During recent times many articles have been produced that address ethical values of doing research in the North. I will not address them except to say that confidentiality is important, that villagers know what they are participating in and that research results be provided to the villagers. It has been too long that Native people have been subjects of research without the honor, respect, reciprocity and cooperation due them. It is now time that we recognize that they are human beings with particular ways of knowing, being, thinking, behaving and doing. They have successfully survived for many thousands of years.

For the Yupiaq people, culture, knowing and living are intricately interrelated. Living in a harsh environment requires a vast array of precise empirical knowledge to survive the many risks due to conditions such as unpredictable weather and marginal food availability. To avoid starvation they must employ a variety of survival strategies, including appropriate storage of foodstuffs that they can fall back on during the time of need. Their food gathering and storage must be efficient as well as effective. If this were not so, how could they possibly hope to survive? To help them achieve this balance, they have developed an outlook of nature as metaphysic.

The Alaska Native world views and technologies are conducive to living in harmony with the universe. Their lives, subsistence methods and technology were devised to edify their world view. After all, the Alaska Native creator is the raven. So, how could the human being be superior to the creatures of Mother Earth? How could their hunting and trapping implements be made of offensive materials to animals that they have to kill in order to live? Thus, their tools were fashioned from resources which were not refined, but formed and shaped using the natural materials. Their tools, housing and household utensils had to be with and of nature. Harmony was the key idea behind this practice. They believed all plants, creatures, winds, mountains, rivers, lakes and all things of the earth possessed a
The four values of honor, respect, reciprocity and cooperation are conducive to adaptation, survival and harmony. The Native people honored the integrity of the universe. It is a whole living being. As it is living, all things of the earth must be respected because they also have life. The Native people had the ability to communicate with all things of the universe. This is called reciprocity. From observing nature, the Alaska Native people learned that the earth and the universe are built upon the premise of cooperation. Researchers must implement these four values to advance knowledge and expand consciousness. The constructs and understandings of the Alaska Native people must be honored for their integrity on the level of the modern scientific holographic image.

The holographic image does not lend itself to reductionism nor fragmentation. Reductionism tries to break reality into parts in order to understand the whole without realizing that the parts are merely patterns extant in a total web of relationships. The Native worldviews do not allow separation of its parts as each part must be understood in its relationships to all other parts of the whole. Respect for the Native people who formalized this view must be practiced. The Native people have transcended the three-dimensional, quantifying and sensory constricted studies of nature practiced by the modern world. It behooves that there be cooperation between the researcher and Native people. The researchers must forget about human superiority to things of the universe and to people considered primitive and backward. The Native people must be treated as equal human beings with powers of observation, critical analysis and a gift of intuition and the magical.

Following are some examples that make the practice of the four values difficult or impossible from the perspective of the modern world for doing research in a Native world.

The tools of mathematics have given us some ideas about patterns and forms as well as abstract and esoteric formulae that sometimes leave us confused and questioning the use to which they will be put. For example, when will the hunter need to know the exact distance across a river using trigonometric functions? However we agree with a lot of mathematical and scientific theories and concepts, such as the shortest distance between two points is a straight line; that a circle is a line that keeps falling in toward the center;
that the radii in a circle are equal length; that the circle has no beginning and no end; and so forth. These are common sense ideas that indigenous people can readily subscribe to.

To the Native people there are many things in this universe that are cyclical and describe a spiral or a circle. Examples of these include the seasons, the solar system, the Native timepiece of the Big Dipper going around the North Star, the atom, the raven’s path across the sky visible at certain times (part of the Milky Way spiral), an eddy in the river, a whirlwind and many other examples. In each instance there is a drawing force in the center. In the Native world view, we can think of this as the circle of life. In each Native person’s life the central drawing force is the self (Fig. 1). Down through many thousands of years, this is what kept the individual in balance. The energy (self) kept the values, attitudes, and traditions from being flung out. It allowed the Native individual to be constantly in communications with self, others, nature and the spirits to check on the propriety of existing characteristics of life. They knew that life is dynamic. In the process of change in the world views, many of the values have remained the same and are very applicable today.

With infringements of new people from other parts of the world, came a weakening of the self with all its strengths of what to be and how to live. At first the circle remained strong. However, with the encroachment of missionaries from various Christian religions, traders, trappers, miners and explorers came diseases unknown to the Native people. Following this came a calamity surmounting any experience that the Native people have
ever had. Many elders, shamans, parents, community members and children died as a result of these unknown diseases. With the loss of so many people, especially the shamans who until this time were the healers, left the Native people questioning their own spirituality. Was it really the work of the devil and his evil allies that the Native people subscribed to and believed in as the missionaries pointed out? This dealt a crushing blow to a people who had direct access and communications with the natural and spiritual worlds through their shamans. The first rent to the circle of life was in the spiritual realm (Fig. 2), and we have been suffering from a spiritual depression ever since. Alaska Native spirituality can in no way be wholly replaced by orthodox Christian religions, Eastern or other ways of knowing about a spiritual life.

Where the break occurs, one side of the curved line becomes more linear to reflect confusion. Through this break occur leaks for new ideas, values and ways of life that cause much doubt about their own world and beliefs. A maelstrom of values, beliefs and traditions result causing a confusion of what to be and what to do. The sense of self becomes weakened, thus its drawing force is weakened causing some original and traditional ideas of life to be lost. The turmoil, like that of a tornado, continues. The amalgamation of Western and other cultures from throughout the world are mixed with Native traditions. Although the Alaska Native people did not readily accept modern education and religions and gave initial resistance, breaks eventually occurred. If conditions had been different, the Alaska Native people could have controlled what was allowed into their world view. But such was not the case. The encroachment of various peoples and their cultures overwhelmed the Native people. Not only did these new people come with new ideas, but with new species of dogs, plants, domesticated animals, bacteria and viruses. This not only caused turmoil for the human beings but also caused ecological havoc. Armed with their new technological tools—hunting, trapping and fishing devices—along with the need to make money to buy these “needed” items, the newcomers battered down sacred ideas of harmony in many Native people.

The next onslaught was in the emotional realm (Fig. 3). Not feeling good about themselves because of the message being told them by the missionaries, teachers, miners, trappers, traders, federal agents and so forth, they became emotionally depressed. They had been told that their languages and cultures were primitive and had no place in the Western or modern world. The educational system was established to dissipate and destroy their languages, spirituality and cultures. The barrage came in many forms from institutions of the colonial hegemonic force. The once proud hunter/provider and successful homemaker now felt little worth living for in their ravaged world. There was
nothing promising left to allow them to feel good about themselves, have confidence for self-governance or self-reliance. Only despair was left.

The intellectual arena was the next rupture to occur in this circle of life (Fig. 4). Rationality and empiricism coupled with intuition had been the Native peoples’ forte’. Nature was their metaphysic and thus they lived in reality. They had successfully devised their world view to allow them to live life with all its difficulties but developed coping tools and skills to deal with the hard times. Now with their spirituality and emotions on a downward spiral, the people became intellectually dysfunctional. They became docile and robot-like, expecting everything to be done for them. Their original clear consciousness or awareness was now unclear, as if being viewed through a stigmatized and scarred corneal lens. Things were dim, shaded, with some channels opaque and confusion followed. A framework for assimilating new experiences no longer existed.

The last fissure occurred in the physical well-being whereby the Native people in their demoralized state became susceptible to diseases such as tuberculosis, influenza, cancer and many nutritional deficiencies and psychosocial maladies (Fig. 5). The foundations upon which a whole person was produced by the culture was now broken asunder with a new fragmented culture, a mix of many cultures represented by newcomers, producing fragmented Native youngsters susceptible to new ideas, diseases and yearnings.
The ruptures allowed some aspects of Native characteristics to flow out or become modified by allowing new fragmented ideas, ways of being, thinking, behaving and doing to seep in. This has caused much confusion among the Native people.

The Native ways of science have always been multi-dimensional to include the human, natural and spiritual worlds. This was a conscious effort to keep in balance. Everything on earth, including earth and self, was endowed with a spirit, therefore life. And because of this spirit or energy from the Spirit of the Universe (Ellam Yua), the Native people must do things in ways that no harm nor disrespect happen to life on earth. It then required that the Native people come up with elaborate rituals and ceremonies to pay homage to all, to maintain or at times to regain balance in one’s life or that of the community. They had transcended the need for quantifying and establishing laws of nature.

Much of the subject matter in the schools’ curricula is one-dimensional because it is linear. The vaunted mathematical and scientific disciplines and their offspring, the technologies, are often one-dimensional. These tools have the wonderful capacity for new discoveries in other worlds but because of the Western society’s need to learn to control nature they lead to confusion and a feeling of being weaned from the life force and its inherit relationships. They are bereft of the values extant in the indigenous societies which open doors for new world discoveries. Western mathematics, sciences and technologies have values, however, they are proscribed to ambition to learn in depth and greed to use this knowledge for gain. This is arrogance, a senseless and meaningless ambition, leading to the disintegration of the human experience. Through them, the more we know, the less we know about life. This says to me that Western mathematics, sciences and technologies have been superficial, never getting to the meat of things. What has been missing from the great potential of these and the other disciplines?
From all indications, nature thrives on diversity. Look at the permutations of weather during a day, month or year. Climates differ from one part of the earth to another. Flora and fauna differ from one region to another. Continents and their geography differ. No two snowflakes are exactly alike. The stars, constellations and other heavenly bodies seem to be unchanging, yet our learned astronomers tell us that many changes are taking place. According to them, novae, supernovae, black holes, stars dying and being born and so forth are happening in the universe. The science of chaos and complexity shows us a diversity of patterns we never thought existed in nature. These all point to diversity—the balance that makes nature thrive. The Alaska Native people knew this and strove for harmony with all of life.

Alaska Native people have come full circle and are seeking to heal the breeches that have put life asunder. Seggangukut, we are awakening, we are being energized, is what the Yupiaq say. They have nature as their metaphysic and have drawn energy from earth whereby things in times past were often quite clear and thus could be attended to or a resolution reached. One aspect of energy exchange that has often been spoken of by Native people who are ill is that of being visited by various people from the community to show care and love for the ill person. They have expressed the feeling that some people will cause the person to feel worse while another person will make the person stronger and clearer of mind. It is said that in the former case, a person who does not have the right mind or balance in life will draw energy from the ill person thereby making the ill person worse than before the visit. On the other, there will come a person who is kind, upright and is with a mind of making you better. Instead of drawing energy from the ill person, this person shares some of his/her energy with the sick person. The ailing one feels better.

Another example of energy exchange is the story of a man out on the ocean. He gets caught on an iceberg that gets cut off from shore and drifts out. He has no choice but to try to keep warm and survive the night. The next day, he finds that the iceberg is stationary but is not attached to the shore ice. New ice has formed overnight in the water between. He remembers the advice of his elders that to test the newly formed ice and its ability to hold up a person, he must raise his ice pick about two feet above the ice and let it drop. If the weight of the ice pick allows the point to penetrate but stops where it is attached to the wooden handle, he can try crossing on the ice. If, on the other hand, it does not stop at the point of intersection, then it will not hold up the man. In this case, the former happened. The man looked around him at the beauty, the might of nature, and realizing the energies that abound, he gets onto the ice. He must maintain a steady pace for if he stops or begins to run he will fall through because he has broken the rhythm and
concentration. The story goes that when he began his journey across, there was a lightness and buoyancy in his mind. This feeling was conveyed to his physical being. Although the ice crackled and waved, he made it to the other side. He drew energy from nature and was in rhythm with the sea and ice and, coupled with lightness and buoyancy, made it safely to the other side.

In the another story, two youngsters come into being and they find themselves in an abandoned village. It has been some time since the people disappeared by indications from the decay of semi-subterranean houses and artifacts in the village. One possible explanation of why the people were gone might be that these Yupiaq people may have reached the apex of spirituality which is pure consciousness. Their bodies became the universe and their pair of eyes became part of Ellam iinga, the eye of the universe, the eye of awareness. This could explain how some communities became mysteriously deserted.

Western physics with its quantum and relativity theories say that we are mostly energy. Why then should not our spirit or soul be energy? Scientific technology has given proof of energy fields, personal aura, findings from near death experiences and many other human experiences. Theory of relativity tells us that matter is condensed energy and also conveys that the world is made up of relationships. Can we not then say that our spirit is made up of energy? If this is true, the Alaska Native must be able to draw energy from earth because we are a part of it. All life comes from earth. Alaska Native peoples’ metaphysic as nature becomes corroborated by the Western theories. This also strengthens the argument that the laboratory for teaching and learning should be placed where one lives. Being outdoors in nature enjoying its beauty and energy, and becoming a part of it, energizes the youngsters. This could bring back the respect of personal self, and if one respects oneself then certainly one would be able to respect others, nature and the spirits that dwell in and amongst all things of nature. The students will be able to whet their observational skills while learning from nature and drawing energy to themselves. They can again attain love and care with all its concomitant values and attitudes that give life. It is imperative that the students from all walks of life begin to experience and get close to nature. There is a vast difference in learning about the tundra in the classroom and being out in it. Being in and with it the whole year round, they can experience the vicissitudes of seasons, flora, fauna, sunlight, freezing, thawing, wind, weather permutations, gaining intimate knowing about place and using their five senses and intuitions to learn about themselves and the world around them.
It is this drawing of energy from nature that will allow the self to again become strong so that the breaks in the circle of life become closed. Then the individual and community can allow chosen outside values and traditions to filter in which they think will strengthen their minds, bodies and spirits. The Alaska Native people will again become whole people and know what to be and what to do to make a life and a living. They will have reached into the profound silence of self to attain happiness and harmony in a world of their own making. *Quyana!*