The Bering Strait and American Indian Origins

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13

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The purpose of this chapter is to examine, contrast, and question the widely held and generally accepted beliefs concerning America's aboriginal inhabitants and the manner of their arrival in the Western Hemisphere.

Among the sources cited are those which assert, either directly or by implication, that the Bering Strait formed a land, ice, or water bridge for countless numbers of Old World immigrants entering the vast, unoccupied expanses of the Americas. Although the literature has been virtually unanimous on this point, the hypothesis that the Bering Strait was the only or even the primary route of access used by the ancestors of the American Indian is inescapably open to question.

The virtual absence of artifacts necessary to establish cultural parallels between habitation sites located on opposite sides of the strait should have encouraged doubt and fostered debate. In addition, the ancestral origins of the Paleo-Indian and the time of their arrival in the Americas are subjects that have not been conclusively established. An uneasiness in this regard is expressed in the writings of

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some thoughtful scholars who are bothered by wildly inflated dating and questionable artifact claims. One of these scholars, H. Marie Wormington,[1] though herself an advocate of man's early presence throughout the Americas, cautions against unwarranted speculations at excavations such as the Texas Street and Calico Hills sites in California, where experts have dated artifacts at more than 80,000 years B.P. (before present). Even though the latter dig is a project headed by Richard Leakey, son of the famed African pre-historian Louis Leakey, Wormington suggests that the dates are open to question and the artifacts found may be natural rather than man-made.

Declaring that all research in the area of American Indian antiquity must meet reasonable standards, such as a clearly defined stratigraphy, reliable and consistent radiometric dates, and contextually acceptable human artifacts, Dennis Stanford rules that "none of the currently known archeological sites found south of the ice sheets, and for which great age is claimed, meets these criteria at this time."[2] Stanford criticizes interpretations given of all such sites, concluding that "we cannot decisively push back the time of human occupation beyond 12,000 B.P."[3]

Roy L. Carlson points out that truly early dates, 70,000 B.P. and older, are acknowledged primarily by the excavators alone.[4] The scientific community as a whole rejects them, believing that the overlap between naturally flaked objects and those of possible human origin, plus the absence of an acceptable cultural context, compromises the finds as credible evidence of man's presence. Carlson admits that the period from 63,000 to 23,000 B.P. was best suited for man's arrival from Asia, but declares that the evidence of this arrival is rare.[5] Stone tools said to have come from the period are clearly questionable, and human bones located at Delmar and Sunnyvale, California, previously dated at 48,000 and 70,000 B.P., have more recently had their ages set at 11,000 and 8,300. Also, remains of the Tabor Child from southern Alberta, originally said to have lived 40,000 years ago, is currently assigned an age of 3680 $\pm$ 4800 B.P.

Although not all of these assertions are sympathetic with the findings of this chapter, they do hint at divisions

that persist concerning the issues of Indian antiquity and Indian origins. While neither the conclusions drawn nor much of the evidence presented in the following pages will be greeted with enthusiasm by some students of the subject, the sources utilized typify the large body of materials consulted which further substantiate these conclusions.

The Earliest Americans

Kenneth MacGowan and Joseph A. Hester, Jr., describe the earliest human residents of the Americas as being archaic in appearance, having long heads with straight sides and heavy brow ridges.[6] In their opinion, these early finds do not demonstrate Mongoloid characteristics and are not typical of the present American Indian. George Woodbury draws a similar conclusion, declaring that the fossilized bones exhibit "no affinity" with those of historic American Aborigines.[7]

Earnest Hooton states that the long-headed, heavy-featured crania are the remains of peoples who were closely akin to the Europeans of the same period. He describes them as being primarily white with "Nigritic elements and with whatever else was kicking around Asia before they crossed the Bering Strait."[8]

Harold Gladwin measured the skull of a pygmy-eating Australoid called Talgai and found a distinct resemblance between it and the several early American finds.[9] He concludes that the earliest American was an Australoid, not a great deal different from the present Australian Bushman. Since it would have been rather difficult for this ancient personage to have journeyed successfully from Australia to the Bering Strait and from there into North and South America, Gladwin suggests he originated either in Africa or Central Asia. From there, two factions of the original group parted company and eventually made their way to two widely separated locations, the Americas and Australia.[10] Richard Schutler supports this common-origin theory, suggesting a pre-Mongoloid ancestor in southern China some 70,000 to 100,000 B.P.[11]

Others who have pursued the non-Mongoloid theme are James B. Griffin, Paul S. Martin and Alex Hrdlicka.

Griffin stated that these earliest skeletal finds were of Europoid physical type,[12] while Martin wrote that both round heads and long heads came early to America, but that the long heads were definitely here first.[13] Hrdlicka, who toured Siberia early in this century, saw among the Siberians clear traces of an older, pre-Mongolian, especially pre-Chinese, population whose vestiges were identifiable in the American Indian.[14] Harold Driver likewise concludes that the Indian physical type is closer to that of marginal Mongoloids, who represent an earlier, less specialized racial type than the Mongoloids of China, Mongolia, and Japan.[15] At one time living in most of Asia north and east of India, they shared more characteristics with Europeans than with traditional Mongoloids. Some scholars believe that the peoples of Indonesia, west central Asia, and Tibet descended from them.

Following the Australoids from 17,000 B.P. to 4,500 B.P. Harold Gladwin writes of a migration of Negroids or Folsom men who made their way up the east Asian coast and crossed successfully into the New World.[16] From the close of this migration until 2500 B.P., his third group arrived. This aggregate of individuals, being a combination of Mediterraneans and whatever else may have been picked up en route, made its way from Africa through Spain, France, Bavaria, and Silesia to Siberia, and on to North America, settling across the continent from Oregon to New England.[17] Presently called Algonquin, these people were supposedly carriers of cord-marked pottery, which ceramic not only identified them but also marked their route of travel. Gladwin's fourth migration consisted of the Aluets and Eskimos, who arrived sometime prior to the first century B.C.[18] Hooton, who drew his conclusions following a careful examination of available skulls and skull fragments, like Gladwin, thinks in terms of multiple migrations, the last being the Mongoloids. Of this group he writes:

> At a somewhat later period there began to arrive in the New World groups of Mongoloids coming by the same route as their predecessors. Many groups of these were probably purely Mongoloid in race, but others were mixed with some other racial element notable because of its high-bridged and often convex nose. This

> may have been either Armenoid or Proto-Nordic (or neither one). These later invaders were capable of higher cultural development than the early pioneers and were responsible for the development of agriculture and for the notable achievements of the New World civilization. In some places they may have driven out and supplanted the early long-heads, but often they seem to have interbred with them, producing the multiple and varied types of the present American Indians—types which are Mongoloid to a varying extent, but never purely Mongoloid. Last of all came the Eskimo, a culturally primitive Mongoloid group, already mixed with some non-Mongoloid strain before their arrival in North America.[19]

An opposing view is that of Clark Wissler, who states that the first Americans not only came from Asia via the Bering Strait, but were closely related to the historic Chinese Mongoloids.[20] His examination of their remains led him to declare that they were Indian in type. He arrived at this decision, in part, by assuming that the Mongoloids controlled Asia during the earliest migrations and were masters of the area. No foreign migrations, Negroid, Australoid, or otherwise, could have made it through to the northeast Asian outlet adjoining Alaska.[21] Wissler is supported in his conclusion by almost all other authorities. Robert Clairborne has even written that "no scientist today doubts that American Indians are genetically most akin to the present peoples of East Asia."[22]

In addition to assuming that the earliest immigrants to the Western Hemisphere had to be Mongoloid due to their geographic proximity and because they formed an insurmountable barrier which discouraged other migrations, scholars generally point to an obvious likeness of hair and facial features as well as less known but equally profound dental comparisons. Among those examining dental similarities is Christy Turner, who has demonstrated the possible common ancestral roots of these New and Old World peoples.[23] Using all suitable Paleo-Indian remains, including Minnesota Lady and Midland, Texpexpan, Lagoa Santa, Cerra Sota, and Palli Aike Man, as well as archaic finds from California, Saskatchewan, Quebec, Alabama, Tehuacan and Cuicuilco, and later prehistoric Aleut-Eskimos and Indians—in all more than 4,000 individuals—Turner demonstrates that all apparently possessed crown and root trait frequencies similar to those of northeastern Asiatics.

Among the seventeen traits analyzed, incisor shoveling, double shoveling, single-rooted upper first premolars and three-rooted lower first molars are relatively common. For example, 91.2% of American Indians have shovel incisors and 71.3% have double shoveling. Such trait intensification and addition is called *sinodonty* and occurs only in northeastern Asia and the Americas.

Turner's findings led to the conclusion that American Indians are of Mongoloid stock, that multiple-origin hypotheses have no validity, and that, except for some Aleut-Eskimo and other related peoples, all North and South American Indians are descendants of an original Paleo-Indian population.[24] Turner also found that, given the small, almost immeasurable amount of evolutionary change or divergence among Indians living from the Arctic south to Tierra del Fuego, the time of Paleo-Indian entry into the New World was as recent as 15,000 years ago. Their point of origin, Turner noted, was the Lena Basin in Siberia, a site far enough west to have been subject to some European influences. This explains a slight European condition in Indian dental conformation.[25]

Issues That Muddy the Waters

These conclusions drawn by Turner, Wissler, Clairborne, and others are clearly at odds with some of the previously mentioned data. For example, as Wissler points out, there are Indians who resemble in some respects the remains of what are thought to have been their earliest American ancestors. These ancestors, however, are not representative of the Mongoloid physical type, past or present. This was further demonstrated by Edgar B. Howard, who described them as being a composite of Mediterranean, Negroid, and archaic white elements with Mongoloid blending of a later date.[26] James B. Griffin claimed that "the Indian did not belong to a single physical type," as evidenced by the "great many linguistic groups in America." [27]

This statement by Griffin introduces a further significant point. If, as indicated, the Indian is truly Mongoloid, either recent or prehistoric, there should be some language similarities between the two groups. It appears, however,

that, with the exception of the Aleut-Eskimos, there are virtually none. Further, as Griffin, Kroeber, and others have noted, there is greater language variation among and within the many North and South American Indian tribes than among any other related peoples on earth. The number and variety is such that some agent other than time must provide an explanation. This is especially true if the time frame is as recent as that set forth by Turner. Whereas the validity of her data on dental comparisons necessitates a postglacial entry of early man into the New World, the language differentiation within North and South America and the lack of affinity between these languages and northeast Asian tongues[28] requires either a beginning far back in antiquity or a multi-origin tradition of considerable breadth.

The situation is further complicated by the question of blood types, a condition which the passing of millennia alone cannot resolve. From birth, every individual belongs to blood group A, B, AB, or O. Each segment of the world's population has one or more of these in various proportions. In Spain, for example, the breakdown is 46.5% A, 9.2% B, 2.2% AB, and 41.5% O. A typical Mongoloid runs 25.1% A, 34.2% B, 10.0% AB and 30.7% O. The high incidence of B is typical of East Asian subgroups, but of no other people on earth.[29] Given their assumed Asiatic origin, one would naturally expect a similar incidence of B among New World aborigines, but such is not the case. Except for the Aleut-Eskimos of the far north, B is not present within relatively uncontaminated societies. Ratios as high as 80% to near 100% O are common, along with a slight incidence of A. Present evidence suggests a near-total absence of A, B, and AB in prehistoric times among early inhabitants of the New World.[30]

As can readily be seen, the questions raised by such matters as skeletal characteristics, dental peculiarities, language differentiation, and blood types translate into a complex level of inquiry into the origins of American Indians and raise doubts concerning such commonly held beliefs as those expressed by Alex Hrdlicka[31] and others, who assert that the differences between Indians and Indian groups are more imagined than real and that time, isolation,

and inbreeding, along with unquestioned Mongoloid ancestry, are responsible for America's aboriginal inhabitants.[32]

Despite what appears to be a veritable "can of worms" in terms of unresolved issues and an absence of concrete answers, there is one issue and one answer with which almost everyone nevertheless declares himself to be in agreement: that the Bering Strait was the route of entry for virtually all the ancestors of the Americas' aboriginal inhabitants. With this matter supposedly settled, all related problems are treated as easily resolved or yet-to-be-explained minor differences. Thus the question for most is not whether they emigrated via Siberia and Alaska, but rather when and how.

The Bering Strait

Any discussion of the Bering Strait, a 56-mile-wide, 180-foot-deep body of water separating the Asian and North American continents, as a prehistoric port of entry for early Americans must reckon with the Late or Upper Pleistocene glacial period, labeled the Wisconsin. It was during the middle, late, and postglacial periods of this most recent of several great ice epochs that man presumably crossed into and firmly established himself in the Americas. As Knut R. Fladmark has noted, and most other authorities agree, "Any specific discussion of Early Wisconsinan [pre-60,000 B.P.] environmental parameters significant to human occupation would be so speculative as to be essentially meaningless."[33]

The post-60,000 B.P. middle period of the Wisconsin was significant in human history. It was then that Homo sapiens neanderthalensis was replaced by Homo sapiens or modern man. It was during this interval that man, equipped with Upper Paleolithic technology, may have arrived in eastern Siberia. During much of this era, 60,000 to 25,000 B.P., most of the land mass on either side of the Bering Strait was ice-free, and the strait itself was a broad, unencumbered land bridge for a 6,000-year span from 32,000 to 38,000 B.P.[34] (Since there is no way of knowing the exact years associated with the various phases of the Wisconsin or any other ice age, those used are the ones thought best suited to the available evidence.)

This was a time when both flora and abundant mega-fauna such as the mammoth, mastodon, musk ox, horse, bison, elk, moose, and camel, all of which presumably originated in the Old World, may have crossed into Alaska and eventually southward into other parts of North America. Most of the plant and animal exchange that biologists affirm occurred between the two hemispheres, however, supposedly took place thousands of years earlier when the shallow plain that is today's Bering Strait was a 1,300-mile-wide, elevated land mass that tied the two continents together.[35]

There appears to be little doubt that mega-fauna in large numbers were present in both eastern Siberia and western Alaska throughout this phase of the Wisconsin. The long years between stadials or ice advances are described as relatively mild. Animal life would have flourished and, for indefinite periods, likely moved southward along an unglaciated coastline or down an ice-free interior valley.

During this rather pleasant era, according to many authors, man made his initial entry into North America. Taking advantage of the Cherry Tree Stadial between 32,000 and 42,000 B.P., he crossed the then water-free Bering Strait in pursuit of large game animals upon which he depended for sustenance. As the Wisconsin glacier or glaciers reached maximum limits 40,000 years ago, the Bering bridge remained ice-free, as did some parts of coastal and interior Alaska, making possible a relatively uninhibited southward journey for both men and animals. This condition persisted to 29,000 B.P., when the climate began to deteriorate rapidly. By 18,000 B.P., all of Canada from east to west was sealed off by the last Wisconsin ice mass.[36] It was not until 13,000 to 12,000 B.P. that conditions ameliorated, permitting both man and animals once again to move safely and credibly into and southward through North America.

The scenario given here is a fair reflection of what most authorities believe actually transpired. The query, however, is not whether early man could have traveled eastward and southward as suggested, but whether there is, in fact, evidence to suggest that he did.

Looking at the Evidence

The area between north China and the Bering Strait was for many decades a virtual blank as a source of factual information for early human occupation. In recent years, the discovery of chopper and flake tools at a number of sites has altered previous perceptions, and a smattering of carbon 14 dates have established tentative time parameters.

Two sites, Mal'ta and Buret, located on the Angara River, are characterized by unusual bone art, stone tools with bone and antler handles and stone flakes. Dates established for the two are 18,000 to 15,000 B.P.[37] The Yenisei Basin farther west contains bifacial chopping tools, scrapers, bone tools, and knives and is dated by carbon 14 at 20,000 to 13,000 B.P.[38] Farther east on the lower Aldan River, the Diuktai tradition contains leaf-shaped bifacial points, triangular bifacial knives, and wedge-shaped cores. The carbon 14 dates recorded by Y. A. Mochanov[39] are 35,400 ± 600 to 30,000 ± 500 B.P. These dates are derived from Ust'Mill II, which contained wedge-shaped cores, pebble cores, and flakes. The Hokkaido assemblages located in the far north of Japan contain micro-blades, bifacially prepared core preforms, burins, and scrapers, all thought to postdate 14,800 ± 350 and 15,800 ± B.P. Berelekh, located farther north than any other Paleolithic site in the works, is dated 11,000 B.P. [40]

All of these northeast Asian locations, except those reported by the Russian scientist Y. A. Mochanov, fall within the 20,000 B.P. or younger ranger and are typical of other Paleolithic sites in the same general area. Given the consistency of all other dates and the level of artifact sophistication at Mochanov's Diuktai sites, there may be reason to doubt the accuracy of his data. Aside from this, each of the sites contained an identifiable lithic technology that was essential to its inhabitants' way of life and would have accompanied them in all their wanderings. Positioned as they were on the doorstep of the New World, better acclimatized, and in every way the best suited of all potential immigrants, it presumably must have been they who first entered Beringia and became the earliest Americans.

If any of these or if other Old World wanderers entered Alaska at any time between 35,000 and 13,000 B.P., there should be some concrete evidence verifying their presence. W. N. Irving, who approached his work at Old Crow Basin (located in the north central Yukon valley) convinced that man's presence there went beyond these dates, found no stone artifacts to identify its early occupants and lamely concluded, "Stone implements at present simply do not figure in the definition of a Pleistocene industry or tradition of Old Crow Basin." The material evidence of man's early presence, he concluded, "though compelling was far from eloquent."[41]

Richard E. Morlan, who also studied the Old Crow as well as other sites, was convinced that those who crossed Beringia were well adapted to prevailing environmental conditions and had an adequate technology to assure their success.[42] Still, he was unable to explain the near total absence of lithic artifacts, claiming only that their marks left on pieces of bone and antler were sufficient evidence of their existence.[43] Man's early presence as far back as 80,000 years ago was attested by mammoth and other bones that appeared to have been artificially worked or splintered. But the tools for such were not present, neither were any human remains located, nor have they been confirmed in any pre-postglacial sites.

The problems faced by Morlan, Irving, and other advocates of man's mid-Wisconsin presence in Alaska are not only the absence of available Asiatics and their artifacts at that time, but also the acknowledged possibility that 80,000-year-old bones could have been broken, chipped, polished, and flaked in numerous ways, and the probability that they were redeposited on any number of occasions. There is, in fact, "no way to know which pieces belong together historically, or even which animals may have formed living communities."[44] The latter problem is so extreme that a thorough mixing of middle and late Wisconsin fauna has occurred, resulting in a misreading of the prehistoric record. Fladmark noted that scholars have pictured the mammalian community of the late Wisconsin as equivalent to that of West Africa, along with a similarly rich environment.[45] While this may have been true of the

mid-Wisconsin, carbon 14 dates from central Alaska reveal no animals commonly listed between 18,000 and 21,000 B.P. and only the musk ox, bison, and perhaps mammoth between 12,000 and 15,000 B.P. At Old Crow, no faunal remains date from 22,000 to 14,000 B.P. At other sites, the musk ox alone was recorded from 26,000 to 15,000 B.P. All data combined indicate that no "hunter's paradise throughout Beringia" existed during the period from 26,000 to 15,000 B.P.

J. D. Richie and Les C. Cwynar deal a further blow to the widely held concept that the Arctic of that period was conducive to the immigration of central Eurasian big-game hunters into North America.[46] Based on a study of pollen cores taken near the front of what was once the Laurentide ice pack, they conclude that polar desert or fall tundra conditions existed in that part of Beringia during a period from 14,000 to 30,000 B.P. Such an environment would be as harsh as that of the modern-day high Arctic.

It is this era, 20,000 to 14,000 B.P., that some scholars point to as the time of man's arrival in the New World. Sites such as the Blue Fish Caves near Old Crow Basin have yielded dates of 15,500 ± 130 B.P. and 12,900 ± 100 B.P.[47] Scientists located bone and stone artifacts, but none demonstrated any affinity with known Asian discoveries. Since the dates were established from bones described as being from a "large ungulate population during full glacial times," a population which included the horse, mammoth, bison, sheep, wapiti and caribou, they were obviously redeposits from an earlier or later period, and the dates can be discounted.

Except for microchips or microblades located under hard-to-verify circumstances, and distantly similar bifaced, disk-like scrapers found at the lower or pre-6500 B.P. level of Onion Portage site in northwest Alaska,[48] researchers have found nothing of substance to clearly relate North American artifacts to those of northeast Asia. Even the fluted point which stands as the best evidence of a historical connection between continental and northwestern North America, though abundant at both locations, is strangely absent in northeast Asia or Siberia. It was circumstances such as this that led A. L. Kroeber to make a

statement thirty years ago that is as pertinent today as it was then: "It remains one of the great enigmas that, at the top of the continent, where presumably the ancestors of all American natives crossed from Asia, no real connection links have been recognized between glacial times [or before] and shortly before the time of Christ."[49] Clearly, the question is not when but *if* early man, except in incidental and accidental instances, ever made the assumed journey.

Conclusions

If Asiatic tribesmen journeyed into North America anytime between 13,000 and 20,000 B.P. (there is no real evidence to show they were on site prior to this time), the environmental conditions they faced would have been unlike anything known to man in historic times. We cannot postulate concerning preparations or travel requirements, since nothing so severe has ever faced modern man. A glacial epoch is unknown to us. Not even conditions in Antarctica compare with an event so awful that it entombed one-third of the earth's surface with an ice mass one or more miles thick. An ice front converged on central Alaska, from both east and west, at a rate of 1000 meters or more a year. What kind of climatic extremes produced it, and what was the nature of those resulting from it? If the centuries during its buildup were beyond comparison, what were the millennia like which encompassed its demise?

If man ventured into North America during the period when a land bridge was available to him, following the animals that drew him after them, he would have entered an ice-free but cold, sterile, hostile environment. Once there, sometime after 20,000 and before 14,000 B.P., he would have been forced to wait out the ice age for an indefinite period prior to the opening of an ice-free corridor running down the east side of the rockies into North America sometime between 12,000 and 13,000 B.P. Though free of ice, the corridor was not without unimaginable difficulties. Fladmark[50] describes it as a veritable wind tunnel, pouring arctic temperatures off the ice mass into the Great Plains. En route, massive rivers, steep and treacherous

terrain, and enormous ice-water lakes—Lake Agassiz was larger than all the Great Lakes combined—would have cluttered the course of travel. A journey along the west coast of Alaska and Canada was no less improbable. A fjord-like mainland, encumbered with great ice lobes reaching out into the sea and either extreme cold or enormous amounts of water discharge from the melting glaciers all spelled defeat for even the most determined travelers.

Even with the limited knowledge available of actual conditions in Beringia, Alaska, and Canada, given the assumed extremes of the Wisconsin glacial period for a decade of millennia from 24,000 to 14,000 B.P., we can rightfully suppose that our wildest speculation concerning probable conditions fall short of reality. How, then, in the absence of concrete evidence other than looking at a man and saying there was no other way available, can we begin to assume that early man out of Asia chose this time to discover a new world? With the wide-open, more-inviting expanses of Siberia to the west, it defies logic to suppose he would continue living in a geographically, climatically, economically inhospitable Alaska for perhaps thousands of years with no way of knowing but that conditions east and south were far worse than those he was experiencing. Viewed in this manner, one might correctly wonder why scholars have concluded that the Bering Strait was the primary route of access to the Americas with so little evidence to substantiate their findings.

A Peopling Hypothesis

If not via the Bering Strait, then how? For many, the answer to this query either lies hidden beneath the garbage and other remnants of successive civilizations or has been distorted, if not destroyed, by the altering, burying, crushing forces of nature. Either way, it can at best be only guessed at, and so approached, actual truth will always be beyond man's grasp.

For the few who know and for others who care to listen, there is an answer to the above question. Latter-day Saint doctrine avers that Adam and his early posterity were native to what is currently North America.[51] Whatever the degree of their expansion into inhabitable parts of

the world, it came to an end with the biblical flood which encompassed all the landmass and, except for Noah and his family, extinguished the human species. From this we understand that the original peopling of the Americas, however long ago, was by Adam and his posterity—a race truly distinct from and not the immediate ancestors of the American Indian.

The next known inhabitants of the "New World" were the followers of a man named Jared and his prophet brother. Their arrival may have been as early as 2000 to 2200 B.C. following the dispersion of mankind at the time of the Tower of Babel. For an indeterminate period of time, an undisclosed number of individuals made their way over land and water until they came to a great sea. Their course of travel may have taken them across Asia to the Pacific and from there, in specially constructed vessels, to the uninhabited Americas (Ether 6:1-12).

Based on figures given sometime after their arrival, these 150 to 200 pilgrims multiplied and spread throughout the land (Ether 6:13-21). Whatever their ancestral composition, these Jaredites were the true Paleo-Indians and must have carried with them the inheritable characteristics that came to typify modern American aborigines. The widespread O blood type, the dental peculiarities, the hair, and facial features were common within the group and became standardized as they intermarried and moved unrestricted, often compelled by war and insurrection, to all points of the compass. In time, language and customs changed, but these basic traits remained dominant.

The next known group to arrive, in 589 B.C., was small (1 Nephi 18:1-25). It too experienced divisions and strife and soon migrated into the wilderness (2 Nephi 5:1-25). There, the followers of Laman, called Lamanites, and some of those who allied themselves with Laman's brother Nephi, called Nephites, met and intermarried with the remnants of the original Jaredite population, thereby becoming part of the established and more ancient gene pool. Within one or two generations, basic physical and cultural characteristics were greatly altered. As they received, however, they also gave, and in time the language,

the culture, and the physical makeup of the Paleo-Indian or Jaredite population was indelibly influenced.

Soon after the arrival of the Nephites and Lamanites came a third group, the followers of Mulek, a son of the Jewish King Zedekiah. The Mulekites crossed the ocean and located some distance north of the central Nephite settlements (Helaman 6:10; Mosiah 25:2). In time the remnants of these two societies merged, but retained the Nephite designation. Again their languages and cultures "blended," and within a few generations a new, more complex society emerged. Centuries passed and peripheral mixing of all the inhabitants occurred. A new and distinctly American gene pool was forming, radiating outward from several major areas of influence.

The process heightened following A.D. 33, stimulated by a general combining of the principal Nephite and Lamanite factions. Major divisions followed a two-hundred-year period of integration, resulting in a total breakdown of Nephite society (4 Nephi 1:1-45; Mormon 6:1-20). The ensuing assimilation was final. The foundation population was in place, scattered throughout the Americas. Composed of remnants from prior Jaredite, Lamanite, Nephite, and Mulekite societies, it was further impacted over a 2,500-year period by countless other transoceanic and Bering Strait arrivals. Depending on individual numbers and the extent of their subsequent assimilation, such ingraftings may have profoundly enhanced cultural—especially language—variations among peripheral elements of the population. Thus viewed, the Americanization of the Indian was complete.

The substantial number of Mongoloids who undoubtedly made a water crossing into the New World also comprise a late post-flood entry. Their impact southward, confined as they were to the far northern habitation of historic Aleuts and Eskimos, which people they became, was far less significant than scholars have supposed. In actual fact, the predominant exchange of both culture and genes may have been south to north from cultural climax centers deep within the Western Hemisphere.

Notes

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