

STABILITY IN ESKIMO NAMING OF BIRDS ON CUMBERLAND SOUND, BAFFIN ISLAND

by

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It is not surprising that hunters should study the prey upon which their livelihood depends, but it has been interesting for me to verify that inland Alaskan Eskimos know every species of their birds even though only a few of them are significant for food (Irving, 1953 and 1958a). In western arctic America this comprehensive and explicit information about a numerous category of natural objects appears to be coded in specific Eskimo names that constitute phonal keys to a highly cultivated system for storing information in memory. By the use of this nomenclature the information is communicated in conversation and can be transmitted from generation to generation.

I was able to inquire how the eastern Eskimos identify birds while I was with an expedition, led by Dr. J. Sanford Hart for the National Research Council of Canada, for studying reactions to cold among the people at Pangnirtung on Cumberland Sound, Baffin Island, in March and April 1960. I was impressed to find that they recognized and named nearly all species of birds of Cumberland Sound, and I found many resemblances between the names used at Pangnirtung and Eskimo names familiar to me in Alaska. Since Ludwig Kumlien (1879) recorded Eskimo names used for birds at Cumberland Sound 100 years ago, I could also see whether changes in nomenclature had occurred there during a historic period. I was surprised by the evidence of stability of the unwritten Eskimo language, for like most scientists I am dependent upon written catalogs, tabulations, and other indices that are the poor substitutes for my memory of images of living birds.

In March and April 1960 there were few birds about Pangnirtung; and being engaged indoors on physiological studies, I saw only rock ptarmigan (*Lagopus mutus*), snowy owls (*Nyctea scandiaca*), ravens (*Corvus corax*), and a few snow buntings (*Plectrophenax nivalis*) which first appeared before the middle of March. Yet without ability to speak Eskimo I was able to learn from Eskimos who did not speak English that we could agree upon our certain recognition of 38 species, and that we probably knew about 5 more that we were unable to specify because I could not describe them with sufficient accuracy. We had the help in translation of Dr. H. B. Sabeen (Dalhousie University), who is an accomplished student of Eskimo language, some illustrations, and I was familiar with the reports of naturalists who had earlier visited Baffin Island. The discussion and confirmation of our birds proceeded with the extensive use of pantomimes of birds' habits which Eskimos are so keen to appreciate,

and for some species I could suggest the sounds of their calls. Although our gestures and sounds were mere caricatures, we could, nevertheless, appreciate their meaning.

The Eskimos apparently recalled images of the real birds without the intervention of the mnemonic aids of writing and abstract relations that we employ. They were as pleased by my interest for their birds as I was delighted by their hearty enjoyment at sharing the information and the scenes that it recalled, with the result that I quickly gained a happy sense of familiarity with the life of a country in which I had been a stranger.

Informants

My informants at Pangnirtung were Etwanga and Paulosee. Paulosee, aged 32, had recently become a resident of Pangnirtung, but he had lived before as a hunter in camps about Cumberland Sound. Etwanga, aged 54, had been a resident of Pangnirtung for about 20 years as assistant to the medical officer. He had formerly been a hunter and was well acquainted with the people and conditions about Cumberland Sound. Neither man spoke or read English. I chose them as responsible and agreeable men with whom I came in daily contact. During our discussion it was apparent that they were deeply interested in the birds of their country, but I doubt if they were eminent in the community for their knowledge of natural history.

Method of Interrogation

Paulosee and I talked with the help of Dr. Sabeau to interpret English and Eskimo. Dr. Sabeau had been a medical officer in the eastern arctic for some years, and he knew and liked the people as well as their language. He gave more detailed explanations of questions and answers than is usual in translation. As a physician among Eskimos he was familiar with the errors produced by unskilled interrogation, and he carefully screened my questions to reduce the stranger's tendency to suggest answers. Two other Eskimo men, Apa and Amosee, who were present were called upon to some extent for references, but in the main Paulosee answered directly from his own knowledge.

For illustrations we had Peterson's "A Field Guide to the Birds" (1947). If I were not sure that the illustrations were clearly recognized, I could often verify identification through questions about size, habits, sounds, dates of appearance, and likely habitat of the species. After I had become satisfied with the identification of a species with its Cumberland Eskimo name, I mentioned names as I had learned them in Alaska. They were recognized as being either alike or different in sound. In refreshing manner, Paulosee refused to guess and occasionally asked me to revise questions so that he might give his own answer. When I dwelt upon a

description of the pintail duck (*Anas acuta*), Paulosee informed me that my bird looked like a very fine duck and that he would like to see it on Cumberland Sound but that he knew nothing about it.

The conversation with Etwanga proceeded similarly, but occasionally another Eskimo listened for a few minutes. Etwanga seemed ready to add more description, perhaps because his age gave him greater authority. His recognition was certain, and he either gave a name promptly or refused to acknowledge recognition until his doubts were settled. He was puzzled about the illustrations and my poor definitions of species of sandpipers.

Number of Species in the Avifauna

Southeastern Baffin Island was first visited by Martin Frobisher in 1576. It subsequently became an American landfall for the long sequence of British, European, and American whalers and navigators coming to arctic America from the Atlantic Ocean, but they left few records for natural history. Ornithological surveys about Cumberland Sound were made by Kumlien (1879) and by Hantzsch (1914). J. D. Soper (1928) reported on his observations made from 1924 to 1926 and reviewed earlier observations listing 85 species that he or other scientists had reported in the southeastern part of Baffin Island. The area considered by Soper extended beyond the range of Eskimos from Cumberland Sound, and his list included some reports of birds so rare or even conjectural that they would not be designated as normal to the avifauna.

In the various reports I would count Baird's sandpipers (*Erolia bairdii*) and white-rumped sandpipers (*Erolia fusciollis*) as species normal to Cumberland Sound that Etwanga, Paulosee, and I could not distinguish. Each of them gave 3 names for small sandpipers, but I could not describe their appearance well enough to be sure of the species referred to. I believe, however, that Etwanga was satisfied that we both agreed upon identification of the semipalmated sandpiper (*Ereunetes pusillus*) by its manner of calling in flight. I could only define one kind of redpoll (*Acanthis*) in terms of obvious characters. Etwanga and Paulosee did not distinguish the three jaegers (*Stercorarius pomarinus*, *parasiticus*, and *longicaudus*) by different names. One name, Isungak, was used for the three species which resembles that widely used by Alaskan Eskimos for jaeger. Both of them knew that jaegers appeared in several forms but did not seem to have considered whether the difference explicitly differentiated them. Thomas Brower of Barrow (Irving, 1960), Simon Paneak of Anaktuvuk Pass (Irving, 1953), and Charles Sheldon of Kobuk (Irving, 1958a) differentiated three species of jaegers. Paneak and Brower, however, are eminent among Eskimos for their knowledge of natural history.

I estimate that about 45 species would be in the range of view of people around Cumberland Sound. Etwanga designated 38 to me (Table 1). If we could spend a summer together observing real birds and if we were

as diligent and fortunate as the eminent earlier naturalists, I believe that we would find 45 species.

History of Ornithological Information from Cumberland Sound

In the late summer of 1877 Ludwig Kumlien (1879) went with the Howgate Expedition of the United States to Cumberland Sound where their schooner wintered and remained frozen in until the next summer. Most of the time the crew of the little schooner were confined by rough ice to a very limited outlook, but Kumlien used his opportunities like a keen naturalist to prepare a valuable anthropological survey of the Eskimos and a biological survey of birds and mammals of Cumberland Sound. His descriptions aptly quote information obtained from Eskimos, and he was at pains to give 25 Eskimo names for birds (table 1) from Cumberland Sound. In July 1878 the schooner took 16 Eskimos from Cumberland Sound to Godhavn, Greenland, where Governor Fencker, an able and enthusiastic naturalist, and other Danish officials helped Kumlien to acquire information about the birds of Greenland. On Disko Island the Cumberland Eskimos pointed out the turnstone (*Arenaria interpres*) as one of their birds which Kumlien had not seen on Baffin Island. They recognized the ringed plover (*Charadrius hiaticula*) on Greenland and knew that it and the semipalmated plover (*Charadrius semipalmatus*) were different and that both nested on eastern Baffin Island. They told him that cormorants (*Phalacrocorax carbo*) had become rare on Cumberland Sound. These cormorants have not been reported there since Kumlien's time, but they are still found in southwest Greenland, where Salomonsen (1950-51) writes that they are now known by the Eskimo name that Kumlien said was common in 1878 to the Eskimos of Greenland and Baffin Island. Important parts of Kumlien's valuable information are attributable to his discretion and competence in communicating with the Eskimos.

In 1912 Bernhard Hantzsch (1914) was wrecked in Cumberland Sound and lost most of the equipment that he had privately collected for an exploration of Baffin Island during which he planned to cross from the head of Cumberland Sound to the shores of Foxe Basin. Kumlien had remarked upon the importance that this traverse would have for natural history and had given suggestions as to the routes which the Eskimos recommended. After many difficulties Hantzsch assembled inadequate stores for his expedition and set out upon the traverse with the help of local Eskimos. Eventually he reached the shores of Foxe Basin with an Eskimo family who in kindly fashion helped him to travel westward along the barren coast. In late summer, illness and scant food had so weakened him that he had to turn back. In spite of the care of his Eskimo friends, he perished, but they faithfully preserved his journal with its valuable survey of the country and its fauna. Hantzsch reported Eskimo names for 30 species that he saw (Table 1).

History of Stability in Eskimo Names of Birds

Individual Eskimos differ in their ability to discriminate species. When I have had time to become acquainted in an Eskimo village, I have found several influential older men and women who were familiar with the species in their surroundings. Kumlien (1879, p. 83) remarked that although Cumberland Eskimos discriminated between the similar semipalmated (*Charadrius semipalmatus*) and ringed (*Charadrius hiaticulus*) plover, "they confound all the larger gulls under one name." Indifference to related species is not characteristic of all Eskimos, for Etwanga clearly recognized and named for me 4 gulls and a tern (Table 1). Simon Paneak of Anaktuvuk Pass named 4 gulls and a tern (Irving, 1953) as did Charles Sheldon at Kobuk (Irving, 1958a). Etwanga did not designate the 3 jaegers specifically although he recognized differences among them. I have found that it takes long acquaintance and discussion before an Eskimo and I finally understand each others' discrimination of some species, but even trained ornithological colleagues cannot always communicate their recognition of some species without debate. It is sometimes a slow process to discover the knowledge of another person.

It is nevertheless remarkable that these diverse naturalists communicating with Eskimos in languages that are basically so different should come out with Eskimo names written according to their English or German tongue (table 2), which are still obviously the same for most species. A stable convention in nomenclature, especially if it is unwritten, favors accurate communication and cannot be accidental or erroneous.

We should realize that writing introduces a manual process for accumulating errors between the mental acts involved in perceptions and their storage in memories. After reading a list of 25 Eskimo species names attributed to Hantzsch by another author, I noted that 4 names differed from those given by Etwanga. But when I consulted the German publication of Hantzsch's journal records, I found 27 birds named like Etwanga's and only 3 were different. I have not searched to see whether I introduced the error in my first hurried copy.

I think that we can eliminate the likelihood of error in the identification of species. When I uttered Paneak's names to Etwanga, errors in communication probably crept in to increase the appearance of difference. Etwanga's recognition of 19 out of 32 of Paneak's names cannot, however, be either fortuitous or erroneous and is significant of their common relation in the use of language.

Anaktuvuk Pass and Pangnirtung are over 2,000 miles apart and separated by 80 degrees of longitude at an arctic latitude. This geographical separation suggests a long duration of time in which a large resemblance in the naming of birds has persisted in these far separated Eskimo communities.

TABLE 1. *Names of Birds of Eastern Baffin Island*

Species	Kumlien	Hantzsch	Soper	Etwanga
(AOU, 1957)	(1877)	(1912)	(1924)	(1960)
<i>Gavia immer</i>	Toodlik	Tullik	Tudlik	Tudlik
<i>arctica</i>	Codlulik	—	Kudlulik	Kaglulik
<i>stellata</i>	Kuksuk	Kaksau	Kokson	Khaksau
<i>Fulmarus</i>				
<i>glacialis</i>	Oohudluk	Kakkordluk	Oohudluk	Khakhudlo
<i>Phalacrocorax</i>				
<i>carbo</i>	Okaitso	—	—	—
<i>Olor columbianus</i>	—	—	Kuodjuk	Kogjuk
<i>Branta canadensis</i>	—	Nerdlek	—	Nidlerk
<i>bernicla</i>	—	Nerdlernak	—	Nidlerngnak
<i>Chen hyperborea</i>	—	Kangu	Kungo	Kango
<i>Clangula hyemalis</i>	Agingak	Aggek	—	Agerk
<i>Somateria</i>				
<i>mollissima</i>	Metuk	Mittek	Metik	Miterk
<i>spectabilis</i>	Kingalalik	Kingalik	Kingalalik	Kingalalik
<i>Mergus serrator</i>	Pye, Pajk	Pai	Pyle	Paerk
<i>Falco rusticolus</i>	—	Kigavik	—	Kingnuaiuk
<i>peregrinus</i>	—	Kigaviarsuk	Kikkeveokjuk	Kikaviarkjuk
<i>Lagopus lagopus</i>	Akagik	Akkigirk	Arkagik	Akigikvik
<i>mutus</i>	Akagik	Niksartok	Arkagik	Akigerk
<i>Charadrius</i>				
<i>semipalmatus</i>	Koodlukaleak	Kullekulliak	Kudlekaleak	Kudlikuliak
<i>Pluvialis</i>				
<i>dominica</i>	—	Ungalitti	—	Toodlik
<i>Arenaria</i>				
<i>interpres</i>	Telligvak	—	Tellevak	Talikbak
<i>Ereunetes</i>				
<i>pusillus</i>	—	Livilivilakulluk	—	Livilividlak
<i>Phalaropus</i>				
<i>fulicarius</i>	Shatgak	Sagak	Shutgak	Jakjak

Species	Kumlien	Hantzsch	Soper	Etwanga
(AUO, 1957)	(1877)	(1912)	(1924)	(1960)
Lobipes lobatus	Shatgak	—	Shutgak	—
Stercorarius				
parasiticus	Ishungak	Issungak	Ishungak	Issungak
pomarinus	Ishungak	Issungak	Ishungak	Issungak
longicaudus	Ishungak	Issungak	Ishungak	Issungak
Larus hyperboreus	Nowgah	Nauja	Nowyah	Nauyak
argentatus	Nowgah	—	Nowyah	Tasermiuktak
Pagophila eburnea	—	—	—	Kanirk
Rissa tridactyla	Nowavah	—	Nowyavah	Nowyava
Sterna paradisaea	Emukitilak	Immerkotailak	Emakatilak	Imerkotailak
Cephus grylle	Pesholak	Pitsiulak	—	Pitsiolak
Uria lomvia	Akpa	—	—	Akpak
Plautus alle	—	—	—	Akpaliakjuk
Nyctea scandiaca	Opigjuak	Ukpikdjuak	Opigjuak	Ugpigjuak
Corvus corax	Tudluak	Tullugak	Killugak	Tuluak
Eremophila				
alpestris	—	Mannorodligak	Tingodluktuk	Tinguluktuk
Oenanthe oenanthe	—	Erkoligak	Ekuligak	Erkogudligark
		Avioktuk		
Anthus spinoletta	Kung-nuk-took	Nedliayok	Kungnuktuk	Siusiuk
		Kernertak		
Acanthis flammea	Anarak	Saksariak	—	{Kaingak Sirksigiak
Calcarius				
lapponicus	Kiologak	Kaoligak	Kowlegak	Kaugudliark
Plectrophenax				
nivalis	Kopenuak	Koppanoak	Kopenuak	Kopenoavik

TABLE 2. *Resemblance of Eskimo Names in Earlier Reports to Those Given by Etwanga at Pangnirtung*

Source	Like	Unlike	Resemblance (percent)
Kumlien, 1877	22	2	92
Hantzsch, 1912	27	3	90
Soper, 1924-26	24	1	96
Alaska, 1953 (Irving)	19	13	59

Differences in Eskimo Names from Other Localities

Likeness and difference in language can be related to the degree of cultural divergence among its users. In a list of 99 names for birds given to me by Kutchin Indians in arctic Yukon Territory (Irving, 1958b), I could only see that two or three might sound like names given to those species by Eskimos in nearby Alaska (Irving, 1958a). In this respect the two people were completely different. In contrast, the extent of differences among names used by various groups of Eskimos appears small. I believe, however, that accurate comparison of these differences will show traces of the history of cultural change among the different groups of Eskimos.

Forty to fifty species of birds are to be found alike and common in many American arctic localities. For the vicinities of 10 Eskimo communities I have examined lists of the avifauna prepared by naturalists whose identifications of species I could ascertain. These ornithologists were also in a position to know the local Eskimos, and each has reported names for at least 30 of the widespread arctic species. Among 13 common arctic species I found that 4 were named alike in all 10 localities, 4 were alike in 9 localities, 3 in 8 localities, and 2 in 7 localities. The authors used various conventions in spelling Eskimo sounds and did not prepare the names for the purpose of my comparison. Nevertheless it is evident that this groups of species is named much alike by Eskimos across the arctic.

In another group of 17 common species, I found resemblances in the names used across the arctic in from 7 out of 10 for some species to only 3 out of 10 for others. Some of the variations in names of a species appeared to distinguish eastern from western usage, but a common geographical system of variation in naming was not evident. There appeared, for example, 7 different names for the widespread and abundant lapland longspur (*Calcarius lapponicus*) and for the rather common water pipit (*Anthus spinoletta*). It is possible that some species receive different attention that leads Eskimos readily to give them special names.

Many ornithologists are now working among Eskimos, often in association with anthropologists. Within a few years accurate lists of Eskimo

names for birds will become available from many localities and well designated Eskimo groups. With this information new evidence will appear to indicate the geographical distribution of cultural deviations among Eskimo societies. Chronological sequences of contact and separation may also appear through comparison of deviations in the use of language.

Influences for Cultural Change on Baffin Island

The contact of Eskimos with white men has changed the material and implements by which these arctic people subsist. The intervention of white people in Baffin Island has also fluctuated according to interests completely irrelevant to those of the Eskimos and their country. After Frobisher's contact with the Island began in 1576, the expeditions of explorers passing along the coasts occasionally brought in goods and implements which were profoundly different from any in Eskimo experience. A few Eskimos temporarily joined the crews of explorers.

As early as the explorers, whaling ships came from Europe, Britain, and later from America to the waters of Davis Strait. Many of them engaged assistance from Eskimos whom they paid in objects of trivial cost but which, like knives and needles, were novel and of great use to Eskimos. Several stations in Cumberland Sound, established for whaling and rendering oil, at times employed a large share of the local population, contributing to them foreign material and implements. To an unknown extent white and Eskimo blood intermingled, for these social relations between the races are not accurately discussed in the records of trade. Kumlien (1879) observed that venereal disease had been introduced by the whalers and that lung disease probably killed more Eskimos than all other diseases combined. Early in the 1900's, the near extinction of bowhead and right whales in the North Atlantic and the decreasing value of whale oil and whalebone rather suddenly terminated whaling.

At about this time the fur trade expanded vigorously into the arctic and for about 30 years the traders' payments for furs enormously increased imports to the arctic coasts and islands. For a time some Eskimos were wealthy. About 1930 the brief richness of the arctic fur trade was suddenly deflated to a fraction of its former values.

A few missionaries zealously spread their creeds, sometimes in competition with each other that had a disruptive influence upon Eskimo societies. Old British and European folk tunes accompanied by accordion and fiddle were skillfully adopted to lead the complicated steps and figures of the lively jigs and reels that Eskimos must have learned from the vigorous old sailors and fur traders. But it is a sad loss that Eskimo vocal music, the accompanying drums and the formal and, for them, classical dance figures that are still popular in Alaska are not now evident about Cumberland Sound, where their cultivation appears to have ceased. It was to

the benefit of the Eskimos that the influence of their unprincipled shamans dwindled. Erratically at first, but recently to great effect, medical care has treated indigenous ailments and has begun to counteract some that have been introduced from our civilization.

These examples illustrate marked changes in the ways of Eskimos, some of which came about suddenly. The material used by Eskimos has been profoundly modified, and some aspects of their social activities have changed. Although for several hundred years powerfully equipped and organized parties of foreign explorers, whalers, traders, missionaries, and scientists have exploited the few poor inhabitants of Cumberland Sound they have adhered to the old Eskimo concern for knowing their own natural surroundings accurately.

Completeness of the Eskimo identification of birds and precision and stability in their nomenclature is in contrast with popular customs in Europe and America. During the centuries since scientific naming of animals began, scientific accounts of European and American birds have been so inconsistent about applying common or vernacular names to species that if there ever existed a comprehensive popular English nomenclature for avian species it is no longer apparent. But this part of Eskimo culture, transmitted verbally, has remained stable. Meanwhile in many circumstances related to goods, implements, and trade with the outside, Eskimo ways have changed even drastically and have shown their flexible attitude toward the adoption of strange customs. Until now the Eskimos have lived in many small camps so scattered around Cumberland Sound that they have had little schooling and few of them read or speak English. It may be suspected that the introduction of our education will divert their attention from dwelling upon their own environment, and that their concern for local natural history will decline as the irrelevant entertainment of big cities is brought to absorb their interest.

Acknowledgements made in the literature on arctic exploration and science suggest that Eskimo have made greater contributions of accurate and significant information to our scientific knowledge than has been derived from other aboriginal people. Numerically few and scattered and poor in natural resources, Eskimos have tenaciously retained many of the intellectual and social ways of their own culture while they have readily adopted and mastered some of our ways. They still stand out for acuity of observation and for vivid and accurate memory of natural phenomena. Written records supplement the use of memory in science and in the accumulation of knowledge, but writing is not a substitute for memory. Memorized knowledge is often disparaged, but accurate and vivid recollection of the phenomena represented by words is the basis for the systematic and even logical organization of information about natural phenomena. The vivid pictorial memory is cultivated among Eskimos and their names for objects are used in recalling and communicating information. The

individual and social practices for the cultivation of useful memories could be studied among Eskimos and might be found useful in our way of education. If we are to benefit from study of these aboriginal ways it must be before our offer of scanty and superficial schooling replaces the accurate ancient Eskimo methods for obtaining and communicating information.

SUMMARY

For 42 species of birds adjudged normal to the vicinity of Pangnirtung, Cumberland Sound, Baffin Island, two Eskimos who did not write recognized and named orally 38 in their own language. Among Eskimo names reported by Kumlien in 1877, Hantzsch 1912, and Soper in 1924-6, 92%, 90%, and 96% respectively are close to those obtained in 1960. These resemblances in naming cannot be fortuitous, but the differences may result from erroneous communication, which must at any rate have been infrequent. Fifty-three percent of the Baffin Island names are clearly like names for those species obtained from Eskimos of interior Alaska. Communication on this kind of natural history between Eskimo and scientist is accurate. Eskimo nomenclature has been stable at Pangnirtung for 100 years of history. Temporal and geographical separation between Baffin Island and Alaska has brought about some differences in naming that signify cultural change. The accuracy and stability of unwritten Eskimo names illustrates the cultivated character of aboriginal concern for natural objects and phenomena.

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