



Title: Wayfinding and the New Sun: Indigenous Science in the Modern World

Author(s): Pamela Colorado

Published by: Noetic Sciences Review

Publish date: Summer 1992

Disclaimers:

The information and all content provided herein by the Worldwide Indigenous Science Network (WISN) are provided as a service and are for general informational and educational purposes only. Original creator(s) of materials contained herein retain full copyrights. Although WISN uses reasonable efforts to ensure high quality materials, WISN does not guarantee the accuracy or completeness of content. Neither WISN nor any party involved in creating, producing, or delivering this information shall be liable for any damages whatsoever arising out of access to, use of, or inability to use the materials, or any errors or omissions in the content thereof. Users assume all responsibility for the access to and use of these materials.

Translations of any materials into other languages are provided as a convenience, and translation accuracy is not guaranteed nor implied. Users may refer to the original language/official version to ensure accuracy.



wisn.org | 573 Waiane'e Street, Lahaina, Hawai'i 96761

Note: The last few years have seen a re-assessment of the knowledge held by the indigenous peoples of the world, and a desire to understand traditional ways of life and the wisdom they contain. One of the most exciting possibilities to emerge from this revival is a synthesis, a real dialogue between ancient and contemporary modes of knowledge. The following article is one such contribution to that synthesis. It is adapted from a talk between Jane Carroll of Beshara magazine and Pamela Colorado, founder of the Worldwide Indigenous Science Network (WISN).

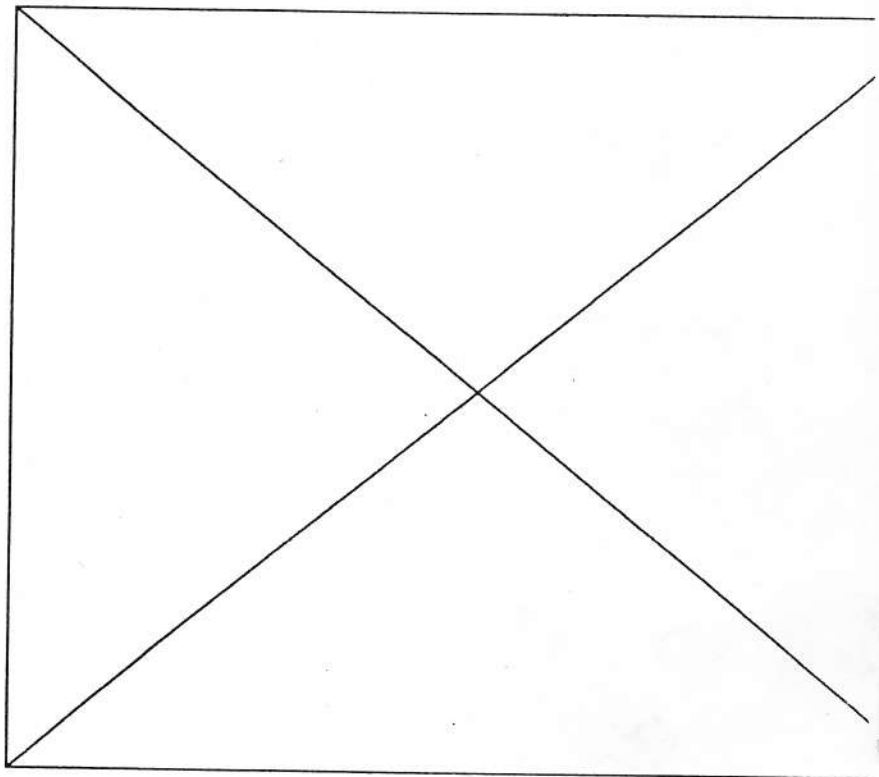
Pamela Colorado was born an Oneida Indian, meaning "people of reality" (called by white settlers the "Iroquois") of the tribe of Ongwehahwe ("the people of the long-standing rocks"), and was brought up on a reservation in Wisconsin. She was one of the first Indian women to attend an American university and completed her doctorate work at Harvard University where she started her attempt to integrate within herself Native and Western systems of knowledge. This led to the founding of WISN, with participation from tribal elders, scientists, artists, and others; its purpose is to forge links between indigenous and non-indigenous peoples throughout the world, revitalizing ancient forms of knowledge. Of special interest are the great migrations of pre-history, and correlating the oral accounts of these events with modern archeological discoveries.

Adapted with permission from Beshara, Issue 13, Summer 1991.

My thoughts concerning indigenous science first came to me while I was completing my doctoral dissertation in 1977. At that time I was having great difficulty communicating with my doctoral committee. I had excellent instruction and a thorough curriculum, but I just could not communicate in the way that was expected. One day I was sitting in my apartment in Cambridge, and it came to me that it was not just that, as Native people, we look at life differently. *Even the way we come to knowledge and present that knowledge is totally different from the Western way.* Then I heard myself say out loud: "It's almost as if we have a science of our own!" And as soon as I thought it, or heard myself say it, I realized that is what needs to be said, because up until that time it was only the West which "had science".

Of course, a lot of what is in the Native American worldview, or indigenous worldview, falls beyond what would normally be thought of as science in a Western sense, although there are some things that are directly parallel—for example, the knowledge Native people have about the environment. But because I felt our view is so much broader I thought it a good thing to call it "science". Some people have called it natural science, others have called it life science, some have called it woman science. But for my own purposes, I go back to

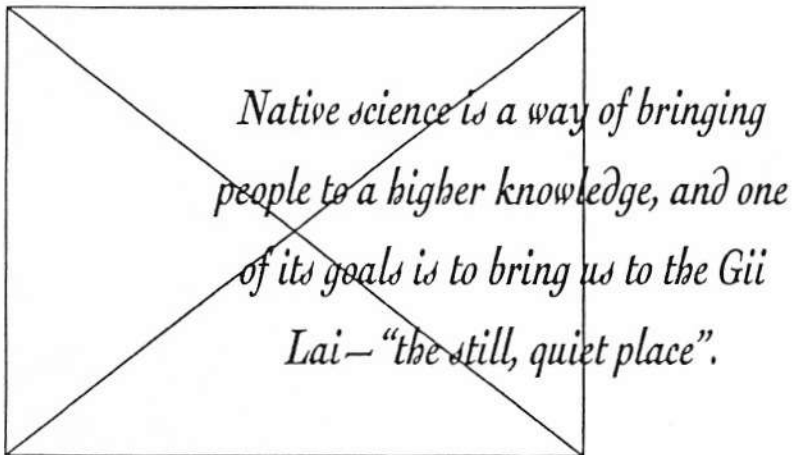
Wayfinding and the New Sun



*Indigenous Science
in the Modern World
by Pamela Colorado*

sciens/scientia, which meant “to know” in its largest sense. Native science is a way of bringing people to a higher knowledge, and one of its goals is to bring us to the Gii Lai—“the still quiet place”. In other words, our religion and our spirituality are built into our science. And Native scientists, through their rituals, songs, dance, are working all the time with energies—the energies of the Earth—in very precise ways.

Now in 1977 it seemed quite radical to think that tribal peoples would have anything at all to contribute to Western knowledge. And indeed nothing much happened until several years ago. By that time, the environ-



mental crises had deepened, threats to the survival of tribal peoples had sharpened, and attention to environmental issues like the rainforests had to some extent focused the world's attention on tribal peoples. Then in 1987 along came the Bruntland report. It is rather weak in its understanding of tribal peoples but at least the commission's report says, in effect, go and learn from indigenous people, because they are the last reservoirs of knowledge of how to live sustainably with the environment. They did not do anything to ensure this would happen or make any suggestions about how it could come about. But it was from this that the inspiration came for the Worldwide Indigenous Science Network.

The Dark Sun

Had I tried to do this work before now, it would not have happened because in tribal peoples' view, at least in the Americas, it wasn't appropriate to talk about certain kinds of knowledge. These things were considered secret; we just didn't share them, not among tribes and definitely not with the Western world. Oral tradition says there was a very definite decision made, at some point, not to talk, not to share our knowledge. Recently I discovered that one such policy originated in Mexico at Tenochtitlan in 1521.

People knew then that we were entering a time they called the Dark Sun, which was predicted for 468 years.

During this time consciousness would go through darkness. Prior to the arrival of the Dark Sun, the spiritual and scientific community prepared the people for what was to come. These preparations were four- or five-fold. The first was that the sites of knowledge—the pyramids and petroglyphs sites that dot the Americas—the traditional “universities” would be closed. The knowledge would no longer be recorded, neither written by Aztecs and Mayans, nor enacted in the big centers of ritual like the pyramids. This is why, when the white people came, they found so many of the ancient sites apparently abandoned.

Secondly, the people were told that the ancient teachings would have to be preserved within family structures, and moved to the personal domain of our own hearts. Thirdly, Native tribes would stop their cycles of international gatherings and, as a result, the knowledge would become scattered to all the directions.

Many people still assume that the Native peoples of the Americas always lived just as the new wave of Europeans in the 1500s-1600s found them. But that is not true. What they found were people who were under attack, and who were implementing the instructions they had been given for survival through the Dark Sun. For instance, at the time of contact, many of the Native communities had become palisaded, stockaded villages, and people weren't mixing with each other anymore. When they did mix, the contact was often hostile.

Before this, according to our oral history, there had been many, many contacts, not only between the different peoples of North and South America, but also across the Pacific Ocean and across the Atlantic Ocean. There were established trade routes, and ways of exchanging knowledge. The contacts began to be different in the 1500s. For instance I come from a northeast tribe and my people used to go to Mexico City for what we might today call “conferences”—policy-making sessions—about every six years. These meetings were attended by peoples from all over the Americas, and also by tribes which came across the Pacific Ocean by boat. They stopped after 1521.

So at the time of the Dark Sun, it was said that only two things would stay open. We would keep our languages alive, because so much knowledge of our ancestors is in that. Secondly, we would keep our spiritual contact with the Great Spirit, and that would stay open always. It was understood that this layering of activity would encode teachings on our consciousness, just as the ancients carved their knowledge into rocks. And like the rocks, the knowledge or consciousness can be entered into, now, only with the correct “key”.

I have a document which records this prophecy, which I found just recently in Mexico City. In it are the words of Cuauemoc, one of the last Aztec chiefs. Cuauemoc had

the job of standing in front of the thousands of people and delivering the horrific prophecy of the Dark Sun, telling them this is how they were to live, how they were going to survive for the next 400 years:

*Our sun has hidden.
Our sun has disappeared from sight.
And in complete darkness
it has left us.
But we know that it will return again.
That once again it will emerge
and will shed its light on us anew.*

*But while it is there in the place of Silence
let us quickly reunite,
let us embrace one another.
And in the center of our being let us hide
all that our heart loves
and which we know to be a great treasure.¹*

Such a document exists because it was recorded by a Spanish Catholic priest already present at the gathering. It is written in Spanish and Nahuatl, the Aztec language.

All this is in our oral history. Evidence of this, in addition to the written document, is the reading of wampum belts. These are beaded belts, several thousand years old, made out of shells. They are mnemonic devices, used to trigger the mind, and they're memorized; people who read those belts are trained from early on to be able to do it. After I heard about the Dark Sun prophecy in Mexico, I visited one of my chiefs in the north and asked whether it was true, and whether there was the degree of migration and contact which I have described. He said, "Yes, it fits." I was very happy, because I had validated this in a traditional way.

From All The Directions

It was also said that after the 468 years, according to the Aztec calendar, there would be a new sun—which started in approximately 1987. Other Native peoples have a similar prophecy. They may not have put it in mathematical form, but they'll tell you in another, maybe symbolic, fashion.

What is prophesied as the end of the Dark Sun is that the condor (that is, the land of the South Americas) and the eagle (the land of the North Americas) will be re-united, and the knowledge of the Earth will re-emerge and the knowledge that we have will become whole. When we say "the Earth" in our language, we don't mean just the physical Earth, but rather something you might call "energy". During this Dark Sun, the knowledge became fragmented. This ancient knowledge will rise again, only this time the key to it is integration, and we have to do it with "all the directions".

One way of understanding all the directions is that these are the colors of the races of humankind. As the fragments of knowledge start to come out, we will meet people and each will have a certain piece, and as we put them together they will start to become whole again. Many people today don't realize that the different tribes do not understand each other any more. While I can understand most of the Iroquois people, for example, I cannot understand our neighbors, the Sioux, except for a few words. And yet all of our languages (more than 1000 in North America) contain "universal" words, as well as unique local words. Indians love to hear each other's language, because it gives us the chance to discover how, by what kinds of words, we are united and how we are different.

The Overview Effect

How might this integration occur? Some while ago I read about an intriguing phenomenon described by space scholar Frank White. In his book *The Overview Effect*, he talks about what happened to the astronauts when they went into space. Some of them had what I suppose would be called profound spiritual conversions. White describes the experience of looking down on that which we think of as separated things, and seeing it is all one, "the universal insight". Then he goes on to talk about "the overview effect", your simultaneous recognition that you too are a part of what you are seeing. He wonders if we could find some way of creating the possibility for human consciousness to be transformed to this state without blasting everybody into outer space.

Combining this with things I have read from Thomas Berry and other environmentalists, I have come to feel that the biggest problem we face in terms of the Earth, and the whole of humanity, cannot be tackled by technology. We already have the technology to do the job, to heal the Earth—but what matters is the attitudes we carry in our minds and in our hearts. A transformation in worldview needs to occur.

So, how to provide opportunities for large numbers of people to achieve "the overview effect" and "the universal insight"? That is the question if the Earth is to survive. Again, clues come from Native science.

Between the Worlds

Our oral history, which we would estimate goes back more than 30,000 years, describes four periods in the past when the Earth was created and destroyed. One was destroyed by fire, another by wind, another by ice, and another by water. This information is recorded on the petroglyphs in the Americas, for example, as well as in story form. The petroglyphs give rise to two interesting questions—*when* were they made and *why* were they made?

➤

In each of the four periods or “worlds”, there arose a situation from which humanity had some great lesson to learn—and every time there was a mistake made. Sometimes there were warnings. Sometimes people could see they were making a mistake but were unwilling or unable to rectify their error. And so nature herself made an adjustment. The greatest thing we can accomplish in our science and in our lives is to be in balance with the universe. But each time, in each of these four worlds, people were unable to maintain that balance—they made mistakes which led to the destruction of their world.

I have done some research into these four worlds in association with Hanson Ashley, a Navajo medicine man and a transpersonal psychologist. We wanted to know how we could begin to talk about the concept of worlds

humanity had to do things to put itself in accord again—in accord with life, or with the natural world, however you want to say it. The four worlds were not the worlds of “man”, but were worlds in which nature herself went through her growth, challenges, transformations and realignments to come into balance.

So if we are interested in discovering how to create a shift in attitude, which is necessary now in order to save the planet, and how to integrate Native thought, we also have to understand what happened between those worlds. What happened that somehow saved the day and permitted humanity to move into another world—or, one could say, another form of consciousness? And how did our ancestors’ choices accommodate or block the Earth’s natural evolution?

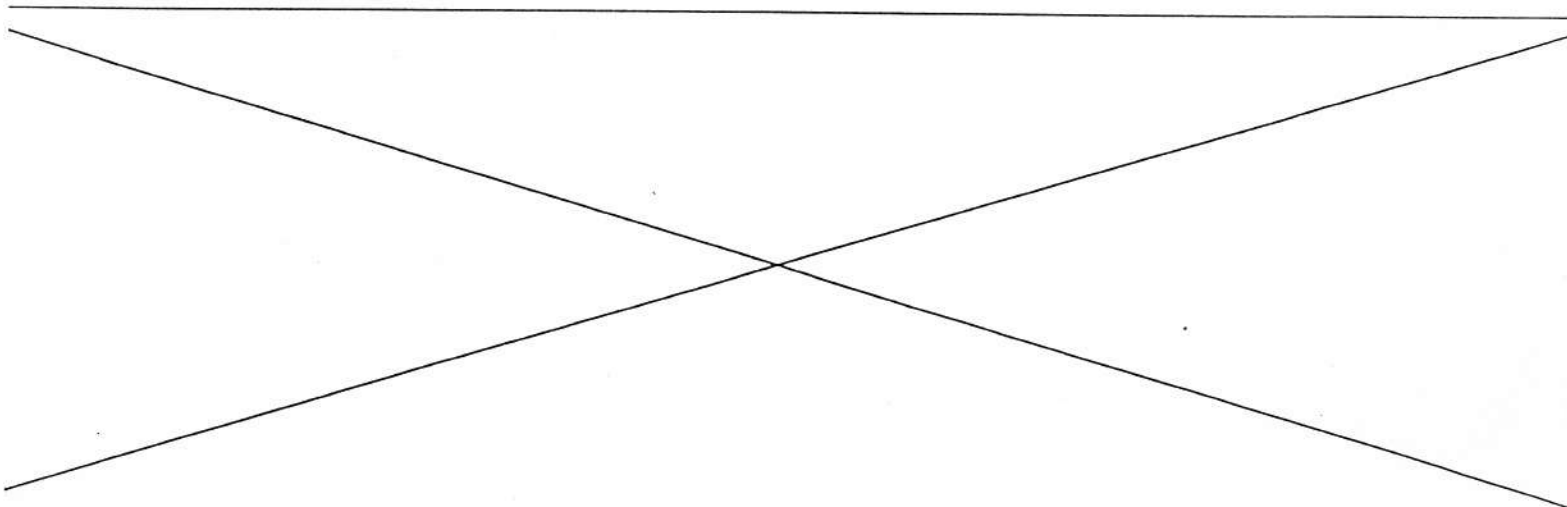


Photo of the Hokule'a courtesy Hawaii Maritime Center, where the canoe is presently stored.

to the West, and developed the hypothesis that they could be described as the evolving consciousness of humanity. (When I say “evolving”, it has to be understood more like a “revolving” consciousness, because as Native people we don’t look at things linearly.) We also wanted to be accurate in what we said; we didn’t want to distort knowledge in an effort to communicate across cultures, so Hanson spent time talking to several elders about the nature of the worlds. He now has a detailed history of each of them—and this includes the specific teachings or learnings which were of each world.

The elders agreed that you could, indeed, think about the worlds in terms of human consciousness. But the situation was more complicated than we had thought, for Hanson also found out that the people did not learn the most important lessons within the worlds—but *between* the world cycles. “Between the worlds” was the time when

The Wayfaring Mindset

Many things happened “between the worlds”, but one of the primary events was a journey or migration. These journeys can be described as wayfinding, and it was during these great movements or migrations that knowledge of how to live in balance with the Earth was recorded in the original rock carvings and petroglyphs.

This was a time when people physically moved around on the Earth or on the water. They moved in a patterned way; it wasn’t just any old way, for they knew they were going to some place for a specific reason. They were usually led by someone, one who had the inspiration or vision of where to go. As the people moved about, there were lessons they learned, mistakes they made, risks they took, and out of those experiences they learned rituals, songs and strategies that prepared them for movement into the next cycle.

One of the things the Indigenous Science Network is working on now is to recreate some of these migrations. Our focus is not so much on recreating the exact journeys, but rather the recreation of the protocol, the mindset that came into being as a result of lessons learned during the migrations. We are inviting our white brothers and sisters to join us in this because we believe this is something we are meant to be doing.

Bridges to the West

To communicate with the West we need "bridges", models of migrations. One good example comes from the Polynesians:

In 1976 the Polynesian Voyaging Society was established and its first task was to recreate a traditional double-hulled Polynesian voyaging canoe, the "Hokule'a", that would be capable of trans-oceanic voyages. But they soon

The interesting question is, how did he do it? Well, that gets to something mentioned earlier—the overview effect. As Native people, we learn to train our minds from the time we are children, to be centered where we are, grounded in reality, and see all the signs that are around us. For the purposes of navigation, it is necessary to see the roll of the waves, the movements of the fish, the birds, the winds, etc. In addition, you have to have the ability to project yourself out, "to see what it's not possible to see". I'm just learning this myself, but I know that it is an ability that our people have known for thousands of years, and still practice. Now our task is to see that this mental acumen, this capacity of "the good mind", is not lost. So this wayfinding mindset, the ability to project ourselves out, is a knowledge that is necessary if we are to create a healthy relationship with the Earth.

It was understood that this layering of activity would encode teachings on our consciousness, just as the ancients carved their knowledge into rocks. And like the rocks, the knowledge or consciousness can be entered into, now, only with the correct "key".

discovered there were no Hawaiians who knew how to navigate in the traditional way—without instruments! As they searched they eventually found Mao Piailug from Micronesia, an elder who still knew the traditional methods of non-instrument navigation. He was brought to Hawaii to work with a young Hawaiian native, Nainoa Thompson. Nainoa drew from Western and indigenous sciences: He studied satellite weather charts and astronomy, and then he studied with Mao, who used stones to teach what our ancestors had known.

The result of this integrated education was the 1976 voyage of Hokule'a from Hawaii to Tahiti. This voyage was accomplished without the benefit of any instruments or charts. In 1985, on a subsequent voyage from Rarotonga to New Zealand, a distance of 1700 nautical miles across open sea, Nainoa steered a course which was only 100 miles farther than the shortest distance possible between the two points. The only reason for the extra miles was severe weather conditions.

A New Sun

Nobody said that the Dark Sun was due to the coming of the Europeans. (In fact there is evidence of much earlier contact with the Europeans; but then the relationships were different.) Who tells the sun how to move? Not the Spanish or the English!

We don't like what has happened. We surely didn't want it. On the other hand, that's life—the cycles of life. Perhaps the best way to say it is that we really value accommodation as a universal principle. Accommodation to life is more important than judging what needed to have happened. Now what is important is that we are entering a new sun.

□

¹Extracted from the translation of the original prophecy, given 12th August 1521, in Tenochtitlan, Mexico.