Documenting the Cultural Geography, Biogeography, and Traditional Ecological Knowledge of King Island, Alaska

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In the summers of 2005 and 2006, members of the King Island Native Community and approximately ten scientists will conduct research for a project called "Documenting the Cultural Geography, Biogeography, and Traditional Ecological Knowledge of King Island, Alaska." This project was funded in Fall 2003 by the Arctic Social Sciences Program, Office of Polar Programs, National Science Foundation. It is based upon a 1997 request to co-Principal Investigator Deanna Kingston by King Island Inupiaq[1] elder Marie Saclamana. She stated "We need to get the elders out to King Island! There are lots of names we're going to forget if we don't get them out there soon." However, at the time Saclamana voiced her concern, Kingston had no idea who to approach for funding to bring elders to King Island. Fortunately, Kingston was aware of other projects in Alaska that documented Alaska Native place names. So, in 1999, Kingston sought and received a seed grant from the Connecticut University System (where she was employed at the time) that allowed her to go to Alaska. The purpose of the trip was to ask other social scientists for ideas about potential funding sources and logistical support and also to begin preliminary interviews with King Island elders.

In all, Kingston conducted five hours of interviews with elders and recorded approximately fifty place names. In these interviews, Kingston was struck by several major themes:

(1) Many of the places that elders remembered referred to subsistence activities as well as to knowledge of the climate and local environment.
(2) Some of the places referred to old village and cemetery sites.
(3) Some of the places were remembered fondly as places to play.
(4) Some of the places were associated with spirits and/or ghosts.

Although Kingston's anthropological training prepared her for the documentation of stories (as represented in themes 3 and 4), it did not prepare her to adequately document (according to Western scientific standards) the different varieties of flora and fauna that live on and around King Island, old village and cemetery sites, and the translation of the place names

themselves. She also knew that it would be important to create professional-quality photographic images (a skill she lacks), particularly since the King Islanders no longer live on King Island.

Because Kingston lacked the expertise to adequately document the other two themes (1 and 2), she approached Jesse Ford, a general ecologist at Oregon State University with an interest in bridging traditional ecological knowledge (TEK) and western scientific knowledge. Ford agreed to lead research on the flora of King island and suggested other scientists specializing in sea birds (Kim Nelson, Oregon State University) and marine mammals (a biology Ph.D. student). Kingston then asked Matt Ganley, archaeologist for the Bering Strait Foundation (and now Land Manager for the Bering Strait Native Corporation), to lead the archaeological team on the island (assisted by Owen Mason and Claire Alix, GeoArch Alaska); Larry Kaplan, an Inupiaq language specialist and chair of the Alaska Native Language Center, University of Alaska, Fairbanks, to help with Inupiaq/English translations; and David Bogan (Green Mountain Documentary), a videographer trained in anthropological theory and method, to capture moving and still images.

In addition, Kingston realized that a project of this type would document what is variously known as "traditional ecological knowledge" (TEK) or "indigenous knowledge" held by the King Island elders. Traditional ecological knowledge has received a lot of attention in the past 15–20 years, especially as natural resource managers, biologists, and social scientists have learned to appreciate the multiple ways that this knowledge can complement Western scientific knowledge about plants, animals, and the environment (e.g., Berkes 1995; Berkes 1999). Only recently have some Western scientists begun to recognize that their way of knowing is just one of many possible ways. For instance, the Inupiat of the Alaska Eskimo Whaling Commission demonstrated that Western science had certain methodological limitations that gave inaccurate census data of the bowhead whale. In fact, the elders' knowledge of bowhead whale behavior actually improved upon Western science methodologies (Freeman 1989; van den Berg 2003).

Recent publications (e.g., Krupnik and Jolly 2002; Ford and Martinez 2000; Huntington 2000) and funding attest to TEK's popularity in social scientific, biological, and physical scientific research. However, recent writings by Cruikshank point to the problems of treating TEK "as an object for science rather than as a system of knowledge that could inform science" (Cruikshank 1998:50). Ford and Martinez remind scientists that TEK is embedded not just in the physical environment, but also within a moral, ethical and spiritual worldview (Ford and Martinez 2000:1,249). Nadasdy shows that there is still an unequal power dynamic between traditional indigenous knowledge holders and western scientists (Nadasdy 1999). These critiques serve to remind scientists that the nature of the relationship between western science, broadly conceived, and indigenous knowledge is still in its formative stages. Over the past fifteen years or so, the unequal power dynamics have led some Native scientists, scholars, and policy makers to conclude that a collaborative relationship is not really possible, and that Native knowledge and Western science can best operate in parallel streams. This conclusion is based in large part on the recognition that simple collaboration does not necessarily change the nature of the power relationships and the resultant primacy of Western ways of knowing.

In addition to these critiques, anthropology as a discipline has recently been called to task for alleged ethics violations in the recently published *Darkness in El Dorado* (Tierney 2000), causing the American Anthropological Association to ask its member anthropologists to

"reflect deeply upon the ways in which they conduct research" and to continue discussions regarding the ethical treatment of indigenous peoples (American Anthropological Association 2002). In the Arctic, the Office of Polar Programs (OPP) of the National Science Foundation now asks scientists to read over OPP's "Principles for the Conduct of Research in the Arctic" and to abide by its tenets when conducting research in northern regions (National Science Foundation Office of Polar Programs 2002). These principles are quite comprehensive and ask scientists not only to inform Arctic residents of their research, but also to include them in the research planning, implementation, and development of products.

Additionally, in the Fall 1999, the Native American Rights Fund helped the King Island Native Community (KINC— an Indian Reorganization Act tribal council)[2] and the King Island Native Corporation develop the "King Island Policy and Protocols for Research and Cultural Property Rights" (cf. King Island Native Community and the King Island Native Corporation n.d.). This was developed in partial response to the oratorio "King Island Christmas" (a musical written, composed, and marketed by non-King Islanders without permission from the King Island Native Community) as well as to other current and past research where King Islanders were not kept informed or given copies of research results (including some of the research conducted by Kingston, a King Island descendent). Key aspects of this policy are that the King Island Native Community:

- claims that all cultural and historical information about the King Island Inupiat is the intellectual property of the King Island Native Community (KINC);
- requires that originals of all research materials be given to KINC;
- asks that researchers collaborate with and include KINC members in the research and research products; and
- encourages researchers to seek approvals from KINC before publishing anything of their work.

In addition, this policy applies to all *previous* research conducted about or with King Island Native Community members, no matter how long ago the research was conducted.

The ethics and policy statements cited above (and especially the one by the KINC), Kingston's previous research and experience with the KINC, and recent critiques of TEK in western resource management form the backdrop for the design of this project. As conceived, our project is in some ways similar to and in some ways different from the above model of operating in parallel streams. On the one hand, scientists have taken the lead to acquire the funding to make this project happen, which is a traditional western-led model. On the other hand, the impetus for the creation of the project in the first place came from the community in the form of a direct request for such work. Further, the lead investigator (DK) has strong family ties within the KINC. However, she only briefly lived in Anchorage as a child and is not a daily part of contemporary King Island communities in either Nome or Anchorage. The co-principal investigator (JF) has some experience working in a few Arctic Alaskan villages with Inupiat elders who are whitefish experts, and is a proponent of paying deep attention to indigenous ways of knowing about contemporary and past environments (e.g., Ford and Martinez 2000; Ford 2001). However, she was raised in the traditions of Western science and so most likely often misses the assumptions of her own epistemologies. Learning is cumulative, but slow. The other Western scientists on this project have a range of experience with indigenous communities, from essentially none to significant involvement, including holding a position of trust (as the Land Manager of Bering Straits Native Corporation). As a

team, we believe that the best path to achieve project objectives will flow from a reversal or, at minimum, an equalization of the power dynamic; to this end, we have enlisted the guidance of both the King Island Native Community and the King Island Native Corporation for significant decision points, and encourage them to speak freely and strongly at any point along the way. To enable this process, we have been trying to keep a steady presence in the Nome community by frequent visits.[3]

Because of these complexities, the typical models of collaborative scientific ecological knowledge (SEK)–traditional ecological knowledge (TEK) work do not really apply to our project. In our case, SEK is not seeking to "incorporate" TEK; neither are we trying to "bridge" SEK and TEK. We are certainly not working in parallel streams independent of one another. In an attempt to articulate the nature of the relationships, we (DK and JF) have developed the following model. It is important to recognize that this model was created by Western scientists for an audience of Western scientists; in out-years, if King Islanders have any interests in trying to articulate the process and relationships that characterize this project (which is not one of the project goals), this model could no doubt be usefully modified by their input.

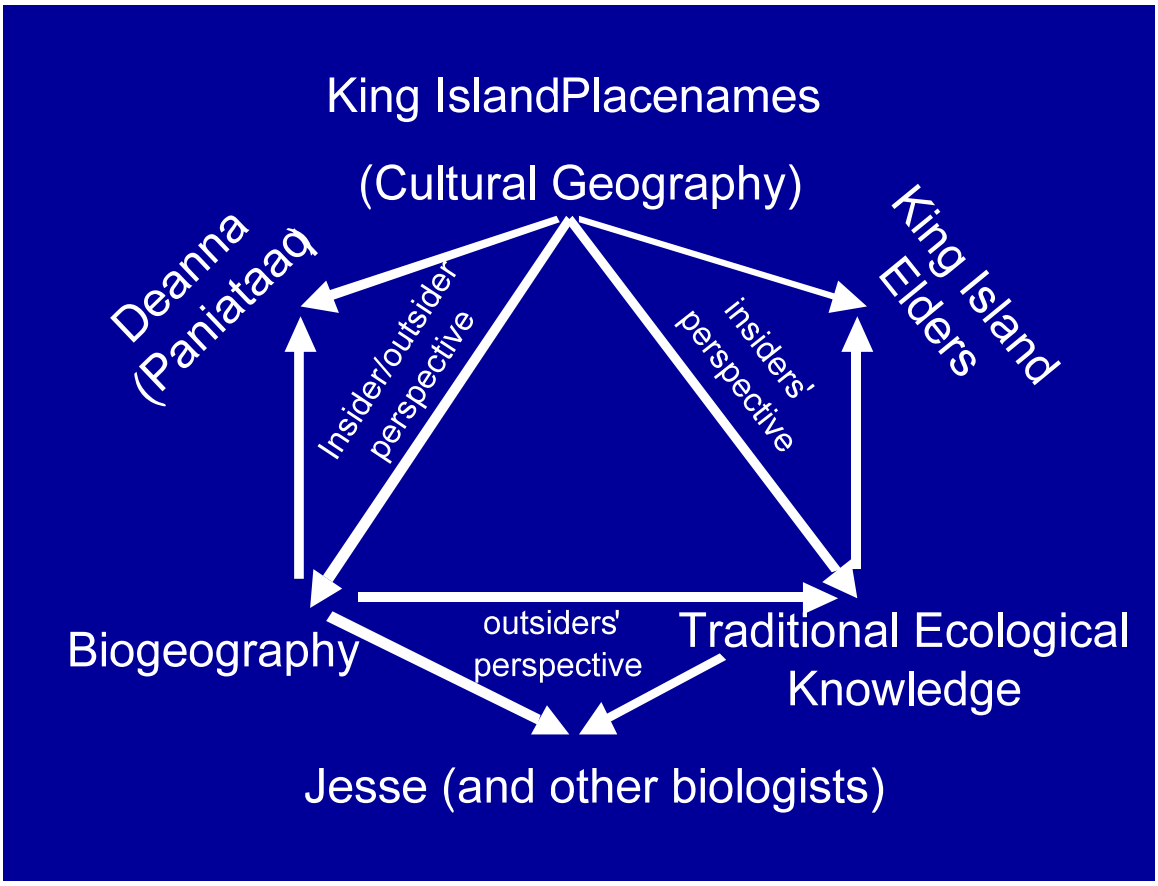

Figure 1. Model for research.

The basic structure of the model (the main triangle) represents the three avenues of research as articulated in the title of the project (cultural geography, biogeography, and

traditional ecological knowledge), which is ultimately based upon Kingston's 1999 research. The people who hold the knowledge and expertise of each of these realms is represented by additional smaller triangles. For instance, elders of the King Island Native Community have the knowledge of both the cultural geography of King Island as well as the TEK of King Island and, thus, they will contribute to both avenues of research. Kingston has the Western scientifically based knowledge of how to document cultural geography as well as some grounding in introductory Western science. Thus, Kingston bridges both the cultural geography and biogeography research. Ford, a Western scientist, is knowledgeable about biogeography and also has interest in and respect for traditional ecological knowledge. Finally, although not represented in the above graphic because of the two-dimensionality of the printed page, there are two pyramids that can be placed above and below the two dimensions of the model. Since language shapes how one perceives and acts upon one's environment, Larry Kaplan (a linguist) will help us to understand all three research avenues by providing translation services from Inupiaq to English and vice versa. He thus occupies the apex of the first pyramid. In addition, since archaeologists (represented by Matt Ganley, Owen Mason, and Claire Alix) are interested in understanding how humans conceive of and utilize their local environment (including plants, animals, rocks, etc.), they form the apex of the second pyramid.

This model shows how all three realms of research are interconnected in this project. In addition, we hope to balance the power relations between scientists and indigenous peoples as much as possible by: **1)** following through on a request from a King Island elder for such a project rather than pursuing the scientists' own research agenda; **2)** gaining King Island Native Community approval for the project when the proposal was submitted to the National Science Foundation; **3)** consulting with the research and research planning with King Island community members, particularly by asking the KINC to choose the fifty or so community members to help with the research, to ask advice on the best times to go to King Island, and to request permission to use houses still existing on the island; **4)** asking the scientists involved in the project to see the elders as teachers and to respect the knowledge and wisdom they retain about the environment on King Island; **5)** putting Western science in the service of the King Island community when scientists train community members in basic scientific techniques and by sharing summaries of Western scientific knowledge on a range of topics; **6)** developing the end-products for the community first and putting the need to publish Western scientific knowledge second; **7)** developing the products of the research (notebooks and DVDs) in collaboration with the community; and, finally, **8)** asking the scientists to gain community approvals prior to publishing about their own research.

This model also suggests that multiple perspectives will be shared during the course of the research. First, KINC elders and research assistants offer an "insider" perspective through an intimate knowledge of their environment. By insisting that the scientists respect this alternate way of knowing, we hope to instill a sense of pride and awe in younger King Islanders, who will act as research assistants throughout the research project. In this way, King Island youth will be exposed to the knowledge of their elders and ancestors.

Second, Kingston's background and experience (and others like her) offer an "insider/outsider" perspective. Kingston is a descendent of the King Island Native Community, but one who grew up in Oregon. She has three post-secondary degrees (B.S.,

M.A.I.S., Ph.D.) from Western universities, which demonstrates the level of comfort she has in navigating in Western society and worldview. However, her anthropological training has helped her to recognize and respect other worldviews, enough to realize that she does not share the insider's view of how the world operates. She also has about thirteen years of experience learning about King Island traditions and history, and has had relationships with her King Island kin for almost nine years. Thus, Kingston serves as a liaison between the KINC (insiders) and the western scientists and social scientists (outsiders).

Ford and the other non-King Island community members (Alix, Bogan, Ganley, Kaplan, Mason, and Nelson) offer an outsider's perspective, particularly with regard to a Western scientific worldview. This perspective is necessary because, for better or worse, King Island community members are part of the wider Western society and must learn to navigate in this society, which favors knowledge generated by scientific methods. To this end, King Island youth will be exposed to Western science worldview and scientific methods through these non-community members. In addition, having Western scientists involved gives the research a certain credibility from the standpoint of dominant Western society (unfortunate but true).

Thus, this project seeks to look at the cultural geography, biogeography, and traditional ecological knowledge of King Island, Alaska, from various perspectives (insider, insider/outsider, outsider, traditional/indigenous knowledge, and Western science) using the expertise of King Island elders, anthropologists, archaeologists, linguists, videographers, and biologists. In this way, we hope to balance the power relationships between indigenous knowledge holders/community members, who have been marginalized through Western colonial expansion, and Western scientists and social scientists. It is hoped that all parties to the research will learn from each other.

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