

THE PREHISTORY OF MONGOLIA AND THE ROOTS OF MAN IN NORTH AMERICA

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The contribution of Mongolia to the peopling of the New World is substantial. Prehistoric cultural events, reflected in cultural remains, indicate Mongolia's early, direct impact on Siberia and later, indirect impact on New World populations. Prehistoric cultural remains in Mongolia share characteristics with Siberia to the north and China to the south, yet their nature is distinctive, reflecting man's adjustment to a harsh environment and his prehistoric contact with neighboring ethnic groups.

The role of the environment cannot be underestimated in any study of Mongolian history or prehistory.¹ Climatic conditions, especially climatic changes, may have been responsible in part for prehistoric fluctuations² as well as historic nomadic expansions and contractions.³ Man's relationship with the environment was recognized by N. C. Nelson, archeologist for the American Museum of Natural History's Central Asiatic Expedition during the 1920s. He noted that the quantity and quality of cultural remains varied with the local environmental conditions. The distribution of artifacts illustrated that "the relation between Nature and primitive man is almost as close as is the relation between any other organism and its environment."⁴

The Gobi desert and surrounding areas are not the most habitable regions of the earth, yet they have been occupied more or less continuously since the Late, and probably, Middle Pleistocene. Northern Mongolia aboriginally was less inhospitable than it is today. It lay south of the ice sheets which covered Siberia. During glacial maxima, Mongolia was probably too cold and dry to support human occupation. It is therefore likely that it was first inhabited during a humid phase, corresponding to the pluvials of glacial interstadials in Siberia.⁵

An early, widespread Paleolithic horizon is present in Mongolia. It consists of a group of sites containing the Levallois-Mousterian technique of stone working, a characteristic usually associated with the Middle Pleistocene. At Ottson-Man't on the Chinese frontier, Okladnikov found Levallois disc-shaped cores as well as the more specialized prismatic cores and the long, wide blades struck from them.⁶ On the basis of typology, he dated the site to between 50,000 and 40,000 years ago. The inhabitants may have been transitional between *H. neanderthalensis* and *H. sapiens*. Another Paleolithic location in this group, Moil'tyn-am, near Karakorum, is one of the few stratified sites in Mongolia. The combination of Levallois cores with prismatic cores was again found. Skreblos--scrapers characteristic of the Siberian Paleolithic--indicate northern influence in the assemblage, while choppers and chopping tools indicate Chinese and South-east Asian affinities. Kuitan-Bulak, near Choibalsan, may also belong to this group.⁷

In the area between Ulan Nor and the Artza Bogdo mountains Nelson found a

quarry-workshop belonging to a later phase of the Paleolithic. The surface scatter was incredibly widespread and dense. Nelson remarked that "the artifacts lay scattered in such abundance that one could scarcely avoid stepping on them."⁸ The workshop artifacts consisted of scrapers, choppers and Mousteroid points. The assemblage as a whole most closely resembles the Classic Mousterian tradition of the Middle Pleistocene. This stage also includes similar finds in the Orokh Nor region.⁹

It has been argued by Derevianko that the Levallois technique is probably indigenous due to its wide distribution in Mongolia.¹⁰ Others favor a western origin for this component.¹¹ Powers suggests that Mongolia was a contact zone between western Mousterian technologies and the North Chinese pebble tool tradition and that early stimulus from the west *did* occur.¹² Because Mongolian Paleolithic sites include artifacts characteristic of western and southern cultures, I believe Powers' interpretation to be the most plausible.

The nature of the Mongolian Mesolithic is not fully understood. Chang notes that assemblages are microlithic in nature,¹³ but Larichev sees nothing microlithic in sites of this age.¹⁴ Okladnikov observes that the raw material available in the Gobi consists in large part of small pebbles, which would lend a microlithic aspect to assemblages but would not necessarily imply a microlithic nature.¹⁵

This controversy extends into the Neolithic. It is partly on the basis of this criterion that the nature of and the distinction between the Mesolithic and the Neolithic is blurred. One factor adding to the confusion is apparent regional specialization.¹⁶ Assemblages in interior Mongolia are simple; along the Chinese and Siberian borders, they display a greater range of artifact types. Regional differences probably reflect adaptations to local environments and do not necessarily imply different periods of time.

Archeological remains unfortunately do not clarify the problem. This is illustrated by the principal site of this period, Shabarakh-usu in the central Gobi. Whether this stratified site is entirely Neolithic or contains a non-ceramic Mesolithic layer has yet to be determined. Nelson and Maringer saw both components,¹⁷ but Soviet researchers, in an unpublished report, have apparently found pottery in both levels.¹⁸ As far as I know, the problem remains unresolved.

What can definitely be said about the Mongolian Neolithic? Nelson defined it by the appearance of pottery, certain agricultural implements and arrow points, reflecting a continuing dependence on hunting in combination with incipient agriculture in northern Mongolia.¹⁹ The Neolithic is closely associated with contemporary cultures in the Soviet Far East and the Baikal area--dwelling and settlement patterns are similar, hearth arrangements are identical, and distinct similarities are present in prismatic cores and pottery.²⁰ Furthermore, the combination of tools made from large and small blades, as well as tools from flakes, and the persistence of the Levallois-Mousterian technique in Siberian assemblages suggest ties to the south.²¹ A later Neolithic stage brought red painted pottery, querns and pestles from China,²² but Siberian influence remained dominant.

How can the overall prehistoric sequence be assessed? I suggest that Mongolia was first inhabited during a humid interval during the Middle Pleistocene. Especially arid areas were occupied only intermittently. Consequent periodic dispersion of the inhabitants, as well as intrusions by outsiders, permitted cultural

exchange. Mongolia seems to have come under the increasing influence of Siberia, and there seems to be more communication between these two areas than with China. The Mesolithic should not be defined in terms of microliths. Large blades are found as well. Of the Neolithic, I would say that the stone tool inventory remains conservative and that it developed from local Mesolithic cultures. Agriculture may be a product of stimulus diffusion from the south. Finally, I would suggest several migrations during the Late Pleistocene and Early Holocene between Siberia and Mongolia. These movements had impact on the steppe and forest tribes and this impact was eventually felt in the New World.

The initial peopling of the New World is an intricate problem, involving many points of origin, ethnic groups and time periods. Mongolian hunters did not consciously migrate north and east to populate the New World. There were several "haphazard" movements by people in response to changing environmental conditions and to the migratory patterns of the fauna they depended on. I should like to emphasize the point that there was no mass exodus from Asia to the New World at any time. It would be better stated that at various times different people from many areas of East Asia found their way to America.

Several migration routes can be distinguished. Müller-Beck dates a movement from the west at about 28,000 years ago.²³ I suggest that the date of this migration, which probably originated in Central Asia, might well be pushed back due to the discovery of increasingly older sites in Siberia. I would further postulate at least two such movements. The first probably occurred anywhere from 50,000 to 30,000 years ago and brought with it the Mousterian tradition and the Levallois technique. A second movement took place, around the time Müller-Beck suggests, of people bearing Upper Paleolithic traditions--the Aurignacian, Solutrean and Gravettian among them. This is not to say that Siberia was a "technological extension of subarctic Europe during the Late Pleistocene," as Müller-Beck suggests.²⁴ No sites in East Asia exactly duplicate European sites, just as no sites in the New World duplicate sites in Asia.

There were at least two routes of northward migration. The first was an inland route, beginning in Southeast Asia and continuing through China and Mongolia, to Siberia. This movement of people brought with it a flake tool technology and the chopper/chopping tool tradition. Perhaps the widespread wedge-shaped core was dispersed in one of these migrations. Ramifications of this movement were felt in interior Siberia where many sites exhibit these archaic components. These sites include Mal'ta near Irkutsk,²⁵ Afontova Gora on the Yenesei²⁶ and Ust' Kanskaia in the Altai mountains.²⁷

A second, later movement involved northward expansion along the Pacific Coast, with some incursions inland. It consisted of people from the Amur River, Japan, Manchuria, Korea, North China and, in all likelihood, Mongolia. During glacial maxima, Japan was joined to the mainland and a coastal shelf 20 to 30 miles wide existed, facilitating movement from the mouth of the Amur and along the shores of the Sea of Okhotsk. From here these groups may have traversed the coastal ranges until they reached the Anadyr Gulf.²⁸ This group of people might well have introduced certain innovations such as the Araya diagonal burin from Japan, a trait found at Verkholskaia Gora near Lake Baikal²⁹ and also along the Pacific Rim at Ushki Lake on the Kamchatka Peninsula³⁰ and at Anangula Island in the Aleutians.³¹

The Bering Land Bridge during times of glaciation was approximately 1300

kilometers wide³²--about the same distance from the southern shores of Lake Baikal to the northern reaches of the Ordos desert.²³ Therefore, it was vast enough to accommodate several groups at once without their being aware of each other. It has been postulated by Laughlin that the interior of the Land Bridge was crossed by tundra-adapted big game hunters, ancestral to the Paleo-Indians and that the southern coastal route was taken by the ancestors of the Eskimos and Aleuts who had a marine-focused economy.³⁴ Along similar lines, Dikov postulates a movement of Paleo-Indians during the main Wisconsin glaciation which traveled down through Alaska and was responsible for such sites as the Marmes Rock Shelter in Washington State.³⁵ A later, post-Wisconsin movement by Paleo-Eskimos and Paleo-Aleuts brought with it the wedge-shaped core and populated early Alaskan localities, such as portions of central Alaska (the Denali Complex) and Anangula Island. This may account for some earlier dates in interior North America and later dates in the Arctic.

Mochanov distinguishes two cultural groups in Siberia during the terminal Pleistocene--the unifacial "Mal'ta-Afontova" cultural tradition and the bifacial "Diuktai" tradition.³⁶ The people of this second tradition, who are named after the Diuktai cave site on the Aldan River, made pebble cores, Levallois cores, wedge-shaped (or Gobi) cores and skreblo--in other words, artifacts similar to those found in prehistoric Mongolia. It is suggested by Mochanov that elements of the Diuktai people migrated to North America between 18,000 and 11,000 years ago, bringing bifacial technology with them. However, independent invention in Alaska of this technological advance is quite probable. It is quite likely that elements of both the Mal'ta-Afontova and Diuktai populations founded the early core and blade technologies in Alaska. It must be pointed out in a discussion on possible dates of entry of man into the New World that the Bering Strait, only 56 miles wide between Cape Dezhnev and Cape Prince of Wales, freezes each winter so that contact between eastern Siberia and western Alaska has always been possible, even when the Land Bridge was submerged during interstadials, and during the Holocene as well.

Certain Alaskan assemblages retain a configuration of Asian traits and therefore merit discussion. The four I will discuss are all early--between 11,000 and 7,000 years ago--and are defined as core and blade technologies.³⁸ The first of these is the Akmak Complex of Onion Portage on the Kobuk River.³⁹ The assemblage in this basal stratum includes large, wide blades struck from polyhedral cores, microblades, burins, and crude bifaces used as scrapers and knives. Gallagher Flint Station, locality one, on the North Slope contains a wide variety of cores and unifacially retouched blades, but no burin or bifaces. The Denali Complex in central Alaska⁴⁰ includes the famous Campus Site near Fairbanks.⁴¹ This group of sites is composed of wedge-shaped and polyhedral cores, microblades, burins, end scrapers, a chopping tool or scraper, a number of biface blanks and knives or spearpoints. Anangula Island in the Aleutians⁴² is a completely unifacial industry. It consists of a wide variety of core types (including wedge-shaped cores), burins, and prismatic blades.

Anderson sees several similarities in the Akmak Complex to Siberian assemblages.⁴³ Core bifaces, blades, burins and bifacial knives are reminiscent of Mal'ta, Afontova Gora and Verkholskaia Gora. He sees only one connection with Ushki Lake--the wedge-shaped microcores. In Alaska, Akmak has more correspondences with the Denali Complex than with Anangula. I suggest that part of the explanation involves the different environmental foci of each site.

Gallagher Flint Station, locality one, is most like Anangula in Alaska because both lack bifaces. On the other hand, there are no burins in the assemblage, while Anangula exhibits a dependency on this artifact. Dixon has suggested that the two sites are remotely linked to a common ancestor, perhaps Tadusha in the Maritime Territory of the Soviet Union.⁴⁴

It was N. C. Nelson who first recognized the close correspondences between the end-scrapers, wedge-shaped cores and prismatic blades of the Campus Site to those of the pre-Neolithic Gobi.⁴⁵ Rainey also noted similarities to the Baikal area.⁴⁶ More recently, West has identified components of the Denali Comple as being related to Afontova Gora, Verkholskaia Gora, Ushki Lake and certain localities in Japan.⁴⁷ Cores of the Kobuk Complex, which overlies the Akmak Comple of Onion Portage, resemble Campus cores, but the overall context of Akmak separates it from the Denali finds. Anangula and Gallagher Flint Station contain elements in common with the Denali Complex, but the assemblages, taken as a whole, are quite distinct from each other.

Okladnikov has identified seven Asian traits in the Anangula assemblage.⁴⁸ They are the Levallois technique, Gobi cores, pebble tools, Mousteroid points, skreblos, diagonal burins and transverse burins. The burins are most like those of the Araya Complex of Preceamic Japan. The assemblage is just as reminiscent of Japan as it is of Siberia.⁴⁹ This suggests direct influence of the Pacific Coastal migration route. Okladnikov and Laughlin examined Nelson's Gobi material and found that "the identity of artifacts is in some cases remarkable."⁵⁰ The Denali Complex and Akmak share similarities with Anangula, but close correspondences are rare. As noted above, the principal trait shared with Gallagher Flint Station is that of a completely unifacial technology. Beyond this, the two sites are quite different.

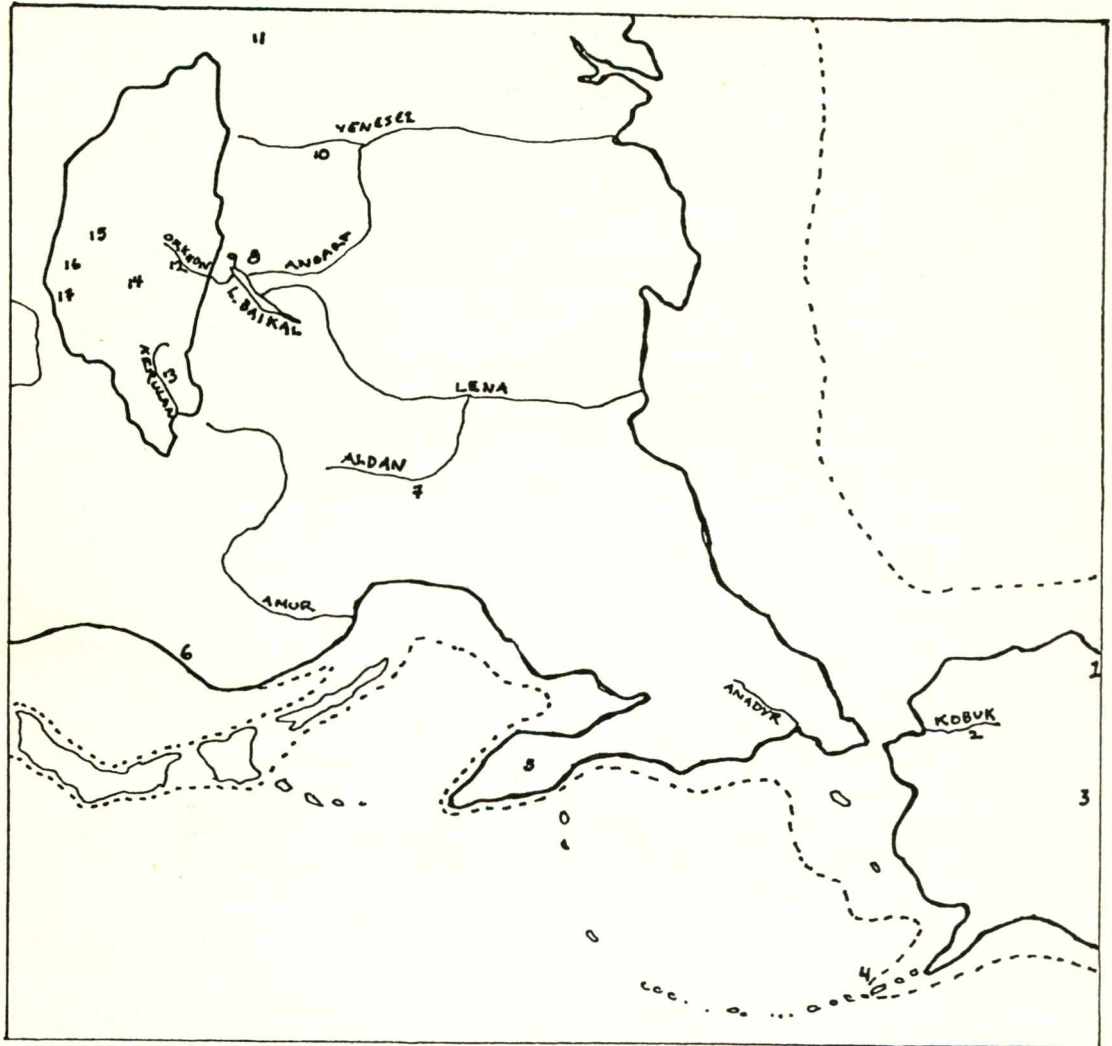
Despite the significant differences apparent in these assemblages, certain components link them together and point to a common ancestor in East Asia. The presence of wedge-shaped cores and prismatic blades, both common in prehistoric Mongolia, reflect this. Differentiation has occurred due to the several routes taken by the Paleo-Eskimos and Paleo-Aleuts as they approached the Land Bridge and moved across it. Regional variation, different subsistence strategies and various ecological adaptations also explain the distinct nature of each site.⁵¹

The exact nature and extent of influence of Mongolia on the New World is hard to put into concrete, quantifiable terms. At this point only general statements can be made. There are several cultural attributes which occur early in Mongolia, are found later in Siberia and reappear in the New World. Entire duplication of assemblages will not be found and direct correspondences of individual artifacts are rare. The basic fact that a Gobi core was fashioned in the desert-steppe about 20,000 years ago and that a Campus core was manufactured in a forested zone about 8,000 years ago is crucial in the interpretation of man's ability to adjust to new situations through time and space. Human beings evolve and adapt to different surroundings and this is reflected in their material culture.

Notes

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Sites Discussed in the Text

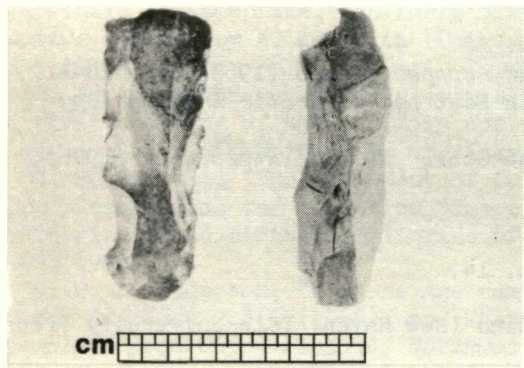


- 1-Gallagher Flint Station
- 2-Onion Portage (Akmak)
- 3- Campus Site
- 4-Anangula Island
- 5-Ushki Lake
- 6-Tadusha
- 7-Diuktai Cave
- 8-Mal'ta
- 9-Verkholskaia Gora

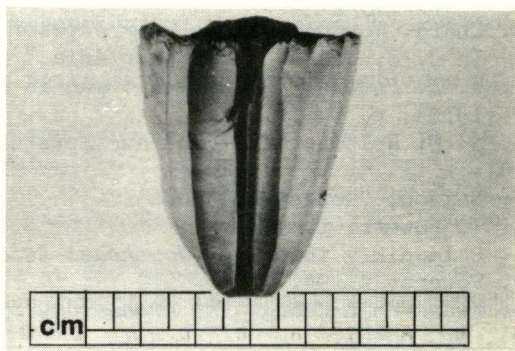
- 10-Afontova Gora
- 11-Ust'Kanskaia
- 12-Moil'tyn-am
- 13-Kuitan-Bulak
- 14-Shabarakh-usu
- 15-Orok Nor
- 16-Ulan Nor
- 17-Ottson-Man't

----Extent of the Bering Land Bridge during the Wisconsin glaciation

SLIDES PRESENTED



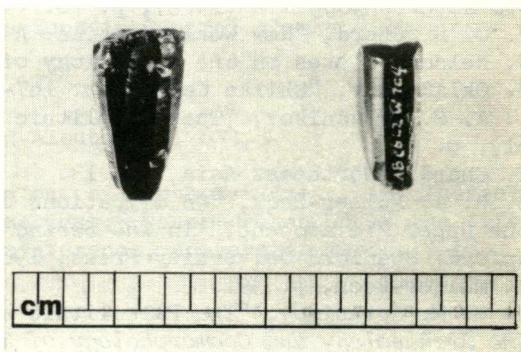
Left: Large Mongolian blade of red jasper from the general vicinity of Shabarakh-Usu.
Right: Large blade of metamorphosed argellite from Anangula Island.
Length of both approximately 12 cm.



Anangula wedge-shaped core of brown chert, frontal view. Maximum height: 4.5 cm.



Left: "Pencil-shaped" conical core of chert from the general vicinity of Shabarakh-Usu. Maximum height: 5.5 cm.
Right: "Pencil-shaped" conical core of chert from Sagan-Saba, Lake Baikal area. Maximum height: 6.75 cm.



Two conical cores of obsidian from Anangula Island. Maximum heights: 3.5 cm. and 2.75 cm.

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