SYMBOLIC FIRE AND WATER TRANSFORMATIONS
AMONG THE COOK INLET, ALASKA DENA'INA

by

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I. INTRODUCTION

Precontact Dena'ina sites are remarkable for the fact that though hundreds, perhaps thousands of Dena'ina swelling sites reflecting semi-subterranean houses called *nichtij* dot the western Kenai Peninsula landscape, most are virtually devoid of artifacts or other cultural refuse. Over the years the results have been consistent—weeks of working in and around prehistoric Dena'ina *nichtij* have yielded only small undistinguished collections of artifacts, large amounts of fire-cracked rock, and very little faunal refuse. Just a few examples will illustrate the situation. A crew of fifteen worked two weeks at the Ciechanski Site and found one spear point and no faunal refuse. A crew of ten worked three weeks at prehistoric Kalifornsky Village and recovered no artifacts and only bits of bone debris (Boraas 1975). More recently, a crew of twelve worked three weeks at four Dena'ina sites in the City of Kenai and recovered two artifacts and only small bits of bone material.

This paucity of artifacts and faunal refuse has resulted in an unusual situation where the more recent part of the prehistoric record of the Kenai Peninsula is, in many ways, less well understood technologically than older periods such as those represented by the Kachemak tradition and its treasure of discarded artifacts and wealth of faunal material (cf. Workman and Workman 1989). Were it not for the remains of hundreds of house and cache pits, the Dena'ina would be virtually an invisible people as far as the archeological record is concerned.

How, then, are we to evaluate the culturally barren house depressions of the Dena'ina? Do they represent a short duration of occupation as suggested by Dumond (cite Fish Creek paper), do they represent, as others have suggested, a technologically impoverished culture, do they represent a psychosexual obsession with housekeeping, or is there some deeper cultural patterning behind it. The lack of artifact litter can, in part, be accounted for in terms of the Dena'ina cremation practice. In describing the cremation ceremony Osgood writes, "Outside, about two or three miles away, the Indians [Dena'ina] make a crematory by building up a pier of logs. On the top they finally place the body together with the particular implements and necessaries of the deceased" (Osgood 1976:166). The practice of burning personal artifacts along with the deceased was part of an intricate mourning pattern rooted in the Athabascan concept of ancestor propitiation and a reincarnation of souls and is the subject of future analysis. [cf. Boraas and Peter 1996 K'ech Eltani, The True Believer Among the Kenai Peninsula Dena'ina, for a more
complete discussion] It is our contention that the precontact Denai'ina extended this concept to game animals and used both fire and water transformation ceremonies to ritually recycle food animals. We suggest the lack of bone litter at prehistoric Denai'ina sites is indicative of an investment of time and energy on the part of their prehistoric inhabitants intent on abiding by the dictates of the sukdu or mythological stories. A number of sukdu prescribe that a ritual act of transformation be performed on animal bones that have been killed for food or furs. This act of transformation involved the use of fire or water to symbolically transport butchered animals "to the place where they are reincarnated." The result was Denai'ina living sites with little scattered cultural refuse. From the standpoint of faunal remains, Denai'ina sites are highly ordered exhibiting a kind of negentropy (Bateson 1979), or reverse entropy, driven by what can be thought of as a form of cultural energy. In this case we believe the cultural energy was supplied by the deep spiritual belief that to perform the appropriate transformation ritual would cause the animals to return for human use.

The evidence for this thesis comes from three sources: the mythological stories, ethnohistoric accounts, and the geochemical analysis of Denai'ina hearths.

II. EVIDENCE FROM MYTHOLOGICAL DENAI'INA STORIES

Lévi-Strauss (1963:207-208), among others, has cautioned that mythology should not necessarily be interpreted as a blueprint prescribing social action. However, in the case of the Cook Inlet Denai'ina, many aspects of the mythical stories seem designed to describe proper attitudes and behavior toward both nature and other Denai'ina, (Fall 1990:5). These stories rest on three implicit assumptions:

1) Nature is aware of human actions,
2) Information about one's attitude toward nature is sent through ritual human action,
3) Proper actions have positive consequences while improper actions have negative consequences.

To date Peter Kalifornsky has written fifty-seven sukdu [traditional stories, 9-13-00] set in mythical time, or "the time when the animals were talking," which he first heard as part of the Denai'ina oral tradition. Some have been previously published in two books (Kalifornsky 1977, 1984) and a number of pamphlet publications, and some are currently being prepared for a new
publication. A number of these stories recount how Denä'ina should aspire to a form of belief described as k'ech' eltan which translates as “belief in things one cannot see,” and is represented by becoming a k'ech' eltanen or “true believer,” (cf. Kari 1984:10). This form of Denä'ina belief is different from that of the shaman which is described as k'efn i jch'ggh'elax which translates as, “belief in things one can see.” Shaman activities involved healing illnesses, interpreting observed phenomena, and dealing with other tangible events, whereas k'ech eltan involved a more transcendental experience. In a number of stories the attitudes and behavior of the true believer or k'ech' eltanen are represented by the actions of a mythical character called Gashaq or by a pantheon of mythical characters sometimes described as “the men with Gshaq” which include the Dreamer, Sky Reader, Doctor, and Prophet. These mythical characters, in turn, represent social roles which individual Denä'ina would aspire to through a kind of belief quest. Success in the belief quest resulted in one becoming a K'ech' eltanen (true believer).

Proper attitudes and proper behavior toward animals are primary themes of the mythology associated with becoming a true believer and are best represented in a sakdu written by Peter Kalifornsky titled "K'ech Eltan, Belief in Things One Cannot See." Like many Denä'ina stories, this one has a preamble which defines the belief in question:

The Denä'ina, they say, had some beliefs about animals. After they killed and butchered an animal in the woods while hunting or trapping they would put the bones in one place. In the winter they would cut a hole in the ice and put the animal bones in the water. At home in the village, too, they put all the animal bones into the water, either in a lake or in the Inlet, or they would burn them in the fire. They did this so the animals would be in good shape as they returned to the place where the animals are reincarnated. They say they had that kind of belief about the animals. [Kalifornsky 1991:41]

The story goes on to relate how a man listened to the sakdu of the elders but did not

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1 That publication is A Denä'ina Legacy, K'il'eqh'i Sakdu: The Collected Writings of Peter Kalifornsky published in 1991 by the Alaska Native Language Center, Fairbanks, Alaska and edited by James Kari and Alan Boraas [Alan Boraas, September 13, 2000]

believe the stories. In particular he did not believe in any special treatment of the animal bones after butchering, and so he simply cast them out where people would inadvertently walk on them—a practice severely prohibited by the stories. While out hunting, he is beset by mice and he wantonly kills them. More mice besiege him and he pours scalding water on them and kills them all—another practice with adverse consequences. As a result of his actions, he is plagued by bad fortune and later, back at his village, he has a dream. In his dream he travels to a mythical place where a beautiful woman chastises him for his inappropriate actions and shows him the animals he mistreated. They are horribly disfigured and are being tended to, but they are unable to be reincarnated as animals again. Then she shows him the place where the properly treated animals come to be reincarnated. They are healthy and willingly return to the human land to be used again. She states,

The human people take good care of us. They take our clothes for their use and if the humans treat us with respect, we come here in good shape to turn into animals again. We will be in good shape if the humans put our bones into the water or burn them in the fire. [Kalifornsky 1991:45]

When the man wakes from his dream he is ashamed of his actions and confesses the error of his ways in front of the people of his village. There are many levels to this story, but the most significant for the purpose of this presentation is the prohibition of leaving butchered bones scattered about and to assure natural recycling by properly disposing of bones in fire or in water.

Symbolic fire and water transformations such as described in the above story are important themes in Cook Inlet Den'ina sukhu and are represented by at least two kinds of transformations: reversible transformations, which seem to be associated with the ancient sukhu, and irreversible transformations which appear in historic narratives. There are a number of examples of sukhu with reversible transformations. In the “Whistler Story” as told by Shem Pete (Fall 1990:8) a man assists his partner’s transformation into a whistler (hoary marmot) by giving him a drink of water, and later is instructed to turn him back into a human again by these words:

Build a fire well, and...throw all my bones in the fire. And my bones are going to start
smoking and the smoke...is going to be in two layers like a stream of clouds alongside of the mountain. Then be happy. If you see smoke go like that then you'll know that I'm going to come back...again, (Fall 1990:16).

In other stories water plays a primary role as a mechanism for symbolic transformations. For example in "The Raven and the Camprobber," Raven has died and his friend Camprobber brings him back to life by sprinkling water on him. In "The Woman Who Was Fasting," a woman who has fasted takes three sips of water and is then able to break a large porcupine bone, symbolic of spiritual strength, which her three strong brothers cannot break. In like manner in, "About the Shaman and the Men with Gashaq," the Gashaq, Prophet, Dreamer, Sky Reader, and Doctor pursue a transformation of consciousness by taking three sips of water. In "The Man and the Loon," a loon dives into a lake with a blind man three times thereby restoring his sight and allowing him to see the way to return to his camp and correct a bad situation. And finally in "The Steambath Spirit," a previously inexact hunter pours water on hot rocks in a steambath and states with proper respect for the steambath spirit, "Big Old Man, I give you a drink of water," and, because of his correct attitude, he receives good luck in hunting and becomes a useful and productive member of his village.

In historic stories, irreversible transformations tend to occur. In an expanded version of the Kustatan Bear Story told by Maxim Chichkalusion and written by Peter Kaliforsky (Chichkalusion 1982, and authors’ files) [subsequently published in Kaliforsky 1991:297-307], fire and water play an important role in resolving a turn-of-the-century shaman battle between the people of the Lake Clark area and those of Cook Inlet which lasted thirty years. In this story a shaman exorcised the Kustatan people of two evil shamans by placing their altered form into a fire along with wolf effigies whereupon they were transported to the Lake Clark village of Qizhje (Kijik) where they were from. In a later episode the Kustatan People threw the skin of a bear that had been invaded by the spirit of evil shamans into the fire, along with snow for water, and the resulting magic caused the people of Qizhje to die. The shaman battle was finally ended when a chief who had been invested with the spirits of friendly shamans, bundled wolf effigies with porcupine quills and threw them into the fire thereby transporting a powerful spirit back toward the people who were doing evil causing them all to die. After that, it is said, there were
no more shamans in Cook Inlet. The transformation was irreversible.

III. ETHNOGRAPHIC PRACTICES INVOLVING FIRE AND WATER

The mythological prescription of fire and water transformations was also realized in actions described ethnographically and can be illustrated by a few examples. Several sources indicate great care was taken with animal bones. At Kalifornsky Village during the first part of this century bones were piled in one place during the winter and dogs were kept from disturbing the pile. In the spring the bones were taken to the Inlet where they were dispersed in the tide. According to recent information gathered by Priscilla Russell (letter in author's files, December 11, 1989) the Inland Dena'ina buried land animal bones, but water animal bones were returned to water. Bear bones were never put in water because, as Russell was told, "bears don't belong in water." Among the Inland Dena'ina, as with other Dena'ina, it was important not to scatter animal bones or place them where animals or people might bother them because it showed lack of respect and would cause the bones to, "leave the country."

Before the introduction and spread of Orthodoxy, the Kenai Peninsula Dena'ina practiced another form of transformation: the cremation of their dead (Osgood 1976:165-168). In addition Osgood (1976:160) states categorically that the Dena'ina believed in human reincarnation although the intensity of this belief is not clear perhaps because the idea disappeared so rapidly upon conversion to Orthodoxy. A human reincarnation belief coupled with cremation is, however, another instance of symbolic transformation by fire and is testament to its importance in pre-contact Dena'ina culture.

IV. EVIDENCE OF BURNT BONE IN DENA'INA FIRE HEARTHS

During the summer of 1989 a group of anthropology students from Kenai Peninsula College excavated four Dena'ina sites at the mouth of the Kenai River within the corporate boundary of the City of Kenai (KEN-230, KEN-231, KEN-232 and KEN-233). Our purpose was to gather charcoal from fire hearths and other structural elements of Dena'ina nictji in order to help establish the chronology of the Late Prehistoric Dena'ina occupation of the Kenai Peninsula.
We did not expect to find large numbers of artifacts or faunal material, and we were not disappointed. A month's excavation at the four house depressions yielded exactly two artifacts (see Figure 1), only a few identifiable pieces of animal bone, and small distinctive middens of fire-cracked rock about ten meters from the houses.

While extracting charcoal from the fire hearths, we observed an inordinately large amount of bits of bone in a matrix of what can best be described as "bone meal." We saved the entire contents of each of the four hearths for later soil analysis not realizing at the time the samples might yield useful information about the Dena'ina practice of burning bone in the fire. Upon subsequent work with Peter Kalifornsky in preparing his recent stories for publication, it became apparent these hearths might yield empirical evidence corroborating the Dena'ina practice of burning bone in the fire.
Random samples were taken from the four hearths within Dena'ina house pits (KEN-230, KEN-231, KEN-232 and KEN-233 respectively) and analyzed using an atomic absorption spectrophotometer for three elements which would indicate the presence of bone: calcium, magnesium, and orthophosphate. As a control, a non-cultural sample from a non-hearth area twenty meters outside of a house pit at site KEN-230 was also analyzed for the same three elements. The latter "non-cultural" test indicates the presence of calcium, magnesium and orthophosphate.

Figure 2: Bone Content of Four Dena'ina Hearths
From KEN-230, 231, 232 & 233 Compared to Non-Cultural Soil

<table>
<thead>
<tr>
<th>Percent Dry Weight</th>
<th>KEN-230</th>
<th>KEN-231</th>
<th>KEN-232</th>
<th>KEN-233</th>
<th>Non-Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>2.80%</td>
<td>2.80%</td>
<td>6.80%</td>
<td>14.30%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>0.70%</td>
<td>0.80%</td>
<td>0.10%</td>
<td>1.80%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>1.40%</td>
<td>0.80%</td>
<td>0.20%</td>
<td>2.40%</td>
<td>0.02%</td>
</tr>
</tbody>
</table>

3The hearth and non-hearth samples were refluxed with hydrochloric acid to prevent sulfate precipitation, brought to volume with deionized water, and analyzed for calcium, magnesium, and orthophosphate using a Perkin Elmer atomic absorption spectrophotometer. A digest blank was run with the samples and the results of the blanks, though negligible, were subtracted from the sample results before calculation. The analysis is reported as percent of dry weight. The analysis was done by Sheree VanNatta Ross.**
orthophosphae in the natural soil in the vicinity of the prehistoric houses. The results are portrayed graphically in Figure 2 and indicate the Den'a'ina hearths contained as much as 470 times the amount of calcium, nine times the amount of magnesium, and 120 times the amount of orthophosphate as the non-hearth control test.

We conclude from this analysis, that the late prehistoric Den'a'ina were burning bone in their fire hearths, and the most obvious explanation for this practice is that they were conforming to the dictates of the suktu to transport the animals back to the place where they are reincarnated. We suspect that were archaeologists to look, they would also find evidence of ritually discarded bone in lakes and creeks in close proximity to prehistoric Den'a'ina sites.

V. SUMMARY

In addition to being a descriptive and heuristic device, Den'a'ina stories functioned to portray metaphorically how each generation could be symbolically conceived anew as a symmetrical reconstruction of the previous generation. Continuity and cycles were an important element of Den'a'ina thought and these concepts were particularly important regarding the animals they hunted and trapped. One way the Den'a'ina accomplished the reformation of animal populations was to perceive of two separate spaces, a human space which was empirical and observable and a mythical space described as the place where the animals were reincarnated, which was a mental formulation. The mechanism of ritual action caused movement from observable space to mythical space where, in a kind of metaphysical genetics, the animals were reshaped to return to human space. The fire and water transformations of the Den'a'ina were, therefore, examples of ritual practices to symbolically recycle animal populations.4 Performing the appropriate ritual, humble as it was, assured the return of the animals. Not performing the ritual broke the life-deaths life cycle and destroyed the ecology. Performance of ritual transformations was an important part of the belief quest that resulted in one becoming k'e'ch'telune and, raising the quest to the level of spiritualism, assured these practices a prominent

4 In subsequent discussions with Alan Boraas, Peter Kalifornsky stated that traditional Den'a'ina did not view fire and water rituals described in this paper as metaphors. He and others traditionally trained in the old ways believed in the rituals operated on a cause and effect basis and thus represented a kind of literal truth. (Alan Boraas, September 13, 2000)
place in pre-contact Dena'ina life. The fastidiously clean prehistoric sites without scattered animal bones and artifacts represent a highly ordered material world which, in turn, is indicative of a highly ordered mental culture devoted to reproducing a generational symmetry of animals and society.

It is interesting, and perhaps not surprising, that historic Dena'ina sites contain more cultural litter the those of prehistoric times—though still nowhere near the cultural debris of other Alaskan peoples (cf. Yesner and Holmes 1990). With the advent of Russian and later American colonization, the ordered universe of the Dena'ina was thrown into imbalance and the pace of cultural evolution was accelerated. It was no longer possible to reproduce each generation as a copy of the previous one. Historic stories, such as the Kushtan Bear Story mentioned above, describe the end of the old ways and invoke irreversible fire transformations to symbolically describe the accommodation to change that was imposed upon the Dena'ina people. In effect, the introduction of industrial technology broke the generational cycles that were a focal point of Dena'ina thought, and the practice of performing the transformations of the old sukehu began to disappear. The reordered Dena'ina cosmology began to incorporate, as its models, the religion of Orthodoxy and the materialism of American culture.
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