

Aleut Mortuary Practices. Re-Interpretation of Established Aleut Burial Customs

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The Unangan/Aleut people have lived in the Aleutian Islands for more than 9,000 years. About 250 years ago this unique and successful balance between nature and man was disturbed to such a degree, that the Unangan people almost became extinct. Russian fur hunters and traders (promyshlenniks) killed, annihilated, raped, introduced new diseases (leprosy, smallpox, syphilis and consumption (tuberculosis)), and forcefully displaced Unangan people for the purpose of promoting their fur business. This resulted in major declines in the Unangan population size. It is estimated that an original population of more than 15,000 people in 1741 (time of arrival of Russians in the Aleutian Islands) to less than 2000 in 1800. This drastic reduction in the population size and increasing Russian control did not result in a thoroughly eradication of the Unangans' culture and spiritual belief. Also, it is doubtful that the Russian Orthodox Church had much control over the Unangans' spiritual activities, as previously suggested by the church's records. Our research, based on the historical record, archaeological excavations and particularly on the reconstruction of the traditional mortuary practices, strongly support our present hypothesis that the Unangans' devotion to their

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This publication has respectfully been dedicated to the late Professor William S. Laughlin, and to the great people of Nikolski, the Aleutian Islands.

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traditional spirituality was well established and operational at any given time, including: — after the arrival of the promyshlenniks (1741), — after the establishment of the Russian American Company (1799), — after the introduction of the Russian Orthodox Church (ca. 1800), — after the sale of Russian America to the USA in 1867, — and most likely well into the 20th century.

Keywords: Aleutian Islands, mortuary practices, spirituality, mummification, reconstruction, Chaluka.

Алеутские погребальные практики: переосмысление сложившейся алеутской погребальной обрядности

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Коренное население Алеутских островов (народ унанган, более известный как алеуты) на своих территориях проживало на протяжении более 9000 лет. Около 250 лет назад этот уникальный баланс между природой и человеком оказался в значительной степени нарушен, в результате чего коренные обитатели островов практически исчезли. Численность унанганского населения резко сократилась в результате недружественной деятельности российских промышленников (убийства, насилие, распространение инфекционных заболеваний, таких как оспа, проказа, сифилис, туберкулез) и насильственного переселения алеутов с целью повышения эффективности и доходности пушного промысла. Считается, что население островов, составлявшее на момент прихода русских в 1741 г. около 15 000 человек, к 1800 г. насчитывало менее двух тысяч. Резкое сокращение численности народонаселения и управление различными сторонами его жизни, осуществлявшееся российской администрацией, все же не привели к полному уничтожению культуры унанганов и особенностей их духовной жизни. Русская Православная церковь осуществляла христианизацию местного населения, однако имеются сомнения в том, что воздействие этого процесса на духовность унанганов было существенным (в то же время, подобные утверждения встречаются в церковных архивах). Выводы нашего исследования, основанные на исторических данных, результатах археологических раскопок, и, в особенности, на реконструкции погребальной обрядности, подтверждают ранее высказанную авторами гипотезу о том, что приверженность унанганцев их традиционной духовности была хорошо выражена и последовательно практиковалась во все времена на протяжении последних 250 лет — после прихода промышленников (1741), после создания Русско-Американской Компании (1799), после появления русской православной миссии (около 1800) и после продажи Русской Америки Североамериканским Соединенным Штатам в 1867 г. Скорее всего, традиция не прекращалась и в XX столетии.

Ключевые слова: Алеутские острова, погребальный обряд, духовность, мумификация, реконструкция, Чалука.

Introduction

The Unangan/Aleut people have lived in the Aleutian Islands for more than 9,000 years. About 250 years ago, this unique balance between nature and man was disturbed to such a degree that the Unangan people were almost annihilated. The Russian

conquest of the Aleutian Islands and other geographical areas in what we today know as the State of Alaska was powered by relentless greed and demand for fur products. In less than 60 years the uncontrolled activities of promyshlenniki (fur hunters) resulted in an eighty-five percent reduction of the Unangan population. Additionally, the delicate ecological balance between man and his environment was severely disturbed by the excessive overexploitation of marine mammals.

Russian records, including those of Ivan Veniaminov¹, tend to emphasize the success of Russian political, physical, cultural, social and spiritual power resulting in an almost complete conversion of the Unangan people to Russian traditions. Until recently it has been unclear how effective the Russians and later the Americans were in converting the Unangan people from their traditional way of living and especially in making them abolish their traditional spirituality. Needless to say that little is found in the ethnographic records, which for the most part derives from Russian hunters, administrators and clergy. Granted, a rich and wonderful amount of information is found in many sources including those of Ivan Veniaminov² and George Steller³ (1793), but all tend to ignore the possibility that the Russians did not have full control over the Unangan people⁴.

The archaeological record is helping us to understand the historical record and the extent to which such records can be trusted. Burial records are especially important. Without burial records we significantly limit our ability to reconstruct historical and pre-historical events.

Our work on burial practices is based on the study of existing records, as well as on modern research on human remains still in our collections (as of 2002).

We use only nondestructive and noninvasive methods. Thus, technologies such as x-ray, photography, and computed tomography (CT) are used to explore and study the remains. If tissue sampling is required and permitted, CT scanning allows directed removal of minute samples for analytical purposes.

Our data, interpretations, and results have been combined with records from archaeological surveys, excavations and the ethnographical record. Not only does combining all available resources allow us to obtain a much better understanding of Unangan burial practices, but it also enables to evaluate the various records in terms of accuracy.

We hypothesize that Unangan traditions and spirituality continued long after the arrival of the Russians in 1741 and the Americans in 1867. Indeed, traditional Unangan burial practices and the practice of Unangan spirituality most likely continued well into the 20th century. It was not significantly replaced by Russian and American traditions and culture until more efficient travel and communication procedures became available with the arrival of fossil fueled ships, radio communication, organized education, and with easier opportunities for the Unangan people to travel and communicate with the “outside world”.

¹ *Veniaminov I.* Notes on the Islands of the Unalaska Division. 80, vol. 3. St. Petersburg. 1840. (cited by: *Hrdlička A.* The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. Philadelphia, 1945. Reprinted by the Limestone Press, 1984).

² *Veniaminov I.* Notes on the Islands of the Unalaska Division.

³ *Steller George W.* Reise von Kamtschatka nach Amerika mit dem Commandeur-Kapitan Bering. St. Petersburg, 1793. (cited by: *Jochelson W.* History, Ethnology and Anthropology of the Aleut. The Carnegie Institution Washington. Washington, 1933. P. 18).

⁴ *Berreman G. D.* Aleut Shamanism in the twentieth Century? An Assessment of Evidence // To the Aleutian and Beyond. The Anthropology of William S. Laughlin / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P. 25–50. (Publications of The National Museum. Ethnographical Series, Vol. 20).

Unangan Mortuary Practices

The very sparse knowledge available today about Unangan mortuary practices is based on recorded observation by Russian explorers, hunters (promyshlenniki), administrators and clergy men, a few late 19th — and early 20th — century excavations, and the more recent collection of burial artifacts and human remains from settlement excavations, caves and rock shelters⁵.

Much of the records describe burials, probably less than 1,000 years old. Unfortunately little is known about the first approximately 8,000 years of Unangan burial practices. This is a product of logistic problems in identifying ancient burials, which for years have been exposed to a very austere environment.

Excavations and Collections. 1870–1945

Unangan mortuary practices have been studied by many scholars. Alfonse L. Pinart (1872)⁶ explored caves in the Shumagin island group and on Amoknak Island, Unalaska⁷. William Dall, during a geographical and hydrographic survey of the Aleutian Islands between 1871 and 1873, located several settlement sites and burial caves on

⁵ *Aigner J. S., Veltre D. W.* The Distribution and Pattern of Umqan Burial on Southwest Umnak Island // *Arctic Anthropology*. Vol. XIII (2). 1976. P.113–127; *Aigner J. S., Veltre D. W., Fullem B., Veltre M.* An Infant Umqan Burial from Southwest Umnak Island // *Arctic Anthropology*. Vol. XIII (2). 1976. P.128–131; *Cook J.* A Voyage to the Pacific Ocean Undertaken, by the Command of His Majesty, for making Discoveries in the Northern Hemisphere. G. Nicol, Bookseller to His Majesty, in the Strand; and T. Cadell, in the Strand, London, 1785. P.519; *Coxe W.* Account of the Russian Discoveries Between Asia and America to Which Are Added the Conquest of Siberia and the History of the Transactions and Commerce Between Russia and China. 4th enl. London, 1780. P.154–155, 173; *Dall W.*: 1) Notes on the Pre-Historic Remains in the Aleutian Islands // *Proceedings of the California Academy of Sciences IV (1868–1872)*. San Francisco, 1873. P.284–286; 2) On Succession in the Shell-Heaps of the Aleutian Islands // *Contributions to North American Ethnology*. Washington, 1877. P.62–71, 84; 3) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. Smithsonian Institution. Washington City, 1878. P.5–8; *Hrdlička A.*: 1) Exploration of Mummy Caves in the Aleutian Islands. Part I. Previous Knowledge of such Caves. Vol. 52. January. 1941. P.5–23; 2) Exploration of Mummy Caves in the Aleutian Islands. Part II. Further Exploration. Vol. 52. January 1941. P.113–130; 3) The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. Philadelphia, 1945. P.178–194; *Jochelson W.* Archaeological Investigations in the Aleutian Islands. The Carnegie Institution of Washington. Washington, 1925. P.44–52; *Laughlin W.*: 1) Aleuts: Survivors of the Bering Land Bridge. Holt, Rinehart and Winston. New York, 1980. P.89, 96–103; 2) Aleut Mummies: Their Significance for Longevity and Culture // *Cultures of the Bering Sea Region: Papers from an International Symposium*. IREX, New York, 1983. P.41–44; *Laughlin W., Gordon H.* The Lamellar Flake Manufacturing Site on Anangula Island in the Aleutians // *American Antiquity*. 1954. Vol. XX (1). P.28–29; *McCartney A.* Prehistory of the Aleutian Region // *Arctic. Handbook of North American Indians*. Vol. V. Washington, 1984. P.131; *Sarychev G.* Account of a Voyage of Discovery to the North-East of Siberia, the Frozen Ocean, and the North-East Sea. London, 1807. P.77–78; *Sauer M.* An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia for Ascertaining the Degrees of Latitude and Longitude of the Mouth of the River Kovima; of the whole coast of the Tshutski, to East Cape; and of the Islands in the Eastern Ocean, stretching to the American Coast. London, 1802. P.161; *Veniaminov I.* Notes on the Islands of the Unalaska Division; *Weyer E. M.*: 1) An Aleutian Burial // *Anthropological Papers of the American Museum of Natural History XXXI(III)*. The American Museum of Natural History/ New York City, 1929. P.228–238; 2) Archaeological material from the village site at Hot Springs, Port Moller, Alaska // *Anthropological Papers of the American Museum of Natural History of Natural History, XXXI(IV)*. The American Museum of Natural History. New York City, 1930. P.260–263.

⁶ *Pinart A.* Catalogue des collections rapporte de Exposees dans le Musee d' Histoire. Paris, 1872.

⁷ *Hrdlička A.*: 1) Exploration of Mummy Caves in the Aleutian Islands. Part I. Previous Knowledge of such Caves. Original Explorations. The Scientific Monthly, vol. 52. January 1941. P.8–9; 2) The Aleutian

Unalaska, Atka, Adak, Amchitka and Attu islands and in 1874 secured the accession of 12 bundles of human mummified remains from the Warm Cave on Kagamil Island⁸. The mummies were collected by Captain E. Hennig of the Alaska Commercial Company in 1874⁹. Between January 1909 and June 1910 Waldemar Jochelson excavated 13 ancient village sites and five caves on Attu, Atka, Umnak and Unalaska islands¹⁰. Aleš Hrdlička¹¹ completed three expeditions to the Aleutian and Commander islands. In 1936, Hrdlička surveyed and excavated settlement sites and burials on Amoknak Island (Unalaska Island), Atka, Kiska, and Kagamil islands. The following year (1937) Hrdlička continued his work on Unalaska Island (Cernovski, Split Rock, Veselov [Wislow Island], Kashega Bay [Split Rock Island], and Amoknak Island); Umnak Island (Chaluka); Atka Island (Nazan Bay); Amlia Island; Adak Island (Bay of Waterfall, Bay of Islands); Attu Island (Chichagof Harbor); Agatu Island (McDonald Bay); Tanaga and Ilak islands (caves); and Ship Rock Island (rock shelters). Hrdlička's last expedition to the Aleutian Islands took place in 1938. Hrdlička and his team, which included William Laughlin, visited Unalaska (Amoknak Island, Cernovski, Kashega Island); Ship Rock Island; Umnak Island (eastern coast survey, excavating Chaluka/Nikolski); Amlia Island; Kanaga Island (Kanaga Harbor); Ilak Island; Amchitka Island (Constantine Harbor); and Kagamil Island (Fig. 1).

1945 to Present (2002)

The post WWII period did not see excavation of burial grounds in the same magnitude as those carried out by Dall, Jochelson and Hrdlička. As early as 1948, William Laughlin, on the US Coast Guard Cutter 'Northland', visited the Warm Cave on Kagamil Island, but found it 'empty'¹²; apparently Hrdlička had done a complete 'excavation' a few years earlier (in 1938). Later, between 1973 and 1975, William Laughlin and his students excavated a few burials on Chaluka (Nikolski) and on Anangula Island, and Aigner and Veltre¹³ (1976) excavated two Umqan burial structures on the southern part of Umnak Island.

and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. Philadelphia, 1945. P.403; *Jochelson W.* Archaeological Investigations in the Aleutian Islands. Washington, 1925. P.21.

⁸ *Hrdlička A.* Exploration of Mummy Caves in the Aleutian Islands. Part I; *Hunt D.* Aleutian Remains at the Smithsonian Institution // To the Aleutian and Beyond. The Anthropology of William S. Laughlin / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P.139–140. (Publications of The National Museum. Ethnographical Series, Vol. 20).

⁹ *Dall W.* On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. Washington, 1878; *Hrdlička A.*: 1) Exploration of Mummy Caves in the Aleutian Islands. P.9; 2) The Aleutian and Commander Islands and their Inhabitants. P.186, 414–415; *Jochelson W.* Archaeological Investigations in the Aleutian Islands. The Carnegie Institution of Washington. P.44–45; *Laughlin W.* Aleuts: Survivors of the Bering Land Bridge. New York, 1980. P.99–101.

¹⁰ *Jochelson W.*: 1) Archaeological Investigations in the Aleutian Islands; 2) History, Ethnology and Anthropology of the Aleut. The Carnegie Institution Washington, Washington, 1933; *Korsun S. A., Taksami N. Ch., Ushakov N. V.* Treasures of the Kunstkamera. Aleuts: How they were seen by V. Iokhel'son. Photo-Laboratory. St. Petersburg, 2001.

¹¹ *Hrdlička A.* The Aleutian and Commander Islands and their Inhabitants.

¹² *Thomas C. W.* Ice is where you find it. Bloomington, 1951.

¹³ *Aigner J. S., Veltre D. W.* The Distribution and Pattern of Umqan Burial on Southwest Umnak Island. P. 113–127.

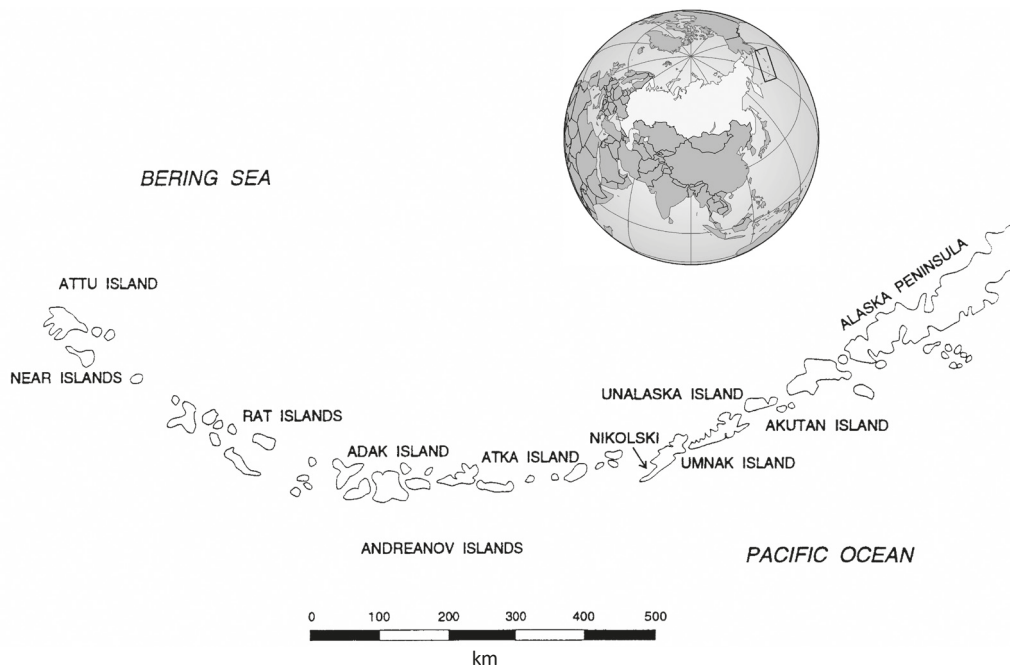


Fig. 1. Aleutian Islands, Alaska. The island chain stretches for about 1,500 km (950 miles) from Port Moller on the Alaska Peninsula to Cape Wrangell on the western end of Attu Island (after [Frohlich et al., 2002, p. 90])

Around 1950, the focus of research shifted from the collection of human remains to the analysis of collections including human remains and what such information could teach us about the Unangan people.

Such analyses have strongly supported the figures of an original Unangan population of about 16,000 people, with a temporal continuity of about 9,000 years¹⁴. Similarly, the uniqueness of the Unangan people and the importance of such data in the interpretation of population movements/migrations, adaptation, demography, paleopathology and much more, is attested in many publications, including: Harper and Laughlin¹⁵; Harper¹⁶;

¹⁴ Dumond D.E., Knecht R. An Early Blade Site in the Eastern Aleutians // University of Oregon Anthropological Papers. 2001. Vol. 58. P.9–34; Harper A. B.: 1) Secular Change and Isolate Divergence in the Aleutian Population System. Ph.D dissertation. University of Connecticut. Storrs, 1975; 2) Life Expectancy and Population Adaptation: The Aleut Centenarian Approach // The First Americans: Origins, Affinities, and Adaptations. New York, 1979. P.309–337; Knecht R.A., Davis R.S. A Prehistoric Sequence for the Eastern Aleutians // University of Oregon Anthropological Papers. 2001. Vol. 58. P.269–288; Knecht R.A., Davis R.S., Carver G.A. The Margaret Bay Site and Eastern Aleutian Prehistory // University of Oregon Anthropological Papers. 2001. Vol. 58. P.269–288; Laughlin W.S.: 1) Ecology and Population Structure in the Arctic // The Structure of Human Populations. Oxford, 1972; 2) Aleuts, Ecosystem, Holocene History and Siberian Origin // Science. 1975. Vol. 189 (4202). P.507–515; 3) Aleuts: Survivors of the Bering Land Bridge.

¹⁵ Harper A. B., Laughlin W.S. Inquiries into the Peopling of the New World: Development of Ideas and Recent Advances // A History of American Physical Anthropology, 1930–1980. New York, 1982. P.281–304.

¹⁶ Harper A. B., Laughlin W.S. Anthropologist's Anthropologist, 1919–2001 // To the Aleutian and Beyond. The Anthropology of William S. Laughlin / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P.7–23. (Publications of The National Museum. Ethnographical Series, Vol. 20).

Frohlich and Pedersen¹⁷; Frohlich, Harper and Gilberg¹⁸; Laughlin¹⁹; Laughlin and Harper²⁰; Harper and Laughlin²¹; Laughlin and Jørgensen²²; Laughlin et al.²³; Turner²⁴ and Zimmerman²⁵.

Ethnographic Data. A Review

The Unangans' attitude toward the dead is based on respect rather than fear²⁶. The Unangans preserved all deceased members of their communities from new-born to elderly and of both sexes²⁷. This importance of preserving every individual meant that bodies were buried in their clothing and encased in wrappings of animal tissues and woven matting to keep the remains protected²⁸. Cave and rock shelter burials, like those found on Ship Rock Island, contained naked adult bodies of both sexes wrapped in gut robes²⁹. Deceased babies and infants wore their bird skin caps, a tradition most often observed in infant burials in mummy caves of the Islands of Four Mountains³⁰. Whole kayaks, paddles, and related hunting equipment were included in the burials of 'kayak hunters'³¹.

¹⁷ Frohlich B., Pedersen P.O. Secular Changes Within Arctic and Sub-Arctic Populations: A Study of 632 Mandibles from The Aleutian Islands, Alaska and Greenland // Arctic Medical Research. 1992. Vol. 51. P. 173–188.

¹⁸ To the Aleutian and Beyond. The Anthropology of William S. Laughlin. Publications of The National Museum. Ethnographical Series. Eds B. Frohlich, A. B. Harper and R. Gilberg. Vol. 20. Copenhagen, 2002.

¹⁹ Laughlin W.S.: 1) Human Migration and Permanent Occupation in the Bering Sea Area // The Bering Land Bridge. Stanford, 1967; 2) Holocene History of Nikolski Bay; Eskimo and Aleut Evolution // Folk. 1974/1975. Vol. 16–17; 3) Aleuts, Ecosystem, Holocene History and Siberian Origin // Science. 1975. Vol. 189(4202). P. 507–515; 4) Holocene History of Nikolski Bay, Alaska, and Aleut Evolution // Beringia in Cenozoic. Vladivostok, 1976. P. 492–508; 5) Aleuts: Survivors of the Bering Land Bridge; 6) Aleut Mummies: Their Significance for Longevity and Culture // Cultures of the Bering Sea Region: Papers from an International Symposium. New York, 1983.

²⁰ The First Americans: Origins, Affinities, and Adaptation. Eds W.S. Laughlin, A. B. Harper. New York, 1979.

²¹ Harper A. B., Laughlin W.S. Inquiries into the Peopling of the New World: Development of Ideas and Recent Advances, 1982. P. 281–304.

²² Laughlin W.S., Jørgensen J. B. Isolate Variation in Greenlandic Eskimo Crania // Acta Genetica et Statistica Medica. 1956. Vol. 6.

²³ Laughlin W.S., Jørgensen J. B., Frohlich B. Aleuts and Eskimos: Survivors of the Bering Land Bridge // The First Americans: Origins, Affinities, and Adaptation. New York, 1979.

²⁴ Turner C. G. 1) The First Americans: The Dental Evidence // National Geographic Research. 1986. Vol. 2(1). P. 37–46; 2) The Dentition of Arctic peoples. New York, 1991.

²⁵ Zimmermann M. R. Alaskan and Aleutian Mummies // Mummies, Disease, and Ancient Cultures. Cambridge, 1998. P. 138–253.

²⁶ Jochelson W. Archaeological Investigations in the Aleutian Islands. P. 41–42.

²⁷ Laughlin W.S. Aleut Mummies: Their Significance for Longevity and Culture. P. 41.

²⁸ Sauer M. An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia for Ascertaining the Degrees of Latitude and Longitude of the Mouth of the River Kovima; of the whole coast of the Tshutski, to East Cape; and of the Islands in the Eastern Ocean, stretching to the American Coast. London, 1802. P. 161; Hrdlička A. Exploration of Mummy Caves in the Aleutian Islands. P. 129.

²⁹ Hrdlička A. The Aleutian and Commander Islands and their Inhabitants. P. 417.

³⁰ Ibid. P. 80, 420, 422, 471.

³¹ Dall W.H.: 1) Notes on the Pre-Historic Remains in the Aleutian Islands. P. 286; 3) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. P. 21; Hrdlička A. 1) Exploration of Mummy Caves in the Aleutian Islands. Pt. I. P. 15; 2) Exploration of Mummy Caves in the Aleutian Islands. Pt. II. P. 129; 3) The Aleutian and Commander Islands and their Inhabitants. P. 412, 433; Sauer M. An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia for Ascertaining the Degrees of Latitude and

The bodies were preserved so that they, over time, would be accessible for visits, offerings, and consultation. Mummification was an important religious observance aimed at preserving the spiritual life of the person, following physiological death³².

The preservation of the deceased person could take place within the household where it was prepared, kept for up to several months, and then deposited in a cave, rock shelter, or pit burial³³. It has been suggested that they were placed in distant and inaccessible caves so that the body was well protected, allowing only the most courageous members of the society to visit and view the body³⁴. However, according to Hrdlička³⁵, some caves were easily accessible to the villages that used them.

Coxe³⁶ and Dall³⁷ postulated that only wealthy and important members of the society were artificially mummified.

Dismemberment was the opposite of preservation and was supposed to release the resident power in the body so that it could not harm living Aleuts³⁸. Dismemberment appears to have been practiced by the Unangans to some extent on non-Unangan bodies during the massacre of the Russian Medvedev's party in 1764 in Nikolski³⁹. More recently, a Nikolski Unangan named Iliodor Sokolnikoff dismembered a man who had attacked him while he was building a baidarki (Aleut kayak). The dismemberment was not carried out in anger but strictly for the purpose of protecting oneself from the malevolent power that otherwise would have remained in the body of the slain enemy⁴⁰.

Additional information can be found in Aleš Hrdlička⁴¹ publication: *The Aleutians and Commander Islands*, William Laughlin's⁴² publication *Aleuts: Survivors of the Bering Land Bridge*, and in Frohlich, Harper and Gilberg⁴³.

Longitude of the Mouth of the River Kovima; of the whole coast of the Tshutski, to East Cape; and of the Islands in the Eastern Ocean, stretching to the American Coast. P.161.

³² *Jochelson W.* Archaeological Investigations in the Aleutian Islands. The Carnegie Institution of Washington. P.41; *Laughlin W.S.* Aleuts: Survivors of the Bering Land Bridge. P.96–106; *Laughlin W.S.* Aleut Mummies: Their Significance for Longevity and Culture. P.41; *Veniaminov I.* Notes on the Islands of the Unalaska Division.

³³ *Laughlin W.S.* Aleut Mummies: Their Significance for Longevity and Culture. P.42–43.

³⁴ *Weyer E.M.* An Aleutian Burial // *Anthropological Papers of the American Museum of Natural History*. Vol. 31, Pt. 3. New York, 1929. P.226.

³⁵ *Hrdlička A.* 1) Exploration of Mummy Caves in the Aleutian Islands. Pt. I. P.21; 2) The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.409.

³⁶ *Coxe W.* Account of the Russian Discoveries Between Asia and America to Which Are Added the Conquest of Siberia and the History of the Transactions and Commerce Between Russia and China. P.173.

³⁷ *Dall W.H.* On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. Smithsonian Institution. P.5–6.

³⁸ *Laughlin W.S.* Aleut Mummies: Their Significance for Longevity and Culture. P.44–46.

³⁹ *Laughlin W.S.* Massacre at Chaluka // *Polar Record*. Vol.22, no.138. Cambridge, 1984. P.316; *Laughlin W.S., Harper A.B., Laughlin S.B.* Massacre: Fate of the Medvedev Promyshlenniks in an Aleut Village, 1764 AD. Paper presented at the 55th Annual Meeting, Society for American Archaeologist, 1990.

⁴⁰ *Laughlin W.S.* Aleut Mummies: Their Significance for Longevity and Culture. P.45.

⁴¹ *Hrdlička A.* The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology.

⁴² *Laughlin W.S.* Aleuts: Survivors of the Bering Land Bridge.

⁴³ *To the Aleutian and Beyond. The Anthropology of William S. Laughlin. Publications of The National Museum. Ethnographical Series. Eds B. Frohlich, A. Harper, R. Gilberg. Vol.20. Danish National Museum. Copenhagen, 2002.*

Burial Types. A Review

Unangan burial practices fall into three main categories: (1) cave and rock-shelter burials, (2) house burials and charnel houses, and (3) pit burials. All three categories yield various sub-categories displaying a diversity of methods and procedures presumably related to the individual's function and social status within the Unangan community, the number of surviving relatives, the availability of suitable burial locations, and the interaction between the spirits and the living⁴⁴.

Cave and Rock-Shelter Burials

Cave and rock-shelter burials have been described⁴⁵ and have, in general, been associated with the practice of artificial mummification⁴⁶.

Cave and shelter burials are defined as burials where the body is placed on the ground, suspended from a wall or ceiling in a protected area, or placed in a container making it suitable to keep within the household. In some cases, the mummified body was placed in a wood frame or box and hung from a supporting system of wood so that it could be observed easily by visitors⁴⁷. In some cases, stonewalls were constructed around the body and covered with soil and turf⁴⁸.

Common for all recorded shelter and cave burials is that they are located in isolated areas most often separated from settlements by a body of water (salt) and, in general, protected from the environment (Fig. 2). The accessibility was relatively easy with a nearby boat landing.

⁴⁴ *Laughlin W.S.* Personal Communication. University of Connecticut. Storrs, CT, 1992.

⁴⁵ *Dall W.H.*: 1) Notes on the Pre-Historic Remains in the Aleutian Islands // Proceedings of the California Academy of Sciences IV (1868–1872). The California Academy of Sciences. San Francisco, 1873. P.283–287. P.286; 2) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. P.5–11; *Hrdlička A.* The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.412–417; *Jochelson W.* Archaeological Investigations in the Aleutian Islands. The Carnegie Institution of Washington. P.45–49; *Laughlin W.S.*: 1) Aleuts: Survivors of the Bering Land Bridge. P.99; 2) Aleut Mummies: Their Significance for Longevity and Culture // Cultures of the Bering Sea Region: Papers from an International Symposium. P.43–44.

⁴⁶ *Dall W.H.*: 1) Notes on the Pre-Historic Remains in the Aleutian Islands. P.286; 2) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. Smithsonian Institution. P.6; *Hrdlička A.* The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.182–195; *Jochelson W.* Archaeological Investigations in the Aleutian Islands. The Carnegie Institution of Washington. P.42–45; *Laughlin W.S.*: 1) Aleuts: Survivors of the Bering Land Bridge. P.99–101; 2) Aleut Mummies: Their Significance for Longevity and Culture. P.42–44; *Sauer M.* An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia for Ascertaining the Degrees of Latitude and Longitude of the Mouth of the River Kovima; of the whole coast of the Tshutski, to East Cape; and of the Islands in the Eastern Ocean, stretching to the American Coast. P.161; *Zimmermann M.R.* Alaskan and Aleutian Mummies // Mummies, Disease, and Ancient Cultures. Cambridge, 1998. P.147–152.

⁴⁷ *Coxe W.* Account of the Russian Discoveries Between Asia and America to Which Are Added the Conquest of Siberia and the History of the Transactions and Commerce Between Russia and China. P.154–155, 173; *Laughlin W.S.* Aleut Mummies: Their Significance for Longevity and Culture. P.43–44; *Veniaminov I.* Notes on the Islands of the Unalaska Division. P.184.

⁴⁸ *Coxe W.* Account of the Russian Discoveries Between Asia and America to Which Are Added the Conquest of Siberia and the History of the Transactions and Commerce Between Russia and China. P.173; *Dall W.H.* On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. P.5.



Fig. 2. The “Warm Cave” on the southwestern end of Kagamil Island in the ‘Islands of the Four Mountains’ [Frohlich et al., 2002, p. 91]

House Burials and Charnel Houses

At times the body of a deceased person was placed within the household until a suitable and permanent resting place could be either located or constructed⁴⁹. In some instances, the deceased was interred in the household dwelling (Barabara), either in a grave dug into the floor or in a covered niche within the wall structure⁵⁰. At other times, an entire house was used for the disposal of deceased individuals, thus turning such structures into “charnel houses”.

⁴⁹ Dall W.H. On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. P.6–7; Laughlin W.S. Aleut Mummies: Their Significance for Longevity and Culture. P.42–43.

⁵⁰ Dall W.H.: 1) Notes on the Pre-Historic Remains in the Aleutian Islands. P.284; 2) On Succession in the Shell-Heaps of then Aleutian Islands. P.84; 3) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands. P.7; Laughlin W.S. Aleut Mummies: Their Significance for Longevity and Culture. P.41–42.

House Burials

House burials have been described by Jochelson⁵¹ and may constitute a major part of the burials recovered by Hrdlička on Attu, Agattu, Umnak and Unalaska islands in 1936, 1937, and 1938⁵². Unfortunately, the lack of excavation records prevents us from separating these structures into house or pit burials.

Pit Burials

Pit burials have been identified outside house structures and within, or in close vicinity of a village site. Unfortunately, very few controlled and well-documented excavations have been conducted in areas where such burials are present. We do know that these burials are quite common⁵³. For example, the occupational site at Chaluka, in present-day Nikolski, on Umnak Island, has yielded numerous burials that, in certain cases, could have been located within and outside proven house structures⁵⁴.

The construction of a water line in Nikolski Village in May and June of 1974 crossed the Chaluka mound and yielded 11 burials of which none could be positively associated with known house structures. However, the fact that the Chaluka mound originally was and still is an occupational site strongly supports previous observations that some Unangan burials were located within or near houses. Such houses (barabaras) could be dwellings of living Unangan or structures constructed chiefly for the purpose of disposing of the deceased⁵⁵.

Umqan burials are pit burials located behind a village, most often positioned on a hill, and are therefore often exposed to strong erosion. Umqans are unique by being located on hillsides and with man-made trenches surrounding the burial pits⁵⁶ (Fig. 3).

Uncommon Cases

The variety of burials found within each of the three main categories includes a small number of unusual burials, most of them found within the Chaluka settlement (Nikolski Village)⁵⁷. For example, the following unusual cases have been reported: burials above and

⁵¹ Jochelson W. Archaeological Investigations in the Aleutian Islands. P.49–52.

⁵² Hrdlička A. The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.211–402, 420–423.

⁵³ Aigner J.S., Veltre D.W. The Distribution and Pattern of Umqan, 1976. Burial on Southwest Umnak Island // Arctic Anthropology. Vol. XIII (2). Madison, 1976. P.127; Hrdlička A. The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.364–381, 411–412; Jochelson W. Archaeological Investigations in the Aleutian Islands. P.49–53; Laughlin W.S. Aleut Mummies: Their Significance for Longevity and Culture. P.41–42.

⁵⁴ Hrdlička A. The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P.411; Jochelson W. Archaeological Investigations in the Aleutian Islands. P.49–52; Laughlin W.S. Aleut Mummies: Their Significance for Longevity and Culture. P.41–42; Weyer E.M. Archaeological material from the village site at Hot Springs, Port Moller, Alaska. Anthropological Papers of the American Museum of Natural History. Vol. 31, pt. 4. The American Museum of Natural History. New York City, 1930. P.261–263..

⁵⁵ Laughlin W.S. Personal Communication. University of Connecticut. Storrs, CT, 1992.

⁵⁶ Frohlich, B., Laughlin S.B. Unangan Mortuary Practices and the Umqan Burials on Anangula Island, Aleutian Islands, Alaska. To the Aleutian and Beyond. P.89–119.

⁵⁷ Frohlich B. Aleut Settlement Distribution on Adak, Kagalaska and Attu Islands, Alaska.

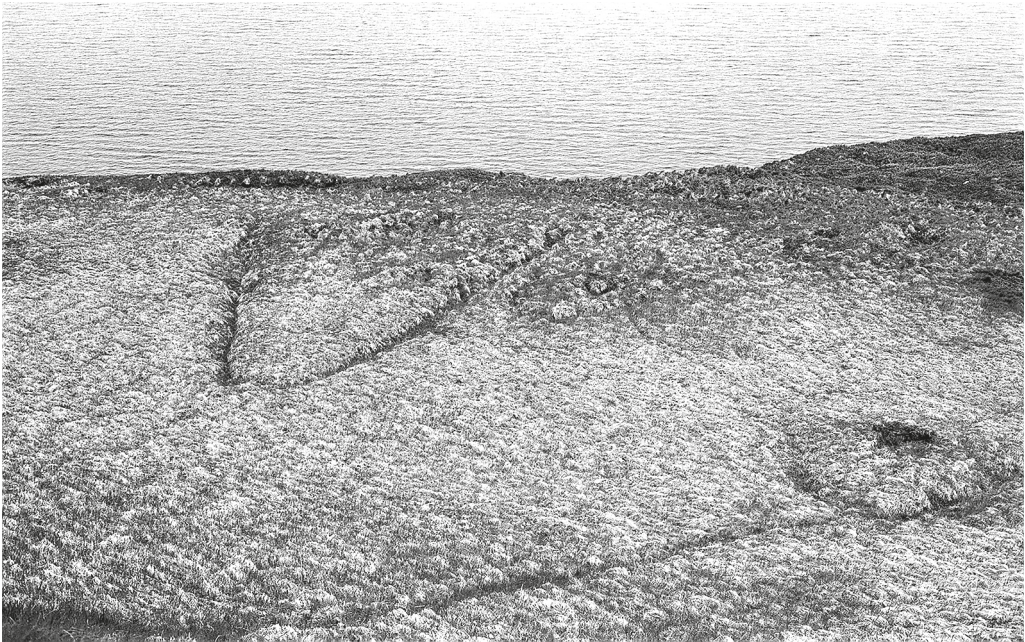


Fig. 3. “Umqan” on Anangula Island. Burials are located within the “V trench” [Frohlich et al., 2002, p. 96]

below the same whale scapula⁵⁸; burials in slab-stone boxes⁵⁹; burials in stone boxes (so far identified and excavated only on hills near the Chaluka mound); and the use of smaller houses for single burials, essentially a conical chamber built of logs or posts and covered with sod⁶⁰. Such traditions fall within the aforementioned three main categories and attest to the great variability found within Unangan mortuary practices.

Controlled and well-documented archaeological excavations of Unangan burial structures are limited and have focused on a few Umqan excavations⁶¹.

Mortuary Practices

The purpose of studying burials is to reconstruct mortuary practices. The knowledge of mortuary practices combined with other archaeological records, such as historical and

⁵⁸ Hrdlička A. The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology. P. 368.

⁵⁹ Laughlin W. S. Aleut Mummies: Their Significance for Longevity and Culture. P. 42.

⁶⁰ Laughlin W. S.: 1) Ibid.; 2) Personal Communication. University of Connecticut. Storrs, CT, 1992.

⁶¹ Aigner J. S., Veltre D. W. The Distribution and Pattern of Umqan, 1976. Burial on Southwest Umnak Island. P. 113–127; Aigner S. J., Veltre D. W., Fullem B., Veltre M. An Infant Umqan Burial from Southwest Umnak Island // Arctic Anthropology Vol. XIII (2). Madison, 1976. P. 128–131; Frohlich B. The Evidence from Umqan burials on change within the Aleut population // Abstract. American Journal of Physical Anthropology. Vol. 41. The Wistar Institute of Anatomy and Biology, Philadelphia, 1974. P. 480; Frohlich B. S., Laughlin B. Unangan Mortuary practices and the Umqan Burials on Anangula Island, Aleutian Islands, Alaska // To the Aleutian and Beyond. The Anthropology of William S. Laughlin / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P. 89–119. (Publications of The National Museum. Ethnographical Series, Vol. 20).

ethnographical records, creates a larger body of information allowing the development of inferential arguments.

The archaeological record does not specifically lead to a complete understanding of the intricate spiritual world, as the Unangan people see it. Neither do ethnographical records derived from explorers, hunters, traders, and the Russian Orthodox clergy. We do not have any records or knowledge of ethnographers or of any scientists actually living with and recording Unangan traditions without, at the same time being part of a foreign system, imposing new traditions and beliefs. Thus, our reconstruction of Unangan spirituality and how its relation to burial practices, or vice versa becomes a process of reasoning based on decent and reliable 'evidence'. Our evidence is the accumulative volume of information consisting of the archaeological, ethnographical, historical, and physical anthropological records. The evidence helps us to understand Unangan burial practices, how the Unangan relate to death, and how this relationship is reflected in the various ways the biologically deceased body is treated, respected, feared, and/or ignored.

We argue that (1) Russian control over the Unangan people was never as absolute as indicated by Russian priests and administrators, (2) the early attempt to convert all Unangans to the Russian Orthodox Church failed, and (3) the study of Unangan burial data suggests that traditional Unangan mortuary practices continued well into the 20th century. The result is that some present Unangan people, especially the 'elders', may possess direct knowledge, and interest in traditional behavior and especially traditional Unangan spirituality.

Russian jurisdiction over the Unangan

At the time when the Russian American Company was established in 1799, Russian fur hunters and traders (promyshlenniki) had successfully eliminated the greater part of the marine mammals and sea otters in the waters off the Aleutian Islands.

The Russians gradually started to move their interest further toward the American northwest coast⁶². In less than 60 years, beginning in 1741 when Vitus Bering and Alexei Chirikov first discovered the Aleutian Islands, the number of Unangan people decreased from an estimated 15,000 individuals to about 5,000. Svetlana Fedorova⁶³ reported over 8,000 natives in 1799, a number which includes all native groups in Russian America. In 1880, the number of Unangans had decreased to a little more than 2,000⁶⁴.

The decrease in the Unangan population is a product of several factors. The introduction of diseases such as leprosy, smallpox, syphilis and possibly consumption (tuberculosis) certainly is partially to blame⁶⁵. It is also likely that the Unangan population by its early exposure to smallpox, developed biological resistance or immunity against such diseases over time. Thus smallpox may not have been the 'big killer' although epidemics were reported by Ivan Veniaminov in 1807, 1808, 1830 and 1838, which killed mostly

⁶² Fedorova S. G. The Russian Population in Alaska and California. Late 18th Century — 1867. The Limestone Press, Kingston, Ontario, 1973. P. 105–106, 178.

⁶³ Ibid. P. 275–279.

⁶⁴ Ibid. P. 278–279.

⁶⁵ Jónsdóttir B. CT Scanning of Aleutian Mummies // To the Aleutian and Beyond. To the Aleutian and Beyond. The Anthropology of William S. Laughlin / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P. 155–167. (Publications of The National Museum. Ethnographical Series, Vol. 20); Ortner D. J. Identification of Pathological Conditions in Human Skeletal Remains. New York, 2003.

young and healthy men⁶⁶. The presence of immunity against such diseases and/or survival is supported by the finds of smallpox lesions in some Unangan skeletal material⁶⁷, which suggests that the person(s) lived with the disease for some time, survived and could have died from other causes.

Primarily, the decrease in population size is due to the deliberate attempts by Russian promyshlenniks to kill, annihilate, rape and forcefully relocate Unangan hunters in order to benefit the Russian fur business. Even with the introduction of advanced Russian technology, the hunting techniques applied and developed by the Unangan for thousands of years were most likely still far superior. The Russians capitalized on these skills by removing Unangan hunters from their homes, forcing them to act as hunters, significantly enhancing their own fur trade. Such events undoubtedly increased the mortal effect of Russian introduced diseases, by, among other things, eradicating the traditional Unangan family support system.

The Introduction and Influence of the Russian Orthodox Church

The Russians designated the first small chapel in Nikolski between 1795 and 1799⁶⁸. Chapels were built in Unalaska in 1808 and in Atka in 1806. Churches were established in Nikolski in 1826, in Unalaska in 1825, and in Atka in 1826⁶⁹. In general, few Russian priests arrived in Russian America before 1820. A total of four priests are recorded to have been in Russian America around 1840, a number, which had increased to about 11 by 1860, not including about 16 deacons, sextons and sacristans⁷⁰.

With the exception of the eminent priest Ivan Veniaminov, who resided in Unalaska between 1824 and 1834⁷¹, it appears that the effect of the Russian Orthodox church was limited⁷². If the church was effective to any degree in converting Unangan people and other native American population groups, such effectiveness would have been evident only at administrative centers including Kodiak, Sitka (Novo-Arkhangelsk), Unalaska and to a lesser extent Nikolski and Atka.

The number of Russians in 'Alaska', including traders, administrators and church officials ranges from 225 (in 1799) to the maximum recorded number of 823 (in 1839). However, the average number is around 600. The majority settled and lived in Kodiak and Sitka. In 1860, for example, 519 out of 595 Russian settlers, or 87 %, lived in Sitka and in Kodiak⁷³. It is unlikely that about 75 individuals, mostly consisting of promyshlenniks, could have had any major cultural and spiritual impact on native populations ranging from Attu island in the West to the interior of the Alaska mainland, and from the north slope and down south to Fort Ross in northern California. The records tell us that Unangan people were converted in great numbers, but referring to Gerry Berreman's paper on Aleut Shamanism⁷⁴ this could easily be misleading: 'Those whose task it has been to obliterate

⁶⁶ *Veniaminov I.* Notes on the Islands of the Unalaska Division. P.257–258.

⁶⁷ *Ortner D. J.* Identification of Pathological Conditions in Human Skeletal Remains. P.334–336.

⁶⁸ *Laughlin W. S.* Aleuts: Survivors of the Bering Land Bridge. P. 79.

⁶⁹ *Veniaminov I.* Notes on the Islands of the Unalaska Division. P.233–239.

⁷⁰ *Fedorova S. G.* The Russian Population in Alaska and California. P.261–262.

⁷¹ *Veniaminov I.* Notes on the Islands of the Unalaska Division.

⁷² *Fedorova S. G.* The Russian Population in Alaska and California. P.261–267.

⁷³ *Ibid.* P.273, 275–279.

⁷⁴ *Berreman G. D.* Aleut Shamanism in the twentieth Century? An Assessment of Evidence. P. 25–50.

traditional religion have an even greater investment in denying all traces of its persistence than do those they sought to convert who, by their words and behavior, expose the clerics' imperfect accomplishment of their goal⁷⁵.

We argue that traditional Unangan spirituality continued after the arrival of Russian promyshlenniks in 1741, after the establishment of the Russian American Company in 1799, after the sale of Russian America to USA in 1867, and most likely into the 20th century.

Biological and Archaeological Evidence

We are using data from previous studies on Unangan human remains to support our ideas and hypotheses. Some of the skeletal remains are presently curated in the Department of Anthropology at the National Museum of Natural History in Washington, DC and have been collected from Ship Rock, Chernovsky, Kashaga, Unalaska, Unga, Chaluka, and Okee Bay⁷⁶.

Recently we have focused on the study of 36 mummified bodies from the Warm Cave on Kagamil Island⁷⁷. The study included detailed descriptions of exterior surfaces and extensive study of the interior using nondestructive and noninvasive analytical methods such as computed tomography and traditional x-ray technologies⁷⁸.

The antiquity of the Unangan mummies from the Warm Cave on Kagamil Island has been debated for a long time. Our research has suggested that some of the bundles and 'packs' containing human remains may be much younger than previously believed. We base this on a variety of observations, including (1) descriptions of find locations by William Dall⁷⁹ and Aleš Hrdlička⁸⁰, the preservation and especially the weathering of the wrapping material, (2) the study of diseases and anomalies found in the skeletal remains and in the mummified soft tissue, and (3) the archaeological and ethnographical records.

Captain Hennig collected 12 mummies from the Warm Cave in 1874⁸¹. Hennig removed only 12 bundles, and it is believed that he collected the best preserved material leaving many less desirable items. A majority of the 12 mummies are in fair to good condition, but not exceptionally well preserved. Indeed, some of them appear to have been seriously damaged, perhaps by foxes.

⁷⁵ Ibid. P. 29.

⁷⁶ *Frohlich B.* The Aleut-Eskimo Mandible. PhD Dissertation. University of Connecticut, Storrs, 1979; *Frohlich B., Pedersen P.O.* Secular Changes Within Arctic and Sub-Arctic Populations: A Study of 632 Mandibles from The Aleutian Islands, Alaska and Greenland // Arctic Medical Research. Vol. 51: Nordic Council for Arctic Medical Research. Oulu, 1992. P. 173–188; *Hunt D.* Aleutian Remains at the Smithsonian Institution. P. 137–153.

⁷⁷ *Hunt D.* Aleutian Remains at the Smithsonian Institution. P. 137–153; *Jónsdóttir B.* CT Scanning of Aleutian Mummies. P. 155–167.

⁷⁸ *Jónsdóttir B.* CT Scanning of Aleutian Mummies. P. 155–167.

⁷⁹ *Dall W.H.*: 1) Notes on the Pre-Historic Remains in the Aleutian Islands. P. 283–287; 2) On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands.

⁸⁰ *Hrdlička A.*: 1) Exploration of Mummy Caves in the Aleutian Islands. Pt. I; 2) The Aleutian and Commander Islands and their Inhabitants. The Wistar Institute of Anatomy and Biology.

⁸¹ *Dall W.H.* On the Remains of Later Pre-Historic Man obtained from Caves in the Catherina Archipelago, Alaska Territory, and especially from the Caves of the Aleutian Islands; *Hrdlička A.* Exploration of Mummy Caves in the Aleutian Islands. Pt. I. P. 9.

Based on the description of the caves, it is likely that Aleš Hrdlička visited the same cave in 1936 and removed everything which was left to collect. Of the material Hrdlička collected, 29 bundles of mummified remains are still intact and preserved in their original condition⁸². Some of the bundles and backpacks are in excellent condition and display no damage or any decay caused by weathering. Indeed, one bundle appears to be almost new (Fig. 4). We argued that if Hennig and Hrdlička collected human remains from the same cave, then some of the mummies Hrdlička collected more than 60 years after Hennig had visited the cave must have been placed in the Warm Cave by the Unangan after Hennig's visit but before 1936.



Fig. 4. Three dimensional reconstruction of infant placed within a backpack structure. Body is protected by several layers of marine mammal furs, bird skins and grass mattings. The reconstruction is based on about 900 slices of CT (computed tomography) data [Frohlich et al., 2002, p. 110]

⁸² *Hunt D.* Aleutian Remains at the Smithsonian Institution. P.137–153; *Jónsdóttir B.* CT Scanning of Aleutian Mummies. P.155–167.

There is still some doubt about the identity of the cave Captain Hennig visited. Hrdlička visited a third, but empty cave during his journey to Kagamil in 1937 or 1938, but no other information is available⁸³. If this cave is the one visited by Captain Hennig in 1874, then somebody else must have emptied it before Hrdlička visited it and found it empty. Based on the descriptions available today, it appears that Captain Hennig collected his 12 mummies from the same cave (the Warm Cave) Hrdlička visited and collected from in 1936⁸⁴

Several of the adult mummies, including the poorly preserved that were macerated include pathological anomalies such as leprosy⁸⁵, syphilis (Ousley, personal communication, July 2002), and smallpox⁸⁶. If such diseases were present in the Unangan population before the Russians arrived, we should find similar frequencies of such anomalies in the skeletal population from Chaluka/Nikolski, about 26 km (16 miles) east of Kagamil Island. We did not. The Chaluka burials are all dated to pre-Russian period, and none of them displays any potential introduced diseases, such as smallpox, leprosy, syphilis, etc. Because of the clear evidence that post-Russian diseases are present in the mummified burials, the obvious conclusion must be that at least some of the mummified burials can be dated to post-Russian period.

Nikolski is one of the areas where a few Russians may have intermittingly settled. A small Russian Orthodox chapel was constructed between 1795 and 1799⁸⁷, and a church was established in 1826. It is likely that most of the burials found in the ancient Chaluka mound and depicting Unangan burial practices are pre-Russian, thus preceding the arrival of the Russians around 1800. Out of 98 skeletons from Chaluka, Okee Bay and one other site on southeastern Umnak Island, one case of possible syphilis has been identified. In contrast, a minimum of five cases, including syphilis (n = 3), smallpox (n = 1), and leprosy (n = 1) have been identified in the Kagamil material (n = 200 +/-)⁸⁸.

We conclude that most of the remains found in the Warm and Cold caves on Kagamil Island can be dated to after the arrival of the Russians and that some of the diseases we find in the Kagamil mummy material is a product of bacterial or viral transmission from the Russians to the Unangan people.

The research on the Unangan skeletal remains is not completed, however. Only part of the collection has been analyzed, and, at this time, no data collection will be conducted before prior approval has been obtained from the Unangan people. We are processing already available data and comparing the results with other Arctic and Sub-Arctic populations. For example, studies of skeletal data in pre-contact and post-contact Eskimo groups from western Greenland demonstrate significant differences in especially non-metric frequencies when comparing the two groups⁸⁹. This change has been attributed to cultural and genetic changes caused by the arrival to western Greenland of Europeans and espe-

⁸³ Hrdlička A. Exploration of Mummy Caves in the Aleutian Islands. Pt. I. P.21.

⁸⁴ Hunt D. Aleutian Remains at the Smithsonian Institution. P.145-148.

⁸⁵ Jónsdóttir B. CT Scanning of Aleutian Mummies. P.155-167.

⁸⁶ Ortner D.J. Identification of Pathological Conditions in Human Skeletal Remains.

⁸⁷ Laughlin W.S. Aleuts: Survivors of the Bering Land Bridge. P.79.

⁸⁸ Jónsdóttir B. CT Scanning of Aleutian Mummies. P.155-167; Ortner D.J. Identification of Pathological Conditions in Human Skeletal Remains; Ousley S. Personal Communication. Department of Anthropology, Smithsonian Institution. Washington, 2002.

⁸⁹ Frohlich B., Pedersen P.O. Secular Changes Within Arctic and Sub-Arctic Populations: A Study of 632 Mandibles from The Aleutian Islands, Alaska and Greenland. P.184-186.

cially Danes in the 18th century⁹⁰. Presently, similar analyses are being planned on skeletal material from Kagamil and Umnak islands, supported by data collected in 1978⁹¹.

Samples for radiocarbon dating were collected several years back from some of the Kagamil mummies. It is unknown if the collected samples are human bone, wood, fur, or other kind of associated material. The dates range from about 1,600 BP to about 600 BP with the majority of the samples between 1,100 BP and 900 BP. We are unaware if these dates have been calibrated (including marine reservoir effect), and we have not yet established the amount and kind of preservation and conservation chemicals added to the bundles over time since the arrival at the museum 65 years ago. In fact we have little knowledge of any potential factors, which could have altered the carbon dates. New and additional samples will be collected and submitted for processing when adequate permissions have been received from the Unangan people. Apparently, some of the samples previously collected for dating purposes were obtained from some of the excellent bundles collected by Hrdlička in 1936. Knowing the effect of the Aleutian weather on any object, we seriously question the 1,000 year antiquity of an object, appearing as if it has been produced more recently and never exposed to the harsh Aleutian environment. We hope that new dating of the bundles and backpacks can solve some of these questions.

Traditional way of life, including traditional spirituality was not abandoned before the Unangan people were significantly exposed to western civilization including organized education, improved housing, nutrition, and access to better information and communication. The question is at what time this major exposure took place. We have used the photographic record to evaluate at what time the change from using the traditional Unangan house (barabara) to modern European/American house structures occurred. Up to at least 1910, a majority of Unangan people still lived in the traditional barabaras, although some improvements had been added, such as doors and perhaps a few glass windows replacing the top entrance described by Cook⁹² and McCartney and Veltre⁹³. Between Waldemar Jochelson's visit to Umnak in 1909/1910 and Aleš Hrdlička's first visit in 1936, the Unangan community in Nikolski had been transferred from a population living in barabaras to a population living in wood framed American-styled housing (Figs 5 and 6). During the same period, communications between the islands and other communication centers were greatly improved by the gradual switch from wind and steam powered shipping to diesel powered shipping, and with the increasing availability of wireless communication, health-care and a methodical educational services.

Some Unangan children became educated outside the islands and, in general, there appeared to be a move of Unangans from the Aleutian Islands to other geographical locations in the U.S. It is inferred that this is the time when the majority of the Unangan people adopted western traditions and the Russian Orthodox teaching, and by then

⁹⁰ *Frohlich B.* The Aleut-Eskimo Mandible. P.40, 168; *Frohlich B., Pedersen P.O.* Secular Changes Within Arctic and Sub-Arctic Populations: A Study of 632 Mandibles from The Aleutian Islands, Alaska and Greenland. P.184–186.

⁹¹ *Ibid.* P.174–178.

⁹² *Cook J.* A Voyage to the Pacific Ocean Undertaken, by the Command of His Majesty, for making Discoveries in the Northern Hemisphere. G. Nicol, Bookseller to His Majesty, in the Strand; and T. Cadell, in the Strand. London, 1785.

⁹³ *McCartney A.P., Veltre D.W.* Longhouses of the Eastern Aleutian Islands, Alaska // *To the Aleutian and Beyond. The Anthropology of William S. Laughlin* / eds B. Frohlich, A. B. Harper, R. Gilberg. Copenhagen, 2002. P.250–253. (Publications of The National Museum. Ethnographical Series, Vol. 20).



Fig. 5. Nikolski Village viewed from the Chaluka settlement, ca. 1909–1910 [Frohlich et al., 2002, p. 111]



Fig. 6. Nikolski Village viewed from the western part of the Chaluka settlement, ca. 1936 [Frohlich et al., 2002, p. 111]

abandoning their traditional way of life and traditional Unangan spirituality. It is also the time when Unangan completed the migration from traditional settlements to a few centralized villages and when the Aleutian Island Chain started to become the home for fewer and fewer Unangans.

Unangan Mortuary Practices and Traditional Unangan Spirituality

Traditional Unangan spirituality is complex and based on criteria that are closely related to the individual's understanding of the spiritual world, and works in great harmony with the Unangans' 9,000 years of successful adaptation to a very rich natural environment. While much still has to be learned about Unangan spirituality and the extent of its relation to mortuary practices, it is possible to infer a model which appears to be compatible with our finds.

Much of our knowledge about traditional spirituality derives from living with the Unangan people in Nikolski for a total of more than nine months, talking to elders, discussing burial practices and helping them with processing the finds of unmarked pre-Russian burials, especially on Chaluka and at Sandy Beach (excavations and reburials). We also obtained valuable information from elders in Unalaska during a short visit in August, 2000 at which time an early version of our model was presented and discussed.

The following reconstruction of Unangan mortuary practices and its connection to Unangan spirituality is based on data and information as discussed above, but is strictly hypothetical and tentative:

- (1) According to traditional Unangan spirituality, at the time of biological death the human soul leaves the body and goes to 'another world'. When the soul has left the body, the body is less important and cannot create any potential problems for the living Unangan. In fact, the Unangans are not afraid of the body after the soul has left. The 'soul/spirit-free' body is placed in a permanent burial structure, which can be within the settlement or in a pit burial (Umqan) adjacent to the settlement. Why some bodies are interred within or externally to the settlement is presently unknown.
- (2) In situations where there are unsolved problems between the deceased and the living, the soul may not leave the body. In such cases, the body and soul become a potential danger to the living, and for that reason the problems, which caused this situation must be resolved before the soul can go to 'another world'. Problems are resolved by communicating with the soul.
- (3) Because the soul and, possibly, the body could become dangerous to the living, the body is left in an isolated location, separated from the settlements by a body of salt water. The access to the location has to be relatively easy so that everybody, including children and older people, can visit and communicate with the body-trapped souls. The caves on Kagamil Island and the shelters on Ship Rock Island and other islands fulfill these requirements: separation and easy access.
- (4) When the soul is satisfied, it leaves the body and goes to 'another world'; and the body can now be buried in a pit burial within the settlement or in an Umqan. The process can take a short or long time, possibly up to a year or longer.

- (5) Similar situations appear with deceased infants and young children. In such cases, the mother may not have had enough time to establish adequate spiritual contact with the deceased infant/child. Thus, when the infant/child dies, the soul is confused and cannot depart the body. Since this unfortunate situation is not caused by an external problem developed during their lifetime, the deceased child's or infant's soul is not necessarily dangerous to the living person. The mother can keep the body and the soul within the household and communicate with it until the soul can leave the body and go to 'another world'. For practical reasons the body may be eviscerated, and the body's cavities are filled with cut grass⁹⁴.

Bird skins, furs from marine and terrestrial mammals, and grass matting are used to keep the body safe and protected. In some cases, the body is wrapped into a bundle that can be hung from the wall or ceiling in the barabara, placed in a backpack like structure, which can be carried by the mother at any time, or placed in a wood dish, enhancing her communication with the infant's soul.

This procedure may be supported by observations by Martin Sauer in 1790 and Gawrila Sarychev in 1791–1792 describing the way in which the Aleuts disposed of their dead children: 'A mother will keep a dead child thus embalmed in their hut for some months, constantly wiping it dry; and they bury it when it begins to smell, or when they get reconciled to parting with it'⁹⁵, and ... 'but little children for whom such a frame can be made firmer and closer, are kept sometimes a whole year and even longer, until another comes into the world to supply its place'⁹⁶.

An image, by Wladimir Jochelson in 1910, and now located at the Peter The Great Museum of Anthropology and Ethnography (Kunstkamera), St. Petersburg, Russian Federation, show an Unangan woman (Chaluka, Nikolski) with a baby in a backpack (Fig. 7). The baby's position suggests that something else is taking up space in the backpack. At the national Museum of Natural History (Smithsonian Institution) we have several such similar backpacks collected from the Kagamil Warm Cave by Hennig in 1874 and Hrdlička in 1936, 1937 and 1938 (see [Frohlich, Laughlin, 2002, p. 92–93] for more details and images). All of the backpacks include the remains of a deceased infant, in some cases artificially mummified. We argue that the woman photographed by Jochelson in 1910 carries a backpack with her deceased baby and her new baby on top (see Fig. 7).

Nondestructive and noninvasive CT scanning has improved our knowledge about the mummy bundles and mummy backpacks. Bird and mammal skins can be identified by studying the CT images, and the presence of beads, labrets, wood tools, stitching, and major construction features can be viewed and studied in Jónsdóttir's article in Frohlich, Harper and Gilberg⁹⁷.

⁹⁴ Jónsdóttir B. CT Scanning of Aleutian Mummies. P.159, 162; Frohlich B., Laughlin S.B. Unangan Mortuary practices and the Umqan Burials on Anangula Island, Aleutian Islands, Alaska. To the Aleutian and Beyond. P.114.

⁹⁵ Sauer M. An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia for Ascertaining the Degrees of Latitude and Longitude of the Mouth of the River Kovima; of the whole coast of the Tshutski, to East Cape; and of the Islands in the Eastern Ocean, stretching to the American Coast. T. Cadell, Jun., and W. Davies, in the Strand, London, 1802. P.161.

⁹⁶ Sarychev G. Account of a Voyage of Discovery to the North-East of Siberia, the Frozen Ocean, and the North-East Sea. London, 1807. P.77–78.

⁹⁷ Jónsdóttir B. CT Scanning of Aleutian Mummies. P.155–165.



Fig. 7. Nikolski woman at the entrance to a barabara on Chaluka. Backpack is carried on back and supported and held in place by a string around the upper part of the woman's body. Shown backpack is similar to those found in the Warm Cave on Kagamil Island containing bodies of deceased infants [Frohlich et al., 2002, p. 114]

The backpacks are re-used over time, but the most important packing material and the lines securing the deceased body to the pack are new. For decorative purposes, some of the fittings on the backpack are new as well. Marine mammal skins, used as outer layers for both adults and sub-adults, are re-used. This is seen in the presence of older and unused stitch holes, which may have had another practical function, when the skin was used for something else at an earlier time.

When the soul has left the infant's body, the body is removed from the bundle or backpack and placed in a pit burial within the settlement or in an Umqan. Aigner et al.⁹⁸

⁹⁸ Aigner S. J, Veltre D. W., Fullem B, Veltre M. An Infant Umqan Burial from Southwest Umnak Island. P. 128–129.

reports the find of an infant bundle in an Umqan burial including bird skin, beads, and a supporting wood piece, all features of which are much similar to what we identify on the CT images of the Kagamil mummy backpacks. It appears that this infant burial could represent a case where the mother was satisfied with the communication, and the child was placed in an Umqan for a final resting place. Additionally, Russian artifacts have been found in Umqan burials⁹⁹ suggesting continuity of the construction of Umqan burials after 1741.

The use of caves and rock shelters as temporary resting places for bodies explains the low number of mummies identified so far. Thus, the cave and shelter burials are temporary burials. Bodies are mummified both naturally and artificially. Mummified infant burials are often kept in the house structure (barabara) where the mother can communicate with the deceased infant; a system is further developed by enable the mother to carry the deceased infant in a backpack while doing walking around. Thus, the total number of similar burials (caves, shelters, etc.) does not represent a 'normal population/distribution' but a selective one of which the applied use is temporary. Therefore, the sample size will never be 'high'. This becomes even more significant when we take into account the possible and most likely extensive and unrecorded looting of rock shelters and caves during the last hundred year, at which time the presence of non-Unangan people in the Aleutian Islands has increased considerably.

Unangan mortuary practices, as evaluated from archaeological and ethnographical records, are products of a belief system based on traditional Unangan spirituality. Most likely, such practices and traditions continued into the 20th century.

Finally, the archaeological and anthropological records are important factors in reconstructing biological and social histories of any population. Such records should be studied in details, but in full collaboration with descendants of the people being studied, and in a manner which is nondestructive, noninvasive and respectable.

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⁹⁹ Ibid. P. 129.

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