

## Alaska Native Holotropic Mind and Science

By Angayuqaq Oscar Kawagley, Ph.D.

Indigenous people have developed complex knowledge and belief systems for living in harmony with Nature. Many of these beliefs are imbedded in our myths, so I begin by telling you a Yupiaq story:

*Aka tamani, ellam kainga mamkitellrani*, In distant time, when the earth's crust was thin, is a crane flying around looking for a likely place to eat. The sky is blue, the sun is shining, the tundra is warming. The crane decides to check out the weather. He begins to fly in a circle. Each time he completes the circle, he gains altitude. He looks at earth from a very high altitude. He then decides to descend and look for food. He flies over a river and sights a skin boat with Yupiat people in it slowly paddling down the river. He continues his flight and sees a lake. He flies to it and finds many kinds of berries. He is very hungry.

He lands on the river bank. He contemplates going back to the tundra to eat the berries, but his mind cannot forget the Yupiat coming down the river. He knows that he could be hunted. He must think of a way to warn himself when the people approach. He sits there and thinks. He finally decides that he will use his eyes as sentries. He removes his eyes and puts them on a log. He instructs the eyes by telling them, "Now when you see people coming down the river, you warn me. I will come down and get you and fly off."

After telling them so, he goes back to the tundra and starts to eat berries. Soon he hears his eyes shout, "Crane, crane, there are people coming down the river!" He hurries down, finds his eyes and plucks them back in the sockets. He looks.

There is only a log drifting down the river. The branches must have resembled people. He gets upset and says to his eyes, "Now you be very careful and make sure they are people before you call for me." He goes back to the tundra and eats. Soon, he hears his eyes calling him, "Crane, crane, there is a boat with people in it coming down the river. Come quick!" He hurries down to the log and picks up his eyes and looks. There is only a chunk of tundra drifting down. Tufts of grass move up and down with movements of the clump of tundra. "Now, look eyes you

have made a second mistake. Look very carefully before you call for me. I'm going back to eat some more berries."

Soon afterward, the eyes call, "Crane, crane, people are coming down the river in a boat." This time the crane does not heed the call. He is thinking, "Well, I suppose they see something else that might resemble a boat and people. This time I won't respond." He continues to eat. Soon the eyes call, "Crane, crane, the people are almost upon us. Come quick!" He does not answer.

Some time elapses, then he hears the eyes calling from a distance, "Crane, crane, the people have us, and they are taking us down the river." The crane runs down to the riverbank and finds the log. He feels around, but there are no eyes. He sits down and thinks, "What am I going to do for eyes?" After much thought and consternation at not being able to see, he ambles back to the tundra. A thought occurs to him, "Why not try berries for eyes?" With that he finds blackberries. He plops them into his eye sockets. Lo and behold, he sees, but the world is different shades of black and grey. This can't be, so, he disposes of the blackberries. He finds salmonberries, and tries them. But the world is orange with its color variations and does not look right. So, he gets rid of them. He tries cranberries, but again the world is not the right color. It shows a place of red hues.

Finally, he tries blueberries. This time, the sky is blue, the tundra is green and varied in color, and the clouds are white — these are to be his eyes. And, that is how the CRANE got blue eyes.

Such stories are very mythical (as defined by Joseph Campbell) and magical. The myth is an analogical way of relating to our environment; it reflects the human minds response to the world; it has to do with understanding; it tells us that we humans have the heavy burden of intelligence and thus responsibility to care for the world in all its beauty; and, it provides healing. The Yupiat people accepted this on faith because of the need to know and understand the world around. To them, it made beautiful sense. If people believe in a worldview that includes a language, an ecosophy, epistemology, and eco-psychology all contingent on Nature, why should the things of Nature not be understandable and interchangeable. According to the Yupiat, all have a spirit, therefore a consciousness and an awareness of the world around them. So, the eyes are able to communicate, perhaps, not verbally, but maybe through unsaid words. To the Yupiat, listening not only with the ears, but with the mind and heart are essential to becoming aware of patterns and events that reflect natural laws. The sun will rise and descend each day, the earth will revolve around the sun and bring new seasons, the spruce seeds will germinate and produce new trees, and so forth. These are recurring observable phenomena that occur in relatively predictable ways. We come to recognize these patterns through a life that is lived as a science — a way of knowing.

A case in point is the crane flying in circles and ascending. The Yupiat know that the tundra warms under the sun. This becomes visible when they look out across the tundra and can see the air turbulence as the heat waves are rising. They know the scientific principle that hot air rises and they incorporate it into their story, as the crane uses the ascending currents to get high into the air to look around. Nature is science — science is nature.

The Western scientists tell us that in the growth of a human embryo, a gene or a combination thereof will produce an eye. Through observation, experiment and reasoning we have seen this happen time and again, but there is much we accept on faith. We will never fully understand the creative design behind the genetic mechanism that produces the eye, just as we will never know what creative forces or entity started the physical laws into motion to bring about the universe. The scientific laws of nature merely explain or describe what physicists, astronomers, biologists and others have observed. The preconditions leading to this phenomenon have not been seen and can only be imagined. The Yupiat too observe the natural environment make sense of the world around them, and they accept on faith that which is unknowable, uncontrollable and immeasurable.

The Western scientists tell us many things, such as that there are particles in the atom that are so small that no one will ever be able to see. They exist only as mathematically deduced statistics. But, we as a people accept these on faith. Do mathematical and physical principles really exist in Nature, or are they merely constructs of the human rational mind to try to make sense of this world? The important aspect to consider is that the modern creative scientist focuses primarily on the physical and intellectual essences, in other words the outer ecology of our existence. In addition, the modern scientist generates theories based on sometimes limited facts, and these theories are then used to construct our technocratic societies. However, with an incomplete factual basis, the theories do not necessarily reflect physical reality. When these socio-political-economic-scientific theories do not adequately describe reality, the technologies and social practices they spawn likely will not be useful in tribal societies, where day-to-day survival is deeply imbedded in reality.

To the Yupiaq, such theories and practices are seen as incomplete and often erroneous knowledge. The fragmentary approach of reductionist knowledge generation disassociates the parts from the whole. In trying to understand the parts to learn about the whole, the scientific methods skew our way of looking at things. Disembodied assumptions and expectations can muddle our efforts to see things as they really are. Lack of self knowledge about the reciprocity that exists between ourselves and the world

in which we are situated leads to nature keeping its secrets when we most need to let the book of Nature speak for itself. The Native creative mythology/science, on the other hand, deals with the whole — the physical, intellectual, emotional and spiritual dimensions of our inner and outer ecologies. The Native person realizes that he/she is a microcosm of the whole universe, and therein lies the ultimate difference between the two systems of thought.

The above Yupiaq story is an example of the creative mythology of our ancestors. But is not the physicist who creates the statistics of unseen particles also a creative mythologist? Is not the genetic microbiologist who deciphers what gene(s) cause Alzheimer's a creative mythologist? Is not the microbiologist who creates a clone of a sheep a creative mythologist? This penchant for channeling knowledge for the manipulation of the physical world thrusts me into the techno-mechanistic realm whereby insights and discoveries are rendered into useful tools and gadgets, such as the jet airplane, snow machine, outboard motor, cloning living things, antibiotics, fluoride toothpaste, skyscrapers, and the plastic raincoat. Much of this technology is intensive in the use of natural resources and non-renewable energy and reflects a tendency to want to gain control over Nature and manipulate it for the benefit of humankind. Yet, we do not always take into account the fact that much of the natural resources and energy sources of Mother Earth that we are depending upon are finite, so we pursue such a course of action ultimately at our peril. Supposedly, technology will evolve to produce more food, energy and natural resources, as though "Technology is the answer!" But what was the question? According to Lovins, it is not whether more and bigger is better — his solution is "soft technology" in tune with the world around us, and thus sustainable (1977).

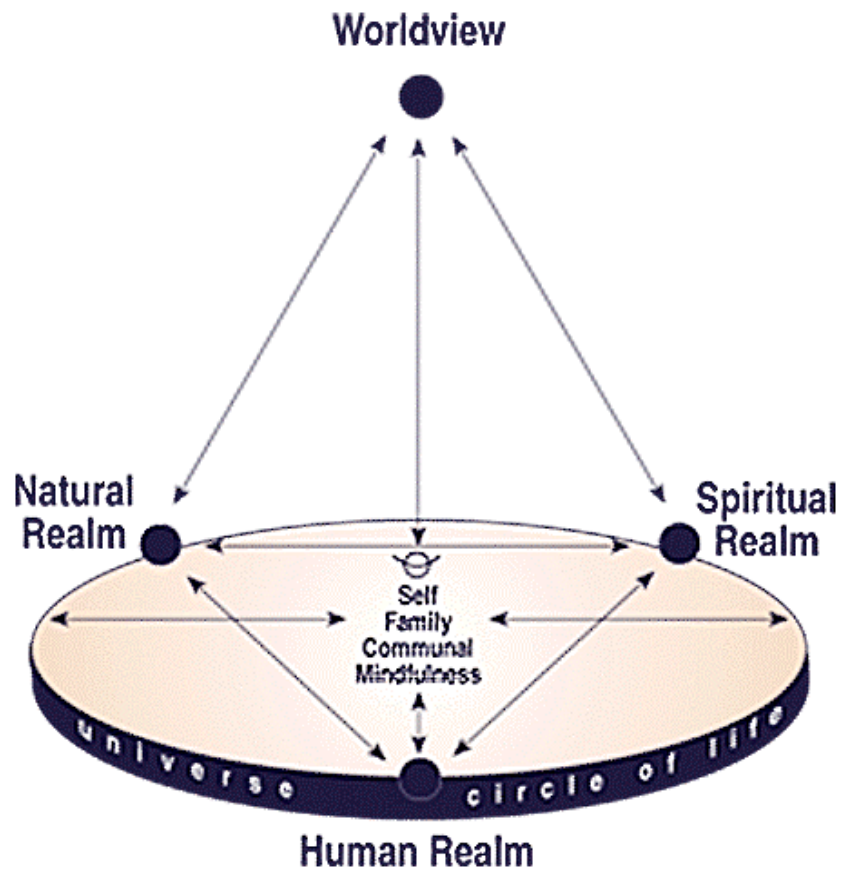
Generally, our industrial leaders are mainly concerned about financial gains driven by greed and ambition (also known as profit). Technological products and inventions are improved means to an often foggy or meaningless end. When a product such as a television, a snow machine, or new material for clothing are made, it does not change just a small segment of life, but all of life. Psychological, social and economic changes are impossible to measure, just as good and evil cannot be quantified. In introducing such changes, technocracy has no conscience, but those of us who participate do, and it is up to us to exercise it on behalf of ourselves and our offspring.

Mathematics, and the disciplines of science have their own languages and specialty areas of expertise. Too often they are isolated from each other so that there is only limited opportunity for the understanding of interrelationships and interconnectedness of all phenomena in this universe. In fact, each area of study has its own contrived language

which makes cross-disciplinary communication and interaction difficult. Within each of these fields of study are an abundance of well-funded research projects generating new bits of information and technological devices. But, what do these lead to? Certainly we are not producing an abundance of new natural resources, natural beauty, and diversity, but too often we are contributing to further degradation of the natural environment and increased poverty and confusion, not only of humans, but of our fellow creatures as well. Our education system and mass media further skew our view of reality by fostering expectations and assumptions without consideration of the long-term consequences. How then do we learn to live in harmony and balance with the world around us? Here we have much we can learn from the creative mythology and science of indigenous people, including the Yupiat.

### **The Alaska Native Holotropic Mind**

The Yupiat people have developed and refined their own ways of knowing and being in harmony with Mother Earth. Following is a diagram using a tetrahedral metaphor to illustrate some of the key elements in the Yupiat worldview.



I have drawn a circle representing the universe, or circle of life. The circle represents togetherness which has no beginning and no end. On this circle are represented the human, natural and spiritual worlds. There are two-way arrows between each of them as well as to the worldview at the apex of the tetrahedral. These two-way arrows depict continuous communications between all these realms and functions to maintain balance. The Yupiat have a saying, *Yuluni pitallkertugluni*, which refers to “Living a life that feels just right.” One has to be in constant communication with each of the realms to know that one is in balance. If there is a feeling that something is wrong then one must be able to check to see what might be the cause for unease (or dis-ease). If the feeling of being just right comes instinctively and this feeling permeates your whole being, then you have attained balance. This means that one does not question the various functions intellectually, but that one merges spiritually and emotionally with each. The circle brings all into one mind.

In the Yupiat thought world, everything of Mother Earth possesses a spirit, a consciousness, an awareness. So the wind, river, rabbit, amoeba, star, lily, and so forth all

possess a spirit. The human consciousness, with its ability to merge into one with all the consciousness of this world, is the embodiment of the holotropic mind. This holistic mind is given to the nurturance of an environmental ethic.

If all elements of the natural world possess a spirit/soul, then all possess consciousness and the power that it gives to its physical counterpart. It allows the Native person to have the ability to enlist the aid of the spirit to do extraordinary feats of righting an unbalanced individual psyche, community disease, or recovering the loss of communication with the spiritual and natural world that has occurred through irreverence toward beings of Nature. Robinson and Wickwire (1992) calls this “nature power,” a life-sustaining spirituality. Grof (1993), in his description of the “holotropic mind,” refers to “power animals” which serve as a source of wisdom or power when humans re-establishing links with them. In today’s world this connection has often been lost through negligence or lack of reverence, or by offending either the animal spirits or one of the greater spirits of the natural world.

These insights are not available through Western scientific research methods, but only through the ancient arts of shamanism or Nature-mediated thought. From this you can see that when we rely only on Western means of research, we are limiting the possibilities for new insights, and yet this is what our institutions of higher learning are expected to espouse and teach. Most areas of formal social and scientific inquiry teach only one way of trying to learn and understand phenomena in the world around us. Our technological and scientific training restricts the student’s mind to these limited understandings, much to the detriment of the learners, who then enter the mainstream world to become unerring progenitors of progress and development.

Alaska Native people needed to take lives of animals to live, so to give honor, respect, dignity and reciprocation to the animals whose lives were taken, they conceived and put into practice many rituals and ceremonies to communicate with the animals as spiritual beings. These are corroborated through the mythologies which are manifestations of fundamental organizing principles that exist within the cosmos, affecting all our lives (Grof, 1993). In consideration of these inherent principles of reciprocity, the Yupiat hunter-gatherer would leave something behind, such as a piece of dry fish, when getting mouse food from the tundra. The mouse food is gathered from the nests in the early fall so that the mouse and its family will have an opportunity to collect more food for the winter. The seal when caught is given a drink of water, so that its spirit will not be thirsty when it travels to the animal’s spiritual kingdom. This is done to show respect to the animal for having shared and given its life to the hunter. Medicinal plants are also

gathered respectfully knowing full well their power to heal, and to recognize that these were given freely by Nature and therefore that we share these freely.

The Alaska Native person is aware that if we do not use these gifts of Nature regularly, mindfully and respectfully, they will begin to diminish through disuse or misuse. Earth, air, water, fire and spirit must always be in balance. All the elements and creatures have an important niche to play in the ecological system. With this concept in mind, it behooves us to carefully examine the lifestyles and technology that are extant in the world around us. Our lifestyles have become materialistic and are given to technological devices and gadgets galore that are not really geared to sustainability. Our modern cities with their networks of buildings, transportation, communications, and goods and services distribution centers are and given to homogenization and conformity. Likewise, the management of natural resources is given to conformity and bureaucratization. They are approached in a fragmentary way such that an expert in harbor seals does not know what the expert in herring fish is doing. This type research is geared toward measuring and objectifying the species for commercial purposes and not for sustaining the essential balance on Mother Earth.

In the Western realm of science and technology there exist many alternative approaches to dealing with the world in ways that are nature-friendly and sustainable. These await the time when the global societies evolve from consumerism and materialism to responsible stewardship that is oriented to conservation and regeneration. As Native people, the Yupiat and other indigenous societies have much to share with the modern world. It is much more difficult to live in concert with Mother Earth than it is to plunder her. We must seek to live in balance with the earth, air, fire, water and spirit, using the sciences and their offspring, the technologies, as tools of enhancement, not destruction. With our realization that Western mathematics and sciences and the resulting technomechanistic inventions impact and change our thinking in ways that can be inimical to living in nature, with nature, and being of nature, it behooves us as indigenous peoples to learn both ways of knowing and doing, so that we can begin to develop a caring consciousness and a technology that is kind to our being as humans, as well as to the spiritual and the natural worlds.



## References

- Kawagley, A. Oscar, 1995. *A Yupiaq Worldview: A Pathway to Ecology and Spirit*. Prospect Heights: Waveland Press, Inc.
- Grof, Stanislav, M.D., 1993. *The Holotropic Mind: The Three Levels of Human Consciousness and How They Shape Our Lives*. New York: Harper-Collins Publishers, Inc.
- Lovins, Amory, 1977. *Soft Energy Paths*. New York: Harper & Row.
- Robinson, Harry with Wendy Wickwire, 1992. *Nature Power: In the Spirit of an Okanagan Storyteller*. Seattle: University of Washington Press.