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A Meeting Between Brothers

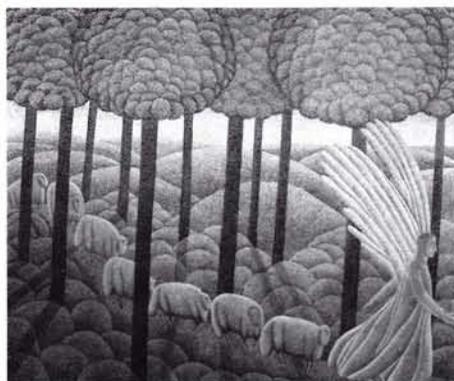
Dr Pamela Colorado and Alan Ereira *on the knowledge of the indigenous peoples*

Gary Davies *on the changing ways of business*

Yoshi Oida *on his work as an actor and director*

Sister Wendy Beckett *on the paintings of Margaret Neve*

*'The Path Through the Wood' by Margaret Neve.
Oil on wood panel, 30" x 35". See page 18.*



Angelic Presences 18

Sister Wendy Beckett introduces the paintings of Margaret Neve: "Making us ponder these mystical questions... and see that certainty and uncertainty are two complementary qualities, is perhaps Neve's greatest achievement."

A Meeting Between Brothers 20

A major double feature concerned with the synthesis of the knowledge of the indigenous peoples and that of western society. Pamela Colorado, an Iroquois Indian, and lecturer in Sociology at the University of Calgary, talks about **Indigenous Science**, whilst television producer Alan Ereira describes his encounter with the remarkable South American people, the Kogi, and their **'Message from the Heart of the World'**

Means of Expression 33

Yoshi Oida, currently appearing in Peter Brook's 'La Tempête' in Paris, talks about his work as an actor and director

Television and the Retreat from Consciousness 36

Paediatrician Sean Spence describes a night on the hospital wards

Reviews

Books 37

Books in Brief 46

Performance 51

Regular Features

Editorial	3
Conference Reports	9
Events Listings	52

BESHARA Magazine

was founded in 1987 as a forum where the ideas of unity which are now emerging in many different fields – in science, economics, ecology, the arts and in the spiritual traditions – can be expressed. 'Beshara' means 'Good News' or 'Omen of Joy', in its Arabic form it is found in the Quran, in its Aramaic form it is translated as the 'Glad Tidings' of the Bible, and it is also found in its Hebrew form in the Torah.

Front Cover: Alan Ereira with Arregeuce, one of the Kogi people. See 'Message From the Heart of the World', page 28. Photograph courtesy of Alan Ereira.

BESHARA

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A Meeting Between Brothers

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 of a synthesis, and a real dialogue, between ancient and contemporary modes of knowledge. In the following articles, we introduce two ways in which this possibility is currently being presented to us.



*Pamela Colorado
Photograph by Frank Herrmann*

Indigenous Science

Dr Pamela Colorado talks to Jane Carroll

DR 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 the state of Wisconsin. She was one of the first Indian women to attend an American university, taking a degree in Social Sciences at the University of Wisconsin in Milwaukee, where she was the only native person in a student body of over 20,000. She went on to do doctoral work at Harvard, studying alcoholism in the native communities. It was during her doctorate that she began to take an interest in her indigenous culture, and to attempt to integrate within herself native and Western systems of knowledge.

She has since made a special study of the ancient American rock carvings and their meanings, and in 1989 founded The Worldwide Indigenous Science Network. With a membership which includes tribal elders, scientists, artists, academics and other professionals, the Network aims to forge links between indigenous and non-indigenous peoples throughout the world, researching and reviving the ancient forms of knowledge which the tribal peoples still hold. Amongst the many schemes scheduled for the next few years is a research project into the great migrations which the Indian peoples undertook in pre-history, trying to correlate the accounts given in the oral histories of the tribes with modern archaeological discoveries.

Dr Colorado now teaches at the University of Calgary in Canada. Jane Carroll spoke to her during a recent visit to the Institute of Noetic Sciences in California.

How did the Network for Indigenous Science start?

The idea had first come to me whilst I was doing my doctoral dissertation in 1977. At that time, I was having great difficulty communicating with my doctoral committee. I had excellent instruction, and it was a really demanding curriculum, but I 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 present the knowledge and come to the 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 realised that that is what needs to be said, because up until that time it was only the West which could have science. The rest of the world's cultures could have culture or philosophy, but it wasn't considered that anyone else could have science.

Of course, a lot of what is in the native American world-view, or indigenous world-view, falls beyond what we would normally think of as science in a western sense – although there are some things that could be considered directly parallel; for example, the knowledge that native people have about the environment. But it was because I felt that our view is so much broader that I felt it was a good thing to call it 'science'. Knowing something about the history of science, I knew that western science is in the process of struggling for its third revolution – revolution in the sense of Thomas Kuhn's definition¹ – so I thought that maybe by calling indigenous knowledge 'science', there was a possibility of making a bridge between it and western knowledge.

Another consideration was that one can still see, everywhere, the destruction of native lands and tribal people. The people have never been able to find a voice to stop this destruction. This is perhaps because of the language that we use; not only because of actual linguistic differences, but also the way we have been educated and learnt to communicate with western people. For instance, we have had available to us the language of anthropology, because in the past anthropologists were the only educated people that ever spent time with us. But these people were clearly not doing the job of preventing the annihilation, for even in the 70s it was becoming clear that things were getting very dangerous; there was worry about the survival of tribal people globally and about the survival of the planet.

So my feeling was, that if I could find a way to talk about the native sciences, and about how much fuller and richer they are in many ways than western science, perhaps the western scientists would see something that they could learn from. Then maybe they would get involved with us, and then maybe they wouldn't kill us anymore. I thought of it that simply, as a protection – not only for indigenous people but also, perhaps, for all people.

Can you say in what way indigenous knowledge is 'science'?

When I looked around at what I had learnt through my education, I asked myself what, in western society, carries the weight that our indigenous knowledge does in ours? What is



*Pyramid of the Sun, Teotihuacan, Mexico.
Courtesy Peter Newark's Western Americana.*

equivalent in terms of the value that we put on our knowledge systems, including the ritual and all that's in it? I concluded that it had to be science, not religion or philosophy, for it seemed to me that science is held in such high esteem in the west. Since we hold our knowledge system to be spiritually based and, in a sense, spiritually driven, I wanted to find an equivalent knowledge system in the west that would be capable of 'carrying the weight of God'. And again it looked like science to me.

If you want definitions of what indigenous science is: 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 *sciens/scientia*, which means '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 *Güi Lai* – 'the still quiet place'. In other words, our religion and our spirituality are built into it. Another thing that can be said is that native scientists, through their rituals and songs, etc. are working all the time with energies – the energies of the earth – in a way which is just as precise as the way western scientists work.

How have people responded to the idea of indigenous science?

In 1977, it seemed as if I had a tremendous nerve to think that tribal people would have anything at all to contribute to western knowledge, and I was considered quite radical.

A MEETING BETWEEN BROTHERS

People said they were interested, but they did not want to know more. Although even then there were a few who said, this is really good stuff, have you written about it? Of course I hadn't, because I had not worked out any way of talking about it properly. So nothing much happened until two or three years ago. By that time, the environmental crisis had deepened, threats to the survival of tribal people had sharpened, and the attention given to certain environmental issues like the rainforests and the problems in Brazil had focussed the world's attention a little on tribal people. Then, in 1987, along came the Brundtland report. It is rather weak-kneed as far as tribal people are concerned, but at least the commission's report says: go and learn from indigenous people, because they are the last reservoirs of the knowledge of how to live sustainably with the environment. Of course, they did not do anything about seeing that it would happen or make any suggestions about how it could come about. But it was from there that the inspiration came for the Network.

One thing that is important to add is that if I had tried to do this work before now, it would not have happened, because in tribal peoples' view, especially in the Americas, it wasn't appropriate to talk about certain kinds of knowledge. They were considered secret; we just didn't share them, not among tribes and definitely not with the western world.

Is there is a specific reason for this?

Yes, at least in the Americas. I haven't checked it out in the other parts of the globe. In our oral tradition, it is said that there was a very definite decision made, at some point, not to talk, not to share our knowledge. I did some research recently into where that policy originated, and found that it was in Mexico at Tenochtitlan in 1521.

You see, people knew then, through our scientific practices, that we were entering a time they called the Dark Sun, which would go on for 468 years. During this time, consciousness would go through darkness. In fact, around that time it is recorded that there was a flare-up of solar activity with enormous sunspots. These sunspots, which were visible to the naked eye, made the sun look black.

Prior to the arrival of the Dark Sun, the spiritual and scientific community prepared the people. These preparations were four or five fold. The first was that the sites of knowledge – such as the pyramids and the petroglyph sites that dot the Americas – those traditional universities would be closed, and the knowledge would no longer be recorded; neither written down in the case of the Aztecs or Mayans, nor enacted in the big centres 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 pre-

served within family structures, and move to the personal domain of our own hearts. Thirdly, native tribes would stop the cycle of international gatherings and as a result, the knowledge would become scattered to all the directions.

It was said, at that time, that only two things would stay open – we would keep our languages alive, because so much knowledge of our ancestors is in that; and secondarily 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 in Mexico City just last February. In it are the words of Cuauemec, one of the last Aztec chiefs. Cuauemec had the job of standing in front of the thousands of people and delivering the horrific prophecy of

the Dark Sun, telling them that this is how they were to live, how they were going to survive for the next 400 years. The reason that such a document exists is that the Spanish had already arrived in Mexico City, and there was a Catholic priest present at the gathering, who recorded it. It is written in Spanish and Nahuak, which is an Aztec language; after I found it last year, I brought it back to North America and had it translated. It is a very powerful and moving speech.

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 pallisaded, stockaded villages, and people weren't mixing with each other anymore. When they did mix, the contact was often hostile.

It had been different before this time?

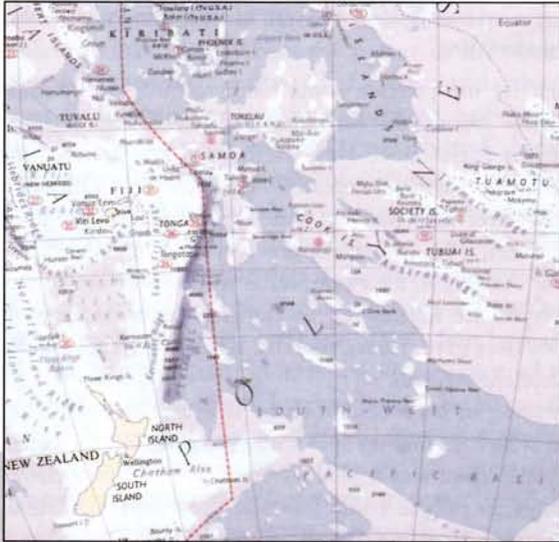
Oh yes. According to our oral history there had been many, many contacts, not only between the different peoples of North and South America, but also across the Pacific Ocean and across the Atlantic Ocean. There were established trade-routes, and ways of exchanging knowledge. The contacts began to be different in the 1500s. For instance, I come from a tribe up in the north-east, by the Great Lakes, and my people used to come down to Mexico City for what we might today call 'conferences' – policy-making sessions – about every six years. These were attended by peoples from all over the Americas, and also by tribes which came over the Pacific

**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.**

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

A MEETING BETWEEN BROTHERS



Hokule'a, the traditional double-hulled sailing canoe built by the Polynesian Voyaging Society, on its great 'Voyage of Rediscovery' between 1985 to 1987. This journey was accomplished without the aid of modern navigational instruments, using the sun, the stars and the moon, the waves, the winds and the movements of the wild-life of the ocean, as guides. Starting in Tahiti, the canoe sailed to Samoa, Rarotonga and New Zealand and returned via the same route. Photograph by Mike Tongg, who was one of the crew members.



Ocean by boat. They stopped after 1521.

All this is in our oral history. But I know, being a western-trained scientist, that if I tell someone it is in our oral history, they'll say, prove it. Well, one of the evidences of all this – in addition to the written document – is that amongst our surviving traditions, is the reading of *wampum* belts. These are beaded belts made out of shells, and they are a couple of thousand years old. They are mnemonic devices, used to trigger your mind, and they're memorised; people who read those belts are trained from early on to be able to do it. After I heard about this prophecy in Mexico, I visited one of my chiefs and asked whether it was true, and whether there was the degree of migration and contact which I have described to you. And he said: Yes, it fits. I was really happy, because I had validated it in a traditional way.

Do you have any explanation for why the choice was to keep that knowledge underground?

Oh yes, they're really clear about that. It was for protection. They didn't want it to fall into the wrong hands: it was too sacred and too powerful.

Was Mexico in some way a centre in that period for the native peoples in the North of America, so that a statement made there could have effect throughout the continent?

Yes, but this is another thing that's tricky to understand. Because some parts of our knowledge system can be said to be very intuitive, people that weren't there knew it anyway, and felt it, and they were preparing themselves.

Then they said that after the 468 years there would be a new sun, which started in approximately 1987. This is in the Aztec calendar. You see my people from the Great Lakes come from the Aztec people, from that migration. Other native people 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 at the end of the Dark Sun is that the condor (ie 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 – and you must understand that when we say 'the earth' in our language, we don't just mean the physical earth, we refer to something which you might call 'energy' – the knowledge of the earth will come out again and the knowledge that we have will become whole. The 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 colours of the races of man. 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. You see, during this Dark

A MEETING BETWEEN BROTHERS

Sun, the knowledge has become fragmented. Many people don't realise that the different tribes do not even understand each other any more. I can understand most of the Iriquois peoples, because they speak dialects of my language, but I cannot understand our neighbours, the Sioux, except for a few words. This is important because all of our languages (there are more than 1000 in North America) contain both 'universal' words and 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.

When you talk about the knowledge coming out now, I take you to mean not the formal knowledge that was repressed or hidden four hundred years ago, but the spirit of the knowledge?

Yes – although I would call that 'formal' knowledge. What's more formal than that?

I mean that rather than being known through a formal ritual, now it might take other forms. For example, the video you show to introduce the Network mentions that modern technology has taken us to the moon and given us a view of the earth as a single whole. The indigenous people have always had this kind of knowledge of the earth, but it has taken highly analytical technology to bring it back to us. This view of the earth is becoming a kind of icon for our times, and it seems to be a combining between the two knowledges.

Except, a man named Frank White, who is a space scholar and a writer, wrote a book called 'The Overview Effect'² in which 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 calls the experience of looking down on that which we know as separate things, and seeing that it is all one, 'the universal insight'. Then he goes on to talk about 'the overview effect'; which is that it isn't just that you are standing back from what you see, but at the same time you recognise that you are a part of it. 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. It is very destructive of the environment to create those ships, we don't have the resources, and not everybody wants to be an astronaut.

Combining this with things that I have read from Thomas Berry and other environmentalists, I have come to feel that the biggest problems that we face in terms of the earth, and the whole of humanity, cannot be tackled by technology. We have the technology now to do the job – to heal the earth – but what matters is the attitudes that we carry in our minds and in our hearts. A transformation in world-view 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. And it is here that I feel that native science has something to really contribute.

Could you give an example of the sort of scientific projects the Network is undertaking?

Yes, but first let me provide some background. In our oral history, which we would estimate goes back more than 30,000 years, it is described that there were 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 are interesting to mention here, because of the questions they give rise to, such as, **when** were they made and **why** were they made?

At each time, in each one of those worlds, there was the situation in which humanity had some great lesson to learn, and every time there was a mistake made. Sometimes there were warnings, or people could see that they were making a mistake but were unwilling or unable to rectify the error, and then nature herself made an adjustment. The greatest thing that we can accomplish in our science and in our lives is to be in balance with the universe, ultimately. But each time, in these worlds, people made mistakes which led to the destruction of the world.

I have done some research into these four worlds in association with a man called 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 to the West, and developed the hypothesis that they could be described as the evolving consciousness of humanity (and when I say 'evolving', it has to be understood that it is more like a 'revolving' consciousness, because as native people we don't look at things linearly, going from one point in a straight line to another). We also wanted to be accurate in what we said; we didn't want to distort knowledge in an



Rock carvings (petroglyphs) portraying the daily lives of the Hopi Indians. The vertical footprints indicate travel to the North or South. The style of the symbols can identify them with a particular clan.

Photograph by Kurt Michael Westermann/Fovea

A MEETING BETWEEN BROTHERS

effort to communicate across cultures, so Hanson spent time talking to the 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 real lessons **within** the worlds, but that in between the worlds, there was a cycle of twelve. This cycle of twelve – I don't know how many years that was – was the time when 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 move from western thought to 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?

Well, many things happened, but one of the primary events was a journey or a 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 is a literal wayfaring?

Yes and no. The literal wayfaring is only one kind; but many things were happening simultaneously. It 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; someone who had the inspiration or vision of where to go. The case of the Navajo is interesting, because one of the people who led them, I think it was after the flood, was a woman, who is referred to in the histories as White Shell Changing Woman.

As the people moved about, there were lessons that they learned, mistakes that they made, risks that 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 that the Indigenous Science Network is working on now, is to recreate some of these migrations. It is important to understand that when I speak of re-creating the migrations, it is not so much recreating the exact journeys and the steps; what we want to recreate is the protocol, the

mindset. We are inviting our white brothers and sisters, the scientists, to join us in this because we believe that this is something we are meant to be doing. As native people that's enough, that we have a vision to do it. In my case, it refers back to a vision that I had at a ceremony in Arizona in 1984, when the spirit of wayfinding came into the ceremony and touched my life in a way that set me on this path. But the problem that we faced was how we would be able to talk to the West about it.

Is this where your interest in the great Polynesian journeys comes in?

Yes. But before I go into that, I want to talk about the confidence level that's generated by indigenous science. Confidence is a big issue in science. In western science, the confidence that people have in it depends on how accurate it is, how likely it is we can replicate it, etc. It was confidence, for example, that brought Columbus to the Americas in the first place – confidence in the navigation instruments which allowed him to go out of sight of land for the first time in European history. He got to the New World because he knew how to use them, whilst none of the other sailors that were

with him did. They wanted to mutiny, to throw him overboard, but they didn't dare because they were out on the ocean, with no landmarks to go by, and Columbus knew the navigation.

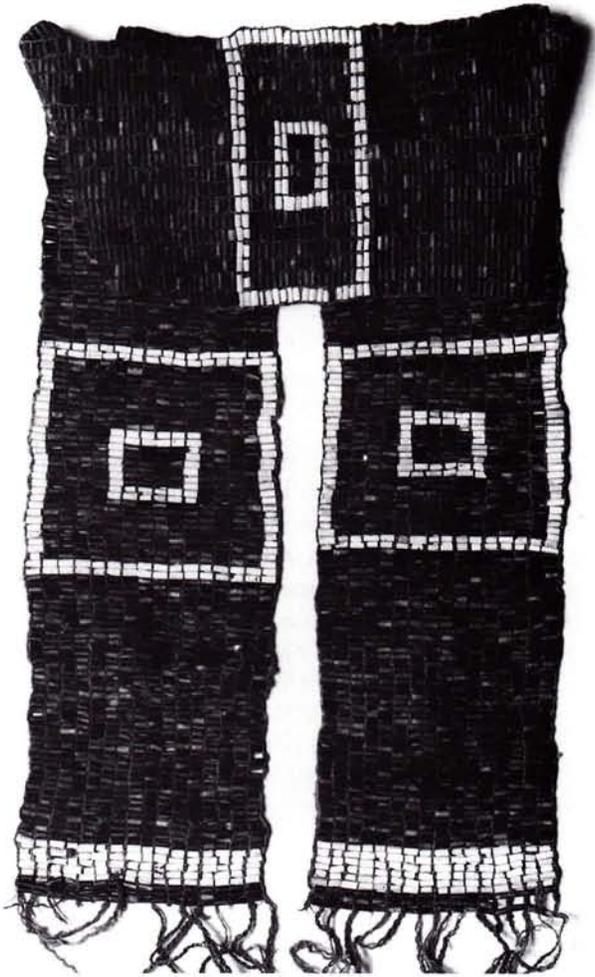
In the same way, there is a confidence that can be engendered by indigenous science. For example, the Navajo people have an extremely short life-span, about fifty years of age. Their average annual income is probably still not much more than about \$2,000 – so in an economic

sense, they live very marginalised lives. But when we first thought about re-creating these journeys, Hanson went back and talked with the medicine man who had run the ceremony in which I had had my vision, and spoke of all the things that had unfolded since then and asked him about it. Specifically, he asked about White Shell Changing Woman's journey, in which she led the Navajo people from where they lived in the South-West over to the coast here in California, to the Pacific Ocean. There, they met Indians who were ocean-going, who could build canoes, and they showed the Navajos how to navigate and what to do. The Navajos sailed to the farthest island in their journey and then came back.

Hanson discussed with the elder the possibility of recreating this migration. In the light of all I've said about the Navajo's lifestyle today, one might have expected the response to be – but how do we do it? Where will we get a grant, who will back us? But actually, the response was: well, we have stories and we have the charts to guide us, it shouldn't be too much of a problem. That's the kind of confidence that's engendered.

This illustrates as well how powerful indigenous science is,

*... the wayfinding
mindset is the knowledge
that is necessary
if we are to create a
healthy relationship with
the earth.*



Wampum beadwork belt – Iroquois. Courtesy of the British Museum.

in the sense that it contains and is able to pass on information through thousands and thousands of years by its oral traditions. In contrast, how long do we think that most of the knowledge that we have today will last? We have very powerful computers, but even with them, the models change all the time, and if the electricity fails because of some kind of calamity or disaster, the knowledge is gone.

But the kind of knowledge that you are speaking of is very different from that of modern technology.

Yes, indeed. So in order to communicate with Western scientists, we have to give them a bridge, or an opportunity, to look again at these ancient forms of knowledge. And to do this we need models, and as far as the migrations and the navigation goes, it turns out that there is a good, existing example, and that is the case of the Polynesians.

For, in 1976, the Polynesian Voyaging Society was established. Its first task was to recreate a traditional double-hulled Polynesian voyaging canoe that would be capable of trans-oceanic voyages. Building the canoe – 'Hokule'a' – revealed some startling facts. Firstly, there were no trees left on the Hawaiian Islands that were big enough to make such a canoe, so Hokule'a could not be traditional; it would have to be a performance accurate replica which used some fibre-glass instead of wood. Secondly, they discovered that there

were no Hawaiians who knew how to navigate in the traditional way. So they began to search and eventually found Mao Piailug from Micronesia, an elder who still knew the traditional methods. 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.

The interesting question is, how did he do it? Well, that gets to something I think Frank White is talking about when he describes the overview effect. As native people, we learn to train our minds from the time we are children, to be centred 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 and 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. And the reason why we've been talking about this today is that the wayfinding mindset, the ability to project ourselves out, is the knowledge that is necessary if we are to create a healthy relationship with the earth.

There obviously is a major dichotomy between indigenous science and western science. Do you see western science as something that has gone wrong, or do you see that it's pursued a particular path which is perhaps unbalanced but which is not wrong in itself?

That's a difficult question, because it's got so out of hand that the temptation is to say that it was an experiment that failed. I don't know if it's failed or it hasn't failed. But I can say from a traditional perspective that when we describe the form that the migrations took, for instance across the Americas, it is a cross within a circle; a cross lying on its side. Our ancestors always knew about linear thought, but it was linear thought contained in a circle of light. The Hopi prophecy, which is written on their petroglyphs and which they ritually re-enact in their cycle of ceremonies every year, tells us that what needs to happen is that the knowledge of the white brother needs to be united with the earth knowledge of the native person. *What do you think Western scientists*

or any of us should be doing in a principal way? Obviously we should be learning to take care of the earth much better than we are, but how?

A MEETING BETWEEN BROTHERS

Well, for example, two physicists asked me in Germany, "Dr. Colorado, what would you recommend if we were to do our science differently?" One thing I said was that I think scientists should extend their calculations to seven generations. I asked them what they thought they would find out if they did that, and they admitted that the results would be very different. That's one really simple thing they could do. Well, perhaps not so simple.

To expand their horizons...

Exactly. And in other directions. If you talk to scientists, you'll find out that most of them have deeply moving moments of creativity and inspiration which they say that, at the present time, they're not allowed to discuss or to bring into their science. They have to act as if it doesn't happen, and as if all of their hunches, which may turn out to be right or to be wrong, were just manifestations of sheets of calculations. So another thing that would be good is for them to begin to create forms where they can talk about the other levels of knowing. Some people of course have already begun this – David Bohm, for instance.

I ask scientists to join us at any level. I have researched the journeys in a western way – I've researched it many ways – and I've had a lot of contact with different kinds of western scientists, from archaeologists to physicists.

It does seem that there is a very narrow focus to much of Western science, and an unwillingness to accept oral history, or mythology.

Bohm makes the point really well. He says that since Einstein, we continue to practice our science as if he hadn't said what he said; and probably that vein of science, that par-

ticular very focussed approach to knowledge, will continue. What we see happening, I suppose, is that new streams of thought and science are appearing now. It's from these that I'm looking for solutions, not only cross-scientifically but also globally. In a way, I think science has already begun this, or at least the scientists have already begun; that's why a place like the 'Institute of Noetic Sciences' in California exists; that's why Bohm does the work that he's done for so many years. There is group of 'scientists for peace', and many scientists are looking for new ways. I have a lot of hope.

Is there a way, from the native American perspective, to look at the cataclysm that occurred for you in the last four hundred years? Is there a way in which it has meaning?

If you think back what I had said earlier about the Dark Sun, nobody said that it was the Dark Sun because of the coming of the Europeans. The Europeans had come thousands of years earlier (there are evidences of very early contact which I won't go into now) but then the relationship was different. Who tells the sun how to move? Not the Spanish!

We don't like what's happened, we surely didn't want it. On the other hand, that's life itself; that's 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 happen. Now what is important is that we are entering a new sun.

1. Thomas Kuhn 'The Structure of Scientific Revolutions', University of Chicago Press, 1979.

2. Frank White 'The Overview Effect', Houghton Mifflin, Boston, 1987.



Indigenous people of Lake Baikal, USSR. During the last four or five years, European tribal people have been joining international indigenous gatherings. The Lappish people have been participating for some time – they have been members, for instance, of the World Council of Indigenous People – but since perestroika other Eastern Europe peoples have been coming forward – from places like Estonia where a 'pagan' tradition has been quietly preserved for five thousand years. One of the events which the Worldwide Indigenous Science Network is planning is a gathering of elders at Lake Baikal this August. The gathering will launch three global projects – a 'pipewalk' for peace and unity, a walk on the Inca trail to restore traditional agriculture and a Pacific voyage of indigenous canoes. Photograph courtesy of Channel 4 TV.