

ARCHAEOLOGICAL INVESTIGATIONS
IN THE ALEUTIAN ISLANDS

Waldemar Jochelson

Foreword by Herbert D. G. Maschner
and Katherine L. Reedy-Maschner

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FOREWORD

Herbert D. G. Maschner and Katherine L. Reedy-Maschner

I

The Aleutian Archipelago, stretching 1,200 miles from the Alaska Peninsula nearly to Kamchatka, formed the cultural crossroads of the north Pacific for at least 10,000 years. This is the homeland of the Aleut, or *Unangan* in one of the region's several dialects. The Aleut occupied most of the Aleutian Islands and the western half of the Alaska Peninsula, but their origins are hidden in the late Pleistocene of Beringia when a land bridge connected Siberia and Alaska. They share an origin that is clearly tied to the Eskimoan¹ peoples of the Gulf of Alaska, the eastern Bering Sea, and Bering Straits, but the timing of the split between Aleut and Eskimo, based on linguistic and archaeological data, is thousands of years in the past. Despite the importance of the Aleutian region in both geography and history, the Aleut were overlooked by the Jesup North Pacific Expedition and had seen only limited investigation (before 1909) in the 170 years since Russian traders and explorers began sailing Aleutian waters. The only extensive ethnographic work is Russian Orthodox priest Ioan Veniaminov's *Notes on the Islands of the Unalaska District [1840]* based on his efforts in the 1820s and 1830s and William Healey Dall's limited archaeological excavations in the 1870s.²

Because of the importance of the region in relation to many questions about the genesis of northern peoples, Russian scientists organized an expedition to the Aleutians in 1907. Waldemar Jochelson (Vladimir Il'ich Iokhel'son 1855–1937) led the anthropological part of the Kamchatka-Aleutian Expedition, spending the years 1909 to 1910 in the Aleutian Islands conducting ethnological, archaeological, and linguistic studies. Accompanied by his wife, Dr. Dina Jochelson-Brodsky, they produced some of the most important research ever conducted on the Aleut either before or since. The trials that led Waldemar Jochelson to take an interest in anthropology, including his exile to

¹ The word 'Eskimo' in this discussion refers to all those groups who speak Eskimoan languages. These include the Inupiat of northern Alaska and Inuit of Canada, the Yupik of western Alaska, and several Yupik dialects such as Alutiq on Kodiak Island and Siberian Yupik on Saint Lawrence Island and the Chukchi Peninsula.

² Veniaminov, Ioan 1884. *Notes on the Islands of the Unalaska District [1840]*. Translated by L. Black and R. H. Geoghega, edited by R. A. Pierce. Kingston, Ontario, The Limestone Press.

Dall, William Healey 1877. On succession in the shellheaps in the Aleutian Islands. In *Contributions to North American Ethnology Vol. 1*. Pp. 41–91. Department of Interior, U.S. Geographical and Geological Survey of the Rocky Mountain Region. United States Government Printing Office, Washington, D.C.

Siberia for plotting to kill the Czar, are discussed in the foreword to the 1933 companion volume, *History, Ethnology, and Anthropology of the Aleut*, also reprinted in this series. It is worth noting that the completed manuscript for this book lay unpublished for several years during the First World War but still won a prize from the Academy of Sciences of Russia. During the Russian Revolution in 1917, Jochelson just managed to save the text and one copy of the plates and maps from destruction as a mob sacked the publisher's offices. Upon arrival in the United States, Jochelson reworked the text into English, made comparisons with a number of North American collections, and finally published it in 1925.

As the reader will notice, Jochelson's research was state of the art for his day, and much of it was enlightened even by modern standards. One of his most lasting contributions is a list of Aleut nouns.³ He gives Aleut terminology in such detail that we not only have the name, for example, of a harpoon, but we also have the names for every part of a harpoon. He was also ahead of his time in thinking about cultures, environment, and adaptation. Referring to Eskimo and Aleut peoples in general, he describes features that are found throughout the north including sea mammal hunting and ritual, skin boats, sewn and tailored skin clothing, the composite bow, harpoons, and semi-subterranean earthen houses. But instead of compiling lists of traits, as the Boasian anthropologists of the United States were doing at the time, he demonstrated his foresight and brilliance by thinking in terms of arctic adaptations. Thirty years before Julian Steward described Great Basin societies in an ecological context, and fifty years before Lewis Binford convinced archaeologists to think about how cultures adapt to their environments, Jochelson stated that the elements of northern society, "whether they originated in America or Siberia, may be called circumpolar, as they are adaptations to natural conditions of life in that region" (p. 2).

II

Chapter I in this book primarily concerns theories for the origins of the Eskimoan peoples, in which he includes the Aleut (while recognizing that they are very different languages and peoples). Many of these theories are still commonly discussed today, especially as to whether the Eskimo-Aleut peoples originated somewhere in the Americas or are a recent migration out of northeast Asia. Working in the tradition of historical geography common at the beginning of the twentieth century (but not today because it requires a breadth of knowledge that is rare in today's scholar), Jochelson points out that many of the myths, beliefs, and social rules of northeast Asian peoples are shared

³ Jochelson was not a trained linguist but appears to have been very systematic in his work on the Aleut language. While he gives the Aleut word for hundreds of items, places, and concepts, the reader should refer to Knut Bergsland's *Aleut Dictionary: Unangam Tunudgusii*. 1994. University of Alaska Fairbanks, Alaska Native Language Center, for the appropriate spelling.

with those of the Northwest Coast and interior subarctic, but not so clearly with Eskimo-Aleut groups, perhaps indicating that a migration of peoples split these two regions in the recent past. Archaeologists have rejuvenated this view a number of times over the last ninety years but recent studies are pointing to an explanation that has the Eskimo-Aleut peoples originating in Southwest Alaska and spreading northward. Of course, if we extend the timeline back 10,000 or more years, the two different views are reconciled and explain much of the modern data.⁴

The long and arduous trip from Russia to London to New York, then on to San Francisco and Seattle, and from there to Juneau, to Seward, to Kodiak, and finally the Aleutians, is an expeditionary adventure in itself. On their arrival in the Aleutians, the Jochelsons found that many villages had boat visits only once a year. Hence they were beholden to merchants, U.S. government vessels, and local residents in order to move between villages and islands. As is still the case today, much of their research was hindered and conditioned by the wind. In fact, Chapter II describes their trip to the Aleutians and follows with a description of the climate, showing that Jochelson considered travel and wind to have a close relationship. In addition to intensely studying the Aleut language, excavating prehistoric village sites, and making observations on natural history and ethnography, Jochelson still managed to make three meteorological recordings each day, providing some of the earliest systematic weather observations for many Aleutian Islands. In approximately fifteen months of observations, Jochelson recorded nine clear days, an observation that is no surprise to archaeologists, fishermen, and those who live or work in the region.

While not formally trained as an archaeologist, Jochelson made detailed observations of the stratigraphic sections in his excavations and site formation processes. He attempted to assign meaning to his finds – details that would not generally enter the methodologies of American archaeologists for another twenty years. For example, he recognized that some house depressions were deep and others were rather shallow. He argued that this difference was based on age because of the differential effects of erosion and infilling. He also noted that vegetation on ancient village sites was inordinately lush, an observation that was investigated by Ales Hrdlicka and Ted Bank a generation later and scientifically verified only in the 1970s.⁵

Their excavation team was composed of Jochelson, his wife, A. M. Yachmeneff, the Aleut Chief of Unalaska (today written as Yatchmeneff, a prominent Aleut family), and L. I. Sivtzeff, the assistant priest of the Orthodox Church in Unalaska. In 47 days they excavated 57 house depressions in 13 ancient villages. Jochelson notes in Chapter III

⁴ Dumond, Don and Richard Bland 1995. Holocene Prehistory of the Northernmost North Pacific. *Journal of World Prehistory* 9(4):401–51.

⁵ Bank, Theodore P. 1953. Ecology of prehistoric Aleutian village sites. *Ecology* 34(2):246–64.

Hrdlicka, Ales 1937. Man and plants in Alaska. *Science* 86(2242):559–60.

McCartney, Nancy 1976. *Effects of Eskimos on Soils and Vegetation at Two Northern Archaeological Sites*. Unpublished Ph.D. dissertation. University of Wisconsin, Madison.

that the average depression size was 56 feet by 35 feet and 14 feet in depth (approximately 17.1 x 10.7 x 4.25 meters). When extrapolated to all excavations, the average debris removed from each house was 27,440 cubic feet (777 m³) and 1,564,080 cubic feet (44,290m³) for all 57 excavations (p. 22). We suspect that this is more excavation than all of the other excavations ever conducted in the Aleutian region combined. They also managed to investigate three burial caves and three other caves. Other than those in charge, they must have had a huge excavation crew, although scattered references to "laborers" gives no indication of its size.

The excavations were conducted at three sites on Attu Island, two sites on Atka as well as investigations at two burial caves, and four village sites on Umnak Island within twenty miles of Nikolski, although he did not investigate the huge Chaluka midden within the village that became the focus of Aleutian work forty years later. Jochelson also excavated three village sites on Amaknak Island and one on Uknadak Island, both in Unalaska Bay. He provides stratigraphic descriptions and reviews the faunal remains found in a sample of the excavations. While not quantified, the faunal discussions are important in that they have complete lists of species, they present the Aleut names for each, and he provides a review of the social uses for each of these species by the local people.

Chapter IV is one of the most complete discussions of Aleut mortuary practices available. Drawing on the nineteenth-century work of Veniaminov, Jochelson's own ethnographic work and his archaeological investigations, Aleut burial practices, perceptions about death, and the importance of mummification are discussed in detail. Perhaps most important is that Jochelson describes a number of socially sanctioned means of disposing of the dead, one of which entails replacing the corpse's internal organs with grass, dressing the corpse in his or her best clothing, tying it in a bundle wrapped with netting, and keeping the individual in the house for a long period. The Aleut had little fear of the dead, and dead relatives might assist the living in a number of ways.

In Chapter V Jochelson begins describing features of Aleut technology and presents some of the artifacts recovered from his excavations. His first descriptions are a schematic of throwing lances and the classic arctic toggling harpoon. He presents the Aleut terminology for each section of these rather complex tools and describes their design and function. The toggling harpoon is the most important technological advance in the entire history of sea mammal hunting, but it has been most often described in the anthropological literature as associated with Eskimo societies further north. We now know that its development in the Aleutian region preceded the rise of more northern Eskimoan peoples by several thousand years.

In the last forty years archaeologists have recognized the importance of investigating the types of stone used in the manufacture of stone tools as well as identifying raw material sources. These data are then used to investigate trade, regional interaction, and mobility strategies. Yet Jochelson was doing this same kind of analysis fifty years earlier. He recognized that different types of stone came from different islands, and he

interviewed the local Aleut about the historic sources for some of these. He made observations about trade and exchange, about traveling to particular islands for certain kinds of stone, and about the functionality of some material types over others. He noted that red ochre had spiritual and magical powers for the Aleut and was regularly used as paint. In fact, archaeologists now recognize that red ochre has played an important role in north Pacific societies for at least 9,000 years.

The fact that only 1,500 artifacts were recovered from his colossal excavations is a measure, we think, of the speed in which the excavations were conducted. His collections are by no means a valid sample of the technology represented in the excavated sites. But what makes his discussion of the tool technology special and unique is again his foresight for research topics that many archaeologists would not find important until the 1960s. Using data collected in interviews with elder Aleut and from his own observations, Jochelson gives a detailed account of the process of stone tool manufacture from the initial reduction of the raw material to retouch flaking and facial polishing. He discusses the appropriate materials for flaking stone and provides the Aleut terminology for the individual tools required to produce certain items. In fact, this discussion will allow a modern lithic technologist to completely reconstruct the manufacturing process used by the Aleut for many types of tools.

The majority of the stone tools are of types that are widely recognized throughout the region and might be dated anytime during the last 4,000 years. Some of the artifacts recovered from Attu, such as the large, serrated and stemmed end-blades, are rather unique to the western Aleutians and have even been described as a separate tradition by Allen McCartney.⁶ Jochelson's artifacts from Umnak Island and Unalaska Bay are similar to collections throughout the eastern Aleutian Islands and the western Alaska Peninsula. He describes a number of polished slate items, some of which have the classic *ulu* form of the Eskimo woman's knife (although women weren't the only ones to use it). There has been some discussion as to whether these semi-lunate knives were actually manufactured by the Aleut or traded in from groups to the east. Jochelson believes that the Aleut manufactured them although they are clearly of Eskimo form. Both Rick Knecht in his recent Unalaska research (personal communication) and our own studies on the Alaska Peninsula argue for a rather late date for these items, perhaps the last 500 to 700 years, although the first items of polished slate enter the region as early as 2,000 years ago.

Jochelson's overview of the bone and ivory technology is especially important in that he discusses both the functions of many types of tools but also the natural processes that may have led to their current condition. He describes the differences between hunting tools and weapons of war, and the different ways in which they were used. Many of the types of spear foreshaft, arrow foreshaft, harpoon, and other items

⁶ McCartney, Allen P. 1971. A Proposed Western Aleutian Phase in the Near Islands, Alaska. *Arctic Anthropology* 8(2):92-142.

he presents are found throughout the Aleutian region over the last few thousand years. The descriptions of composite fish hooks and their manufacture and use is of such detail that it can be used as a basis for interpreting fish hooks across the north Pacific region where such items are often recovered in excavations.

He completes his discussion of the artifactual remains with a description of decorated pieces, design elements, labrets, and items of adornment. It is immediately clear that the use of labrets (perforated lip ornaments) is uneven in the Aleutian region and further, where they are used the form changes with island group. For example, we recognize strong similarities in labret form and, for that matter, harpoon form, between the Alaska Peninsula and Jochelson's Atka excavations. Yet the materials found in the Unalaska and Umnak Island excavations, while situated between these two widely separated regions, look quite different.

Jochelson concludes his work with a critical review of everything that is known of the prehistory of the Aleut in Chapter VI, followed by a comparison between his archaeological research and his ethnographic studies in Chapter VII. He is especially critical of William Healey Dall who conducted the first systematic excavations in the Aleutians in the 1870s. Dall argued, based on his analysis of both faunal and artifactual remains, for a prehistoric succession of Aleut peoples in the region. Keeping in mind that nineteenth-century scholars often argued that every culture evolved through a succession of stages from very primitive to more cultured and civilized, Dall believed that the first Aleut who came to the Aleutians did not use fire, made poor tools, did not hunt sea mammals, and did not know how to make houses. Jochelson tested this theory and found it was not true at all. Instead, his researches led him to assert that "the Aleut came to the islands with a comparatively high primitive culture, not far removed from that found by the Russian invaders. Of course during the period of occupation change in the native material life did occur, partly as the result of adaptation to changes in the environment, partly as a matter of culture progress, but these changes were trivial" (p. 110). This is a statement that has taken nearly thirty years of modern research to corroborate and still appears to hold true across the region.

When one considers the other large, twentieth-century archaeological expeditions to the Aleutians, such as Ales Hrdlicka's relentless search for human skeletal remains in the 1930s, William Laughlin's Aleut-Konyag Project resulting in the Anangula and Chaluka excavations spread from the 1950s to the early 1970s, Hiroaki and Atsuko Okada's extensive excavations at the Hot Springs Site in the 1970s, and the comprehensive study of Amchitka Island in anticipation of nuclear testing,⁷ one must be amazed at Jochelson's accomplishments with little funding, few resources, but intense determination and curiosity.

⁷ Hrdlicka, Ales 1945. *The Aleutian and Commander Islands and Their Inhabitants*. Philadelphia: Wistar Institute of Anatomy and Biology Press.

Laughlin, W. S. 1980. *Aleuts: Survivors of the Bering Land Bridge*. New York: Holt, Rinehart and Winston.

Merritt, Melvin and R. Glen Fuller (eds.) 1977. *The Environment of Amchitka Island, Alaska*. Prepared for Division of Military Application. Published by Technical Information Center, Energy Research and Development Administration.

Jochelson was the consummate scholar: linguist, ethnographer, and archaeologist. He came to the Aleutians with a number of scientific questions in mind and specific methods to investigate them. He managed the difficulties of travel and logistics in the region better than most modern scholars. This work stands alone for its breadth, its integration of multiple lines of inquiry, and its foresight for the directions that modern archaeology would take over the next eighty years.

Okada, H. 1980. Prehistory of the Alaska Peninsula as Seen from the Hot Springs Site, Port Moller. In *Alaska Native Culture and History*, Y. Kotani and W. B. Workman, eds. Pp. 103-12. Senri Ethnological Studies No. 4. National Museum of Ethnology, Osaka.