later Paleoindian Traditions. But this seems unlikely as researchers have found that the oldest Paleoindian sites linked to fluted Clovis and Folsom points are found entirely within the Americas, appearing to be initially conceived in the southeastern North America. This would place their origin closer to Europe. Genetic links with Europeans based on mtDNA marker X found in Northeastern Native Americans at it's highest frequencies supports the archaeological link directly with late Upper Paleolithic Europe.

An argument can be made, and we believe sustained, that specialized stone hunting tools were *not* present in the *southern* Americas (south of the Ice Sheets) until the end of the Wisconsin Glacial Period. Any earlier Amerindian presence in the southern Americas was devoid of highly refined stone tools and the debitage associated with lithic tool manufacture. Here, the directionality of human achievement is viewed as, out-of, rather than, in-to the Americas as Paleoarchaic live-styles found in the *southern* Americas indicate a reliance on gathering/foraging subsistence behaviors. Specialized large game hunting industries and the sophisticated stone tool technologies that define archaeological locations (and their archaeological signatures) are found earlier in the Old World and are clearly used to define evidence of human habitation. In contrasting this evolution, the similarity of Paleoindian Traditions with Old World Solutrean Industries should not pre-determine that stone tool complexes must be found in earlier pre-Clovis occupations since evidence defining the American mid-Pleistocene record does not embody such distinctions.⁹

Could Arctic adaptation and survival have required man to develop specialized hunting technologies, where "from necessity is born the mother of invention?"¹⁰ This explains why man chose bone first as the Old Crow and Yukon archaeological remains would have us believe? If we agree to examine the propensity to use bone technologies for hunting moderately sized game (caribou, moose, and elk) in the American sub-Arctic,

⁹ It is apparent, by their diagnosis as "geofacts," that evidence of stone as tools found in Pleistocene American sites are not acceptable to many advocates of the "Clovis Only" camp (Dincauze, Dena F., "An Archaeo-Logical Evaluation of the Case for Pre-Clovis Occupations," in *Advances in World Archaeology*, edited by Fred Wendorf and Angela E. Close, 1984 Academic Press; Haynes, Vance, "Geofacts and Fancy," *Natural History* 1988, February); Lynch Thomas F., "The Peopling of the Americas--- A Discussion," in Dillehay and Meltzer eds., op. cit., pg. 267-274.

¹⁰ The nature of human behavior during the Upper Paleolithic is interpreted in a way that demonstrates that a new, highly evolved adaptation to new or changing environments was developing (Knecht et al. op. cit., 1993 p.1). Could the Arctic biome and mans survival and adaptation to a growing glacial isolation have initiated this response, one leading to specialized bone tool (and later stone) hunting technologies and their 45,000 year old diffusion out of Asia into Australia and the rest of the Old World (Dragoo op. cit., 1980). The earliest subsistence strategies supporting mid-Pleistocene hunting industries are found north of the 'Wisconsin Ice Sheets' (see Bonnicksen, R., Young, D. Early Technological Repertoires: Bone to Stone. *Can J Anthropol* 1980, 1:123-128. Harington, C.R., R. Bonnicksen, R.E. Morlan, "Bones Say Man Lived in Yukon 27,000 years Ago," *Can Geographical J* 1975, 91:42-48; Irving, William N. "New Dates from Old Bones: Twisted Fractures in Mammoth Bones and Some Flaked Bone Tools Suggest that Humans Occupied the Yukon More than 40,000 Years Ago," *Natural History*. 2/87; and Stanford, Dennis, "The Ginsberg Experiment: Archeology Can Be Bone-breaking Work" *Natural History*. 1987 September). The microflakes of chert and quartzites and modified bone tool kits could be the prerequisite example of Late Paleolithic technologies. These bone and stone tools are similar to but less refined than those defining the earliest known 'lithic' hunting tool kits found in the 35,000-30,000 y.b.p. levels of northeastern Asia (Tang, Chung and Pei Gai, "Upper Paleolithic Cultural Traditions in North China," in *Advances in World Archaeology*, Academic Press 1986).

then a suppositional argument must follow as to why bone tool industries were found at Old Crow and not a specifically Asian Middle Paleolithic or a Late Paleolithic stone tool technology. In much the same way that simple bone and wood tools were representative of human activities found at Monte Verde just 13,800 years ago (Dillehay 1989) so may bone tool types have been the inherited choice for the initial hunting technologies of the Yukon. Clearly, this kind of evaluation can be made from the presence of bone, ivory and antler tools found in the Yukon. In looking to pre-Clovis for later derivatives one could imply that the earliest Yukon hunting industries were derived from similar, bone and wood tool resources found in the Paleoarchaic levels from the Americas. That bone was chosen before stone is profoundly empirical in characterizing our analytical attempts to make sense out of what archaeologists have to gather in order to substantiate an archaeological record and, with this, the direction of innovation.

In Southeast Asia, an environment totally different from that of the Yukon, Geoffrey Pope has arrived at a similar formulation: he suggests, as have others, that bamboo served as a basic raw material for making edged tools of many kinds, replacing the need for certain stone tools. Because these tools were made of perishable material, the archaeological record is incomplete. Pope's observations and the work at Old Crow seems to show that the paleolithic of southeast Asia and northern North America cannot be understood by paying attention only to implements made of stone.¹¹

A major point in my own representation of the existence of bone tool traditions discovered at Old Crow and Bluefish Caves in the Yukon can be inferred in the direction of innovation, out the backdoor of the Americas. The evolution of human achievements would not have left forsaken previous Middle or Late Paleolithic tools. Clovis-First, *can in no simple way*, now derive from their Paleolithic based theory, a new journey with a specific preference for bone and wood tools by identifying Old World precursors for the more relaxed "learned" economies marking pre-Clovis subsistence. Again, it is apparent that skeptics of Pleistocene human occupation of the Americas remain so because evidence, supporting pre-Clovis archaeological locations, are missing key elements including specialized stone tools often used in hunting in the Old World.

Another criticism in claiming a valid human association (and with it evidence of bone tool industries implied from the contexts) of the Old Crow and Yukon archaeological definitions are, the dating of these industries between 60,000 - 40,000 y.b.p. (Irving 1987). This is clearly just before modern human's initial presence in the Old World. The singularity of these bone tool industries and the implication that they were used for hunting game animals - a virtual requirement of sub-Arctic habitation and survival, could imply that *Homo sapiens* originated in, and thus, through inevitability, migrated out of the Americas.

An alternate hypothesis could imply that the development of specialized hunting activities and sub-Arctic induced subsistence behaviors developed in isolation from aboriginal human ancestors left behind in the southern Americas.

Cinq-Mars and Morlan operate with the reasonable hypothesis that the microblades were mounted as lateral barbs into grooved antler or bone projectile points, like those in the Trail Creek Caves on the Seward Peninsula (Larsen 1968) and at various Late Paleolithic sites in Siberia. They also hypothesize that the microblade technology at the Bluefish

¹¹ Irving *ibid.* 1987

and Trail Creek Caves is closely related to and possibly stems from the Dyuktai complex, well dated between 18,000 and 12,000 yr B.P. in Dyuktai Cave and possibly earlier at other sites on the Aldan River (Mochanov 1978).¹²

PART 8 ARCHAEOLOGICAL FACTS: THE PHYSICS OF PRE-CLOVIS AMERICA

Tom Dillehay's direct association of wood, bone and simple stone industries at Monte Verde and a growing number of archaeologically accepted pre-Paleo-Indian New World sites establish and validate a new archaeological signature. A natural independence based on a pre-Paleoindian level of subsistence portends a uniquely fundamental aspect described as "learned economy" based on a remarkable archaeological definition of a new emerging forager/gatherer lifeway dating well back into the last Ice Age. Further dramatic archaeological discoveries and improved interpretations of "pre-Clovis" or "pre-

¹² Bryan Alan L., "The Fluted Point Tradition-One of Several Adaptations to Late Pleistocene Environments" in *Current Research in the Pleistocene* Oregon St. U., eds. Robson Bonnicksen and Karen Turnmare 1991.

Paleoindian" human behavior may eventually solve the haunting question of how long modern man has been present in the Americas. The principle issue may be that there is, as yet, a theory that conforms with the limited evidence sustaining the America's Pleistocene archaeological record. Without adequate explanations and/or even acceptance of mid-Pleistocene occupation, the precursor to modern human behaviors in the Old World may ultimately remain unresolved. This will certainly remain the case unless we investigate the ageless potential and evolutionary significance offered by acknowledging pre-Clovis *Homo sapien* archaeological signatures.

Although there are occasionally found stone artifacts, the development of lithic based hunting activities remains outside the diagnostic energy flow characterizes pre-terminal Wisconsin II habitation of the Americas. There is an indication that a pre-Upper Paleolithic technology was practiced by our earliest New World ancestors with a particular reliance on wood, bone, some apparently naturally flaked stone tools and small "bola" pebbles.¹³ The problem of diagnosis and an accompanying verification of these rudimentary activities has compounded the efforts of pre-Clovis archaeologists who are left little behind to substantiate subsistence behaviors in alignment with traditional Paleolithic hunter/gatherer societies.

Pre-Clovis human occupation in the Americas and an earlier Old World adaptation to big game hunting subsistence behavior presents another comparative example of innovation brought on by the necessity to develop new technologies to meet the needs of sub-arctic habitation. Surely, a migration implying a northern Asian origin for the First Americans and Upper Paleolithic adaptation is archaeologically missing from the contexts of pre-Clovis sites throughout the Americas. Numerous migrations from northern Asia would not permit continual abandonment of important Upper Paleolithic technologies that would have been an integral element of sub-Arctic survival and adaptation, should man have migrated into the Americas during the Last Ice Age. The nature of all early "early man" sites, and an explanation or theory to accompany them, must be found. A theory to accompany why stone projectile-points are missing from pre-Clovis sites must be identified in order to counter limitations articulated by the enduring Clovis-First advocates.

New interpretations of archaeological evidence may lead to a re-evaluation of dental, linguistic, and mitochondrial DNA studies. Someday we might finally find substantial anthropological support ("warranting evidence" if you-will), that modern human origins research has been too quick to eliminate an independent evolution for *Homo sapiens* from the armamentarium of the Western Hemisphere. The distinctive nature of Upper Paleolithic Old World *sapiens* behavior could well be viewed as a product of sub-Arctic adaptation by migrating Amerindian tribal groups exiting the Americas 45,000 years ago. Large-game hunting could be viewed as an invention of necessity remarkably improving the carrying capacity of *new* Old World biomes. This is indicated by the spread of an *evolving* Upper/Late Paleolithic defining truly sapient behavior earmarking *Homo sapiens* Peopling of the Eastern Hemisphere. We believe we would win any argument, based on archaeological observations alone, of an earlier than 45,000 y.b.p. sapient settlement of the Old World. This challenge includes all known Old World sites as discussed in Chapter Four Parts 1-4.

¹³ Re: Pendejo Cave, McNiesh et al. 1996

When scientific-based archaeological evaluations affirm a greater number of *ancient* pre-Clovis habitations a new theory endorsing the detection of greater linguistic and genetic diversity will have archaeological correlates admonishing an ancient pre-Clovis horizon. From there, a reevaluation of untested fossil and archaeological remains must append the search for human origins. What we are endeavoring to present are plausible answers concerning an ancestral base for modern man in the Western Hemisphere. Our efforts are to direct a new approach and interpretation of human pre-history, founded in a justified anthropologic inclusion of the Americas in the search for the origins of *Homo sapiens*. There remains an enigma regarding a solution to the origins of *Homo sapiens*. If this was not the case, our own "human" desires to openly re-examine valid interpretations directing both recent and precursory anthropologic studies would be even less justified.

Inquiry and Archaeological Explanation

The placement of 'sapien' behavior into the habits of *Homo erectus* activities is *not* an elementary observation, but rather, an unsubstantiated perspective that is not demonstrated within the archaeological record supporting the presence of 'archaic' hominid forms (Binford personal comm.). The indications are that the earliest fully modern humans maintained vast cultural advantages including the ability to plan ahead and the proficiency to demonstrate - within the archaeological record - clear definitions of reasoned adaptation to varying habitats and environments. In essence, archaeologists have in the Old World two distinct records of stone tool-making hominids:

the Acheulean, Mousterian or Middle Paleolithic industries employed by *Homo erectus* of Africa and their later descendants of Europe and Asia;

and

modern tool types associated with fully modern humans; the Asian, Late Paleolithic; the European, Upper Paleolithic; and the Africa, Later Stone Age.

Certainly, there are numerous "problems" associated with the evolution of one set of tools into another. This is a perplexing issue as difficult for many scholars to explain as the anatomical transitions leading to anatomically modern *Homo sapiens*. Many researchers from divergent fields have drawn similar conclusions.¹⁴

"Whatever the exact nature of the behavioral differences between modern humans and their ancestors, and of the transition between them there is a plausible case to be made for the argument that the biobehavioral gap was wide, that 'archaic' human behavior was different from the behavior of anatomically modern groups, and that we see in the

¹⁴ The transition from Middle Paleolithic to Upper Paleolithic remains as difficult to comprehend as is the anatomical transition from *Homo erectus* to *Homo sapiens*. [for archaeological assessments see: Bordes, Francois, *The Old Stone Age*. Weidenfeld, London, McGraw-Hill, New York 1968; Mellars, Paul A., editor, and others therein, *The Emergence of Modern Humans, An Archaeological Prospective.*, Cornell University Press, Ithica, New York 1991; Binford, Lewis R. *Working at Archeology*. Academic Press, Inc 1983b; and White, Randall, "Rethinking the Middle/Upper Paleolithic Transition," in *Current Anthropology* :1982, 23:169-192.]

'archaic' the final representatives of a very long phase of human evolution, during which only limited changes took place... A case can be made that the nomen *H. sapiens* should apply only to hominids for which modern behavior patterns can reasonably be inferred: another name would then be needed for 'archaic' *H. sapiens*.¹⁵

We could agree that the European Neandertal's productions of Mousterian lithic materials were themselves the product of earlier Acheulean stone tool manufacture, indirect evidence of migration(s) by *Homo erectus* out of Africa and into Europe and Asia. Contrarily, the European Upper Paleolithic tool types associated with *Homo sapiens sapiens* (though highly modified at an earlier time in Europe) date to ~40,000 y.b.p., having evolved contemporarily with Asian Late Paleolithic and African Later Stone Age industries. Understanding the evolution of separate lines of Stone Tool Traditions from separate radiation's of hominids (*erectus* and *sapiens*) in the Old World, can help in addressing explanations that must be applied to the New World "pre-Clovis" contexts. Conventional wisdom has long championed the perspective, based on an Old World origin for modern humans, that Late/Upper Paleolithic tool complexes should have been carried into the Americas by the first Americans (Klien 1973; Haynes 1988; Martin 1987). Evidence of a "pre-Clovis" horizon requires anthropologists to acquire an explanation for why this *is not the case*, as well preserved archaeological affinities from Monte Verde so defiantly attest.

Explanation 1 (Clovis First Theory). Stone tools found in Pleistocene New World (pre-Clovis) sites are not stone tools but rather an accumulation of stone "geo-facts" resulting from natural fracture (Haynes 1988). That they are less-highly refined Paleoliths, especially when compared to known Old World lithic industries, can imply that they are not the products of human manufacture (Haynes 1983). The inability to demonstrate from the archaeological record any kind of evidence of an ability to shape stone into elaborate tool types, defies a logical explanation. Knowledge of Paleolithic manufacture is the basic tenant offering verification of an archaeological context found in association with *erectus* or sapient activities. The limited evidence of stone tool use and/or resulting debatage, indicates that man, as we have come to discern him from the archaeological record of the Old World, was not in the Americas until Clovis people arrived 11,2000 years ago (Jelinek 1992).

Explanation 2. A single Amerindian migration (Greenberg et al. 1986; Schurr et al. 1990) and/or incorporating a coastal entry (Fladmark 1983; A. L. Bryan 1986; and Gruhn 1990). This alternative suggests that the First Americans/Asians to enter the Americas were oblivious to stone tool usage and were not accustomed to hunting large game with stone tools. Yet, many Clovis-First advocates demand that there be an explanation for why highly evolved Upper/Late Paleolithic tools are missing in Pleistocene Amerindian occupations. A lack of evidence of specialized hunting activities, within the contexts of pre-Clovis Amerindian habitation, presents a major criticism by "Clovis First" advocates in contending that there was not a pre-Clovis presence.

¹⁵ Pilbeam, David, In *Major Topics in Primate and Human Evolution*. editors Wood, Martin, and Andrews, published by Cambridge {Cambridgeshire} New York 1986. pg. 335.

Congruous to the Clovis-First model is the suggestion that migratory explorers entering the Americas would deploy adaptations, belonging to hunting cultures. Evidence demonstrating that pre-Amerindian tribal group originated in northern Asia is not supported by the critical analysis at the center of the Clovis First paradigm; that migration from Asia should be evidenced by Paleolithic tool use. This “requirement” is offset should only a small single group of explorers be the founding population of Native Americans. If this migration occurred at least 33,000 years ago this idea might also offer an explanation to the great diversity suggested by linguistic and genetic data.

Explanation 3. Some proposals suggest *several independent migrations from northeast Asia* with great antiquity seen in the wealth of languages and “extensive genetic diversity” found in Amerindians (Chakraborty and Weiss 1991; Ward, et. al 1991). Could many tribes have migrated into the Americas during or before the onset of Wisconsin I glaciation (Horai et el. 1993)? One difficulty in this contention is that virtually every tribe would have had to abandon Paleolithic know-how found in Old World Late/Upper Paleolithic sites (Muller-Beck 1966; Dragoo 1980). An earlier invention and/or reliance of specialized game hunting and the accompanying lithic record associated with these and other Old World endeavors could not have been simply forsaken by many sets of Pleistocene New World colonists. This abandonment would have had to have occurred over and over again. This scenario must also address how so many groups could enter the Americas and leave little, if any, evidence of contact with northeast Asian Late Paleolithic hunting cultures. They either forgot this strategic advancement altogether or did not arrive until the end of the last Ice Age as Clovis-first proponents have long argued.

Explanation 4. A New World Wellspring. The “learned economies” of Pleistocene New World tool users and their diagnostically uncharacteristic behavior is constituent of an even older subsistence strategy than any Old World Upper/Late/Later Stone Age Paleolithic form. After exiting the Americas during a waning of the last Ice Age the first Old World *Homo sapiens* began to develop Paleolithic Industries. The remaining pre-Clovis Amerindians remained behind, glacially isolated, unaware of new substance strategies and evolving Paleolithic industries developing “beyond the backdoor of the Americas”. The accompanying archaeological production is limited to wood, bone and simple stone tools (and HEARTHS) indigenous to “learned economies” in a “pre-projectile horizon” (Krieger 1964; Bryan 1991). The transportation, and introduction of bone, wood, and naturally formed stones into pre-Clovis archaeological sites offers evidence of an earlier stage of human behavior *predating* the evolution of Old World Upper/Late Paleolithic and Later Stone Age cultures. As a result, pre-Clovis sites do not measure up to Old World Upper Paleolithic habitations.

The linkage of the Upper Paleolithic with Paleoindian Culture through direct contact led to the diffusion of Old World adaptations into already widespread pre-existing pre-Clovis groups. This supplants the Clovis-First model with Clovis/Paleoindian representing a secondary “Paleolithic” confluence. The equatorial niche of forager/gatherer/small game hunter systems did not require the implementation of elaborate stone tool industries and/or refined lithic technologies later perfected by modern Old World Paleolithic cultures. This concept is fundamentally abstract, allowing

only a precursory position for New World pre-Clovis/Paleoarchaic cultures. *Evolving Paleolithic Industries* signify the first *Homo sapien* settlement of Asia, Europe and Africa and remained isolated from the New World by the rejoining of the Cordilleran and Laurentide during the Middle Wisconsin. If this points of order is accurate, modified stone tools should not be a prerequisite for defining the presence of humans in the Americas since earlier subsistence strategies pre-date Paleolithic stratagem.

The fact remains that several stages of the Upper Paleolithic are well defined including its initial stage in Eurasia with continual modification apparent throughout the Old World (Bowdler 1990; Binford 1984). If we contrast the evolution of Upper Paleolithic technologies over a 35,000 year period (45,000-10,000) we must accept that Old World *Homo sapien* populations were steadily advancing these technological achievements. Simply, modern Paleolithic cultures from the Old World represent a recently evolved set of Traditions that must have their own precursory niche. We believe the pre-Clovis renders precise this earlier behavioral niche, retaining a correspondingly ancestral relationship to later advancements subsequently developed, in isolation from the Americas, during the Amerindian/*Homo sapien* settlement of the Eastern Hemisphere.

THE PRE-CLOVIS ARCHAEOLOGICAL RECORD

Pendejo Cave - An Example of Pleistocene New World Subsistence Strategies

Richard M. (Scottie) MacNeish (1992) has been described as a tireless archaeologist working well into his 80's two full seasons a year.¹⁶ His background as an advocate of an early presence of man in the Americas is founded in five decades of archaeological research. His work at Pendejo Cave is detailed in the 1992 ANNUAL REPORT of the Andover Foundation for Archaeological Research.

Description: The site is named after the Pendejo Basin where it is found in the Chevera desert in southern New Mexico. Located on the Fort Bliss military reserve, it has been protected from vandalism and presents a unique study area for this reason. Work began in archaic levels (top eight levels) while the earliest (Pre-Clovis) levels contain extinct species of horse, rabbit, camel, goat, llama, giant bison, and pack rat. Both Paul Martin and Vance Haynes find the faunal remains most impressive while they also provide chronological data for dating the time frames associated within these deposits. Of the 15,000 bones, 9,000 have been identified, (26 species) along with 12,000 sources of plant pollen. Does this rival the Middle Paleolithic introduction of foreign bone and plant materials associated within the hominid contexts of Old World Middle Paleolithic cave sites?

There is a layer of calcium carbonate that seems to have preserved the stratigraphy and datable C-14 sequences below this formation as (28) C-14 dates range from 12,700-27,000 y.b.p. to zone L. Sixteen strata contain hearths indicating the use of controlled fire. Burned pack rat dens are offered as a natural cause for these burned areas, while MacNeish proposes that only a "Texas" pack rat (countering his critics) could bring in the 8" in diameter log, a charcoal artifact whose size is estimated from tree ring analysis.

According to MacNeish, stone tools associated with human presence and procurement are found throughout the shelter and are diagnostic for butchering or wood and bone tool manufacture. *Stone hunting tools coincidentally, seem to be missing.* The

¹⁶ Dr. MacNeish died at the wheel of his jeep while working in Belize in 2001.

appreciation of the stone tools is found in that there is a preponderance of worked stone that may have been selected from natural caused debitage and brought into the cave to perform tasks. These selective stone tool types are found to have emanated in quarries many kilometers from the site. This offers evidence of the presence of humans from the sheer numbers of chipped stone tools and by the fact that they must have been quarried from sites located at considerable distances from the cave. The number of natural occurring stones that are not chipped or indicative of tool types associating a human preference is, in comparison, evidence that man introduced the foreign born stones. Selection of foreign stones indicates a bias for naturally chipped stone as tool types versus evidence for developed stone making technologies. *Simply, the introduced stone tools have selective uses when compared with natural rock sources found within the cave walls and floors.* Analysis indicates that human procurement from distant quarries is evident for the presence of 272 stone tools as these stone tools did not originate from within the cave walls or ceiling. The association of the stone foreign to the cave associated with human man-u-port compliments the detection of bone and wood supplementing plant based technologies with fabrication of ropes or snares, basketry, and similar applications accompanying “learned economies”.

There are several horizons offering evidence of butchering including marked bone and possibly flint imbedded-into bone tools. Further analysis of the numerous bones found in the cave deposits may hint at a possible reliance on bone tools as well as stone as is indicated at other New World sites. A pencil-shaped pointed tool associated with a horse bone has been determined to be of bone itself and not stone. Cat scan analysis of this foreign bone tool (possibly fox), imbedded in the pastern bone indicates that it has been heated to help shape the tool end or point, that it has regular groove or cut marks and maintains a tapered pencil like form. This proposed prying or digging tool is associated with dates at 28,000 y.b.p.

In the last profile examined (work was to be resumed following the conference), human palm and fingerprints were found. Although animals have skin ridges on their tails for instance, forensic analysis by the Ontario Police Department has revealed these prints to be of primate and most specifically humans. This has been verified from the presence of ridges and swirls and sweat dots that ultimately confirm their humanness.

In conclusion: MacNeish points to several good reasons to conclude that human beings were present at Oro Grande New Mexico during the Wisconsin glacial period. These include: A) finger and/or thumb and palm prints; B) fireplaces with hearths and charcoal offering evidence of human introductions; C) a preference for foreign stone for tool types; D) a modified bone tool imbedded in a horse bone; E) the presence of selective faunal remains of extinct animals, and butchering tools; F) preservation of evidence in levels stratigraphically dated; and G) humanly formed clay hearths. MacNeish in a presentation to the American Association of Archaeologists in April 1993 was able to report that human hair found at the site has now been dated at 40,000 years old, a finding that may have no Old World parallel. I believe future digs at this site and others promise to provide more evidence and a reevaluation of the propensities of early human behavior and the antiquity of modern humans themselves.

Meadowcroft Rockshelter

In 1973 archaeology students from the University of Pittsburgh began excavating a sandstone overhang 50 feet long and 20 feet deep. What was discovered just 30 miles from the southern edge of the Wisconsin glacier were fragments of barklike material apparently woven or plaited mat or basket used made by humans nearly 20,000 years ago (C-14 dated at $19,600 \pm 2,400$). No fluted points were found although blades found in the deposit were struck from cores found outside the cave. These unifaces (implements flaked on only one face) from the site were apparently used as knives, graters or slicing tools for working bone and wood into tools. A charred base of a deer antler was dated by association with other material to $16,175 \pm 975$. The authors suggest that the antler was used as a hammerlike baton to remove small flakes from stone tools like artifacts found in Europe, Asia and the Americas. Only at its most recent levels are Lanceolate points found, indicating that hunting may have been practiced at this time (near the Pleistocene/Holocene boundary). The hunting tools are distinctly unlike Clovis but;

“may prove to be specialized parts of a larger flaked-stone tool industry that also included, or came to include, the distinctive Clovis fluted point.”¹⁷

Adovasio and Carlisle (1986) are able to contrast bone and wood artifacts with unique stone tools associated with specific tasks used in the manufacture of human goods. The demonstrated levels of the *Meadowcroft Rockshelter*, a highly scrutinized site in Pennsylvania that also offers evidence of man in the Americas in “pre-Clovis” times, remains one of just a few pre-Clovis sites that adequately demonstrates the presence of humans during the last Ice Age. The earliest habitations are similar to those from Monte Verde while the manufactured items can be used to verify not only earlier than Clovis occupation but reliance on simple technologies that only later came to include hunting. The more recent levels at Meadowcroft show evidence supporting Late Paleolithic influences and hunting technologies that could have been diffused into the Americas from Asia. These industries could be related to similar stone tool systems found in the 15,000-12,000 year range supporting early stone hunting tools found in the western Americas, in contrast to the earlier levels.

Archaeologists may someday conclude that the small stone blades, cores, and flakes from Meadowcroft and these other sites belong to a single, widely distributed pre-Clovis technology and culture. Some or all of these groups of artifacts, however, may simply prove to be specialized parts of a larger flaked-stone tool industry that also included, or came to include, the distinctive Clovis fluted point. The extent to which the people who produced them pre-dated those responsible for the Clovis big game hunting points will be determined when additional well-dated sites can be joined to the evidence from Meadowcroft. Only then will archaeologists have demonstrated, once and for all, that human groups crossed the land bridge from Asia to North America well before the end of the last ice age.¹⁸

¹⁷ Adovasio, J.M. and Ronald C. Carlisle. Pennsylvania Pioneers: Meadowcroft Rock-shelter Adds a Long Lost Chapter to American History Books. in *Natural History*. 1986, December pg. 27

¹⁸ Adovasio, J.M. and Ronald C. Carlisle *ibid* 1986 pg. 27

Clearly, Meadowcroft has withstood the traditional battering that accompanies all “pre-Clovis” sites while, it may very well represent the first substantiated evidence of contact between early New World and later Old World modern human populations.¹⁹

Links Through the “Backdoor of the Americas”

There is growing evidence that the earlier definitions of bone tools indicating human habitation at Bluefish Cave 26,000 - 40,000+ years ago (Cinc-Mars 1979) may have relationships with the earliest Siberian human habitations, resulting from migrations out of the Americas. Could these bone tools industries found in northern North America have had earlier precursors as contemporary pre-Clovis habitations of the Americas might indicate? The idea that bone tools gave way to stone tools is supported by archaeological data since the first encounters between Middle Paleolithic Homo *erectus* and the first Homo *sapiens* from the Americas occurred in southern Siberia. There are a growing consortium of archaeological data suggesting the first direct encounter between these two long separated species occurred in southern Siberia.²⁰

New interpretations are needed, perhaps ones that would contrast the present paradigms shaping the hypothesis of the “the first peopling of the Americas” with observations relative to the “first modern human peopling” of the Old World. Evidence of pre-Clovis subsistence in the Americas suggests just the opposite, a long standing Ice Age presence that has little, if any, influence from Old World habitations until the end of the Last Ice Age. New ideas and concepts must be willing to include the Western Hemisphere in the search for human origins in order to explain the evidence of “pre-Clovis”. Simply, the Old World - with all the money that has been spent there so far - does not presently offer solutions to our human origins. While it remains contrary to Old World paradigms to have fully modern humans in the Americas before they arrived in Europe, it is my opinion that we need to remove our paradigmatic straitjackets and venture forth to impartially investigate these New World sites and with them, an evaluation of their potentially profound evolutionary anthropological significance. It is simply “good judgment” to expend greater energy in a professional scientific appraisal of the linguistic, genetic, and archaeological evidence acknowledging the presence of humans in the Americas during — and if archaeological assessments emanating from sites like Pendejo Cave (MacNeish, 1992), Pedra Furada (Guidon 1987), and Old Crow (Irving 1987) are correct — preceding the Wisconsin/Wurm glaciation (that began nearly 40,000 y.b.p.).

¹⁹ Haynes op. cit., 1988; Dincauze op. cit.; Haynes, C. Vance, Jr., "Carbon-14 Dates and Early Man in the New World" In *Pleistocene Extinctions; the Search for a Cause*, P.S. Martin and H.E. Wright, Jr., eds., 1967, 267-268, Proceedings of the Seventh Congress of the International Association for Quaternary Research, vol. 6 New Haven: Yale University Press; Haynes, Vance "Paleoindian Charcoal from Meadowcroft Rockshelter: Is Contamination a Problem?" *Am Antiq* 1980, 45:3:582-587.

²⁰ The earliest Upper Paleolithic (predating even that of Europe), lies directly above the Mousterian levels of remote Siberia, the furthest north and east the Neandertals were able to migrate out of Europe. That bone tools did not give way to stone until this encounter suggests that the Old World Middle Paleolithic Stone Age inspired Homo *sapiens* to adopt stone as a more effective tool for hunting although they did not abandon bone as a valuable source for tools. The oldest dates for modern human encounters with Homo *erectus* anywhere in the Old World are, not surprisingly (if you hypothesize the Americas as the source for the first dispersals of our species), the Russian Near East (Radiocarbon Chronology of the Siberian Paleolithic, Kuzmin, Yaroslav V. and Lyobov A. Orlova, *Journal of World Prehistory*, Vol. 12, No. 1, 1998).

“I would say I am in favor of good judgment on all grounds. We must continuously remind ourselves of our ignorance, and if we ever conclude that no ignorance exists, then we are not scientists. Science has the interesting characteristic of being cumulative, and hopefully what we are ignorant about today, we can use good judgment about tomorrow. To argue that having good judgment about the nature of the archaeological record is justification for abandoning good judgment about our potential ignorance of the archaeological record is a fallacy.”²¹

Without the active participation of archaeological scholars the enjoyment, excitement, and anticipation of making new finds will be limited by the scope of objective inquiry. The resulting discoveries will continue to be seen as incomprehensible while the terms emanating from and the conditions culminating with the diagnosis the earliest New World archaeological contexts will remain deficient. Funding will also remain meager and without active participation from granters and their moneys, conclusive evidence and, as well, theories to explain observations emanating from them, will remain enigmatic. Pleistocene New World stone tools are truly unrefined when compared to bipolar stone technologies of the Middle or Upper Paleolithic. Yet, is this an adequate criticism for dismissing them (and the bone tools often found beside them), as tools used in and by the human hands that many believe must have held them?²² That they were transported but not shaped by humans can be reliably argued.

By George, I Think He’s Got It!

In a letter to this author (1988), George Carter re-described for me the types of stone tools found in Pleistocene occupations and the systems deployed in their production. Anyone familiar with the debate regarding the antiquity of man in the Americas is well aware that Dr. Carter suggests that humans have been present in the Americas at least 100,000 years. His description of the stone tool industries follows:

In the Great Basin - A. [There is an] Abundance of pre-biface projectile [used by] people on the shore of Lake Lahoutan. These are 11,000+ and NOT Clovis (also see Jennings - Danger Cave - Lake Bonneville) --- 10,000 + and not fluted -. B. No bifacial points associated with the (extinction time). Lake Mannix: The cultural explosion in America (at least in the West) dates to <15,000, > 11,000. [there is] secondary pressure/percussion flaking with bifacial flaking with flakes driven across the face of the implement. Stone was certainly being broken for 10’s of millennia in America before the \pm 11,000 yr. explosion. But it was steep flakes, short, often one edge - clearly heavy percussion. True specialized stone hunting points were absent - pre 15,000 - and appeared close to 11,000. But there were strongly developed stone tool industries. The tools were simple cores (a cobble with 2 or 3 flakes removed) --- and simple flakes. The flakes undoubtedly were

²¹ Binford op. cit., 1983 pg. 27

²² There is a growing list of potential preClovis early man sites in the Americas and scholars who are willing to contend their validity: 1. Pedra Ferrad, Brazil (N. Guidon 1990) 33,000 - 47,000 y.b.p.; 2. Texas Street, San Diego, CA (George F. Carter 1979), 100,000 y.b.p.; 3. Buchanan Canyon, so. CA (Herb Minshall 1989) 100,000 y.b.p.; 4. China Lake (E.L. Davis), so. CA, 40,000 y.b.p.; 5. Pendejo Cave, NM (Richard S. MacNeish, 1989) 38,000 - 63,000 y.b.p.; 6. Tiama Tiama, Venezuela, (Alan L. Bryan, 1990) 13,000 y.b.p.; 7. Old Crow, Yukon 40,000+ y.b.p. (W.N. Irving, R.E. Morlan); 8. Monte Verde, Chile (Tom Dillehay, 1989) 13,000 and 33,000 y.b.p.; 9. Meadowcroft, PA (James Adovasio) 12,000-19,000 y.b.p.; 10. Calico Hills, CA (Leakey, Simpson 1971) 200,000 y.b.p.; and 11. Santa Rosa Island (Phillip Orr and Reiner Berger) 40,000+ y.b.p.

used as general purpose tools; skinning, scraping, wood and bone shaping, etc. On the American scene, you are right on the equatorial “men”. They used scant lithic technology, but they did have stone work traditions.

uniface and flakes	La Jollan
Blade and core and flakes	Texas street and Calico
Pebble tools and flakes	Wide over the Americas

La Jollan duplicates Soan in s.e. Asia and Kartan lithic tools in Australia.²³

In one respect, less refined stone tools can be used as a measure of the course of invention, not entirely against the production of but, rather, as a measure and implication of direction conveyed by the archaeological record.

This hypothesis suggests that isolated tribal groups migrating into Beringia, north and east out of the Americas, refined bone tools to accompany adaptation to living in the Arctic north. The first Old World Homo *sapiens* expanded these technologies from “bone to stone” after encountering Neandertals in southwestern Siberia. The original Amerindian tribal groups with their ancient linguistic affinities and extensive mitochondrial DNA diversities, remained south of the shrinking Wisconsin I glacial expanse, isolated from the initial modern human populations. Simply, the advancements we acquired as we migrated “out the backdoor of the Americas” were augmented as we explored a new, Old World. This scenario helps explain why archaeological evidence (Adovasio and Carlisle 1984; Guidon and Delibrias 1986; Dillehay 1989) directly supports the contention that pre-Clovis “Amerindian” tribes were well established in Pleistocene times yet were, evidently, unaware of evolving Upper Paleolithic industries.²⁴

Clearly, comparing Paleoarchaic pre-Clovis subsistence activities in the New World to advanced survival strategies found in the Old World, remains the most challenging endeavor awaiting archaeological science.²⁵

²³ George Carter, pers. correspondence, 1992.

²⁴ Archaeological evidence supporting human activities during the mid-Pleistocene in the southern Americas are disputed by a majority of archaeologists, while proponents continue to argue that the paleoarchaic offers a unique definition supporting a plant based subsistence economy. These sites are perhaps very difficult to comprehend, or accept, because they are neither Middle Paleolithic nor unequivocally descendant of Upper Paleolithic advancements found earlier in the Old World. There is an agreement that highly refined stone tool industries and/or large game hunting technologies are not present in the southern Americas in Pleistocene times. (for references see Carter George F., *Earlier than you think: A Personal View of Man in the Americas*, Texas A and M Press 1980; Bryan Alan L., "The Fluted Point Tradition-One of Several Adaptations to Late Pleistocene Environments" in *Current Research in the Pleistocene* Oregon St. U., eds. Robson Bonnichsen and Karen Turnmare 1991; Collins, M.B., "The Implications of the Lithic Assemblage from Monte Verde, Chile, for Early Man Studies," in *Early Man in the America from a Circum-Pacific Perspective*, edited by Alan L. Bryan 1981 pp. 63-65. U. of Maine, Orono; Krieger Alex D., "Early Man in the New World." In *Prehistoric Man in the New World*, J.D. Jennings and E. Norbeck, eds., Chicago: University of Chicago Press, 1964 23-84.; and Wormington, Marie H., *Ancient Man in the North America*, 4th edition, Denver Museum of Natural History, series #4 Denver 1957.

²⁵ Klein, Richard G., "The relevance of Old World Archaeology to the First Entry of Man into the New World. *Quaternary Research* 1973, 5:391-394; Haynes op. cit. 1988; Martin, Paul S., "Clovisia the Beautiful!: If Humans Lived in the New World More Than 12,000 Years Ago, There'd Be No Secret About It." *Natural History* October 1987.

"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."²⁶

Binford's assessment, when applied to pre-Clovis archaeology directs that refined equatorial subsistence strategies and a reliance on gathering rather than hunting were the ancestral norm. Advanced stone manufacturing techniques did not embody the earliest human subsistence strategies, those defining mid-Pleistocene archaeological sites in the Americas. The theory being outlined suggests that pre-Clovis behaviors (even though they are difficult to detect), pre-date the first modern human "Paleolithic" achievements comprising hunter/gatherers cultures of the Eastern Hemisphere? Having attempted to define, in principal, an overview of the fundamental terms for the relative simplicity of the New World pre-Clovis mid-Pleistocene forager/gatherer industries (see Dillehay 1989 and Adovasio et al. 1986; Guidon 1987), an attempt will now be made to develop research strategies that would complement the terms defining the unique character of the New World archaeological record.

If Amerindians in the Pleistocene America did not manufacture tools from stone we should not dismiss the evidence of human 'manuport,' the importation of stone into archaeological contexts. Quarried naturally altered stones removed and used as tools far from their autochthonous origins offers proof that humans inhabited the Americas. In contrasting this evidence as a Paleolithic stage, elaborate stone tools should not be a prerequisite for defining the presence of humans in the Americas or for that matter, anywhere else.

Several other sites in the Andean region have yielded artifacts in association with extinct fauna. These include Pikimachay Cave, where subtriangular ground-bone points and *simple unifacial stone artifacts* were found with sloth and horse bones in a context dated 14,150± 180 yr B.P. Earlier cultural contexts are possible, but more difficult to demonstrate (MacNeish et al. 1981). Simple flake artifacts were recovered with horse and mastodon at Tagua Tagua in central Chile from a layer dated 11,380 ± 320 yr B.P. (Montané 1968). Farther south in the sub-Antarctic rain forest, mastodon bones first attracted attention to the Monte Verde locality, but subsequent excavation of this unique wet site has indicated that the bones had simply been collected for use. . . .*Despite the presence of extinct animal remains, none of these Andean sites has produced actual evidence that the occupants were specialized big-game hunters.* Rather, these early Andean people appear to have been general foragers who occasionally took advantage of locally available large mammals in addition to smaller mammals.²⁷ (*emphasis added*)

Accepting Pre-Clovis Pleistocene Occupation of the Americas

The confrontation that exists within the archeology of the Americas is born out of comparisons that run counter to the Old World archaeological record. The perspective is provided here in that the discovery of black swans in Australia does not infer that because

²⁶ Binford op cit., 1983, p. 36

²⁷ Bryan 1991 pp. 26

they are black they are not swans. By finding black swans the definition of the presumed common knowledge becomes inconsistent with a new consensus reality: that not all swans are white. By characterizing the earliest archaeological record in the New World as a “black swan” (from Binford 1983) we counter that Paleolithic terms from the New World archaeological record fit a natural progression. This pattern is precursory to later patterns emanating from the Old World. The ‘proposed’ presence of Pleistocene New World sites cannot be appreciated without the professional appraisals of the contexts and the creation of a new paradigm to help guide our insights. If I were to argue that I will not agree to the existence of black swans and I feel it would be best to critique discoveries made by others, than perhaps I should oblige my colleagues in examining the evidence first hand. Should I find (after going to Australia to view these anomalies), that there is another proposition to define, (that black swans exist), then perhaps I should question the premise that all swans are white. The acceptance of Monte Verde level II is an example of such an endeavor. Other pre-Clovis sites merit such an investigation while the terms defining the conditions for associated scrutiny should weigh the nature of “black swans” as they pertain to the known archaeological production.

Archaeologists cannot accept the increasing probability that their ways of viewing swans (i.e. human archaeological remains) could be inconsequential. Perhaps the greatest difficulty in acknowledging human activities during Pleistocene times is that they are a threat to the empirical belief defined by Upper and Late Paleolithic human activities. We must take into account the consensus that known time depths purported by some New World activities lay well beyond the strictest evaluations archaeologically associated with modern human occupations in the Eastern Hemisphere.²¹ That archaeology lies at the center of a need to evaluate other inter-related anthropological disciplines is contained in the following quote from eminent Stanford geneticist Luca Cavalli-Sforza;

“I prefer archaeological dates, when available, but archaeology of the Americas seems more like a battlefield than a research topic. Given the circumstances, I suppose it is reasonable to be cautious. Only if I were forced to bet I would probably prefer older dates (personal correspondence 1992).”

There are many archaeologists who remain unimpressed by the meagerness of any early New World evidence. This includes the well preserved archaeological evidence associated with the preservation of humanly made artifacts of bone and wood preserved at Monte Verde II. What kind of relationship can be made to other “pre-Clovis” human occupations if the kind of human expressions we would have to draw from them *are anything like* the impression left at Monte Verde 13,000 y.b.p.? The uniqueness of the “Amerindian” archaeological record may hold untold perspectives for archaeologists should they be willing to accept and compare what remains. In spite of their efforts some archaeologists have willingly toss the out with the baby without any water. This event was disclosed to me by George Carter as his Texas Street lithics once housed by Texas A&M displeased its caretaker. Clovis-first advocates are so challenged by analogous human definitions that they willingly *forgo* diagnoses of pre-Clovis artifacts less they conform with ‘Paleoindian timeframes’. Clearly, pre-Clovis or Paleoarchaic definitions offer an intriguing perspective, a behavioral relationship that runs counter to expectations regulated to the earliest archaeological definitions of the Old World. A change in paradigm could find support in a new kind of archaeological evaluation. This definition

must be willing to cast doubt on the *hypothesis* that the New World's "Amerindian" population originated in and thus migrated from the Old World as generally argued.²⁸

The discovery of signs of human habitation in Chile accompanying the earlier occupation at 33,000 y.b.p. must be assigned a theory to accompany the substantiation of a valid dwelling in Amerindian pre-history. The discernible relevance implied by this unique archaeological signature should require scientists to re-examine limitations applied to definitions characterizing other early Pleistocene New World habitations. That Tom Dillehay and others have continued to dig in Paleoarchaic or pre-Clovis depths is a matter of conscious obligation and we should all be indebted to their persistent efforts! The archaeological record poses that human beings at Monte Verde inventoried 60 different plants with potential medicinal or other uses. This underpinning argues favorably that "Amerindians" were present at Monte Verde I much earlier than the currently accepted dates of MV II. Should the 22 stone tools found in beds at 33,000 y.b.p. be of human procurement or use then they will hopefully assist in redirecting archaeological based theories. Simply, accepting mid-Pleistocene archaeological evidence in the New World runs counter to - or analogous of "Clovis only" perspectives - perspectives that require a repudiation of equatorial subsistence strategies. Plant based learned economies do not confirm that the earliest inhabitants of the Americas originated in the Old World.

We must define a new paradigm and build from it a new theory for interpreting the meager evidence that presently supports these earliest of New World industries. If we do not accept the challenge to evaluate the significance mid-Pleistocene human settlement holds we may never appreciate its message. By anticipating evolutionary alternatives we may assist ourselves in determining how long and by what kind of archaeological definition humankind has maintained a presence here within the Americas.

Mankind's equatorial niche within the Americas substantially alters our expectations in finding meaningful insights and interpretations from a previously unacceptable archaeological record. Should we be willing to question the casual links to our own ignorance? If so, what revelation must we now apprehend? Why are highly refined Paleolithic tools, found earlier in the Old World? Why was this innovation so late in the Americas? When and by what means (diffusion or invention) did stone tools defining Amerindian Paleoindian Traditions find their way to the Americas?

Could environmental adaptations to sub-Arctic demands encountered by man as he *entered the Old World* have led to the adoption of Paleolithic hunting skills? Perhaps the answers to these questions are pre-requisitioned elements in determining the magnitude of isolation the Ice Age presented in both delaying our arrival into the Old World and, also, the return of technologies gained from the journey.

Part Three: Science and the Measure of Truth

²⁸ It was highly unlikely that the fraternity of turn of the century European anthropologists would have been able to speculate that the American Indian could have been responsible for the wellspring of all of humanity as the Mississippian and southeastern Indian tribes had then only recently been confirmed as the true descendants of the New World Mound Builders. See Willey, Gordon R., Sabloff, Jeremy A., *A History of American Archeology*. W.H. Freeman and Company, San Francisco 1974; and Berkofer Robert F. Jr. *White Mans Indian From Columbus to the Present* 1978, New York: Vintage Books, Random House.

What-ever controversy may surround Admiral Cristobal Colon, we can acknowledge his success in “cracking the egg of discovery” by persuading his benefactors, skeptical as they were, that unknown routes to undiscovered islands lay beyond the Spanish shores, in the Western Atlantic. In light of this inevitable discovery, anthropologists might now ask if the time has come to explore what belies the New World in the chance that the wellspring for humankind’s evolutionary origins lies in the Western Hemisphere. Can the modern Peopling of the Old World best be explained by looking to the Americas for the cradle of *Homo sapiens*?

I am appealing to the advocates of a “total replacement” of *Homo erectus* by identifying a separate world for the earlier genesis of the populations doing the replacing. My aim is to offer compatible archaeological observations in accordance with “paradigm growth and theory building (Binford 1983).” Moreover, a thoroughly testable idea must first appeal to investigators by demonstrating that it offers far ranging solutions to preexisting problems. It can be readily asserted that their remains a "paradigm crisis in modern human origins research (Willamette and Clark 1995)." This chapter explores an alternative that would qualify under the prognosis that in science, when there is no resolution in sight, researchers should be willing to explore what is not obvious.

The strictest evaluations directing ongoing human origins research by archaeologists and anthropologists today are those defining environmental, genetic and/or behavioral circumstances directing the evolution of non-sapient man to fully modern sapient man. But this need not be the issue if we are not related to an Old World primate lineage that begot *Homo erectus*! If we have been modern much longer than the true dating of *Homo sapein*’s arrival in the Old World then we must have been somewhere else, isolated from the Eastern Hemisphere. Well documented paleontological discoveries sustaining evidence of the gradual nature of animal (and plant) evolution seems to be at odds with anthropology’s misbegotten perception of a “missing link” contorting what would have been a most unfathomable transmutation of *Homo erectus* into *Homo sapiens*. Here, the prospect of “total replacement” by fully modern humans from the Americas removes any need to link us with *Homo erectus*. By removing New World members of the Higher Primate family from this investigation, researchers have ideologically illuminated Native Americas as an alternative source for human origins. The result leaves us with two unanswered questions still puzzling anthropologists today; 1) the origins of the first Americans and; 2) the origins of the first *Homo sapiens* of the Old World. The problem anthropologists must overcome is in testing to see if these two “holy grails” of science are perhaps, not separate issues. A resolution to either problem could find comprehensibility if a common answer can be found for both.

The question of Amerindian origins has been rarely allowed to get beyond the scope of “when and from where”, never fully weaving the idea that ‘the Indians were always here’ into the picture of everyone’s human beginnings. Scientific investigation illuminated by interpretations of a “‘peopling’ of the Americas” may find resolution in accepting definitions of a “sudden replacement” of *Homo erectus* in the “modern peopling of the Old World”. The alternative to the scientific contention is the Native American’s contention; “that they have always been here, unrelated to the supposition that the America’s was ever a “peopling” Event. This is an alternative even the most open-minded have trouble entertaining.

What is clear is that there is substantial evidence of pre-Clovis occupation in the Americas. Especially noteworthy is its unique character. What lies ahead are theories to guide our observations should the Amerindian presence in the Western Hemisphere predate the first arrival of Cro-Magnon Man in Europe (40,000 years ago). Acceptance from earlier opponents of "pre-Clovis" occupation requires a redefinition, one that must scrutinize the dates for the earliest Upper Paleolithic of the Old World and the arrival of later European Paleolithic-like Clovis Cultures.²⁹ Who's the explorer and who never left home? What came first; elaborate hunting technologies (dating in the Old World only ~40,000 ybp); or pre-Clovis behaviors (supporting forager/gatherer subsistence) as defined by the limited evidence befalling all Amerindian Pleistocene occupations? The contempt specialists in New World archaeology have for pre-Clovis New World Pleistocene sites is founded in the limited nature of the signatures left as evidence of occupation. Will, or, to be more optimistic, how long will it take evolutionary anthropologists to look to the Americas if skeptical archaeologists only identify limitations? Are anthropologists permanently blinded by the missing links that confound the scientific choices the Old World evidence provides? What kind of chronology is open to investigation if Native Americans were always here, as they have long professed?

Our intention is to redirect the anthropologic contention that *Homo erectus* is not a genetically reliable ancestral relation for *Homo sapiens* by including the American Indian and the Western Hemisphere in a separate search for human origins. That the earliest New World tools kits are missing stone projectile points (again, their invention goes back 30,000 years in the Old World) is, a fascinating fact.³⁰ What is the direction of invention implied since pre-Clovis predates in character, the emergence of hunter-gatherer cultures marking the dawn of the Upper Paleolithic? How effective was the Glacial barrier in isolating, the first Amerindians who left to explore the Eastern Hemisphere from, earlier pre-Clovis Amerindians remaining behind in the Western Hemisphere? These questions offer unique perspectives when incorporating the Americas into the human origins debate.

Kelly presents a current, insightful, and well-written critique of the disparate approaches to anthropologic research of hunter-gatherers. He adopts the conceptual framework of behavioral ecology, defined by a focus on relationships between subsistence behavior and environment, firmly grounded in evolutionary theory. This is distinguished in cultural ecology by an explicit concern with process questions. The relationships among human subsistence activities, biological reproduction, and learned social context, Kelly argues, are behavioral ecology and can best account for modern humans as biologically oriented cultural animals. This process and can best explain how we came to be the way we are today (p. 913).

The robust, but simplistic, archaeological signature uncovered from Chile's "Monte Verde" just 13,800 ybp may be atypical of the type of human subsistence activities delineating other less-well preserved mid-Pleistocene occupations of the Americas. It can be argued that the archaeological signature of pre-hunter/gatherers preceded the evolution to hunter/gatherers found for the first time in Upper and Late Paleolithic occupations from the Old World. That pre-Clovis New World activities do not

²⁹ Dennis Stanford makes a very striking argument for Clovis-like stone tool links to Aurignacian-like cultures in Europe (Banquet Presentation Sante Fe NM 1999).

³⁰ Fiedel 1999

appear to be descendent of Old World hunter/gatherer societies - 30,000 years earlier in the making - does not require that we dismiss their signatures as evidence verifying an archaeological context. As Owen points out in Smith/Spencer (1984), until we can define a theory to help guide our observations, the meaning and/or verification of pre-Clovis will be difficult to process. My arguing that mid-Pleistocene occupations represent a more simplistic behavior suggest's a new relationship can be forged from earlier pre-Clovis definitions. This relationship could delineate an ancestral condition, a kinder/simpler human subsistence activity that remained isolated from specialized hunter/gatherer activities that we know evolved during mankind's recent expansion into what was once a new, unexplored, Old World.

Is the Cart before the Horse?

The criticisms used to refute pre-Clovis sites have more to do with the problem of expectations than contradiction. What is actually archaeologically definable is a less sophisticated non-Paleolithic stage, one that could be seen as ancestral to modern human definitions that themselves evolved into modern Old World Paleolithic contexts. Were the same level of criticisms applied to pre-Clovis, used to scrutinize the archaeological timing of *Homo sapiens* in the Old World, we might better appreciate conservative analysis from both hemispheres. It is simply easier to attempt to refute pre-Clovis sites than it is to address similar criticisms from archaeological and paleontological evidence generated in support of Old World antiquity of fully modern humans.

Could a physically different metamorphous have created a New World line of hominids in the Western Hemisphere following the separation of Africa and South America 65,000,000 years ago? Would this co-event have left separate species to evolve in separate hemispheres, seemingly destined to converge, given enough time. The occurrence of Upper Paleolithic technologies in the Eastern Hemisphere accompanies early on the first truly modern sapient hunter/gatherers cultures, per-say, specialized. Remarkable comparisons can be found with the initiation of evolving Old World Paleolithic industries with a precursor Industry that may have started with antler and bone tools at Blue Fish Caves and Old Crow from the Yukon. These bone and antler tools precedes mankind's arrival into Europe as they predate the migration of man out of the Americas. The spread of Trimmed Core Tool Traditions into Japan and Australia and eventually southern Africa may indicate that the evolution in these technologies was the result of ongoing adaptations and refinements in separate locations or regions of a new Old World. The presence of Trimmed Core Tool Traditions in Northern Asia in the Aldan, in Australia at Swan River, and later prismatic flakes at Klaisies River Mouth in southern Africa, finds them all dating within the outside limits of C-14 methods. They are less than 40,000-45,000 years old. This analysis is compatible with a more comprehensive deployment of refined stone projectile points inaugurated in the Upper Paleolithic industries of Europe. The point I wish to make here is that perhaps many advancements found in Upper Paleolithic Europe were not diffused from there into Australia or southern Africa. Rather, separate tool systems, often made of stone, were being refined as modern man expanded throughout the Eastern Hemisphere with its highest level of sophistication being wrought in the severe, Ice Age, climates of Europe.

"One of the most hotly debated topics of research in the past decade has been that surrounding the first appearance in Western Eurasia of hominids that can be considered *anatomically and culturally modern*. Between 50,000 and 30,000 years ago, the Neanderthals and Mousterian [Middle Paleolithic] industries were *replaced*, from the Near East to the Atlantic seaboard, by physically modern humans whose culture showed significant innovations, many of them never seen before on earth. These included graphic representations, true blade technology, personal ornaments, complex weapon and propulsion systems, long distance procurement of a variety of durable raw materials, subsistence systems based on strategically organized use of the landscape over the course of the year, rapid and continual technological change through time, and cultural systems that vary greatly from region to region.

Although the Middle to Upper Paleolithic *transition* is viewed for purposes of this book as a Western Eurasian phenomenon, it is hard to deny its evolutionary import, especially when we see evidence for the above cultural changes as far afield as Australia."³¹

Could the "European" "*Cro-Magnons*"³² (People of the Great Caves) have been migratory explorers of New World origins? We know that the emergence of *Homo sapiens sapiens*" (R.D. Leakey, 1977) is recognized as the single most significant event coinciding with the extinction of all *Homo erectus* forms including the European Neanderthal and Asian Java hominids. This hypothesis looks to the Americas to find primal links to our modern forms, traits, and similarities. Let us first examine the roots of our predetermined concepts before we redirect our views outside the restricted parameters of Old World religious and scientific authority.

Late nineteenth-century Europeans believed humans evolved on their continent and sought to identify a forerunner of the handsome Cro-Magnon hunters, they being a more honorable and acceptable ancestor than the brutish Neandertal. How far we have evolved in a mere hundred years (pg. 2).³³

There were turn-of-the-century Americanists advocating that Cro-Magnon predecessors originated in the Americas. Among these authorities were Alfred Wallace, Charles Lummis, Florentino Ameghino, J. D. Whitney, and Alexander Chamberlain the first student to graduate from an American university with a degree in Anthropology. Native Americans have long believed in an autochthonous origin though science has yet adequately addressed this alternative. It has adequately dismissed any notion to test this alternative to this day despite nearly 140 years of human origin research that has focused solely on the Old World, continuing to find only, that no resolution is in sight.

A. - My ancestors were descendants of *Homo erectus*.

B. - My ancestors were American Indians

I thought the Age of Science released man and woman from the bounds of religious doctrine. Knowledge and devotion should go hand and hand. It seems though that

³¹ Knecht, Heidi; Anne Pike-Tay; and Randall White; editors. *Before Lascaux: The complex Record of the Early Upper Paleolithic*, CRC Press, Boca Raton, 1993 pg. 1.

³²

³³ *Archaeology*, Vol. 49 No. 1, January/February 1996 pg. Peter A. Young, *Editor-in-Chief* Hustling Hominids

alternatives remain un-explored to the initial pairing of religion and science as a mainstream European insight. The unrecognized probability of an American genesis continues to delay the funding for a concentrated search for archaeological evidence proving a Pleistocene (and earlier) presence of *Homo sapiens* in the Americas. It has been demonstrated that many great discoveries or advancements must first run the gauntlet of scientific ridicule and conjecture. The concept of mono-genesis as applied to the Americas becomes appealing as we encounter inconsistency in the reliance on a singular Old World human evolutionary line that did not belong to *Homo erectus*. Proof of such discontinuity can be provided in detail when we compare the lack of physical and cultural ascendancy of *Homo Erectus* throughout the Middle Paleolithic (>40,000 B.P.) and the later arrival of Upper Paleolithic behavior and anatomically modern *Homo sapiens sapiens* (>40,000 B.P.).

What none of us has yet managed to do, of course, is to provide a clear and coherent explanation of how this dramatic transformation in behavioural patterns came about – evidently long after the initial emergence of distinctively anatomically modern humans in either Africa or Asia. Clive Gamble talks happily about 'big surprises' or 'flicking a switch' in human cultural development. These may be catchy and convenient labels, but they hardly help us to unravel the actual mechanisms by which these dramatic behavioural changes originated. This remains, in my view, by far the greatest challenge facing students of the 'human revolution' over the next decade. (pg. 104)³⁴

Archaeologists can trace the trail of [archaic H.s.], archaic *Homo sapiens* – *Neanderthal* and *Java* – to their *Africanus* and *Erectus* origins. Old World fossil remains show the gradual evolutionary process of both physical and cultural adaptation dating back in Africa 1,800,000 years ago. These archaic H.s are allied with a flat skull cap, heavy brow ridge, promethian face, and massive jaw that may have restricted the development of specialized speech. They were much more heavier boned, held indications of a 12 month gestation period, and remained reliant on their use of the hand held tools. The continuance of both physical and material patterns over the span of hundreds of thousands of years has created an ongoing controversy between archaeologists and anthropologists alike regarding what I consider an assumption that our evolutionary ties are reliably found in archaic Old World hominids.

The profound ascendancy of Upper Paleolithic humans 40,000 B.P. can be attributed to another specialized species, "*Homo sapiens*," ancestors of today's modern human forms. The contrary historical evidence provided by these physically and culturally modern humans, challenges the established belief in genetic conformity, and our having a direct relation to Old World *erectus*. Distinctive characteristics separate modern *Homo sapien* newcomers from their new Old World neighbors. Striking cranial features include an enlarged forehead, a smaller jaw, and protruding chin that provide for a developed larynx and specialized speech.

³⁴ *The European Evidence* Paul Mellars in Christopher Stringer & Clive Gamble. Cambridge Archaeological Journal 4:1 (1994), 95-119 *The Neanderthal World: Flat Earth or New Horizons?* in Cambridge Archaeological Journal 4:1 (1994), 95-119

Base of infant Neandertal skull from Amud Cave, Israel, has oval foramen magnum, through which the spinal cord passed, a genetic characteristic indicating Neandertals did not evolve into modern humans, whose foramen magnum is round (p. 49).³⁵ We discovered the Amud infant during our second field season. The child's remains bear classic Neandertal traits. First, it has no chin. Second, the foramen magnum, the large hole at the base of the skull through which the spinal cord and blood vessels pass, is oval. This trait appears to be accentuated in Neandertal babies, less so in mature individuals, but in both cases it differs from the round foramen magnum of modern humans. Third, masticatory muscles left massive insertion marks on the inside of the jaws in a pattern characteristic of adult Neandertals in the Levant and Europe, but not found in modern humans (ibed p. 50).

Neandertal skulls and mandibles display a singular morphology. Although some of their features can occasionally be found in other hominids, the combination of characteristic traits is unique. European Neandertals are rather short and sturdy, with a long trunk and short legs. The skeleton is robust, and the muscle attachments imply a powerful body. The head is remarkable. It is big, enclosing a brain comparable in volume to that of modern humans, but the braincase and face are very long, the forehead is low, and the browridges protrude. The mandible is strong and lacks a projecting chin. Seen from the rear, the braincase has a rounded, almost circular shape in contrast to the pentagonal shape observed in both the earlier *Homo erectus* and modern humans. The face is structured around a large nasal cavity, and its middle part projects forward. The bone below the eye socket is flat or even convex, receding laterally. The cheekbones are weak and oriented obliquely. This projecting face contrasts strongly with the short, flat face of the first modern humans. Other anatomical details of the ear area and rear and base of the skull are unique to Neandertals. The occipital bone, at the back of the skull, is marked by a conspicuous depression called the supra-iniac fossa (ibed p. 38).³⁶

Contriving *Homo sapiens* from these earlier European inhabitants is definitively more procrustean than my theory that unifies human origins with a replacement from the Americas. The relative continuity of our modern human form over time is in accordance with the first theories of our origins proposed by Alfred R. Wallace, Julian Kollman, and Sir Arthur Keith. Highlighted are examples of terms that have lumped inappropriately, anatomically modern humans with earlier European hominids that are certainly, in the view of most anthropologists, not the same species. Dr. Wolpoff would like us to lump all the hominids together into one taxonomy when the differences definitively confirm that we are anatomically and behaviorally, a separate species.

The long biological continuity is echoed in the archaeological record. For nearly a century, archaeologists separated the Middle Palaeolithic (then thought to be limited to between 80,000 and 40,000 B.P.) from an earlier, more primitive Lower Palaeolithic. With the excavation and study of new sites, this boundary has become more and more difficult to draw. *In contrast, the arrival of modern humans in Europe is reflected in the sharp division between the Middle Palaeolithic and the beginning of the Upper Palaeolithic (ca. 40,000 B.P.).* The former, mainly represented by the Mousterian assemblages, are basically composed of side-scrapers, points, notches, and denticulates shaped from flint flakes. Bone objects are rare and very simple. The dwelling sites do not

³⁵ Neandertals of the Levant, *Archaeology*, January/February 1996, pps. 49-50. Erella Hovers, Yoel Rak, and William H. Kimbel

³⁶ The First Europeans, *Archaeology*, January/February 1996, pps. 36-44. Jean-Jacques Hublin

seem very structured. In the Upper Palaeolithic there is a large variety of flint tools, many shaped from elongated blades and bladelets. There are numerous bone and antler objects, especially spear points. It is the time of prehistoric art, of symbolism, of well-structured dwellings. It is quite likely the time of a new social organization (ibed p. 43).

The *Aurignacian tool kits* included bone needles for fitted clothing, the common utilization of fire, personal ornamentation, exacting paintings and carvings, the use of the metate and mano, and barbed arrows and harpoons for fishing and hunting small game. The Inland Aurignacian tool kit, the Atlatl (spear thrower) and bi-facial projectile points, was associated with the hunting of larger game and was refined as man crossed the central Euro-asiatic frontier. Rich cultural attitudes provided for the development of totemism, music, dance, and art including masterful rock paintings which remain as evidence of their ritual celebrations. The rapid colonization of every Old World continent by these modern human forms is evidenced by the similarity in both physical and cultural remains. The capacity of coastal boat travel. helps us comprehend the rapid colonization of the entire Eastern Hemisphere. These new human populations spread into Australia at 39,500 b.p. + 2,300 or -1,800 and along coastal habitats of the Indian Ocean to the Klaisies River Mouth at the tip of Africa's Cape of Good Hope at 36,500 b.p. ± 200.

Lithic artifacts do not leave pictures of the hominids or humans that held them but they do suggest differing modes of processing behavior into intricate thought. We are all thankful that the earliest *Homo sapiens* of Europe felt compelled to leave behind a graphic expression of the bountiful world that suddenly surrounded them. Anthropologic interpretation would not be as complete without their detailed impressions of European Upper Paleolithic life. But this begins in Europe with the arrival of our species, it does not descend from Europe's first hominid, nor it's later relation, the Neandertal.

Differing opinions can be found to support "multi-regional evolution" and "rapid replacement," the two main camps defining modern human evolutionary studies. The testing of hypotheses concerning the initial presence of mankind in the Western Hemisphere are however, first defined solely against the backdrop of migrations from Asia. These theories are often based on linguistic, genetic, dental, archaeological, or ethno-historical surveys, being cast from the nineteenth century British-school's contention that *Homo sapiens* could not pre-date the Neandertals. The fact remains that all fossil man finds in the Americas are of anatomically modern humans. Yet, since modern man is known to have replaced Neandertals the consensus has established that anatomically modern man in the Americas could not predate the European Neandertal.

Why were the earliest modern humans not as heavily built as the Neanderthals? Neanderthal limb bones are remarkably robust, with strong muscle markings, implying that Neanderthals of both sexes were exceptionally powerful people. In spite of this, they often broke their bones, they commonly developed arthritis or other senile pathologies in their 20s or 30s, and they seldom survived beyond age 40 (Berger and Trinkaus, 1995; Brennan, 1991; Trinkaus, 1995; Trinkaus and Shipman, 1993). The sum suggests that they led extraordinarily stressful lives. In contrast, their fully modern, Cro-Magnon successors were much less heavily built, they broke their bones much less often, and their maximum life expectancy was significantly greater. Since Neanderthals were culturally (artificially) much less sophisticated, a reasonable explanation for the difference is that

Neanderthals often accomplished physically what later people accomplished culturally (technologically) (p. 189).³⁷

The perspectives outlined here offer a conservative assessment of the age for the replacement of *H. erectus* populations. The idea that the replacement could have started in Asia could be implied by the early Australian dates. At any rate the sudden appearance throughout the Old World has an unlikely New World comparison in the rapid colonization scenarios that have been put forth by Clovis First proponents. The alternative to Clovis First must envision a sizable Amerindian population with an accompanying diffusion of Upper Paleolithic hunting technologies into these *pre-existing* tribal groups. But, and we must ask this, why is the mid-Pleistocene America's archaeological signature so difficult to assess? Is it due to what we have assumed we should be finding (Paleolithic Old World lithic Industries and/or archaic *erectus* anatomies), not, what we happen to find missing?

Our conclusion is that, while morphological and behavioural change had certainly started earlier, for behavioural change, the period from 60,000 to 40,000 BP is of the greatest interest. It can be regarded as a pioneer phase with, in one hemisphere, the first appearance of people in Australia while in the other, structures and constructed fireplaces are found for the first time. Clearly humans are on the move, both physically and mentally (a view which can be supported from recent interpretation of mtDNA data: Harpending et al. 1993). The technology of survival begins to reflect an extension in planning and organization. (pg. 96)³⁸

Multi-regional proponent Millard Wolpoff also identifies the timing and completeness of our species placement in Europe.

Behavioural complexity is explained away by fiat. This in discussing the behavioral evidence found at Chatelperronian sites, associated in two caves with Neanderthal remains: the transition in this area to a blade-based technology (the Chatelperronian) and the appearance of structures at campsites (Arcy-Sur-Cure) only occurs long after the Moderns arrived in central Europe and the Iberian Peninsula. Imitation rather than invention *therefore* seems the most plausible explanation for the change in Neanderthal behavior. (p. 201, italics mine) (pg. 99)³⁹

Homo erectus behavior, determined from studies of faunal remains, suggests that these hominids did not hunt big game. They did, apparently, opportunistically hunt small game, but there is little, if any, evidence of the refined technologies associated with the practice of hunting proportional with modern humans. Clearly, there remains a persistent problem in finding a single collective consensus, be it in regard to the first "peopling" of the Americas or the first *Homo sapien* peopling of the Old World (Meltzer letter 1991). I did not undertake this quest without fully articulating what the Old World evidence

³⁷ Klein, Richard G. 1995. Anatomy, Behavior, and Modern Human Origins. *Journal of World Prehistory*, Vol 9, No. 2 pp. 167-198.

³⁸ Christopher Stringer & Clive Gamble. Cambridge Archaeological Journal 4:1 (1994), 95-119
The Neanderthal World: Flat Earth or New Horizons? in *Cambridge Archaeological Journal* 4:1 (1994), 95-119

³⁹ *The Calm Before the Storm* Milford H. Wolpoff in Christopher Stringer & Clive Gamble. ibed

dictates. In a response to my first manuscript George Carter cited many points of concern with my avocation for a human origin within the confines of the Americas. His concerns not only outlined the limited scope of my first paper but the limitations he had come to accept from the Old World. His remarks are pertinent to this day and have helped in the present effort by distinguishing the problems and solutions that can only be identified in a unified theory for human origins. His constructive analysis has helped in identifying concerns not adequately addressed in my original manuscript(s). I have received responses to separate manuscripts and would like to acknowledge those concerns presented by Alan Bryan, David Meltzer, Theodore Schurr and others.

First, it should be expected that revolutionary ideas are rarely, if ever, welcomed into scientific debate. Carter found that by “leaping from premise to conclusion far too quickly,” the end result was that my original “thesis is not well argued.” However, should I have been any more elaborate I believe I would have unduly burdened the time of the scientific community as my initial efforts were intended as “positional papers” only, hoping as I was to solicit needed critique. The concerns researchers identified were addressed in a later, a more complete, “working hypothesis” while the criticisms have helped me solidify my initial presentation. Argument is a constructive element of scientific discourse. By ignoring limitations I brought a human evolutionary perspective to the Americas. The following are major points that were not substantiated or presented “inseparable obstacles” in conferring a “legitimate hypothesis” in my private 1990 circulation, “*Has Human Evolutionary Science Missed the Boat?*” reviewed by Dr. George Carter and others.

Human/primate Evolution 1). *That there is “no basis in biology” For man evolving from a New World Primate Base.* Behavioral and anatomical differences separate *Homo sapiens* and *Homo erectus* as completely separate species. Recent Nuclear and mitochondrial DNA studies support this distinction while archaic fossil hominids are not anatomically modern *Homo sapiens*. Biological, we are not genetically related to *Homo erectus* forms (Svante Paabo, 1998). Supporting evidence of modern human behavior from the Old World archaeological record is not found in association with *Homo erectus* populations although they may have adopted modern behavior, but only after we arrived on the scene (Mellars 1999). The planned strategies and technological advancements used by true hunter/gatherers does not appear until just before the onset of the Last Ice Age when humans began colonizing the Old World. In fact, as the pre-Clovis New World evidence dictates, true hunter/gatherer technologies were not incorporated into the lifeway of native Americans until the end of the Last Ice Age. The distinction I am drawing attention to is, no-where in the Old World does the presence of the behavioral, biological, and/or anatomical characteristics, used to distinguish *Homo sapiens* from *Homo erectus*, predate the dates of 100,000 thousand years Dr. Carter advocates in his seminal book concerning the earliest Americans, *Earlier than You Think* (1980).

The genetic evidence on human origins suggests that modern man originated from a single population rather than from a series of simultaneously evolving prehomimid ancestors, and that his emergence was not accompanied by a drastic reorganization in molecular anatomy. Use of the ‘molecular clock’ on the observed differences between modern human populations suggests that the racial differences between the world’s human groups may have begun to appear at about the time that man began to migrate

from his center of origin.” (J.S. Jones, in *Major topics in primate and human evolution* eds Wood, Martin and Andrews, 1986)

“I don’t think the Neanderthal was evolved into modern people, and modern Europeans. I think the easiest way to demonstrate it is to look at a couple of specimens and see the differences between them. The Cro-Magnon skull is really essentially modern. I mean there are very few differences from...from our own skeletons.... I think personally there’s no possibility that the Neanderthal could have evolved into the Cro-Magnon because the differences between them are too great, and there was no time in Europe to turn a late Neanderthal into an early Cro-magnon, and evolution isn’t capable of changing two such different things from one to another in such a short period of time.” (Christopher Stringer, *Nova* #1402, 1987)

Mainstream thought is directed by a consortium of physical anthropologists who conveniently excuse the Americas from the search for modern human origins. If the 100,000 year old dates for *Homo sapiens* emanating from the Americas are valid, as Dr. Carter and other early “early man” advocates suggest, then the American pre-Clovis could be the evolutionary prerequisite to modern human behaviors that dawned and evolved, exponentially, as our species colonized a new Old World. Carter cites as “vast”, the changes in human physical and cultural affinities coinciding with the arrival of modern humans into the Old World (G. Carter letter to Hicks, 1990). The theoretical differences that separate Rapid Replacement Theorists and Multi-Regional advocates is whether *Homo erectus*, European Neandertals, Java Man, and Peking Man, each participated in *Homo sapiens sapiens*’ evolution? Moreover, molecular biologists/anthropologists question whether our ancestors were ever related to *Homo erectus*. The observation suggesting a “New World wellspring” for modern human origins provides a geographically based reasoning for isolating the source/origin of the modern human populations responsible for said “Sudden Replacement”. Advocates of an Old World *Homo sapien* origin must accept that *Homo erectus* was colonizing the Eastern Hemisphere while *Homo sapiens* were waiting in Africa (Stoneking and Cann et al 1989) or Asia (Johnson et al 1983) until 45,000 years ago, even though there were no real geographic barriers to prevent our true ancestors from earlier colonization.

‘Archaeological evidence indicates that in the past, other types of humans lived alongside modern humans, e.g. *Homo erectus* and Neanderthals. ‘Yet, “We don’t see that in the mitochondrial DNA; we don’t see any deep lineages going far far back, 600,000 or a million years ago, to a common ancestor of Neanderthals and modern humans. It seems from the mitochondrial studies that modern humans replaced Neanderthals without interbreeding.” (Dr. Svante Paabo, from Jim Bonnichsen, *Mammoth Trumpet*, Volume 6, Number 1, March, 1990)

The question of how long we were living side-by-side must not be limited to how long we have been modern but, when the physical geographic barriers separating our ancestors from the Old World and an inevitable encounter with *Homo erectus*, were overcome. In reconciling the C-14 data with the sudden appearance of our own kind in the Old World we might determine that “Man boldly went where no man has(d) gone before” as we exited the Americas ~45,000 years ago. Glaciation and pre-Clovis equatorial subsistence strategies played a decisive role in delaying Old World colonization and/or overcoming, New World isolation. It is pre-Clovis Americas that offers “Sudden Replacement” advocates a fresh place to start for the difficulty in

accepting *Homo sapiens* at 13,800 years ago in Chile will only pail in significance when we reexamine Monte Verde's 33,000 year old implications.

Multi-Regional evolutionists contend that separate, regional, *Homo erectus* populations contributed to today's "races", while, molecular biologists firmly support the "Rapid Replacement Theory". Physical anthropologists advocating Regional Replacement are left to struggle with the best choice for the specific place *Homo erectus* first evolved into modern humans where:

"The source region may be unstated or unknown (Howells, 1976a, 1980, 1983), or placed alternatively in Europe (Hrdlicka, 1927), China (Macintosh and Lamach, 1976; Weckler, 1957), the Near East (Vandermeersch, 1970, 1972, 1981), or more generally western Asia (Bodmer and Cavalli-Sforza, 1976; Guglielmino-Matessi et al, 1979; Howell, 1951), sub-Saharan Africa (Protsch, 1978; Rightmire, 1979), or in the most recent suggestion, Australia (Gribbin and Chérfas, 1982)."⁴⁰

When will Native Americans be included in the search for *Homo sapien* origins?

Looking Out from the Americas

During the last few years a great deal of progress has been made in identifying and responding to issues central to Native Americans concerns. The constructive steps taken to direct an integrated approach to Native issues and beliefs has led archaeologists to seek compatibility in furthering this commitment. A new era has peaked above the horizon, one that promises to herald progressive directives. One of these directives is in executing the daunting task of determining the significance a mid-Pleistocene human occupation of the Americas offers our knowledge of world prehistory. With this goes a willingness to advance indigenous persuasions including beliefs based on historic accounts of the past depicted in myth. This paper attempts to objectively draw these views into an order that might help guide archaeological observation.

Discussions must entertain "Points of Order" while Oral traditions offer valid comparisons to draw such an order from. Is it time to test Native American origin stories to see if they are compatible with scientific terms and evolutionary theory? If the answer is yes(!) then we must be willing to evaluate the concept "that they have always been here". This means we must *test* the idea with bias approximating the "null-hypothesis". The "peopling of the Old World" must envision the Americans as the wellspring from which all later *Homo sapiens* descended even if few researchers have optimistically pursued such a line of thinking, at least out loud.

If we examine the idea of an American wellspring for Old World *Homo sapiens* then perhaps we could undertake with the notion that native people living south of the recurring Ice Sheets migrated north twice, before the onset of the Last Ice Age (~ 45,000 years ago and after the end of the Wisconsin II, just 12,000 years ago. In the least, this shifts the emphasis, of the Clovis First paradigm, to that of a secondary occupation. An earlier pre-Clovis occupation of the Americas leaves scientists the obligation to test Native American contributions to the formation of Circumarctic Peoples at the end of the Last Ice Age. That is, if there were people in the Americas before the end of the last Ice Age, then the direction of human movements could have taken them "out the backdoor of

⁴⁰ from Wolpoff, Wu, and Thorne, in Smith-Spencer 1984, pg. 412

the Americas”, a second time. Through consideration of this possibility we can distinguish the differences between two separate migrations out of the Americas.

In 1995 I presented a paper to the annual meeting of the Society for American Archaeology (SAA) suggesting that mitochondrial DNA analysis could promote this alternate persuasion, a Holocene migration out of the Americas. Simply, I identified Native Americans as the source for present populations currently occupying deglaciated North America, Beringia, and northeast Asia. One month following this presentation Steven Ousley published a paper in *Human Biology* addressing an analysis of recently discovered boxes of anthropometric data collected by Franz Boas at the turn-of-the-century. In his paper Ousley brings back to life Boas’s “Eskimo wedge theory” a contention promoting two separate American Indian migrations north at the end of the last Ice Age.⁴¹ This persuasion cast’s new light on Eskimo and Athapaskan oral traditions; telling us that their ancestors migrated “out of the Americas following the end of the last Ice Age.” O’nieda, a tribal elder of the Bella Coola understood that their initial occupation of this once glaciated region dated to a time when; “in the beginning there was only ice and a narrow strip of shoreline.”⁴² Since there is now a general agreement that there were indeed people in the Americas *during* the last Ice Age subsequent migration north could explain genetic and linguistic similarities. A Final Report was never published from the Jesup Expedition. This alone does not explain why Boas’s theory of back-migration has never been fully scrutinized. That his conclusions were virtually unknown to later research epitomizes the problems other, less renowned scholars, must have faced long after he first addressed the northern Native American’s account of a migration out the Back Door of the Americas.

We might all agree that the formation of the present populations comprising deglaciated North America have rarely been investigated against the backdrop of “back-migration”. More importantly, these implications provide an alternative to the long standing theory that Amerindian progenitors came from northeast Asia. Simply, this untested direction favoring humans migrations across Beringia, be it by Land or by Sea, has yet to tread its own thin ice of scientific scrutiny. By choosing to believe that people were in the Americas before the end of the Last Ice Age a subsequent Holocene migration(s) into Siberia could best account for the multitude of similarities linking recently formed Circumarctic Peoples with Amerindians. Readers who are aware of the genetic links between northeast Asians must know that there are other explanations, most importantly, the paradigm of back-migration gained from the Jesup Expedition (1897-1905). Certainly, the Clovis First hypothesis and the logic of this as a consensus view for anthropologists has unwittingly forced the evidence of gene flow as being an “Out of Asia” phenomenon.

What were people doing in Pre-Clovis America?

I would like to offer an archaeo-logical explanation for what many find are unresolved problems in accepting a Pleistocene human habitation of the Americas. Roger Owen identified many of these doubts in his Chapter; “The Americas” in Smith/Spencer, 1984, “ A World Survey of the Fossil Record”. Let me first list the problems he and others have with a pre-Clovis Peopling or as I see it, occupation of the Americas.

⁴¹ see Waters

⁴² I quote him from Farrand in 1895

1) Neither Upper Paleolithic or Middle Paleolithic tools were made by pre-Clovis people and, as a result, stone tools so often used to define Old World habitations cannot aid archaeologists in the search for evidence. Thus, without Paleolithic tools, there could be no pre-Clovis people.

2) The scarcity of other indications of human habitation are so difficult to distinguish that most researchers are unable to determine if they in fact are proof of human activities.

3) The theories that have grown from accepting that Clovis People were the first Americans identify a terminal Ice Age timing of Paleoindian stone tools archaeologically verifying a Paleolithic human presence.

4) Specialists who defined the censuses of a migration from Asia for the first Americans, including Ales Hrdlicka were so vigorous in their challenges to even a terminal Ice Age Paleoindian presence that finds of pre-Clovis and/or even Clovis activities went unreported.

5) After the acceptance of Clovis as the FIRST Americans, funding for archaeological research did not project surveys into pre-Clovis times (below Paleoindian sites) because this would be an obvious waste of time and money.

6) The hearths, simple stone and bone tools, and other indications of possible human activities could be explained away by suggesting natural forces or archaeologist's errors, even though most critics of a pre-Clovis occupation have never proven these detractions.

7) Modified stone as tools leave ample evidence of Paleolithic activities from the time the first Old World hominids picked up stones and shaped them into tools 3 million years ago. Since refined Paleolithic-like tools are virtually absent in pre-Clovis sites, humans couldn't have been in the Americas before Paleoindian times.

8) Bone, wood, and other "soft" tools are rarely preserved, anywhere, and the reliance on them, alone, in pre-Clovis American would seem to require the abandonment of an earlier knowledge of stone age tools, as a Paleolithic Asian origin dictates.

9) Animals living in the Americas during the last three million years of Ice Ages were not threatened by People in the Americas until the end of the last glacial when Clovis hunter/gatherers first appear.

Archaeologists, by demanding evidence of a Paleolithic signature, have adamantly dismissed, as indiscernible, the limited evidence pre-Clovis mid-Pleistocene American left behind as proof of their presence. Theories that are used to guide New World pre-Clovis observations are unable to subscribe to the idea of a Paleolithic antiquity that would harmonize with what we know from the Old World. There are many reasons for this including:

1) Paradigm bias suggests that the modern human of form could not predate the arrival or antiquity of the first modern humans of Europe since, if they did, the earliest American inhabitants should have resembled Neandertals or *Homo erectus*.

2) No serious researcher would, without risking their reputation, suggest that modern humans, *Homo sapiens*, were autochthonous to the Americas.

3) Once the discovery of early hominid forms from Africa began to be discovered it became sacra-anthropologic to suggest that these discoveries had really nothing to do with anatomically modern *Homo sapien* evolution.

4) Since all fossil human finds from the Americas were that of *Homo sapiens* they could not possibly date beyond the Old World antiquity of our own recent arrival.

Comprehending answers to these problems can be found in examining the points of order this effort attempts to offer. Could Upper Paleolithic technologies have contributed to the development of Paleoindian Traditions? The circumstantial evidence outlined thus far, requires I do more in organizing a scientific equation. I must offer solutions that incorporate resolutions to the problems the science of anthropology seems unable to solve, although they have been adequately identified.

There is no conspiracy, only the problem that we are un-aware of untested waters the crossing of the Bering Sea into the Old World might offer. These non-believers have all the evidence needed to suggest that the Paleolithic/Paleoindian came to the Americas from the Old World. They are dumfounded by alternatives to this “given”. For ‘Clovis-firsters’ there is no rhyme or reason for the simplistic manor indicative of pre-Clovis America, humans simply were not here. The Paleolithic arrived at the end of the last Ice Age, bearing with it tools of the hunting trade. The Paleoindian Tradition offers all the evidence needed in determining the timing of the First Americans. Man arrives, many of the animals he hunts go extinct. The scant evidence that is used to argue that humans were here before this time can be refuted, ignored, or attributed to the work of someone who just fell of the wagon. What a sorry state for such an important scientific enterprise!

All the problems outlined here must find a resolution in the direction of ingenuity. Could a preverence of bone and wood as tools have preceded Paleoindian Traditions, the America’s First Paleolithic stage? Explanation of why pre-Clovis lake distinctive lithic tool types certainly remains an enigma. The most important part missing is the beauty of enlightenment without an invitation the null-hypothesis will remain ignored. Until Cinderella is invited to the Masquerade (conference), the beauty she poses will never be connected with the glass slipper the trickster would leave to have us test it’s fit. Chaos is running the Human Origins debate as we will never find solutions if we do not allow the trickster to assist us in unmask truth. Cinderella’s hidden beauty (hypotheses untested) must out-manuever jealousies contrived in the relativity of *step-sister* bias. The null-hypothesis, (that the Indian is truly a native species to the Americas), must escort Cinderella to the Ball (conference) where her beauty can be revealed for all to see.

He who has come to the Americas last seems to be dictating, to those who have always been here, just how long people have inhabited the *new* World. But those native to the Americas know different! I have attended enough Balls (conferences on this subject) to know that Cinderella has never been invited to the show. Somehow, Cinderella must secure the aid of the tricksters, who are there to attend us in unmasking *when man first was*. Through their efforts does a new light reveal itself and in this search does the glass slipper define all limitations until, in it’s true bearer, we find its covenant. Our human past, and more specifically when man first was, will remain unknown unless Cinderella is invited to dance. Until the masks, embodying what is missing in visualizing absolute truth, are removed, will the fairest explanation of mankind’s greatest journey upon the earth be revealed. Anthropologists must remember that *Homo sapiens* recently “peopled” the Old World by addressing the limitations that depict “the Peopling of the Americas” as the only way to address human occupation of the Western hemisphere! The glass slipper conforms with the tracks left by the First *Homo sapiens*; as a migration “out

the backdoor of the Americas.” The “peopling” of “unknown worlds” conforms best with a recent arrival for our species in the Old World and not the New!

“Once upon a time” ‘deep in the forests of Chile’; is missing from the shared history of every Old World descendant who left the Americas. Hidden in the tale revealed by Monte Verdeans is the story of the people who remained behind. The fable holds truth in an inevitable twist of fate that has long troubled anthropologists by mistaking our relationship to the ancient ones. How it was “in the beginning” is not what anthropologists were told to expect when they began to read from the pre-Clovis stories hidden within Mother-Earth. Monte Verde is the best example of “when man first was” that we could possibly hope to find. It reveals what we were doing for thousands of generations before, and 400 Centuries after, we decided to populate unknown worlds beyond the “backdoor” of the Americas”. Monte Verde has nothing to do with what came later, when people returned to the Americas. It remains a mirror of our most ancient lifeways, before man returned from the journey initiating the dawn of a Paleolithic-based Paleoindian Culture.

Yet, for most researchers, why pre-Clovis people where not employing stone age hunting tools at Monte Verde remains difficult assess. Accepting pre-Clovis as an earlier evolutionary stage of human behavior is the first step in resolving the logical problems archaeologists have long promoted in defining the paradigm of “Clovis First” and it’s Paleolithic embodiment. Yet, understanding this phenomenon seems as difficult to interpret as is Europe’s Mousterian Problem, where difficulties lie in finding not evidence of Paleolithic hominid habitation, but rather, evidence of sapient behavior as decreed from the archaeological record. Archaeological explanation of mid-Pleistocene habitations must rely on evolutionary theory to help guide our observation just as the relationship to an Eurasian precursor was fundamental to the Clovis First/Paleoindian model.

As Fagan asserts “Monte Verde paints a very different picture of first settlement from northern Paleoindian kill sites” because Amerindians in pre-Clovis times did not rely on killing game as their Old World counterparts came to do. Simply, *Homo sapiens* from the Americas could have replaced *Homo erectus* by colonizing the Eastern Hemisphere after exiting the Americas 45,000 years ago but scientists are reluctant to entertain the concept. Why are Paleolithic differences so pronounced when outlining the behaviors between those who left and those who remained behind? As Fagan states, “Dillehay believes the people (in mid-Pleistocene Chile), used a simple technology to gather and experiment with diverse food resources. They exploited a large territory yet used minimal technology to do so.” Fagan further notes that “Monte Verde, a humble but complex settlement, reveals the first Americans for what they really were: small, highly diverse human groups capable of adapting to almost any environment (Fagan 1997 pg. 62).” And yes, they were not employing stone tools for hunting as the ‘Clovis First’ paradigm directs.

Binford uses the depiction of Black Swans (native only to Australia), to explain that; what we become accustomed to as universally acceptable to our way of thinking, can becomes foreign. As when we discovered that swans are not always white. What we have found at the banks of the Chinchihuapi, changes for American Archaeology the color of the swans we have become accustomed to observing. The evolutionary theory of an Asian progenitor we have long tested the initial peopling of the Americas with, no

longer adequately explains the phenomenon that is; Monte Verde. The definitions from ancient Monte Verde require that we compare, by re-examination, the limited evidence supporting *other* contemporary mid-Pleistocene sites. By this, it is implied that the behavior of the people living at Monte Verde, Chile, might have gone unnoticed if they hadn't left their signature beneath a bed of peat. What we are left with now, in accepting an earlier Pleistocene human occupation, is a new definition to guide our observation of what is, always has been, and always will be found to be, a very limited lithic archaeological production. Especially when compared to contemporary Old World Pleistocene Upper or Late Paleo-*LITHIC* habitations.

Certainly, the sudden appearance of White Swans at the end of the last Ice Age is sustained in the evidence of Paleoindian Traditions that must be descendant of Late/Upper Paleolithic technologies from northeast Asia or Europe. Evolutionary theory has ordained this as what we should expect in detailing the consensus paradigm affording the theory of Clovis First. Yet, since Clovis is no longer first, we must now synthesize, as Fagan puts it, the "international significance" a mid-Pleistocene occupation of the Americas of this nature portends.

Neandertals in Europe and Modern Humans in Chile: Problems or Possibilities

Evidence of Pleistocene New World industries is remarkably well preserved in the peat bogs of Chile's Monte Verde where an ancient marketplace of medicinal plants and accompanying indications of human habitation does in fact predate the North American presence detailing the onset of Paleoindian Traditions. If these remains do not fit in the evolutionary scope of proof satisfied by Old World archaeological remains as do Paleoindian Traditions,⁴³ then perhaps new definitions of what we are looking for should be formulated. Ours is an attempt to draw a new paradigm that would help substantiate the limited evidence supporting these earliest "Amerindian" occupations. Clearly, "Amerindian" tribal groups south of the Wisconsin Ice sheets in mid-Pleistocene times supported a sizable population able to maintain extensive diversities corroborating both linguistic and genetic data.⁴⁴ In processing this fact, new archaeological models, accommodating the whereabouts of this ancient populous, are sought.

Perhaps interpretations associated with the expectation that their should be a presence of Paleolithic tools should be removed and a new criteria be created that would link the relevant evidence supporting early "Amerindian" habitations (Bryan 1991). Monte Verde does prove that Paleoarchaic Pleistocene occupations did dwell beyond 12,500 y.b.p. and that they are clearly supported as relying on plant based subsistence strategies, living areas incorporating the use of wood posts tied together with reeds that supported larger enclosures, scavenged animal remains, highly functional wood and bone tools, medicinal plants, and human footprints. Yet, simple stone tools are found to be unsophisticated especially when compared to Old World styles and techniques and the well defined use patterns reported from most of the Old World evidence affording hominid/ and later fully human occupations. Again, support of a change in the paradigm

⁴³ see Dincauze 1984; Haynes 1967, 1988; Lynch 1991)

⁴⁴ Greenberg et al. op cit. 1986; Wallace, Douglas; C., Garrison, Katherine; Knowler, William C. "Dramatic Founder Effects in Amerindian Mitochondrial DNAs." in *American Journal of Physical Anthropology* . 68:149-155. 1985; Schurr et al. op. cit. Wallace Douglas C. and Antonio Torroni, "American Indian Prehistory as Written in the Mitochondrial DNA: A Review." *Human Biology*. June 1992, pp. 404.

can find parallels in definitions accompanying the discovery of the “Clovis industries” following the Folsom finds of 1907 and 1926⁴⁵. The factors and definitions supporting the “Clovis First” hypothesis are being questioned by subsequent discoveries that presently define Paleoarchaic as “pre-Clovis” Pleistocene occupation of the Americas. Clearly, Monte Verde, Meadowcroft (Adovasio and Carlisle 1986) Pedra Ferada (Guidon 1987) Pendejo Cave (MacNeish 1992) and other New World sites offer reliably dated human occupational areas that are decidedly *not* characterized by Paleoindian Traditions and fluted industries.⁴⁶

Several questions should be anticipated. Does the evidence for Pleistocene forager/gatherer industries and early New World plant based economies imply a pre-Paleolithic isolation of mankind in the Americas? Why are Pleistocene subsistence strategies and the recognition of these occupations in the Americas so difficult to comprehend since many must certainly coincide with the discernible Upper/Late Paleolithic industries of the Eastern Hemisphere? Why have archaeologists studying cave paintings, pre-Inca civilizations, early basket making technologies and the origins of agriculture in the New World risked endangering their reputations when they find something that compels them to search beyond the accepted limits given “Clovis” occupation? What kind of so called “sobriety” would defy the scientific traditionalists by implying that human beings could be in New Mexico at Oro Grande or Brazil at Pedra Ferada or even Chile at Monte Verde while Neandertals were roaming Europe as Brian Fagan, (1990) a major critic of Pleistocene man sites in the Americas, has so astutely observed?

These most recent champions of a greater “Amerindian” antiquity must have read of the “early man taboo” well founded over the history of American Archaeology. Are they not conscious of what Frank H. H. Roberts termed in 1940 “dogmatic rejection of turn of the century American Archaeological finds,” finds that would, “tempt the fate of ostracism by intimating that ‘they have’ discovered indications of respectable antiquity

⁴⁵ The stone projectile point was clearly imbedded into an ancient Long-horn Bison specimen.

⁴⁶ Pre-Clovis archaeological confirmation supports evidence of the quarrying of stone for simple subsistence strategies akin to equatorial gathering/foraging industries and not subsistence strategies designed with large game hunting in mind? Site evaluations supporting this contention include: 'Meadowcroft,' (Adovasio, J.M. and Ronald C. Carlisle. 1986. Pennsylvania Pioneers: Meadowcroft Rock-shelter Adds a Long Lost Chapter to American History Books. in *Natural History*. 1986, December); 'Texas Street,' (Carter, op. cit., 1980); 'Monte Verde,' (Dillehay, Tom D., "A Late Ice-Age Settlement in Southern Chile." *Scientific American* 1987, 251(4):106-117.; "By the Banks of the Chinchihuapi," *Natural History*. 4/87; *Monty Verde, A late Pleistocene settlement in Chile*, Smithsonian Institution Press, 1989); 'Pedra Ferada,' (Guidon, N. and G. Delibrias, "Carbon 14 Dates Point of Man in the Americas 32,000 Years Ago," *Nature*, vol. 321, 1986, 769-771; Guidon, Niède, "Cliff Notes: Rock Artists May Have Left Their Mark in Brazil More than 30,000 Years Ago," *Natural History* 1987, August); 'Calico Hills,' (Leakey, L.S.B., R.D. Simpson, and T. Clements, "Archaeological Excavations in the Calico Mountains, California," *Science* 1968, 160, 1022-3); 'Pichimakay Cave,' (MacNeish, R.S., A. Garcia-Cook, L. G. Lumbreras, R. K. Vierra and A. Nelken-Terner, *Prehistory of the Ayacucho Basin, Peru.* University of Michigan Press, Ann Arbor, 1981, Vol. 2: Excavations and Chronology; MacNeish, R.S., "The 1992 Excavations of Pendejo Caves near OroGrande, New Mexico," *Andover Foundation for Archaeological Research*, 1992 Annual Report, and in press); 'Tlapacoya,' (Mirambell, L., "Tlapacoya: A Late Pleistocene Site in Central Mexico," in A.L. Bryan ed.: *Early Man in America: From a Circum-Pacific Perspective* Occas Papers 1, Dept of Anthro, Univ of Alberta, pp 221-230); and 'Santa Rosa Island,' (Berger Rainer and Phi C. Orr, "The Fire Areas of Santa Rosa Island," in *Anthropology* Vol. 56, pp. 1966, 1678-1682).

for the Indian?” The archaeologists working in New World Pleistocene levels are not attempting simply to cast light on previously unresolved implications. They did not undertake these excavations by presupposing a contemporary presence of human activities in the Americas and Europe nor are many of them presently willing to assess the challenges contemporary Paleolithic and pre-Clovis Industries may well imply. The discoveries of Paleoarchaic forager/gatherer industries are themselves defined as bone, wood, and simple stone tool industries incorporating an ancient use of early grain grinding implements (Dillehay 1989) including the matate and mano. An implied knowledge of plants for food and medicinal uses and, as well, domestics including clothing, sandals, nets, ropes, basketry, containers and everything else, nigh human equatorial habitation applauds in “a time-immortal”. These industries define a system implying evidence of man in a “pre-projectile point horizon” as postulated by Alex Krieger in 1964.

Many archaeologists continue to disregard the implications of a pre-Clovis horizon, (perhaps evidence a result of leftover paradigm bias). A new paradigm must be conceived for mid-Pleistocene sites to be recognized and addressed scientifically. The discovery in 1907 and substantiation of, in 1927, Paleoindian Traditions set in motion the “Clovis First” hypothesis”, proving that man was in the Americas in immediate post Pleistocene times. Like this discovery, archaeological definitions proving human habitation at Monte Verde (in 1978) has taken 20 years (1998) to stimulate those advocating the “Clovis First” to adopt an earlier pre-Clovis presence. Clearly there has long been an archaeological consensus foreshadowing the acceptance of an earlier than Clovis or mid-Pleistocene presence of man in the Americas. It will certainly take further dramatic archaeological discoveries and improved interpretations of pre-Clovis subsistence strategies to eventually solve the haunting question of how people came to inhabit the Americas. Theories promoting explanations are required as the pre-Clovis barrier progresses into fact.

By casting doubt we established the need for a way of testing the accuracy of alternative ideas. By showing that the traditional conventions could produce inaccurate results, we made it clear that we needed means for evaluating any interpretative conventions used for converting archaeological observations into statements about the past. *Only by the use of such means would it be possible to evaluate either the alternative views advanced or the traditional views being questioned.* In our view the testing of ideas was central to progress. This position led directly to the second, the investigation of the methods of inference and how to use them – in my opinion the most constructive component of the new archeology.⁴⁷

Many have come accept with the discovery of pre-Clovis habitations but a theory to guide our observation is required, one that must test it’s “international significance”! Theories, even competing theories, should be entertained in order to get the ball rolling. This book is an attempt in “converting archaeological observations into statements about the past” by evaluating “the alternative views advanced” against the backdrop of “the traditional views being questioned.”

⁴⁷ Binford, 1983b, p. 7; A change in paradigm would, I feel, follow an embracement of the anthropological significance of accepting the equatorial nature and plant based subsistence activities of New World mid-Pleistocene habitations.

An appraisal of the Archaeological record characterizing “Clovis” New World Industries would find me in fundamental agreement with Paul Martin’s hypothesis (1973) that humans may have contributed to the extinction of many large game species in the Americas. However, we do not find it any more convincing that these extinction’s were the result of equatorial subsistence strategies and plant based technologies. Rather, the cause would be the diffusion of industries found earlier in the Old World where many large game and mega-faunal hunting practices and extinction’s are known to have occurred much earlier. The defining line is the geographic constraints, the Bering Sea and Wisconsin ice sheets, barriers separating the development of alternately; medium, large, and eventually mega-faunal hunting in the Old World north and west of the Wisconsin glaciation.

Upper Paleolithic tools (and with them advanced hunting techniques) may have made their way from Europe just before the end of the Last Ice Age. They most certainly were not derived from pre-Clovis complexes. This statement is complemented by the evidence, specifically the delay in finding Paleolithic technologies in mid-Pleistocene Amerindian occupations, occupations that *must be seen as* contemporary with modern human finds from the Old World. If we find and sample more New World sites and/or dig deeper even into pre-Clovis depths we may learn to appreciate these unique sites for what they are, not for what they are not. An attempt to characterize the elevation of human lithic manufacture as an Old World invention may help resolve the difficult archaeological issue that has many hoping that Clovis was first. We can entertain an alternative reality when we, by so doing, agree to test new ideas (with-standing their challenges to fundamental anthropological thought), and implications that carry with them the acceptance of a greater time-depth for mankind in the Americas. A statement must be echoed here again that funding for mid-Pleistocene early man sites in the Americas is especially difficult to come by. These discoveries are often initially researched from out of pocket expense with little or no funding available from outside sources with the-net-result-being; that the few sites that have been found are seen as isolated statements standing alone.⁴⁸ Another problem preventing widespread acceptance or verification of these sites is in the lack of on-site participation or evaluation by the skeptics, archaeologists who continue to push their own outdated opinions.

In order to cast doubt on any “pre-Clovis” report, skeptics operating with the conviction that Clovis constitutes the only demonstrated evidence for Pleistocene humans in the Americas and therefore must be the earliest apply what they claim is the scientific method of multiple working hypotheses by raising any imaginable question about the validity of the reported radiocarbon dates, the reported stratigraphy, or the report that artifacts and/or human-made features were recovered in proper contexts. In order to put a cloud over any reported “pre-Clovis” site, skeptics, most of whom have never visited the sites in question, suggest remote possibilities that might conceivably be true, such as that an object that looks like an artifact might have been flaked during a flood or an earthquake, or is the product of a waterfall; that the radiocarbon samples might have been contaminated by coal or ground water containing ancient carbonates; that people might have collected old wood to use in their fires; or that the artifacts might have been intruded from later deposits. Although all these “alternative hypotheses” might conceivably be true, in fact, the skeptics present no actual evidence to support their claim that they are true. Nevertheless, the skeptics insist that as long as at least one alternative hypothesis

⁴⁸ (Bryan personal comm. 1993; Dillehay 1989)

has been presented, then the original report must be considered as “equivocal.” A reader usually interprets this statement to mean that the original report is probably in error and therefore should be dismissed.⁴⁹

I wish, as all theorists do, that I had more information, samples, or sites to deliver the goods others are attempting to admonish. Should the human fossil evidence - the undated fossil evidence that is available - be argued within the contexts of a new anthropological paradigm? Open for reanalysis are linguistic, genetic, dental, and geographic data encompassing a new scope of “middle range research”. This is an appeal to specialists from all scientific disciplines to examine this alternative and its relationship to their own field of study. I only ask that academia be mindful of the value of looking at science, never forgetting to always ask new questions. One must, be willing to return from the forest, half-starved, to begin again refreshed. Common knowledge is itself often led by consensus reality and generalities maintained by our initial paradigms. Of course I am not challenging the principles that we originated as a product of evolution only the exclusion of the Western Hemisphere and American Indian from the search for human origins.⁵⁰ The task in asking anthropologists to reassess the Americas for human/primate relatedness can be likened to the anthropologists asking Christian “creationists” to find atonement between evolutionary theory and Biblical scripture. The sheer number of “Amerindian” languages espouses great antiquity. Genetic support for an Asian source for Old World mtDNAs dispersals (Johnson et al. 1983) conforms in theory with an earlier common origin and a single exodus of *Homo sapiens* “out the backdoor of the Americas” into the Eastern Hemisphere.

We want others to reexamine the archaeological record and relevant implications that have been set asunder before acceptance of pre-Clovis New World habitation. We wish to build from their most ancient definitions a paradigm linking Old World anthropological observations. Science has the obligation to examine alternatives, if and when, they present themselves. It is our opinion that anthropology has yet to demonstrate that the American Indians can be unequivocally eliminated from the search for human origins. The first Chapters identified that this alternative has yet to be executed. Certainly, early Pleistocene occupations run counter to “traditional” theories concerning what archaeologists (Holmes 1899; Haynes 1967, 1988; Dincauze 1984) and evolutionary anthropologists (Hrdlicka 1912; Wallace et al. 1985, and references there in) have long contended; that mankind must have originated in the Old World. Since the archaeological record remains in disarray in the Americas (and to a similar degree in the Old World), is a demonstration that anthropologists and archaeologists are missing key elements. These elements could propel their sciences into formulations as compatible with the frameworks they have obliged themselves to define. Yet, archaeologists continue to risk their reputations in confronting evidence of mid-Pleistocene man in the Americas, without a general theory of relativity with the Old World overshadowing discretionary observations.

Are there unexplored concerns or relevant explanations available that would lead scientists to conclude that what some New World archaeologists are finding is part of a humanly created “archaeological record”, predating our initial occupation of the Old

⁴⁹ Bryan 1991 pp.....

⁵⁰ perhaps an emphasis of an earlier modern anatomical evolution

World? Simply, there is truly more than the Peopling of the Americas to be reckoned if humans were here before they were in the Old World. Pre-Clovis sites should not be dismissed because we are unable to define paradigms to support their existence or theories that would challenge time depths accompanying a fully modern human presence in the Old World. The accommodation of early New World finds are not to be found in definitions determined from Old World archaeological associations and the “given” that the American Indian “peopled the Americas”. Archaeologists should no longer be concerned with discrediting the presence of an earlier than “Clovis” human habitation, but rather, in reevaluating the anthropological significance of mid-Pleistocene habitation. We are finding new archaeological definitions offering a unique type of human occupation. Although they may be very difficult to define or substantiate they may be widespread and analogous with other genetic and linguistic interpretations supporting extensive ongoing tribal affiliations within the American continents.

“When archaeologists ask such questions we are seeking explanations, we are seeking a kind of understanding which goes beyond an unweighted description of the world; we want to know what makes the world work the way it appears to. When we address such questions we are demanding of ourselves a different kind of intellectual endeavor. We are demanding the use of our creative powers to imagine the links of determinant interaction, the ‘causal’ links if you will, which glue together the dynamics of experience and render it both understandable and capable of being anticipated. This concern with causation, determinacy, is the context of theory building.”⁵¹

I feel my own efforts would not be possible without the rigorous evaluations resulting from anthropological research today. Should Spain’s Bartholome de Las Casas, Argentina’s Florentino Ameghino, founder of Argentina’s National Museum, or Charles Lummis, founder of the Southwest Museum of Archeology have had these valuable works from which to investigate this persuasion. If they had then most certainly, the opportunity to present this idea would not be of today. I believe they were all open to the concepts I have attempted to demonstrate. The present impasse in Anthropology included both the New World origins of the “First Americans” and the Old World origins of the first anatomically modern *Homo sapiens*. These continuing uncertainties make evident that the theories constraining our perspectives of the past are not complete. The evaluations of prehistory and our own dependence on traditional ideas and basic scientific sentiment must be willing to determine alternatives. Anthropologists must not be predisposed to unproved generalities of the past. The archaeological record in the New World requires a reconsideration of traditional views and a willingness to question what we don’t know. “Science is the evaluation of our own ideas.” It is by definition “designed to evaluate these ideas.” Our appeal for a shift in paradigms are made in light of our ancestral obligations to test the perceptiveness of our own scientific knowledge. By definition, the qualities that remind us of our ongoing cultural awareness defined by the designation, *Homo sapiens sapiens* (wise man walking).

Part 10: A Reappraisal of the Genetic Data

A reverse migration from Alaska to Siberia encouraged by Amerindian mtDNA data commands a re-examination of a New World origin for the dispersal of modern man into

⁵¹ Binford, 1983b, p. 58

Asia, Australia, Europe, and Africa. Contrasting a recent settlement of the Old World is New World evidence supporting mid-Pleistocene human occupations. They do not draw separate lines in the sand but link continents once drawn asunder by outdated and unproven anthropologic objectives (MacNeish 1992; Guidon 1987; and Orr and Berger 1966; Leakey and Simpson 1968, and others). The only argument to drawn from the lack of distinguishable New World archaeological evidence must be isolation from developing Upper Paleolithic like adaptations dating <40,000 years ago in the Old World. Glaciation has been identified as the cause for the preservation of the indistinguishable Amerindian mid-Pleistocene archaeological lifeway that - however unfortunate for Archaeologists - may be representative of the aboriginal pre-Clovis Amerindian archaeological record. This contrasts the evidence from the Old World where Sudden Replacement "theory" has yet to identify Amerindians as a source for the species doing the replacing. Archeological models always starts with a "peopling" of the Americas? Perhaps it was a "peopling of the Old World" the sudden inter-continental arrival of *Homo sapiens* dictates.

Although some molecular anthropologists promote interpretations for an earlier presence for "archaic" *Homo sapiens* in Africa 50,000 to 200,000 y.b.p. there is as yet any unequivocal paleontological or archaeological evidence to support a fully modern human physical and cultural presence anywhere in the Old World beyond the onset of the Eurasian Upper/Late Paleolithic. Even the Peopling of the African interior, after earlier coastal settlement, can find corroboration in archaeological assessments and C-14 dates verifying modern human entry (into Asia and Australia) pre-date those of interior Africa. As we will test, mtDNA analyses of Native Americans - as a source for recent colonization of the Eastern Hemisphere - need be given greater attention.

If one presumes a long evolutionary history for modern humans in the Americas, then *new* blood groups in their Old World migratory relations is evidence of founding effects. This the result of adaptation to previously unknown environmental condition including exposure to new environments and pathogens. I believe the prevalence of Type O blood group accompanying the existence of "extensive genetic diversity" and "mutational drift equilibrium" implies an ancestral evolutionary isolation for modern man in the Americas. Moreover, isolation from the original Amerindian populations that exited "out the backdoor to the Americas" best explains the differences that distinguish *Homo sapiens* of the Old World from the parent populations of the New. Amerindians, having evolved in the Western Hemisphere in isolation, found little need from foreign evolutionary influence to generate new blood types. This contrasts new blood groups specifically, the AB blood types, as recent markers found in Old World *Homo sapiens* Populations. Simply, migratory response influenced the adaptation of new blood types found in isolated regional Old World populations. Simply, migrations into "Promethean" environments contributed to new blood types and, as we will see, the accumulation of novel genetic markers.

The untested American autochthonous hypotheses finds today wide ranging genetic support transcending Old World genetic findings. Warranted is our effort to reevaluate genetic (Ward et al. 1991; Chakraborty and Weiss 1991), linguistic (Chamberlain 1912; Sapir 1916; Campbell in review of Greenberg et al. 1986; Nichols 1990), and archaeological assessments promoting the residence of a significantly large "pre-Clovis" occupation of the Americas. A migration from a single source with bottlenecks associated with expanding Pleistocene-age populations finds genetic and

archaeological correlation's in Old World people and not Amerindians. Unique mtDNA distributions found in Amerindian Populations include the existence of "mutational-drift equilibrium" and surprisingly "extensive tribal diversity". This conflicts with a recent "peopling of the Americas" while just the opposite is found in Old World groups who in study after study, are found to have descended from a small subset of our initial genetic diversity. To put it in a nutshell, Old World populations represent only small subset of the original diversity found in Amerindian Populations. Conflicting evidence points to conflicting hypotheticals.

Templeton sites Excoffier and Merriweather's (1989) mitochondrial DNA analysis of Old World people and their suggestion that; "the evidence that human mtDNA variation is not in mutational-drift equilibrium is incontrovertible" (Excoffier and Merriweather 1989) (Templeton pg. 59) offering several possible explanations including expanding population size and selection.

We contrast this with Amerindian data showing extensive independent Amerindian tribal diversity, equivalent to ~62% of all sub-Sahara Africa or ~81% of urban Japan (see Ward et al. 1991). Jeffrey C. Long (1993 pg. 266), in sitting Rogers & Harpending, reaffirms the lack of evidence for a recent population expansion in Amerindians.

Interestingly, the samples Rogers & Harpending evaluated provide no evidence for bottlenecks in the evolution of American Indians. This surprising conclusion is supported by other mtDNA data (103)[Ward et al. 1991] and by some nDNA data (51)[Kingman 1978], but it contradicts other mtDNA evidence (81, 95, 100)[Schurr et al. 1990; Torroni et al. 1992; and Wallace et al. 1985] and conventional views on the subject.. (emphasis added)

Genetic Links and Old World Bottleneck

A new hypothesis implying a *reverse migration* from Alaska into Siberia details a new paradigm encompassing corollary Amerindian mtDNA data sets. This new theory, when adequately addressed, may ultimately lead anthropologists to re-examine hidden implications that, when properly apportioned, resolutely support a New World origin for the dissemination of modern humans into Asia, Australia, Africa, and Europe. 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., 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 Upper Paleolithic.

There is a presence, and in fact, dramatic increase in frequencies of several rare Asian mtDNA mutations found in Amerind-speaking Indians of the Western Hemisphere. We believe this conveys an ancestral evolutionary isolation for modern man in the Americas with mtDNAs enduring the maintenance of dramatically independent haplotype frequencies. Having evolved in the Western Hemisphere from an earlier anthropoid primate form, there was little or no foreign evolutionary influence to generate new blood types, found in their later Old World *Homo sapiens sapiens* descendants.

If one presumes a long evolutionary history for modern humans in the Americas, increased blood polymorphism's in their Old World migratory relations evidence

adaptation to previously unknown environmental factors including exposure to new pathogens. Migratory response influences adaptation varying the rate of sequence divergence found in separate regional populations of the Old World. In fact, migrations away from the New World would have had a great potential for broadening the accumulation of new blood types. Although the blood marker studies and mtDNA comparisons show sequence divergence to be greater in African populations, this evidence is contradicted by phylogenetic analysis discrediting the African origin model(s) for modern humans. There are many unrelated factors compromising the reliability of variance in specifying a certain age for any isolated population when employing rates of mutation as the product of some sort of clock. The peopling of a new set of continents could just as easily explain the accumulation of genetic markers be they the result of adaptation, drift, or both of these consequences.

African mtDNA Quote

Although the blood marker studies and mtDNA comparisons show sequence divergence to be greater in African populations, this evidence is not proof of an African origin for modern humans. In fact, there are many unresolved factors interfacing the reliability of a molecular clock.

If man was in the New World 25,000 - 35,000 or as geneticists Svante Pääbo, Rebecca Cann and Ryk Ward believe, as early as 78,000 y.b.p., why would Amerind dental traits be any younger than the "early modern patterns" of the Niah or Tabon finds 39,000 and 20,000 y.b.p.? While there is no real value in comparing modern dental characteristics with those of *Homo erectus* or other Old World hominids, it can be said that the American Indians have the least variant dental morphologies of all the world's populations. This demonstrates the stability over time of the larger Amerindian genetic base. Greater variance in Old World populations is expressed in the divergence of genetic structure when populations expand into previously unpopulated regions, such as Australia.

Nearly all, (92% of the American Indians) retain the Sinodont pattern, characteristic shoveling of the incisors, and increased frequencies of three rooted first molars present in northern Asians and Athapascans. Amerindians and Athapascans, moreover, share the same characteristic shoveling of the incisors, an ancient dental pattern present in the early modern types from Niah Cave and Tabon, characteristic of later and present day aboriginal populations of Sundial encompassing Greater Australia. This condition could link Amerindians and Athapascans to a more recent exodus during Holocene or post-glacial times. This second expansion of Amerindians north is addressed in detail in Part 23.

The initial presence of modern humans in the Old World accompanies a rapid displacement of archaic Old World hominids. This is widely accepted. However, there is little need to speculate that a violent genocide of the Neanderthals occurred at a time marked by the Upper Paleolithic arrival of modern humans, only that foreign (New World) disease may have decimated the Neandertal. A comparative example can be made when examining the bio-genocide of the American Indian following the arrival of 15th century Europeans and their introduction of exotic Old World diseases. Moreover, the indigenous Amerindian susceptibility to many Old World diseases indicates an inherent

isolation in the Americas, a presence that directly contradicts the "Clovis only" hypothesis and a recent Asian entry for Amerindians.

Could Upper Paleolithic contact between *Homo sapiens* from the New World and Old World hominids as well as exposure to natural pathogens have contributed to blood resistance alleles directing adaptations to diseases indigenous to the Old World? The development of new varieties of blood types A, B, and AB, may have resulted in geographically site-specific adaptations made as modern man colonized new, genetically hostile, Old World environments. Asia, as a point of origin for the phylogenetic mtDNA tree postulated by (Johnson et al. 1983), reflects a common wellhead for the dispersals of *Homo sapiens* (i.e. American Indians) into the Eastern Hemisphere's northern and southern regions. The wellspring was the Americas where pre-Clovis populations remained isolated from those who left, "out the Back Door to the Americas".

Reexamination of the mtDNA Tree

Any anthropologic argument that would isolate a single population as the source for fully modern humans cannot afford to ignore some valuable statements coming from recent mitochondrial DNA studies. Let me give you two examples. Researchers at the Douglas Wallace Human Genetics Lab at Emory University believed they could demonstrate the widely accepted Asian origin for American Indians by searching for related Asian mitochondrial DNAs. Instead of finding the most common Asian polymorphism they discovered four rare Asian morphs, isolated lineages (A, C, and D) found in northeast Asian populations and the region V 9bp deletion, a marker found in it's highest frequencies in Polynesians. These morphs are found in surprisingly high frequencies in regional populations throughout equatorial America. Researchers concluded that there must have been a "Dramatic Founding Effect" in the initial colonization of the Americas.

A second study of the Nuu-Chah-Nulth, from the Pacific Northwest, found "Extensive Mitochondrial Diversity within a Single Amerindian Tribe". This paper, examining a larger segment of the mitochondrial genome, finds that 1) minimum estimates indicate that the sequence divergence in this one Amerindian tribe is over 60% of the mitochondrial sequence diversity observed in major Old World ethnic groups such as Japanese or sub-Saharan Africans; while 2) the magnitude of the sequence difference between this tribe's lineage clusters suggests that their origin must predate this tribe's Pleistocene colonization of the Americas. Their conclusions suggest that, "since a single Amerindian tribe can maintain such intensive molecular diversity, it is unnecessary to presume that substantial genetic bottlenecks occurred during the formation of contemporary ethnic groups in particular that a "dramatic founding effect" did not accompany the "peopling of the Americas." They further point out that "preliminary analysis of sequence data for the same mitochondrial segment from other Amerindian tribal groups indicate that a majority tribes are as diverse as the Nuu-Chah-Nulths and that only a small subset of the lineages found in one tribe is shared with other tribes."

Analysis of the two Amerindian studies of isolated tribal populations show them to contain extensive mitochondrial DNA diversities. Comparatively, smaller regional and continental population diversities could be evidence of founding effects in the initial peopling of the Old World. Alternative explanations of molecular findings identify a migration of glacially isolated tribal groups out of the Americas. Certainly, the entire diversity of the human species did not accompany our species exodus of the Americas.

Still, many microbes could have accompanied human hosts out the backdoor of the Americas. As a consequence, the migration of humans from the Americas have resulted in the introduction of once isolated New World disease leading to bio-genocide accompanying the replacement of Old World hominid forms?

One way to account for the extensive genetic diversity and a “peopling” of the Americas is to propose numerous tribal migrations out of Asia between 33,000 and 15,000 years ago. Another idea, our own, counters that Amerindian tribes maintain extensive yet diverse mitochondrial DNA lineages because they have remained in or close to their ancestral homelands for the duration of their tribal existence. This is compatible with dates well beyond the 78,000 year age given the Nuu-Chah-Nulth (Ward personal correspondence, 1993).

The only place any earlier presence of *sapien*-like behavior is evident is in the Americas where theories, to guide our observations of a pre-Clovis as an ancestral stage, are seen as inconceivable. Anthropological interpretations have yet to test as a rational alternative, the idea that Amerindians “ ‘Peopled’ the Old World”. There are surprising findings from mtDNAs studies that should now question why “dramatic founding effect” would accompany rare Asian mtDNA frequencies in Native Americans, unless, the Americas was never peopled by way of Asia. The constraints compromising only rare mtDNA lineages emanating from northeast Asia is indicative of the similar dilemma presented by earlier linguistic, dental, and blood surveys. As Boas’ concluded, though researchers long remained unaware of his conclusions, back-migration offers a distinct explanation for links between earlier ancestral Amerindian groups and descendant northeast Asian Populations. This represents a second migration into Asia at the end of the Last Ice Age.

Timing the Arrival of the First Old World Amerindians (*Homo sapiens*)

Both archaeological and anthropologic studies are constrained by the timing of the initial hypothesized migration into the Americas. My own re-evaluation of anthropologic studies and their interpretations points to an earlier *ancestral* presence of mankind in the Americas. This presence goes well beyond a chronology that some Clovis-only archaeologist would have us currently accept. Could earlier man or ancestral man in the Americas have been able to maintain "dramatically" different sets of mtDNA frequencies? Conforming frequencies of specifically, rare northeast Asian lineages are represented in Amerindians, distinguished as recently evolved mtDNAs. These markers distinguish an earlier Ice Age migration from a later Holocene migration. This does not preclude evidence of great antiquity when “mutational-drift equilibrium” or “Interestingly, the samples Rogers & Harpending evaluated provide no evidence for bottlenecks in the evolution of American Indians”. Rather, these opposing definitions run counter to the diagnosis of a “Dramatic Founding Effect”, with direct evidence identified by Boas 100 years ago, of Holocene back migration into Northeast Asia from the Americas. “Surprisingly” compatible solutions to both “Dramatic Founding Effect” and “mutational-drift equilibrium” fit only our models of separate exodus out of the Americas.

The first *Homo sapiens* to exit out the backdoor of the Americas contained only a fraction of the original diversity. That is, a specific set of mtDNA lineages overflowed from the Americas and this subset of the original diversity augmented as human ancestors

colonized the Eastern Hemisphere. A bottleneck of the original gene-pool, contained ancient or “nodal markers” while new lineages accumulated through “mutation and drift” as distinguished in Old World People. More recent, continent or regional specific mtDNAs may have been generated during and/or after the expansion of *Homo sapiens* as *Homo sapiens* ‘Peopled a *new* Old World’. A common set of ancestors (the mitochondrial Eve Hypothesis) verifies a severe bottleneck of mitochondrial DNA frequencies found in populations from the Eastern Hemisphere. This supports our historical interpretation of a small founding population for all later Old World commonalty. Simply, only subset of the original diversity found in the New World could have exited with the first people settle the Old World. Rebecca Cann suggests as many as 33 eves can be distinguished from the Americas while only a subset of this gene-pool, again, resulting from bottleneck, is found in the Eastern Hemisphere.

The determination of a recent origin for mtDNAs present in the Old World characterizes a common human gene-pool that post-dates the bottleneck distinguishing humankind’s initial migration through Beringia ~45,000 years ago. The development of unique tribal mtDNA lineages in separate regional populations corroborates other evidence of a recent expansion of Old World Populations from a relatively constricted common source. Clearly, a recent Peopling of the Old World best explains the discrepancies in genetic data that have erased any evidence of bottlenecks in New World Tribal Populations.

Amerindians as the Source for Old World Population Expansion

Genetic and linguistic data indicates the existence of a very large, yet distinct, set of Tribal Populations well established in Pleistocene Americas? "Mutational-drift equilibrium" and "extensive tribal diversity" exists in mtDNA of Amerindians and Amerindians alone while two thirds of the Worlds languages are found indigenous to the Western Hemisphere. Moreover, if there were substantial numbers of people in the Americas, enough to support greater linguistic and genetic diversity found in Amerindians, they must be hiding behind an archaeological context that is not comparable to Old World Paleolithic behavior. Is the problem of accepting the biological and linguistic evidence at face value confounded by the fact that archaeologists have no way of anticipating pre-Clovis behaviors as ancestral to later Old World Paleolithic lifeways? We have placed all the eggs in one basket by demanding the Americas were Peopled from the Old World. In unraveling what remains of the "Gordian knot" anthropologists must remember that the basic tenet of evolutionary theory is what came first. Our most recent past must also find compatible archaeological observation of human habitation, a perspective that continues to change while seldom, if ever, engaging autochthonous models. Subsistence behaviors exemplified in the preserved definitions of Chile's Monte Verde offer the best example of human habitation found anywhere in pre-Clovis America. The basic tenets of the now defunct theory of Clovis-First must come full circle since the explosion to Paleoindian Traditions defies a relationship stemming from the first indication of the earliest ancestors of the Americans. The cart did not precede the horse as the archaeological record sustaining pre-Clovis behaviors does not emanate from Old World Paleolithic behaviors. Clovis First Theory links the Upper

Paleolithic with Paleoindian Traditions by diffusion, demic diffusion if you incorporate the X mtDNA marker as a demographic link to Paleolithic European⁵²

Critics have long pondered why there is no accepted archaeological evidence of an early human habitation in the Western Hemisphere. I believe such evidence does exist but defies a pattern anticipated by researchers. For the time being, it remains an interpretational dilemma requiring a redefinition of lithic or pre-lithic tool-making origins. What is the nature of Pleistocene forager/gatherer subsistence, evidence that both supports and defines the lifeway of pre-Clovis habitation? Why are Upper Paleolithic archaeological definitions - those describing a specialized megafauna hunter/gatherer industry - missing in post Wisconsin I times in the New World? What is the potential time depth for these kinds of unique equatorial subsistence strategies comprising simple bone, wood and stone tool industries? These are questions that remain unanswered today while, as stated before, there are many who have accepted their challenge while there is, as yet, a theory to direct an acceptance the limited contexts pre-Clovis affords.

Genetic and linguistic relationships may indeed exist between Northeast Asians and Amerindians due to Amerindian migrations into northeast Asia at the end of the last Ice Age. This later migration may confuse geneticists and the supposition that they have found the ancestors of American Indians. Their “suggested results” are directed to a single tribal dispersal that are not linguistically sustainable or arguably demonstrated by Joseph Greenberg’s own suggestion of one Amerindian language family. A majority of professional linguists are *not* in agreement with the methods used in the classification of Amerind as a single linguistic unit. What is noteworthy *is* a fundamental agreement regarding agreement with Greenberg’s assessments of only four African language groups.

Dental studies may also provide us with something substantial to chew on, food for thought, so to speak. It is compelling that dental traits found in living Amerindian populations are found in the oldest fossil humans from Niah and Zhoukoudian, suggesting an earlier presence of these patterns in the Americas. Shoveling of the incisors and the near absence of three-rooted molars are traits found in Amerindians but are not uniform. They are most closely related to the earliest Old World human remains and are thought to be recessive in Australian Aborigines.

My hypothesis suggests that isolated tribal groups caught north of the initial depositing of Wisconsin I glaciation were the founders of preliminary Upper Paleolithic adaptations. The other Amerindian tribal groups with their ancient linguistic affinities and extensive, yet independent, mitochondrial DNA diversities remained below the Wisconsin I glacial expanse. Archaeological evidence directly supports this contention as Pleistocene Amerindian Tribes must have been isolated from advances analogous with Upper Paleolithic industries. That only a small portion of the diversity would exit the Americas suggests that the Old World’s mtDNA Eve came from the Americas.

Why are archaeological and anthropological explanations constrained to identify the timing of the initial hypothesized migration(s) into the Americas? Clearly, the genetic and linguistic implications support a presence that defies the chronology that “Clovis-

⁵² Paleolithic Cultures may have come directly from Europe at the end of the Last Ice Age, bringing with them technologies that pre-Clovis People could have developed into fluted “Paleoindian Traditions”.

⁵³ I should state explicitly that some or most of these researchers oppose my view, and that my interpretations of the data they have gathered, are my own.

First” archaeologist have long championed; a less than 12,000 y.b.p. *When Man First Was* intends to take mid-Pleistocene habitations a full step further by redirecting the anthropological contention that *Homo erectus* is not a genetically reliable progenitor for anatomically modern humans, *Homo sapiens*. What can we learn by including the American Indian and the Western Hemisphere in a separate search for human/primate relationships. Again, the theory we endorse identifies only solutions to problems by accepting that the Western Hemisphere spawned the wellspring for fully modern humans. We believe these implications will find support in the conclusion that both hemispheres may have maintained viable primate sources for hominoid evolution. We hope to demonstrate that terrestrial habitats were secured by the earliest of *our* ancestors entirely within the confines of the New World.

An American Eve

The laboratory of Douglas Wallace at Emory University determined that they could demonstrate the “widely accepted Asian origin for Amerind speakers” by searching for related Asian mitochondrial DNA’s.⁵³ Yet, instead of finding many of the definitive or common “Asian” markers, traditionally found in southeast Asians, they discovered precisely four “rare Asian morphs,” Three of these are the rare Asian RFLP *HincII* morph 6, a rare *HaeIII* site gain, and a unique *AluI* site gain, isolated lineages now been reported in northern Asian populations (Schurr 1993). The forth “supposed’ founding lineage, [the region V 9bp deletion] is missing in northern Asians, Beringians, Eskimo and Athapaskan populations (Shields et al. 1992). “Interestingly,” these lineages were also found to be present in regional populations throughout the Americas at surprisingly higher frequencies than in Asia. Researchers at Emory University “suggest” that there must have been a “bottleneck” in the initial colonization of the Americas⁵⁴, despite numerous studies contradicting this assessment (Ward et al. 1991; Chakraborty and Weiss 1991; and Horai et al. 1993; and others).⁵⁵

2/4 This explanation counters genetic linkage “suggesting Founding Lineages” with fresh light as the Jesup Expedition reaches it’s 100 year anniversary (1897 - 1902). Moreover, back-migration has rarely been identified since first proposed by Boas and his colleagues. In fact, in a luncheon conversation with Dr. Theodore Schurr at the “Clovis and Beyond” Conference in Sante Fe NM (1999) Dr. Schurr informed us that molecular anthropologists at Emory University were unfamiliar with Boas’s contention when they drew their initial conclusions.

RUSSIAN QUOTE

Perhaps this helps explain why researchers have been reluctant to entertain the back-migration paradigm when published their results between 1985 and 1996 before the Centennial Anniversary of the Jesup Expedition. This helps explain why genetic papers published before the 100 year anniversary of the Jesup Expedition did not cite the

⁵⁴ (Wallace and Torroni 1992)

⁵⁵ Ward et al. op. cit.; Horai et al. op. cit., and Chakraborty, Ranjit and Kenneyh M. Weiss, "Genetic Variation of the Mitochondrial DNA Genome in American Indians is at Mutation-Drift Equilibrium," *American Journal of Physical Anthropology* 1991, 86:497-506. It should be noted here that Ryk Ward, in personal correspondence to this author (1991), found his own data to be "resonate" with my ideas.

compelling alternative of back-migration as described in Chapter 6. Simply anthropologists were un-aware of Boas's conclusions in the early 1990s while few, if any, papers cite the "alternatives" he outline nearly a hundred years ago. Could not the three waves of migrations that are postulated to have produced New World Paleoindians be rather a set of independent "tribal" migrations out of the Americas?

The dramatic founding effect suggested by Emory University's mtDNA studies of Amerindians are again based on the interpretation that there is most likely a northern Asian *source* for the original American Indian population. Similarities between Asians and American Indians has another explanation (see Boas 1905, 1910), for, should as few as four maternal ancestors and their kin be responsible for the colonization of the Americas why should or would 200 language families follow? Genetic links of rare northeast Asian mtDNAs with Amerindian mtDNAs is best explained by the main paradigm gleaned from the Jesup Expedition, Holocene back-migration. Here populations from the Americas also evolved new regional mtDNAs while isolated in the Americas during the Last Ice Age. A *second* post-Pleistocene *migration into northeast Asia* by Athapaskans and Inuit followed the melting of the Wisconsin Ice Sheets 12,000 years ago.

Schurr remains a leading advocate of "founding lineages in northeast Asia" for Native Americans. He is also staunch supporter of a pre-Clovis Peopling of the Americas. Despite indifference to Boas's contention, both linguistic and genetic studies discount the Clovis-first hypothesis as not enough time has elapsed to account for the "extensive" genetic and linguistic diversities these studies identify. They see the limited definitions defining pre-Clovis habitations as irrelevant, they simply believe that tribal people were here in large numbers without suggesting why the archaeological record seems to be putting the "cart before the horse". They seem to be hoping that archaeologists will eventually define a theory that is compatible with behaviors found at Monte Verde since pre-Clovis sites do not contain a "Paleolithic" character.

A second study undertaken by Ryk Ward at the University of Utah and Svante Paabo at the University of Munich is titled "Extensive Mitochondrial Diversity Within a Single Amerindian Tribe". This observation was drawn from studies of the Nuu-Chal-Nulth, from the Pacific Northwest. This paper examines the highly selective "D loop region" by "directly sequencing the first 360 nucleotides of this DNA segment," an informative mitochondrial control region for the, "maternally related" mtDNA genome. Their analysis finds that: 1) minimum estimates indicate that the sequence diversity in this one Amerindian tribe is over 60% of the mitochondrial sequence diversity observed in major Old World ethnic groups such as Japanese or sub-Saharan Africans; 2) the magnitude of the sequence difference between this tribe's lineage clusters suggests that their origin must predate this tribe's Pleistocene colonization of the Americas; and 3) "since a single Amerindian tribe can maintain such intensive molecular diversity, it is unnecessary to presume that substantial genetic bottlenecks occurred during the formation of contemporary ethnic groups in particular that a 'Dramatic Founding Effect' did not result in the peopling of the Americas" (Ward et al. 1991). They further point out that;

"preliminary analysis of sequence data for the same mitochondrial segment from other Amerindian tribal groups indicates that a majority of tribes are as diverse as the Nuu-

Chal-Nulths and that only a small subset of the lineages found in one tribe is shared with other tribes.”⁵⁶

Despite the radical drop in Amerindian populations following post Colombian colonization, singular tribal lineages in the Americas have retained their own independent diversities equivalent to 62% of all of sub-Saharan Africa or 81% of Japan (Ward et al. 1991). Moreover, “few, if any,” (Horai et al. 1993) of the expected or common mtDNA mutations found in southern Asians and other Old World populations are present in Amerindians (Johnson et al. 1983; Schurr et al. 1990). Even more surprising, the genome of Native Americans is found to be “in equilibrium”, the only people where evidence of the effects of a founding population are not evident (Chakraborty and Weiss 1991). The genetic data leads me to conclude that an analogy exists; that *many* Amerindian tribal groups could date back in the Americas *beyond* the sequences archaeologically, biologically, and behaviorally associated with the radiation of fully modern humans in the Eastern Hemisphere. While analysis of mtDNA diversity in Africa implies that the common ancestor(s) (Vigilant et al. 1991) in Africa date to between 200,000 and 50,000 y.b.p. and no further, (mtDNA is not dateable and inferences suggesting time depth are highly speculative - see Templeton 1993 -), fossil and archaeological evidence of anatomically modern humans do not date beyond 45,000 years.

Part Five: Language Correlates and Related Fields

Homo erectus did not have the physical anatomical equivalent of the modern human larynx and, therefore, could not enunciate many verbal sounds. This inability is useful in identifying vast cultural differences between *Homo erectus* and *Homo sapiens*. My contention implies that all Old World languages had a Native American ancestral base with the earliest colonists becoming isolated following the onset of the Wisconsin Glaciation. In fact, the colonization of the Eastern Hemisphere by modern humans from the Americas may better indicate what would be likely to occur in the settlement of unknown continents. This being, behavioral adaptation like those found in the Old World Late/Upper Paleolithic.

Paleoindian fluted tools, the Amerindian languages and ancient dental traits found in the southern American Indians would be ancestral evidence linking northeastern Asians with Athapascans and Sea Mammal Hunting Culture from the Americas. American Indians maintain a specific abundance of languages that do not appear to be descendent of any ancient Old World tongue. Extensive linguistic diversity supports a northern South American origin for the initial dispersal of Joseph Greenberg's macro-phylum classification of "Amerindian," (I. Dyen in Harold Flemming's public correspondence, 1989).

Even if the American Indian hypothetically left from Asia 15,000 - 30,000 y.b.p., one could still conclude that the Amerindian dental pattern is older than both the increased frequencies of specifically 3-rooted molars comprising northeastern Asian Sinodonty while Amerindians also maintain other distinctive Sundadonty characteristics including heavy shoveling of the incisors. The high frequency of three-rooted molars is most pronounced in northern Asians and American Indians today. Amerindian dental traits are also found in early dental patterns of the oldest east Asian fossil remains of

⁵⁶ Ward et al. 1991

Homo sapiens from Niah Cave and Tabon in Southeast Asia. These ancestral dental traits are also found in Australian Aborigines but in reduced frequencies. Simply, the 3-rooted molar and heavy shoveling of the incisors may have been part of the early *Homo sapiens* dental pattern.

The multi-disciplinary proof finds that; Amerindian's retain three-fifths of the World's languages while genetically; Amerindians maintain dramatically divergent, (Schurr et al. 1990), yet extensive independent, tribally oriented (Ward et al. 1991) mtDNA lineages. Moreover, a majority of professional linguists are not in agreement with the methods used or the classification of "Amerind" as a single linguistic unit. Greenberg's work, non-the-less, suggests that 'Amerind' comprise 12 distinct groups.

Even Greenberg, Turner and Zegura (1986; 487) regard their 'genetic' data as "still without confirmation" and so as "supplementary." Therefore, since their dental/genetic claims are not supported, correlations between such claims and Greenberg's linguistic classification (also not substantiated) can be of little value, and postulated migrations to the New World based on such correlations are unwarranted. Finally, as persuasively argued by Rebecca Cann (this volume), the mitochondrial DNA evidence indicates that there were at least eleven lineages from which American Indians descended, perhaps thirty-three; this indicates either several migrating groups or large migrating groups with many unrelated females (cf. Morell 1990; 440 in Campbell 1990).

It is noteworthy to consider *that there is a fundamental agreement* regarding Greenberg's assessment that Africa contains but 4 language groups (Campbell 1990) when this is the continent most often identified as the source for humans. Shouldn't Africa hold the greatest time depth and resulting diversity? Migration theories for the supposed first Americans offer no compelling explanation to account for "extensive" genetic and linguistic diversities. Yet, everyone believes their data must acquiesce to a model compatible with a recent arrival to the New World.

Pleistocene occupations in the Americas exist while genetic (see Schurr et al. 1990; Ward et al. 1991; Chakraborty et al. 1991; Horai et al. 1993) and linguistic (see Sapir 1916; Campbell and Goddard 1990; Flemming 1992; and Nichols 1990) studies support this contention. The "extensive" genetic and linguistic diversities should require greater analytical attention and a valid re-appraisal of their evolutionary and anthropological significance beyond the limitations an Asian origin confounds. Perhaps Amerindian tribes appear to maintain extensive, yet diverse, mitochondrial DNA lineages because they have remained near their ancestral homelands for the duration of their tribal existence. The great diversity offered by genetic and linguistic perspectives does not afford the conservative archaeological contention, that their were only small scattered populations existing in the Americas as "Clovis First" proponents offer in explaining the actuality of pre-Clovis (Fagan 1998).

This interpretation could imply evolutionary perspectives that would find support for: 1) implications of a southern American Pleistocene archaeological context and an earlier reliance on equatorial subsistence strategies demonstrated by plant based economies incorporating bone, wood and simple stone tool industries that may have been geographically isolated from the stone age Middle Paleolithic and/or the recent Aurignacian technologies (<40,000 y.b.p.) of modern humans comprising the European Upper and Asian Late Paleolithic; 2) linguistic families that comprise well over half of the World's languages (Sapir 1916; Goddard 1927; Greenberg 1987; Nichols 1990) in

direct conflict with the “Clovis First hypothesis” affording only a recent post Pleistocene migration from Asia; 3) Sinodontal dental patterns that are characteristic of dental traits found in the modern human from, Zchoukotien, Niah Cave, and aboriginal populations in Australia today (Hanihara 1992 p.193); 4) independent tribal lineages that contain “extensive genetic diversity” greater than the diversities found in much larger tribal populations (and/or regions) of the Old World (Ward et al. 1991); 5) indications that Amerindians have achieved “mutational drift equilibrium” (Chakraborty et al. 1991); and 6) the probability of Holocene migration(s) into Siberia from the Americas (Hicks 1998; Boas 1905, 1910) redirects the suggestion that a “Dramatic founding effect” with as few as four maternal ancestors accounts for similarities between northeast Asians and Amerindians. (Wallace et al. 1985)⁵⁷

Soon after Sapir proposed the Na-Dene family he became aware of many striking similarities between the Na-Dene family and the Asian language family known as Sino-Tibetan. In his correspondence with Alfred Kroeber, Sapir left no doubt that he was absolutely convinced that Na-Dene and Sino-Tibetan belonged to an even more ancient linguistic family: “If the morphological and lexical accord which I find on every hand between Na-Dene and Indo-Chinese [Sino-Tibetan] is “accidental” then every analogy on God’s earth is an accident. It is so powerfully cumulative and integrated that when you tumble to one point a lot of others fall into line” (Golla 1984;374). ...Owing to the recent discovery of this family (or re-discovery, in light of Sapir’s earlier proposal), there is not yet a consensus on precisely which language families constitute Dene-Caucasian. I believe that the following should be included: Basque, (North) Caucasian, Sumerian, Burushaski, Nahali, Sino-Tibetan, Yeniseian, and Na-Dene.⁵⁸

Part Eleven: Is Reevaluation Warranted?

A scientific reappraisal of recent anthropologic studies would open discourse, leading to a new evaluation, supporting conclusions that we have tried to set forth. Our problem is that scientists represent one of the most cautious fellowship’s and dare not stake their reputations on far-fetched hypotheses like the one were testing here. Were we attempting to create a hoax or to rationalize an ancestral relationship that might be granted the indigenous people of the "New World" in order to promote their own interpretations, then so-called "arbitrary" conclusions that have been drawn would be only too easy to refute. We believe recognition is due many New World archaeologists and the sites they have long identified as proof of an earlier, Pleistocene presence. Anthropology remains one of the most conjectural fields of academic and scientific endeavor. While there is merit for skepticism and a desire to demonstrate unambiguous truth’s, we should also be mindful not to overlook the potential resolution(s) a human origin for mankind in the Americas holds.

The bulk of the evidence, supporting a recent Asian entry for Amerind-speaking Paleoindians, is based on predisposed Euro-centric interpretations and unproven anthropologic givens. What is clear is that there is substantial evidence of pre-Clovis occupation in the Americas with little links to what were the first modern

⁵⁷ Torroni, Antonio, Rem I. Sukerik, Theodore G. Schurr, Yelena B. Starikovska, Margaret F. Cabell, Michael H. Crawford, Anthony G. Comizzie, and Douglas C. Wallace, "Mitochondrial DNA Variation of Aboriginal Siberians Reveals Distinct Genetic Affinities with Native Americans," in *The American Journal of Human Genetics* in press, September 1993a.

⁵⁸ Ruhlen 1989 pp.12-13

hunter/gatherers cultures of the Old World. In fact, a great deal of study lies ahead regarding the implications accompanying the acceptance of a contemporary Amerindian presence and a *pre-paleo-Indian* stage and a glacially isolated (pre-Wisconsin I) presence in the Western Hemisphere. The limited concepts affording a new progressive approach must clearly change for scientific investigation of the “peopling” of the Americas to progress into a “peopling of the Eastern Hemisphere. Acceptance from earlier opponents of “pre-Clovis” occupation will require a redefinition, one that must examine the contemporary Upper Paleolithic of the Old World with the contemptuous nature archaeologists must decipher in accepting contemporary pre-Stone Age behaviors unearthed from New World Pleistocene sites.

The Upper Paleolithic emergence of big game hunting could have resulted from a successful migration from North America by early Amerindians. The distinctive nature of the Amerindian pre-Clovis or pre-Paleoindian stage bespeaks of an earlier application of *human* subsistence behavior in the Americas intimating that Paleolithic hunting strategies were not practiced. The presence of these unusual pre-Paleo-Indian life-styles remained uniform until the end of the Würm-Wisconsin glaciation 12,000 y.b.p., when I believe the first migration of people from the Americas may have returned. That the earliest New World lithics do not contain stone projectile points (their invention goes back 40,000 years in the Old World) is a fascinating fact and indicates a pre-Upper Paleolithic isolation for modern man in the Western Hemisphere. Recent genetic evidence suggesting as few as four maternal ancestors for the pre-Paleo-Indian peopling of the Americas is based on the conclusion that the American Indian migrated to the Americas. Amerindians could not have been the product of New World evolutionary process. Our intention is to redirect the anthropologic contention that *Homo erectus* is not a genetically reliable ancestral relation for modern man by including the American Indian and the Western Hemisphere in a separate search for human origins.

Many molecular anthropologists contend that known hominid lineages descending from *Homo erectus* are not specifically ancestral to modern man. These anthropologists propose that our modern progenitors had a single set of common ancestors that were not related to *Homo erectus*. In spite of all the money that has been spent in the Eastern Hemisphere, we have yet to find a descending line of Old World hominids that can be anatomically assured as directly evolving into modern humans. Let us turn now to what we have uncovered from the Old World and examine what we believe is a recent settlement by Amerindians of the Eastern Hemisphere.