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DRUM RHYTHMS OF THE ALASKAN ESKIMO

ABSTRACT — An ethnomusicological investigation of Inupiaq and Yupik drumming practices was intermittently carried out 1973–1985, funded by the National Science Foundation and by the National Endowment for the Humanities. The scope of the study included the social role of the hunter-drummer in ancient and contemporary north Alaskan Eskimo society, and the social dynamics of the community traditional drumming team. Findings suggest that the additive, asymmetrical drum rhythms employed are maximally suited to, and socially functional for accompanying those Inupiaq and Yupik mimetic dances which depict significant episodes in traditional community history.

KEY WORDS: Alaskan Eskimo — Inupiaq and Yupik musicology — Drum rhythms.

The Alaskan Eskimo are part of a widely dispersed and diverse Eskimo population comprising about 43,000 in Greenland, 17,000 in Canada, 34,000 in Alaska, and 1,000 in Siberia. In Alaska, the largest group is that of the Yupik-speaking Eskimo of the southwest, residing in coastal fishing communities such as Togiak, Kwinhagak, Akulurak, Hooper Bay, Emonak, Alakanuk, and St. Michaels. There are also groups on Nelson Island and Nunivak Island, and in river communities along the Yukon and the Kuskokwim, such as Akiak, Kalskag, Aniak, Pilot Station, and St. Marys. Most of these communities have a small population of about three hundred, but Marshall on the Yukon has more than this, and Bethel, a transportation center on the Kuskokwim, has about three thousand residents. The Inupiaq-speaking Eskimo of northern Alaska (the second-largest group) number about 11,000, compared to the 17,000 Yupik. They reside in coastal whaling communities like Kaktovik, Barrow, Wainwright, Point Hope, Wales, Shishmaref, and Kotzebue. They also occupy a few inland river communities such as Noatak and Kobuk.

Until the 1970's, Alaskan Eskimo musical studies were few. Margaret Lantis's *Alaskan Eskimo ceremonialism* in 1947 contained many interesting findings with regard to the use of dance, song, and drums in ceremonies such as the Memorial Feast for the Dead, and the hunting festivals such as the Messenger Feast. Lorraine Koranda's *Alaskan Eskimo songs and stories* of 1972 (a 31-page booklet and record) contained more specific information on song categories and drumming practices. Beginning in 1973, the present author conducted periodic ethnomusicological research in numerous Alaskan Eskimo villages, interviewing song-leaders, documenting musical practices, and making tape-recordings at the seasonal Inviting-In, a competitive dance even at which neighboring village dance teams are hosted, entertained, and feasted.

Drumming has been briefly described for Eskimo groups in Canada and Greenland (Boas 1888, Rasmussen 1931, Hauser 1970, Cavanagh 1973, and others). There, the traditional Eskimo drum is employed mainly for the stand-up solo drum-dance which is largely an endurance test in which successive

players pivot a large caribou-hide drum against a nearly stationary club-like beater for as long as they are able. The drummer sometimes circles while he does this, and the audience, seated and standing around him, sing in unison. The relationship between the singers and the drumming is of a loose, 'floating' nature. Formerly, Greenlandic and Canadian Eskimo drummers engaged in an intriguing performance known as the drum-duel, in which two performers not only drummed competitively, but improvised humorous songs of derision aimed at one another.

THE ALASKAN ESKIMO DRUM

Many Inupiaq and Yupik communities in Alaska still follow traditional subsistence lifeways, and in each of these there is usually at least one experienced drum-maker. The best drums are ornamented with artistically shaped ivory handles, often in the form of a whale or walrus. Today many feature carved bone handles. The Eskimo drum is made without nails (dowels are used); it comprises a large circular frame or hoop. The hard inside core of large pieces of driftwood is used. This driftwood floats down the giant northern arctic rivers after the snow melts in May, and often comprises hemlock (*tsuga* species), an evergreen of the pine family, known among northern Indians for the tanning properties of its bark.

A groove is routed around the outside perimeter of the finished hoop; this takes the lapping cord, made from braided sinew. The carved handle is affixed with dowels, passing through reinforcing corner-angles. The hoop must be strong enough to take the tension of the stretched membrane without warping, but light enough to flex and vibrate.

The drumhead is made from the lining of the lungs or liver of the whale or walrus, and takes much time and care to prepare. The whole, raw membrane is soaked in water in order to remove the blood. It is then blown up with air through the natural opening, and hung out to dry. It must be thoroughly scraped, for it has three thin layers, and the two outer ones must be removed with a very sharp knife or scraper, without rupturing the thin membrane in the center, which has a marketable value of over \$100. With the recent introduction of regulations limiting the number of sea mammals which can be taken, the drumheads have become scarce and at a premium. The preparation takes several days, and the final scraping must be done by an expert.

The finished membrane is trimmed to size and laid over the large round wooden hoop, to be lapped. The sinew is pulled tight and then tied, securing the membrane. About an inch of membrane is left hanging around the perimeter, so that the drumhead can be loosened and tightened according to tension needs (not tuned). The excess around the edge is tightly rolled with the fingers, providing a kind of protective edging.

The drums are often stored together in the community hall, each in a separate, large flat wooden box, not close to heat. When not in use the skin is left slackened to prevent splitting, or warping of the

hoop. If a tear develops in the membrane, a small patch can be applied, made from blackfish skin, and painstakingly sewn into place. During performance, the drumhead is periodically watered from a plastic squirt-bottle; in former times urine was used. This dampening prevents cracking in the hot dry air of the filled community hall.

The drums are not played singly, but in sets of four to eight at a time, being beaten with a thin, long wand, of a length about one-and-a-half times the diameter of the drum. The wand strikes both rims simultaneously, but not the membrane. The striking of the two rims produces a rich resonating tone; this tone is deep and sustained, but the drums are not intentionally matched to any pitch or to each other. It is noteworthy that the sound energy from these loud untuned drums at low pitch is transmitted to the cortex by the ear's low frequency receptors. The latter are more damage-resistant than the ear's high frequency receptors, and thus capable of withstanding greater volume levels over longer periods of time without pain or injury. Inupiaq and Yupik dance events generally last several successive days and nights.

Within the ear, sound waves are intercepted by a loom-like array of sensitive, pitch-specific receptors, each tuned to a different frequency, the finer receptors being set in vibration by the higher frequencies. Sound comprising a single focussed pitch is received and interpreted by the appropriate nerve-fibre in the ear's auditory apparatus. The sound from several untuned drums struck simultaneously is transmitted along several parallel nerve-pathways. Thus the volume of sound energy being transferred at a given point in time is greater than that of a pure tuned sound of specific frequency, such as that of a flute.

Traditional Eskimo musicians, despite the fact that bone has always been available for making flutes, and sinewy cord could provide chordophones (the Eskimo regularly utilize a strung bow-drill), have limited their use of musical instruments to the randomly-pitched flat round *qilaun* frame-drum, played in unmatched sets. The exceptions are the occasional rattle encountered, and the relatively rare crate-like box-drum. The sustained, continuous, and hypnotic beating of the drums at extended, all-night and all-day dance events may be socially functional in bringing about the altered state of consciousness and trance-like states which appear to prevail during important ceremonies, thus furthering the goal of achieving collective heightened emotional experience.

THE SHAMAN-DRUMMER

Much has been written about the shaman-drummer of former times (Boas 1888, Rasmussen 1931). Some of the activities of the Alaskan Eskimo shaman-drummer have been reported (Murdoch 1892, Nelson 1899, Weyer 1932). The shaman-drummer was priest, healer, composer, performer, and intermediary between the whale-hunters and the whaling spirits. Within the men's *qalgich* ceremonial house

he drummed up the visions by which he determined the design of the elaborately carved wooden dance-masks necessary for spirit-placation at forthcoming ceremonies. His shaman-apprentices executed the designs in wood, bone, and ivory, and then danced masks in order to propitiate and entertain the hunting-spirits. If pleased, the spirits would cause the sea mammals to return again year after year, to be caught and used for sustenance. If offended, populations would starve.

The shaman wore a loonskin headdress symbolizing his dive to the ocean floor to communicate with the whaling-spirits. Riding upon his magical drum, he would travel to the moon in order to be able to predict the direction and movement of game animals. Using sleigh-of-hand tricks, ventriloquism, and numerous ingenious mechanical devices such as stuffed running hares and stuffed moving fish, the shaman impressed the community with his supernatural powers. The use of archaic songwords in his propitiatory chants increased his mystique. His extensive herbal knowledge multiplied the influence he wielded within the community, which needed his healing powers. Shamans' drums were ornate, and sometimes bore small ivory carvings of sea mammals affixed to the inside of the rim, in addition to the carving on the handle. Two ivory labrets pierced his cheeks, and he possessed many wives to tend his physical needs.

The extensive ceremonialism surrounding the shaman-drummer and his helpers developed because of the large population in the Bering Straits region, which possessed enough sea mammal resources to support several dozen large communities, some as large as six thousand people (Larsen and Rainey 1948). The shaman-drummer in his *qalgich* was thus able to organize large singing ensembles and unison drum teams, costume-makers and mask-carvers. If the game animals and the human population of the region had been sparser, ceremonialism on this scale would have been prohibitive. To the east in the Northern Territories where it was sparser, Eskimo groups were nomadic and rarely larger than twenty-five persons, following the caribou herd. Canadian Eskimos lacked large organized dance teams and drum teams.

In the shamans' worldview, the relationship between ritual and subsistence was cyclical and reciprocal. The ceremonies ensured the perpetuation of the rich environment, and the environment provided food for feasting, furs for dance-parkas, membranes for drumheads, plus the myriad of ordinary, everyday needs.

THE DRUM TEAM

In Alaska, Inupiaq and Yupik drummers perform seated in rows upon the ground; the drum is held raised in the left hand, with the Inupiaq beating it from underneath, the Yupik on top. Only the men drum, and it is usually the pastime of successful hunters, drumming being a prestigious activity. Another reason is that the lives of most hunters are extraordinarily eventful, and they experience a number

of adventures which eventually can be expressed in song.

The village drum-maker often makes for the use of each drummer an instrument according to individual preferences and specifications, although some drummers make their 'own.' In such instances the drum is still thought of as shared property, and is loaned around as needed. Just before the festival season the present writer obtained a traditional Eskimo drum at considerable expense. When the festival arrived, there came a request for the return of the drum for community use, and it was not seen again. The drum-maker is repaid in services or goods, and is generally a member of the drum team.

Drummers always sing while they drum, but do not at the same time dance. They often leave their place in the drum line, and step forward to dance, returning afterward to the drum line. Drummers are often the composers of the dances and of the songs, although dancers do this too. The dancers do not at the same time drum or sing, but simply move in unison to the drumbeat. The audience may join in the singing, and may step forward to dance at any time.

The drum team rehearses often; the dances, songs, and rhythms are complex and must synchronize well. Rehearsals are held in the community hall where public performance eventually will take place. Drummers travel long distances by dogsled or by boat along the coast with the dance team to the Inviting-Ins held at other villages, and sometimes drum along with the other drum team. During one of these journeys, if the drumhead splits or is accidentally broken, goods are traded for a replacement membrane. Each community endeavors to keep a spare membrane already scraped and prepared, in storage.

Being a member of the drum team is voluntary, and there is no direct payment. All music-making, however, receives some recompense in the form of feasting or gift-exchange. Anyone who is competent may join the drum team, provided there is a drum for him and he is in good standing in the community. The drum team generally consists of older, mature hunters who possess an extensive repertoire of ancestral dance songs. All members of the drum team are considered on equal footing socially (the Eskimo traditionally feature no chiefs, nobility, or class system). However, age and hunting success may earn a member more-than-average status and prestige, manifested in community respect, deference, and order of serving meat at festivals.

Upon the death of longstanding, valued members of the drum team, such as deceased Jimmy Killigivik of Point Hope, and Arctic John of Anaktuvuk Pass, the benevolent spirits of such members are thought to be present at the dance festivals, and to continue to participate in the music-making. Male babies born in their villages after their death may be named after them, thereby establishing a form of namesake relationship with the deceased. The skills and revered attributes of such former drum-leaders are thought to be perpetuated in the young, in a form of reincarnation process. The highest honor that can befall a young

successful hunter is to be bequeathed the ancient drum of a famous ancestral drum-leader. At the traditional village of Gambell on remote St. Lawrence Island, the new high school was recently named after deceased drum-leader John Aponglook.

THE DRUM'S ACCOMPANIMENT ROLE

The main purpose of the frame-drum is to accompany mimetic dance. Inupiaq and Yupik dance is performed with the feet relatively stationary, the trunk bent forward and swaying, and the arms raised in mime. The dance movements always tell a story, often a story previously familiar to the audience through community history, folklore, or mythology. The most common topics involve heroic adventures of the hunters upon the sea ice, the behavior of game animals and birds, and certain legendary figures and culture heroes. In addition to the motions which directly depict action within the story, there are movements which are symbolic of real-life action, but do not portray it directly, and there are purely abstract movements, performed for their aesthetic beauty alone. Additionally, there is a vocabulary of movements indicating processes within the dance, such as "This is the end." All movements synchronize with the drumbeat. All movements belong to a kind of grammar of dance, and may be recombined to produce new dances.

Men's and women's dance movements differ considerably, reflecting the division of labor in arctic subsistence life. The motions of the men are angular and vigorous, and their shape mirrors travel, boating, game-stalking, and trapping. Those of the women mirror garment-sewing, carcass-skinning, bird-plucking, and are more curving and graceful than men's dance motions. Men holler and stomp while dancing, reflecting an outward-looking cultural personality and an aggressive role in providing for subsistence needs. Women dance demurely with eyes cast down and minimal floor movement, and do not look men in the eye. Most dancers state that mittens should be worn by all while dancing as a sign of respect to the hunting spirits.

Although the dance movements are sex-specific and reflect the different subsistence roles of the performers, there is a degree of commonality about them. All Alaskan Eskimo dance movements are spacious, natural rather than stiff, and appear to draw their inspiration from the diving and curving of sea mammal, the undulation of ocean waves, and the flight of birds.

The Yupik dance kneeling, wearing fur crowns which sway, and waving small circular dance fans or hoops bearing perimetral feathers. The Inupiaq dance standing, wearing loonskin headdresses and gut mitten-rattles. The sound of the mitten-rattles synchronizes with the drumbeat. Special dance parkas are worn, as are beaded boots and neck ornaments.

The Yupik sing in successive stanzas, often numbering six or eight, progressively unfolding the events of the story. The Inupiaq dance songs possess only one stanza. It is sung twice only, the first time

soft, slowly, and using the nonsense vocables *ay-ya-ya-ya*. The second time it is sung loudly, fast, and using real words. Both societies employ a strident, nasal tone quality, together with a rhythmic jerking of the glottis and/or diaphragm, resulting in a uniquely 'Eskimo' vocal style. The glottal pulsation is executed in time with the pulse of the drum.

In both cultures the scales used are pentatonic (5-note), with the additional use of microtones for expressive purposes. All singing is performed in unison, the men's and women's voices an octave apart. The ending note is generally the second-to-lowest step in the scale employed in the song. A noteworthy difference in the two singing styles is that the Inupiaq melodies range widely over a 10th or 12th, and move quite freely, while those of the Yupik do not. Yupik melody hovers for long periods on one note, then moves to a note a 4th higher, and hovers there, before descending back to the first note. This yields a chant-like impression.

Dances generally commence with a short drumming incipit or introduction, and are accompanied by unison team drumming throughout, with all of the movements timed to the drums. There is also a remarkable visual effect as the decorative ermine tassels on the dance parkas sway back and forth, along with the swaying of the dancers and of the raised drums. Short dramatic gaps in the drumming match 'freezing' of certain significant dance movements. The gaps occur irregularly, and must be memorized by drummer and dancer.

The drumming accompaniment is consistently so loud that it almost drowns the singing. The singers appear to like it this way. This makes dance songs extremely difficult to tape-record, and one has to request special, muted performances in order to be able to take note of the songwords. This method is, of course, impractical and undesirable at traditional dance events within the community hall, and must be done afterwards, in specially convened meetings with the performers.

The drumming, dancing, and singing are learned holistically by the performers, not as separate entities. This befits the nature of traditional oral transmission, which permits of no cue cards, song-sheets, or written drum notation. In this way the syllables of the songwords perform a mnemonic function, their length and accent recalling the drumbeat. The dance motions, deriving as they do from action within the story, are easily remembered, and in turn serve a mnemonic function, as their duration, symmetry and asymmetry, regularity and irregularity, recall the drumbeat. In creating traditional dance, the four components—movement, songwords, melody, and drum rhythm—are intuitively woven as one fabric during the creation process, rather than successively layered. This requires not only skill and experience, but deep-rooted acquaintance with the musical norms of the society.

It is almost impossible for a non-Eskimo to compose an authentic sounding Eskimo song, let alone the combined dance-with-song-with-drum rhythm. First there must be acquaintance with community history and lore, to provide the story depicted in the dance. Then there must be precise

acquaintance with the grammar of Eskimo dance motions, which possess a specific range of prescribed movements. Then there must be acquaintance with the rules of sung language, for Eskimo words change their inner vowels when sung, and acquire melismatic (one syllable carried over several notes) suffixes. Then there must be acquaintance with the rules of traditional Eskimo melody—its descents and ascents, its preferred intervals, and its permitted leaps, slurs, and glissandi. Then there must be acquaintance with the range of sanctioned rhythmic and metrical patterns, and the successive changes which occur in them as the dance proceeds.

Inupiaq and Yupik musical style, like many other non-Western musical styles, is highly culture-specific, and may be said to (i) epitomize unspoken aesthetic values, and (ii) constitute a core element in Eskimo cultural identity. Inupiaq and Yupik dance, song, and drumming today serve potently as a badge of ethnicity, this social function having superceded their previous function of placating the hunting spirits.

THE DRUM RHYTHMS

The most common Inupiaq and Yupik drum rhythm is 5/8, performed as two unequal beats



This imparts a loping, asymmetrical quality to the music. The two notes are reversible, and the longer beat may occur first. Additionally, the final eighth-note of the long note may be expressed as a light tap of the drummer's wand on one drum-rim only, the far rim. This light tap yields a non-resonant clicking sound, and its use creates a third beat in the measure, thus



Among the Inupiaq, this light clicking of one rim is all that is heard during the first time through for a dance song. For the second time through, the loud, resonant beating of both rims is employed.

Another common rhythm is 7/8, executed as



In many dance songs, 5/8 6/8 and 7/8 are mixed, each holding sway for a few bars before changing (the changes are not frequent). The 6/8 represents two long beats with no short beat, and thus accompanies slower dance motion. For motions which are slower still, 4/4 is employed, thus



As the story unfolds, the changing nature of the human actions is reflected in the drum rhythms. For instance, when dancers need to depict hunters pursuing game animals, the action is fast and the

dance proceeds in 5/8. When the laborious work of hauling carcass-laden sleds is being portrayed, the drum rhythm changes to 4/4, and dance, song, and drum beat slow down. When the sled is unloaded and the dancers wish to represent the energetic and rapid skinning and cutting of the meat, the drum rhythm reverts to 5/8.

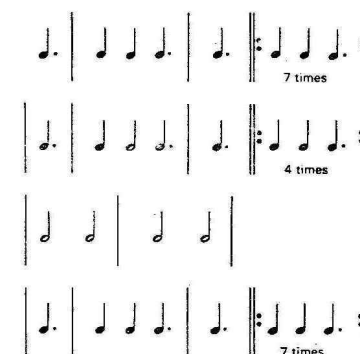
Many of the dance songs exhibit this tripartite metric structure, where slow action becomes fast action, and then reverts. It is used to depict not only the differing pace of Eskimo subsistence activities such as the chase, but also varying degrees of psychological and emotional intensity, such as the difference between disoriented hunters in the blizzard and hunters being rescued or being in social conflict with the community and being in good standing.

The tripartite rhythmic structure not only serves the function of being able to portray varying degrees of action or emotion, but (in its classic arch form) fulfills abstract aesthetic needs such as balance and contrast.

In the Inupiaq *Anilanga* Exit Song from Wainwright Village on the northwest coast, the rhythm is as follows.

Anilanga
(The Exit Song)

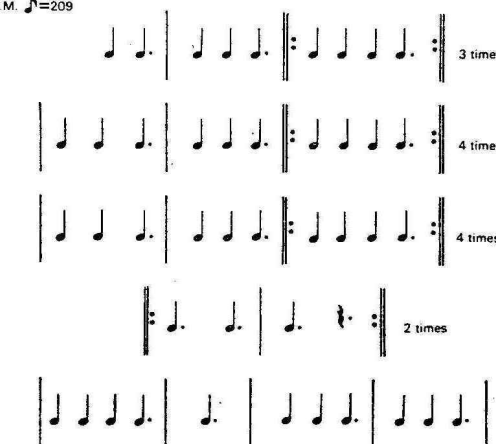
M.M. ♩=207



In the Inupiaq song "Hooking My Partner" composed by Point Hope drum-leader Jimmy Killigvik fifty years ago, the drum rhythm proceeds as follows.

Hooking My Partner

M.M. ♩=209



In David Frankson's "Paddling Sayuun" from Point Hope, the drum rhythm occurs thus.

The Paddling Sayuun

M.M. ♩ = 208

Intro Chorus

5 times

3 times

18 times 9 times

stop singing leads back to beginning

etc.

In many dance songs, a form of intentional rhythmic augmentation and diminution is found, as in this dance song from Gambell on St. Lawrence Island.

Ai-yaa Yai-yaa
(Gambell Dance Song)

M.M. ♩ = 209

11 times

yagai yagai yagai

yagai yagai

yagai

aa

REPEAT THE WHOLE PIECE

Note that in the concluding moments of the song, there occurs a progressive reduction in the number of regularly spaced dotted quarter-notes, which proceed in number from four, to three, to two, then finally to one. This exactly matches the sequential phasing-out of one repetition of a dance movement on the part of the dancers, and the dance concludes suddenly with a solitary execution of the gesture. This and similar archetypical drumming techniques form the intellectual understructure of Inupiaq and Yupik music, and furnish the kaleidoscopic variety

and unique metrical logic which distinguish Alaskan Eskimo dance.

Some of the dance songs combine fast-slow-fast changes in meter, with systematic rhythmic augmentation and diminution, with irregular and unpredictable dramatic gaps in the drumming, with spasmodic use of the soft tapping of the drum-rim, with sudden, loud 'surprise' drumbeats. Thus for a drum team utilizing an extensive repertoire of traditional dance songs, there is a considerable body of material from the past that must be committed carefully to memory, even before taking into account the ongoing composition of new dance songs and the diffusion and introduction of compositions from other Alaskan Eskimo communities.

THE KALUKHAQ BOX-DRUM

There is an ancient legend explaining the origin of the unique crate-like Eskimo box-drum *kalukhaq*, found in use today at Barrow, Wainwright, and Nome. The Eagle met The Hunter, and instructed him to make a square drum from the wood floating upon the ocean. The Eagle endowed the box-drum with its soaring spirit, so that when it is sounded its beat represents that of the Eagle's heartbeat. The Eagle said that the box-drum would entertain the hunting spirits at the ritual Messenger Feast, that it was to be suspended from the rafters and beaten with a club to bring about good weather and an abundant supply of game animals. Zigzag serrated edges were carved by the Hunter along the uppermost facet of the box-drum, and a fur-covered handle attached to the side, symbolizing the game animals sought by The Hunter. From that time on, the beating of the *kalukhaq* box-drum became an important part of the Messenger Feast, along with the wearing of real wolf-head masks, and of gut mitten-rattles.

The box-drum is not beaten solely to accompany dance. In addition to accompanying the special dances of the Messenger Feast, it is used ritually during the gift-giving part of the ceremonies, when it is sounded with a repeated tremolo style of playing.

The Tlingit Indians of southeast Alaska possess a carved and painted box-drum, rather similar to their carved storage chests. The Tlingit box-drum is tied to the rafters of the clan totem house and kicked rhythmically with the heels, by a potlatch officiant. The Tlingit box-drum is also played in a tremolo style. The probability is that the Eskimo box-drum did not result from cultural diffusion, but is an independent invention. Evidence of this lies not only in the different type of artwork wrought upon the drum (Tlingit design goes *around* the corners of their drums), and the different social function, but also the enormous geographical distance between the two societies. Between the Tlingit of Yakutat on the westernmost coastline of Tlingit territory, and the Eskimo of Alaska's southwest coastline, lies the extensive territory and coastline of the Tanaina Indians of southcentral Alaska, around Cook Inlet, and they possess no box-drum, nor does their lore mention it.



PLATE 1. Yupik drummers from Pilot Station on the Yukon River.



PLATE 2. *The large Yupik drums are beaten from on top.*



PLATE 3. *Adjusting the tension on a Yupik drum.*



PLATE 4. *The Inupiaq frame-drum is beaten from underneath.*



PLATE 5. *Drum-leader Joe Friday (2nd from right) with Chevak drummers.*



PLATE 6. *Getting ready for a summer drumming lesson at Chevak.*



PLATE 7. *Yupik children enjoying learning drumming at Chevak.*



PLATE 8. *Inupiat drummer Herbert Kinnevauk at a masked dance.*



PLATE 9. *The author (left) learning Eskimo drumming at Point Hope.*

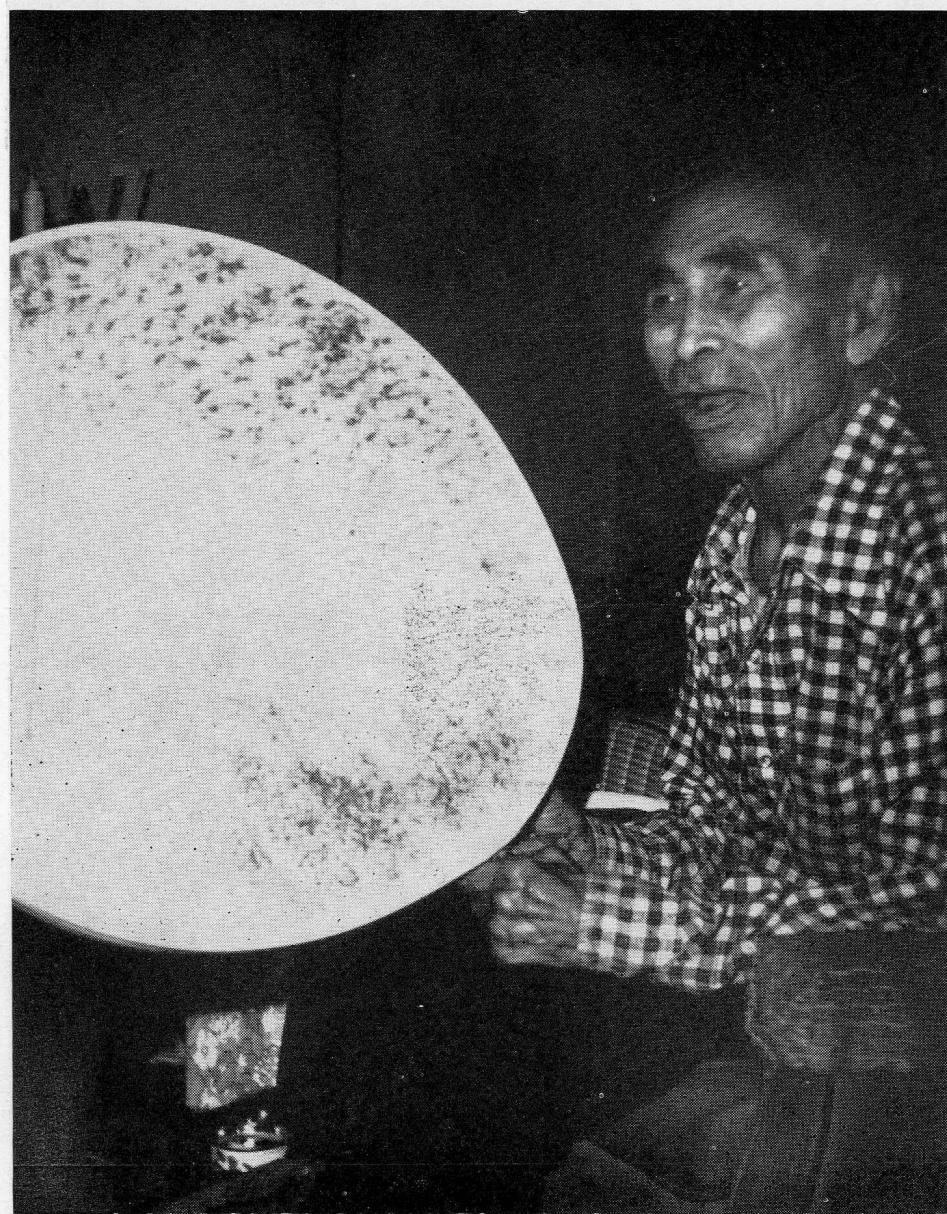


PLATE 10. *Inupiaq drummer Charlie Jensen at Kotzebue.*



PLATE 11. *Drummers accompany the dance of The Raven.*

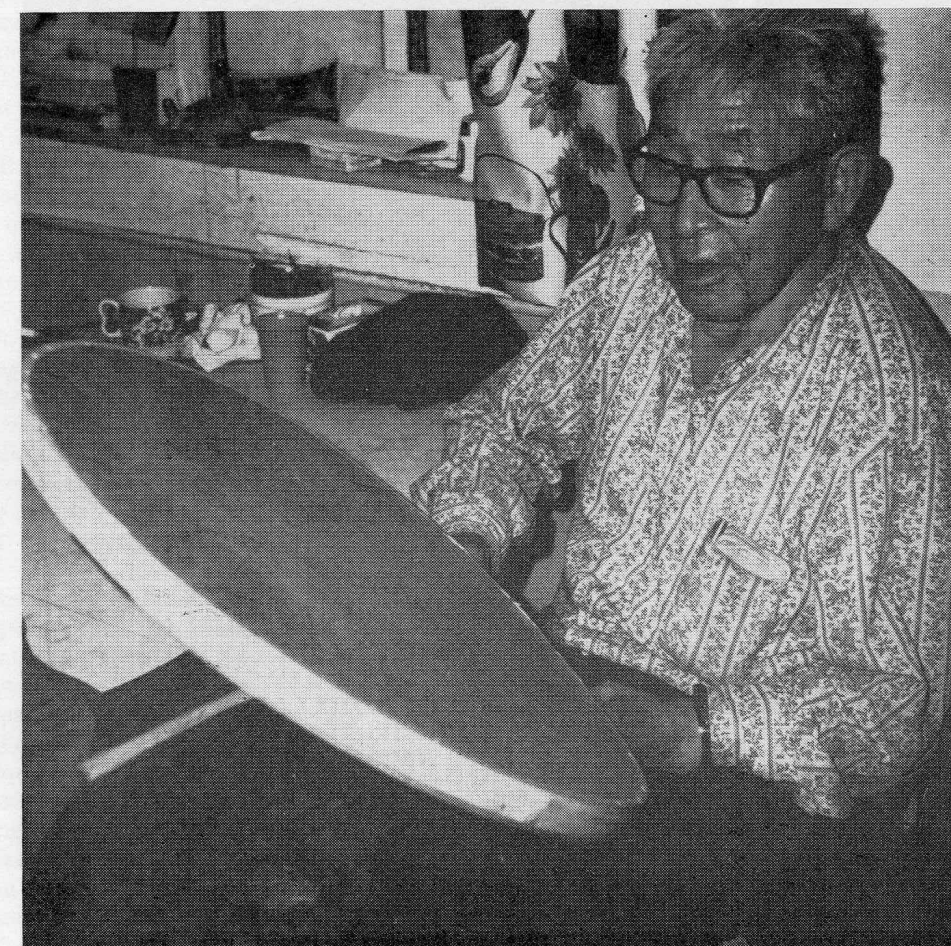


PLATE 12. *Paul Green makes a new Inupiaq drum.*

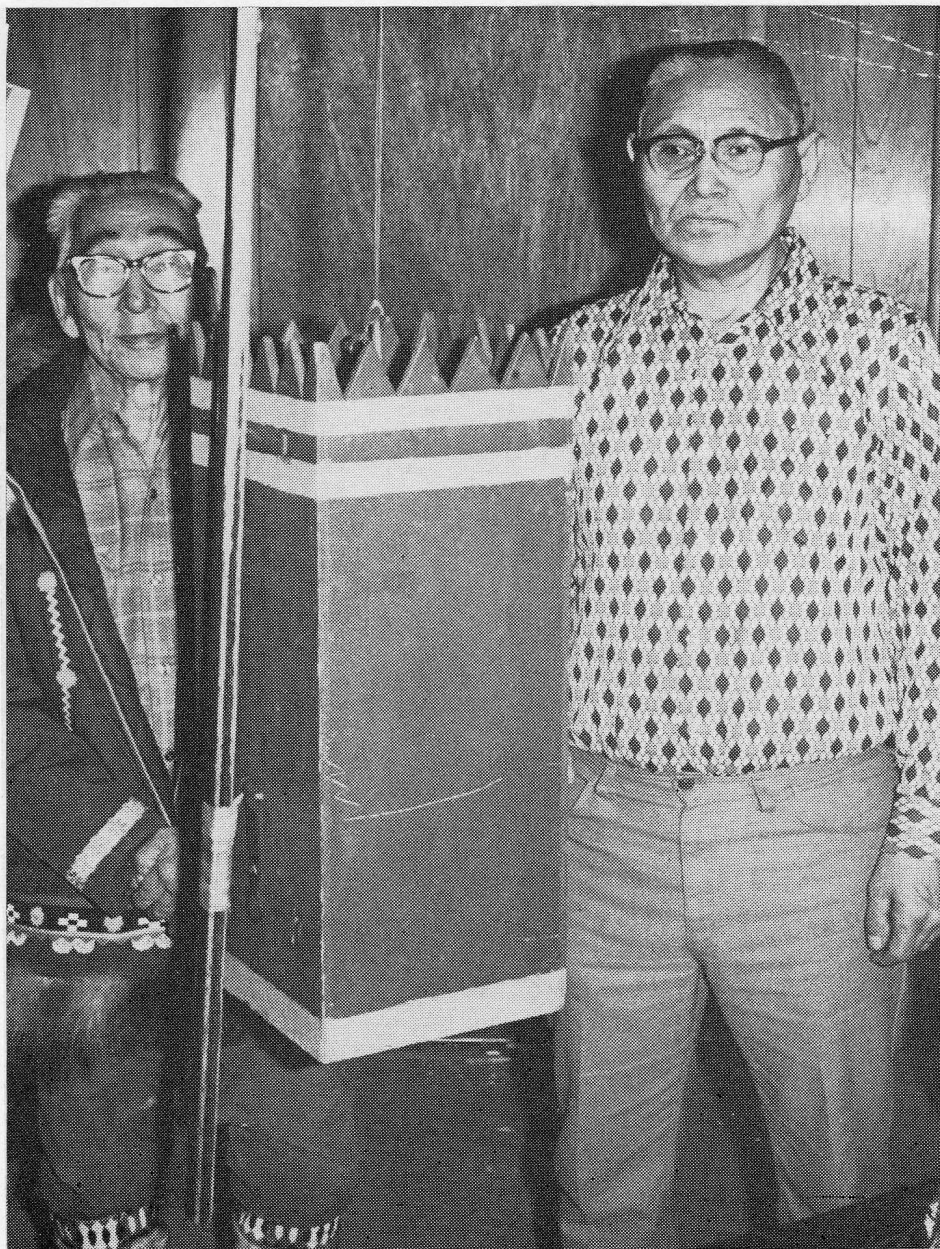


PLATE 13. Barrow drummer Pete Sovalik shows the kalukhaq box-drum.

SYMBOLISM OF THE QILAUN FRAME-DRUM

Many of the ancient shamans' frame-drums bore a carving resembling a man's skeleton, similar to the skeleton found on certain shamanistic ceremonial dance masks. The shaman-apprentice was required to undergo a long and extensive training period, at the end of which came an initiation ceremony. As part of this ceremony, the shaman-apprentice was expected to perceive his own skeleton in a vision. The small carved wooden skeletons found on some shaman-drummers' instruments symbolize this initiation, and embodies the mystical, supernatural powers of the fully-fledged shaman.

The elaborately carved ivory and bone handles of many framedrums in use today symbolize the former social, religious, and economic function of the frame-drum in facilitating spirit-placation, thereby 'guaranteeing' a plentiful supply of food in the forthcoming winter. The handles are carved in the likeness of whales, seals, and walruses, and are skillfully shaped from walrus tusks. Often, the drummer also fills the role of ivory-carver, hunter, and composer, and is a valuable 'historian' for the village. His knowledge and ability constitute a reservoir of the central traditions which sustain and nourish Eskimo society today in the face of relentless culture change.

In a world where mass marketing and technology have begun to introduce the crass ethos of material obsolescence, via commuter airplane into the outermost reaches of the arctic wilderness, the Eskimo drummer lovingly shaping his traditional drum, and the spirited roar of the drums in the mystically integrative ambience of the village community hall, symbolize stability and continuity in a world of accelerating social disintegration.

In many non-Western cultures, the flat, round drum is used by folk-healers and medicine-men for curing the psychological ills of man. It is found among the Shangana-Tsonga of Mozambique, the shamans of Eastern Siberia, the herbalists of Guatemala, and even among certain folk-healers in rural Ireland. Considering the health-promoting properties and feeling of wellbeing deriving from the sun in the heavens, it is possible that the curative properties of the shallow, circular drum lie in its solar significance. Or it may simply be that folk-healers, being paid by the community for their services, are wealthier than other men, and that they do not need or wish to carry heavy drums when they perform their rounds, visiting patients.

As a functional musical instrument, the frame-drum is a singularly efficient product of the human imagination, producing a maximum of sound with a minimum of organological complexity. Drums bearing two heads are often capable of being tuned easily to a single pitch, the two heads facilitating the focusing of the desired frequency. A single head on an open frame resists tuning. In contemporary American musical practice, the professional studio drummers and jazz drummers retain two heads on their bass-drums for tuning purposes, while the less discriminating rock drummers take off one head.

The single membrane stretched across the simple wooden hoop of the Alaskan Eskimo drummer yields a steep-fronted, pitchless resonance unique among drums, an attribute deriving in part from its extremely thin, delicate and responsive peritoneum membrane. It is not beyond the realm of possibility that the composite sound produced by the whale membrane, driftwood hoop, delicate wand, and the striking style of the Eskimo hunter-drummer, evokes in Inupiaq and Yupik audiences not only the learned response shaped by the status and prestige accruing to traditional drumming by virtue of its deep-rooted ceremonial and spiritual associations, but some as-yet unexplained intuitive response deriving from the unique ecosystem. For example, is it merely coincidence that a people experiencing throughout life the asymmetrical nocturnal and diurnal rhythms of lightless days and darkless nights, overwhelmingly employ in their important ceremonials a series of asymmetrical rhythms?

Inupiaq and Yupik frame-drums additionally are symbolic of Eskimo values concerning equality and sharing (game caught is always shared). Most of the sets of frame-drums used for community dance events are communally owned, reflecting this sharing principle.

CONCLUSION

Study of the traditional practices of the Inupiaq and Yupik Eskimo of Alaska reveals that the flat, round *qilaun* frame-drum is their main musical instrument, that its manufacture epitomizes efficient use of the natural environment, and that it is used to accompany rhythmic movements in group mimetic dance. Inupiaq and Yupik additive rhythms are socially functional in that they ideally serve the needs of the indigenous dance style, incorporating as they do complex asymmetrical meter, contrasting metrical sections which match the fast-slow-fast spectrum of Eskimo subsistence activities, and gapped rhythmic grids which provide climactic points in Inupiaq and Yupik theatrical, psychodramatic forms of dance. In examining the social role of the hunter-drummers, findings indicate that hunting experience and community lore provide the wellspring from which the drummers compose dance songs, and that this social role is prestigious.

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