

THE ROLE OF KINSHIP LINKAGES IN SUBSISTENCE
PRODUCTION: SOME IMPLICATIONS FOR
COMMUNITY ORGANIZATION

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by

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INTRODUCTION

The central role of kinship in subsistence production and distribution has been well-documented in hunting and gathering societies worldwide (e.g. Sahlins 1972; Lee and DeVore 1968; Nietschmann 1973). Contemporary research in Alaska indicates that kinship was, and has remained, the organizational theme for subsistence-based economic activities in Native communities of the state (Wolfe and Ellanna 1983; Wolfe 1981; Ellanna 1983a; Wolfe et al. 1984; Magdanz and Olanna 1984; Hughes 1960; Burch 1975; and many others). For the most part, contemporary subsistence researchers in Alaska have identified that kinship is generally the primary principle involved in the organization of hunting and fishing activities in study communities. However, most researchers have not explored the specifics of these kinship relationships nor the implications of kinship-based economic associations for the overall social organization of study communities.

It is the intent of this paper to demonstrate some connections between the organization of subsistence-based economic activities and kinship patterns in three communities and to address the implications of these interrelationships on social organization in a larger framework. Additionally, this paper provides a context for assessing some of the ramifications of the disruption of subsistence activities for socio-cultural and socioeconomic systems as a whole.

The discussion in the paper focuses on three Eskimo communities: King Island (Inupiaq), Gambell (Siberian Yup'ik), and Goodnews Bay (Central Yup'ik) (Fig. 1). Whereas the economic focus of King Island and Gambell residents is large marine mammal hunting, Goodnews Bay

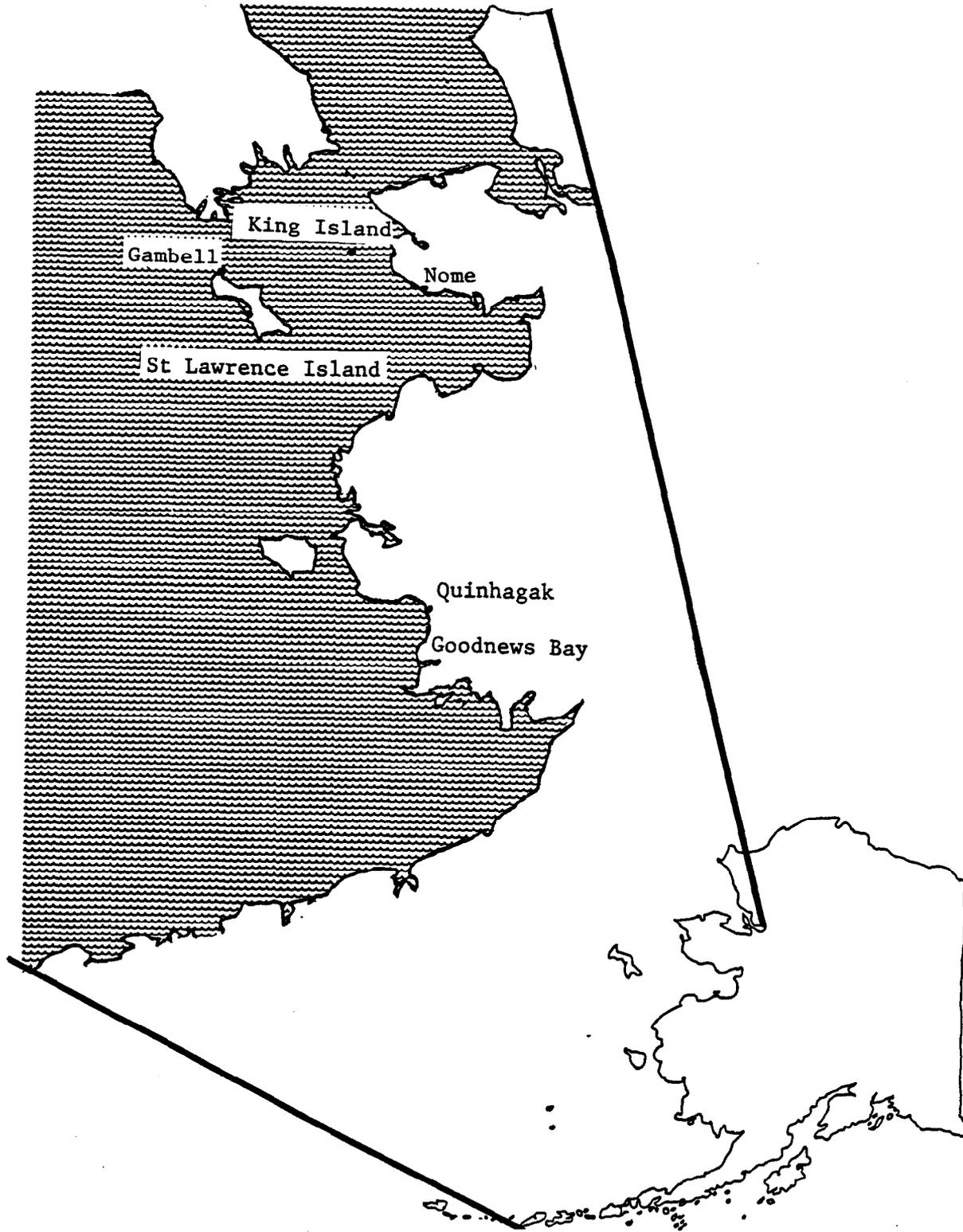


Fig. 1. Map of the study communities.

residents rely primarily on salmon fishing in both the subsistence and cash sectors of their economy (Ellanna 1983a; Wolfe et al. 1984). Detailed kinship data for these communities were gathered in the field in 1975 to 1980 in the case of King Island and Gambell and in 1983 in the case of Goodnews Bay.

THE KINSHIP ORGANIZATION OF COOPERATIVE SUBSISTENCE ACTIVITIES

Since the focus of the paper is the kinship organization of subsistence production, primary resource harvest activities requiring the cooperation of individuals, households, and familial groups are of particular interest. In the case of King Island and Gambell, skinboat hunting (including walrus hunting in both communities, whaling at Gambell, and associated sealing) by crews of related males is the primary economic activity in terms of total pounds harvested; the relatively high cultural value placed on the endeavor; sociotechnological complexity; and overall subsistence and, contemporarily, cash benefits (Ellanna 1983a; Sherrod 1982; Burgess 1974; Bogojavlensky 1969). Skinboat hunting is an activity conducted by males related to the "captain" (umealiq or angyaelik) through primarily paternally-defined kinship links (Tables 1 and 2). In the Gambell example, the dominant pattern of captain and crew relations is based, in large part, on kinship links established through a family group composed of fathers, brothers, sons, brothers' sons, and associated females (Table 1). In 1980 in Gambell, there was no example of a male crew member related to the

TABLE 1. KINSHIP RELATIONS OF WHALING CREWS, 1980 —
GAMBELL.^a

Key: Br = brother Hu = husband Si = sister
 C = captain Mo = mother So = son
 Da = daughter Fa = father Ur = unrelated
 Ru = relationship unknown

Crew Type	Crew Composition	Incidence of Crew Types in Gambell
1	C: Br, So	1
2	C: Br, So, BrSo	2
3	C: Br, So, BrSo, FaSiSo	1
4	C: Br, So, FaBrSo	1
5	C: Br, So, MoSiDaSo	1
6	C: Br, So, DaHu	1
7	C: Br, So, Ru	1
8	C: Br, BrSo, SiHuBrSo	1
9	C: Br, BrSo, MoSiDaHu	1
10	C: Br, BrSo, Ur	1
11	C: Br, FaBrSo, Ru	1
12	C: So, BrSo	2
13	C: So, SiSo	3
14	C: So, SoSo, Ur	1
15	C: So, SiSoSo, Ru	1
16	C: BrSo, BrSoSo	1
17	C: BrSo, Ru	1
18	C: Ur	1

^aOne or more numbers of a crew may be of the relationship expressed in the equation. These crew equations express only the nature of relationships, not the frequency with which they reappear on the crew.

TABLE 2. -- CONTINUED

- ^aThe data from 1930 and 1940 are adapted from Bogojavlensky 1969: 209-210, 221-222.
- ^bThe sister adopted two unrelated males, both of whom were on the crew and one of whom married the captain's brother's daughter. SiSoBr is a sibling of one of her adopted sons whom she did not adopt. One of the adopted sons had a sister who also was not adopted by the captain's sister. This woman's husband and husband's father were also members of the crew.
- ^cThis individual was a step-sibling to the captain (the captain's father married a woman who already had children prior to marrying the captain's mother).
- ^dThis crew member is a Diomedea whose relationship to captain is recognized but details are unknown. He is also the captain's neighbor.
- ^eThere were four crew members who were related to the captain through his wife, but details of these relationships were not known. One of these related crew members was a maternal uncle of another.
- ^fThis crew normally hunts with the captain of crew #9 and are also included in the kinship composition of that crew. The captain of crew #11 did not hunt frequently in 1980 because of full-time employment.
- ^gThis crew and captain normally hunted with the captain of crew #9 and are listed with that crew. Captain #12 usually took out his own boat only when the captain of crew #9 was not hunting.
- ^hTwo of the crew members, whose relationship to captain is unknown, are paternal cousins (FaBrSons).
-

captain through the captain's wife and only one example of a relationship derived through the captain's mother. The core of these crews was clearly a set of males which included the captain, his younger brothers, his sons, and his brothers' sons. Additionally, most other more peripheral males were related to the captain through his sisters and daughters. According to Hughes (1960), traditionally there were no men's houses on St. Lawrence Island, but the house of a boat captain, who was the eldest of a group of related male kinsmen, functioned similarly. It should be noted that it is the procurement of marine mammals by skinboat crews, rather than the processing of harvested meat and hides, which requires high levels of coordination and planning between individuals and

households and is labor-intensive.

Seemingly the King Island data are somewhat different (Table 2). Although the dominant pattern of kinship between the captain and crew also includes sons, brothers, and brothers' sons, this core of closely related males does not participate in crew composition at the same level as that observed at Gambell. Whereas in Gambell there is no example of kinship links established through the captain's wife, at King Island affinal ties between captain and crew are not uncommon. King Islanders perceive that skinboat crews are formed of males paternally related to the captain, and in reviewing the data presented in Table 2 (as published in Ellanna 1983^a), informants recalled more obscure male-focused kinship links between captain and crew members that were traced back several generations beyond the affinal links more obvious to an observer in the contemporary geneological data. Other mechanisms employed by the King Islanders in the past and temporarily to strengthen the male-focused nature of the crew composition include adoption (of primarily male children), naming, comarriage, and the pseudo-kinship institution of the men's house (kagri).

In the case of salmon fishing communities in western Alaska, the primary subsistence production cooperative activity is the processing of salmon during summer months (Wolfe 1981; Wolfe et al. 1984). A greater volume of salmon is produced than any other single resource during the year for immediate consumption and storage. The harvest of salmon can be conducted by individuals or pairs, usually but not exclusively males. Preservation techniques are relatively complex and labor-intensive, involving multiple processing steps which take place over a several-week period (Wolfe et al. 1984). The processing of salmon

is accomplished primarily by groups of related females, a reliable and mutually obligated source of labor for this complex and critical task. In the fishing example, it is not the actual harvest of the fish but rather the complex role of preservation which is analogous to the skinboat hunting crew in the north (Table 3).

TABLE 3. KIN RELATIONSHIPS OF MEMBERS OF KING SALMON PROCESSING UNITS, OUNAHAGAK, 1983^a

Relationships	Frequency	Description
Mo: Da	24 (40.7%)	mother and daughter cutting together
Mo:	16 (27.1%)	mother cutting alone
: Da	7 (11.9%)	daughter cutting alone
Mo: SoWi ^b	6 (10.2%)	mother and son's wife cutting together
Mo: DaDa	1 (1.7%)	mother and daughter's daughter cutting together
Mo: SiDa ^b	1 (1.7%)	mother and sister's daughter
Hu: Wi	1 (1.7%)	husband and wife cutting together
Hu:	1 (1.7%)	husband cutting alone
MoDaFr ^b	1 (1.7%)	mother and daughter's friend cutting together
GF:BF	1 (1.7%)	girlfriend and boyfriend cutting together

^aTaken from Wolfe et al. 1984: 393.

^bThere are no observed examples of these work group types in Goodnews Bay in 1983.

Based on ethnographic data (Oswalt 1966; Ackerman 1983) and recent subsistence research (Wolfe et al 1984), salmon production in Goodnews Bay is patterned similarly to that of other Kuskokwim Bay communities. Although frequencies of kin relationships among members of salmon production (processing) units are unknown for Goodnews Bay, field data from a sample of such units suggest a pattern similar to that of the

neighboring community of Quinhagak depicted in Table 3. In the Goodnews Bay (and Quinhagak) case, the central core of salmon production units appears to be a group of related females, typically mothers and unmarried or married daughters. Field data suggest that these groups of related, cooperating females are more stable units than the group of males involved in harvesting salmon. Female offspring tend to remain in residence in the community after marriage and continue to process fish with their mothers and other female relatives even after they have established their own households, whereas male offspring tend to fish for their own newly established household or for their wife's family subsequent to marriage if they remain in their home community. Married daughter and mother ties predominate in linking households for purposes of salmon production, although husband/wife and brother/sister connections appear to have occurred less frequently in Goodnews Bay based on a series of random observations. Geneologies for all households in Goodnews Bay were completed in 1983, making determinations of kinship linkages less reliant on direct inquiry.

SUBSISTENCE-BASED KINSHIP THEMES IN COMMUNITY SOCIAL ORGANIZATION

The kinship themes prominent in the subsistence-based economic systems described above are also evident in other institutions of community social organization. This is not intended to be an exhaustive discussion of all organizational parallels, but rather a presentation of a few key examples.

Data from these three communities indicate that mate selection

and post-marital residence patterns support the kinship organization of the primary cooperative subsistence activities described above. Figures 2, 3, 4, 5, and 6 depict degrees of community endogamy and post-marital residence patterns for the study communities. Figures 2 and 3 present place of birth of spouses for King Islanders in 1936 and 1980 respectively. In 1936 there were no inmarried males at King Island and community marriage patterns were highly endogamous (89 percent of all marriages were composed of males and females originally from King Island). There were only five in-married females, primarily a group of orphaned sisters from Mary's Igloo who married biological or classificatory brothers. Such marriage and residence patterns were supportive of an economic system based on the close cooperation of related males for purposes of skinboat hunting (Bogojavlensky 1969; Ellanna 1983a). The 1980 data (Fig. 3) reflect the changes which have occurred primarily as a result of relocation to Nome, a decline in walrus hunting associated with the geographic constraints of relocation, partial community dissolution, and the use of aluminum boats which have smaller crews (Ellanna 1983b). It is evident from these data that community endogamy has dramatically declined (to 36 percent of all marriages), and the percentage of inmarried females (36 percent) is only slightly greater than that of inmarried males (28 percent). However, of the inmarried males, 4 (11 percent of total marriages) are non-Native males who do not participate in King Island hunting crews in any capacity. Nonetheless, 72 percent of all husbands are King Islanders, thereby permitting the continuance of walrus hunting by boat crews of related males.

Figure 4 presents data on place of birth of Gambell spouses in 1955.

FEMALES

From King Island

From other communities

43 (89%)	5 (11%)
0 (0%)	0 (0%)

from King Island

from other communities

MALES

^aTaken from Rogojavlensky 1969

Fig. 2. Place of birth of spouses, King Island, 1936 (N = 47).^a

FEMALES

From other communities

From King Island

13 (36%)	13 (36%)
10 ^a (28%)	0 (0%)

from King Island

from other communities

MALES

One of these males was adopted by King Islanders prior to his marriage, so was considered an islander. Four others were non-Native males who did not function as part of King Island society.

Fig. 3. Place of birth of spouses, King Island, 1980. (N = 36).

FEMALES

From other communities

<p>37 (73%)</p>	<p>12 (24%)</p>
<p>1a (2%)</p>	<p>1a (2%)</p>

From Gambell

from Gambell

from other communities

MALES

a) The two males and one female who came from outside of Gambell in these two marriages were Siberians recruited to St. Lawrence Island during a repopulation phase of the island's demographic history.
 b) Taken from Hughes 1954-55.

Fig. 4. Place of birth of spouses, Gambell, 1955 (N = 51).^a^b

FEMALES

From other communities

From Gambell

40 (67%)	17 (28%)
1a (2%)	2a (3%)

from Gambell

from other communities

MALES

Two of the males in these three marriages were adopted into Gambell at a very young age and considered to be Gambell men. The other male was doing bride-service in 1980 for approximately one year.

Fig. 5. Place of birth of spouses, Gambell, 1980 (N = 60).

FEMALES

From other communities

From Goodnews Bay

17 (57%)	1a (3%)
10 (33%)	2b (7%)

From Goodnews Bay

From other communities

MALES

a) The male of this couple originally married outside Goodnews Bay and resided in his first wife's home community. After she died, he remarried a woman from outside the region and brought her back to his home community.

b) The four individuals in these two marriages were born prior to the time at which Goodnews Bay became a community.

Fig. 6. Place of birth of spouses, Goodnews Bay, 1983 (N = 30).

As in the 1936 King Island case, the population was highly endogamous (73 percent) in 1955, with only 2 unmarried males from Siberia who came to Gambell as part of the repopulation of St. Lawrence Island at the turn of the century. In contrast, 13 (26 percent) of all female spouses were inmarried in 1955. In 1980 Gambell had basically maintained similar mate selection and residence patterns to that of 1955, with a slight decline (6 percent) in endogamous marriages and an increase in female recruitment of 5 percent (Fig. 5). In 1980 there was only one male in Gambell who was not either born in or adopted into the community. This individual was living in Gambell temporarily performing bride-service with his wife's family and has since left the community. The survival of the institution of bride-service on St. Lawrence Island in the 1980s attests to the continuation of a pattern of post-marital patrilocal residence.

In contrast to the mate selection and post-marital residence patterns in Gambell and King Island communities, Goodnews Bay (Fig. 6) demonstrates a relatively low level of inmarried females. Although quantitative data for an earlier period in Goodnews Bay are not available, Ackerman (1983) notes that in 1966 matrilocality as a post-marital residence pattern remained strong, despite the fact that informants often provided other justifications for their residential preferences (such as wives getting lonely when they are away from their families). Ackerman (1983) noted that in 1966 two marriages dissolved because male spouses refused to live with the wives' parents and the wives refused to move away from their kinship cluster. In 1983 (Fig. 6) there was one female who had married into the community. The two others who had

been born elsewhere were original settlers of the contemporary community of Goodnews Bay. Therefore 97 percent of all female spouses in Goodnews Bay were either born in the community or were original settlers. In contrast, 67 percent of male spouses were born in or settled Goodnews Bay. This mate selection and residence pattern allows for the formation of cooperative salmon processing units composed of consanguinally related females.

There are other features of contemporary social organization in the study communities which reflect these kinship themes of primary subsistence production. All three communities have political institutions with membership which is consistent with primary subsistence production groups. Bogojavlensky (1969) and Ellanna (1983a) report that the role of the men's house (kagri) on King Island was to reaffirm and strengthen ties between males who participated in the same boat crew and between related males (a male usually joined the men's house of his father). The men's houses acted as distinct political factions and their influence was based on the power of the skinboat captain who dominated the house. The institutional lines of the boat crew and men's house carried over to the allocation of cash-earning opportunities prior to relocation. Contemporarily, preferences in the allocation of cash-earning opportunities are still accorded to members of one's boat crew, and the spatial organization of camp sites at Cape Woolley reflects continued political alliances along the lines of boat crew and allied crew membership.

While the institution of the men's house reportedly did not exist on St. Lawrence Island, Hughes (1960) reported a similar kin-based institution which he referred to as a "patri-clan." Membership in boat

crews and these "patri-clans" were closely related. According to Hughes (1960) in the 1950s these clans led by the eldest male attempted to monopolize wage employment opportunities. Resource use areas and affiliated camps on the island were divided into clan-based use territories. Based on field data, these patterns have continued relatively intact to the present day.

Female-focused factions were reported by Ackerman (1983) in 1966 and confirmed by field data gathered in 1983 (Wolfe et al. 1984). Membership in these factions is usually connected with membership in salmon processing units and shared caches. The spatial organization of the community is strongly influenced by the factional organization, with clusters of two to five households related through females dominating specific areas of the community. Caches, racks, smokehouses, sweat-baths, and other technology are associated with these clusters. Additionally, membership in factions influences access to employment opportunities within the community.

CONCLUSIONS

Several conclusions can be arrived at on the bases of these data. These data have demonstrated that because of the central role which kinship plays in organizing subsistence-based economic activities, an understanding of the kinship system is essential to fully understanding the structure and function of economic systems in Alaska. Conversely, since the kinship organization of primary cooperative subsistence-based economic activities is mirrored in other social institutions, an understanding of subsistence-based economic systems is essential to a

more comprehensive view of community social organization. In communities which have subsistence-based economic systems — that is, in which the domestic mode of production prevails (Sahlins 1972) — the economic system can be expected to drive the configuration of some other aspects of the social system. Additionally, these data suggest that, in these cases at least, some features of the kinship foundation of subsistence-based economic systems may influence allocation of and participation in the cash sector of the community economy.

These data suggest that continued participation in cooperative subsistence activities reaffirms kin group membership, which in turn supports related social institutions. The King Island case provides an excellent example of the effects of a partial disruption of a primary cooperative subsistence activity on other features of social organization — namely mate selection and post-marital residence. It can be anticipated that a disruption of primary cooperative subsistence-based economic activities is more than merely economic in nature. Such disruptions can be expected to impact other features of social organization as well.

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