

# *Hiri Moale*

Documentary Film

Transcript

Narration copyright AS McPhie 2008

This is Epemeavo village in the Gulf Province of Papua New Guinea. An archaeological expedition led by Doctor Bruno David of Monash University in Australia has arrived to investigate some important discoveries made by the local villagers.

About 3 months prior to this visit, a storm had blown over some coconut trees at the mouth of the river that the village is located on.

This had the effect of exposing in the sand two large canoe hulls that no one knew was there. The villagers quickly dug up the hulls and put them on display in the village.

So what are the hulls from, and how old are they?

They appear to be from giant canoes called lakatois, known from the recent ethnographic past, and this is something that the team will investigate.

The team is also here to investigate pottery fragments found 2 kilometres inland behind the village in swampland.

The villagers dig large channels to drain the swampland and make it suitable for agriculture, and it was in doing this that they found highly concentrated deposits of broken pottery, indicating the sight of an historic village, which again no one knew existed.

The archaeological team will conduct detailed excavations at these sites and then undertake further analysis of the objects back in their laboratories in Australia.

Joining Doctor Bruno David is Doctor Alexandra Gartrell, also from Monash University, myself, filmmaker and anthropology undergraduate, Scot McPhie from the University of Southern QLD.

And then in one week's time, Nick Araho and Alois Kuaso from the National Museum of Papua New Guinea, Associate Professor Bryce Barker from the University of Southern Queensland and PhD student Ian Moffitt from the Australian National University.

As the canoes hold pride of place in the village, before settling in, the team is taken to see them. A special hut has been constructed to protect the canoes, and the locals have been visiting from all the surrounding villages to see the canoes.

After the inspection, before anything else is done, a meeting is held in the village with all of the elders and interested people gathered around.

It is vitally important that everyone knows what is happening and has a sense of ownership and investment in it.

The entire village of Epemeavo is one clan, and although they have oral stories telling of their ancestors and how they came to be, there are great gaps in their knowledge of their material history, which the results of their expedition should help to fill.

If, for instance, the canoe hulls turn out to be lakatois, then that will link the village to the Hiri trade.

The Hiri trade existed for at least 2000 years and in it the Motuan people from what is now Port Moresby sailed West with the trade winds in the giant lakatois, trading pottery for sago and other foodstuffs they couldn't obtain themselves.

After a few months when the winds changed, they'd sail back home.

However, the canoes were difficult to handle and their conditions treacherous. Many lives and boats were lost.

The Hiri trade ceased by the 1940s, and none of the living villages have ever seen a lakatoi. Yet they know their grandparents talked of them.

If the canoes can be identified as being from the Hiri trade, it will create a tantalising link to their immediate past, but also will be of international significance, as no hulls from the legendary trade practise are known to exist.

The pottery as well may prove to be that traded on the voyages, and this is something the team will investigate as the fragments are analysed and virtual reconstructions made of the pots.

As the formal part of the meeting concludes, most of the group disperses and returns to their daily activities as usual.

Day-to-day life in the village is based around the gentle cycles of life.

Epemeavo is in a very remote location. There is no road or air access to it, and the nearest western style town, Kirima, is a complete 24 hours walk away along the beach, affectionately known as "the highway".

The only other access is by dinghy, but as the people live a mainly cashless subsistence lifestyle, the cost of this is beyond the reach of most of them.

Consequently, the villages lead a largely independent and self sufficient lifestyle.

Virtually all they need they obtain from the sea or jungle, or the crops they plant. And what they lack in material wealth they more than make up for in pride and sense of purpose.

This independence comes at a cost, though.

They have no modern education or health services at all.

People die regularly from easily preventable diseases such as malaria.

In fact, just prior to the team's arrival, there were two deaths, both of whom are still being mourned by the villagers now.

The presence of the archaeologists and the discussions of the past have led many to bring in artefacts to show Bruno, all of which are treated with great interest.

The canoes not only hold a link to the past, but it is hoped for their future as well. The villagers are hoping the canoes will attract tourists, and along with government support, they hope to be able to establish medical and educational resources in their area.

*We brought our canoes here and then maybe the canoes are lying in the centre, and we are maybe looking around for sort of support, maybe funds.*

Bruno inspects the artefacts brought to him as the day draws to a close.

The pace of life here is gentle, but it is a deceptive paradise. Living this close to nature is full of risks and riches.

The next day, the team rises early and heads straight out to the first pottery site known as Kevioki 1.

The walk takes them through the agricultural area directly behind the village, and then through successively thicker jungle.

With recent heavy rain on the tail end of tropical Cyclone Goober, the ground is extremely sodden and it is critical that the equipment stays clean and dry.

Using nothing but their bush knives and their knowledge of their environment, a makeshift table is constructed.

*What we're going to do first time is have a look around on top so that we're going to do one small excavation. Dig hole in the ground. But that place where we dig hole, it's important we don't walk all around because we want to make sure inside it doesn't disturb too much.*

The area is marked out so as to avoid disturbance and contamination.

The plot is aligned with the East - West and North - South axes.

A stationary mark is made for height reference.

*This mark here does not move. And then with that machine, we find out how high it is. And then everything we find in the ground, we measure over there, with this, it's below this level, underneath it. So if this one moves, it's all right because this one doesn't move.*

*Only one, two, three people inside on this one. We go inside now, don't we? And when we over there if you look at us sometimes we go like this we go like this it means still like this and be careful this one doesn't go backward or forward and make sure we try those straight straight straight thank you.*

The villagers are involved in every step of the way and are keen to learn the archaeological process.

The surface layer or excavation unit is removed and then weighed and sieved.

*I'm just about to start sieving everything now but first we're going to weigh and then we'll put through the sieves*

The material is sieved in the drainage channel and then laid out to dry.

*And we're keeping everything that's in the surface layer because it's still cultural material that's, even though it's had some form of disturbance through gardening, it's still got cultural materials that have been dug up from further down by the gardeners. And so we're still interested in finding out what's in there. But there isn't much material in there. There's hardly any clay pots, any bits of ceramics.*

The process is slow to begin, but once underway, everyone knows their jobs and a steady work rate can be achieved.

Lunch is provided for the team at a nearby house behind the neighbouring village of Kia Kia.

Bruno, Alex and myself are the first white people the children have seen, and they are momentarily stunned.

With the rain increasing it is decided to take a break for the rest of the afternoon and rather than travel back through the jungle, the team cut through Kia Kia and travel along the highway.

On their return to the village, the team find their hut has been decorated for them.

Flowers and leaves are hung from the rafters and eaves and inside ancestor boards have been hung.

Later that afternoon, the pottery found in the excavation, along with that found by hand in the drainage channel, is washed and laid out to dry.

It makes for a mesmerising end to the first day's work.

The next day, the rain continues.

A few days prior to this, and about 400 kilometres away, tropical cyclone Goober had caused widespread flooding and the death of about 200 people in the Oro province.

Epemeavo and all the villages along the Gulf of Papua still sit under the outer edges of the huge cyclone and receive heavy rain but no damaging storms.

Mouths must still be fed, however, and a number of the villagers are out fishing in the surf with large traditional V shaped nets.

We decide to travel out to film them.

The catch is small fish known as Hari Hai.

By lunchtime the weather clears and the villagers are able to hold a welcoming ceremony for the team.

This would have happened earlier, but it was postponed due to the mourning of the two recent deaths.

Wearing mainly traditional dress, the women dance and carry boards, telling of their ancestors, whilst the men sing of the village and their ancestors as well.

We wait in the centre of the village and endure the mock advances of a warrior, much to the delight of the children.

Elaborately woven billum bags are presented to the team as gifts.

At the conclusion of the ceremony, all the dancers and singers meet the team and then the whole village mingles afterwards.

In an act of fortuitous timing, one of the villagers arrives with a jew fish he has just caught on the reef offshore from the village.

The fish will be divided up amongst the villagers.

The next day, the rain is heavier, but the village life continues unabated.

By the time it clears, the forest is sodden, but the sight is still accessible, although a wash out.

*It's been raining for a couple of days now. It's quite heavy rain. And as you can see on the ground here, the rain has exposed a lot of the pottery that normally would be about this much below the ground. But because the surface of the ground in this area has already been disturbed, the rain has washed away the ground surface and exposed the pottery that is normally in the stratified layer deeper down.*

*Now that's caused a bit of a problem for us, because it not only means that the surface of the ground has been disturbed also in the area where we were planning to excavate, but it's also flooded the entire area. And as you can see from the drain, it's quite high up, which means that we're now going to have to relocate the whole excavation.*

*The good thing is that when we did start the excavation, we only started excavating for the top 5 centimetres or so, and then we ceased the excavation. We only excavated in the area which was the gardening layer. So it's not too big a deal to actually move the square.*

It is decided to cut a smaller excavation, directly into the side of the drainage channel. This will allow for easier access and a quicker excavation overall.

*So what we've just done is remove all the string line from the original square from a few days ago, and we've now set up the new excavation*

*square, which is 50 by 50 centimetres. So tomorrow morning when we start the dig, we'll clean up this face first, and then what we'll do is start excavating from the side. We'll be digging this way. It'll be much faster than the original excavation, partly because it's a smaller excavation, and also partly because we can see much better what we're doing. We've got better access to the excavation.*

The next day, the site is roped off to prevent disturbance and with the sun now shining, the new excavation is set to begin.

First a straight face is cut into the drainage wall and then the surface grass is removed before the digging commences.

*As you can see here, the pottery is lying in all different angles. Sometimes it's flat, sometimes it's vertical, sometimes it's diagonal. And that's a good indication that the sediments here are all disturbed. Because if it wasn't disturbed, when you drop something on the ground, it lies flat.*

Progress continues steadily and then associate Professor Bryce Barker and Ian Moffat arrive after flying into Port Moresby 2 days ago from Australia.

With things progressing well at Kevioki 1, the team then travel to the nearby Kevioki 2 site where again drainage channels have revealed high pottery concentrations.

A detailed diagram of the excavation profile must also be drawn. When combined with the dating results. This will help piece together the overall picture of what happened at the site and what processes have helped to form it.

*So the tool that we're using for this survey is a proton precession magnetometer. And what this does is measures the intensity of the earth's*

*magnetic field at each particular spot in the survey area. Now what this allows us to do is look for small variations in the earth's magnetic field in this area that would be caused either predominantly by metal or in this case by pottery that's been fired. So what we're trying to do is get a spatial understanding of where there might be pottery in the subsurface outside of the areas that Bruno and Bryce have excavated. So I'm hoping to see patterns that indicate the extent of the village and how the density of use in various areas in the cleared bit here.*

*So basically what we do is lay out a regular grid and then we collect points throughout that grid area during the day. We're also, while we're gridding, we're drawing a map of the site, so we can compare our results to known features here, so we can return to the same spot later on. Once we've got that data, it's all saved in the memory of the machine, we can take that back to camp, download it into a laptop, and then it's processed to make either a topographic style map, a contour map, or a colour plot. and that colour plot will reveal the changes in intensity throughout the site so we can pinpoint areas of interest.*

*We won't be processing it here unfortunately, just due to the constraints on battery life that we have working in an area with no power. So what I'll do is every day do the survey and download it at night, just do a basic check to make sure that the data is at least functional and then once we get back to Australia I'll process the data in more detail.*

At the Australian National University in Canberra, Ian starts to analyse his data.

His hand drawn scale map is scanned into the computer and then cleaned up, producing a concise and accurate map of the area.

When overlaid with the magnetometer results, it shows that fortuitously the drainage channel was dug right through the area of highest pottery concentration. Although one lobe does exist to the side, but there is no more significant pottery in the immediate area.

Meanwhile, in Melbourne, at Monash University, Bruno is finding some interesting results with the pottery.

*What we're going to do now is try and reconstruct the shape of the original pot from the pot sherds that we've excavated at Kevioki. So the principle really is firstly to find out what angle did these sherds originally orient themselves at. So let's use a modern pot from the Sepik River as an example. This pot is broken, but it's a good one to illustrate the principles that we're going to use. So if we have a piece of this pot, as we do here, from the break, the original pot itself lays up at the top, the lip of the pot was horizontal.*

*So if we orient this pot like this, in other words, with a small piece, if we orient it at a wrong angle, what we find is if we lay it against a hard surface, it doesn't sit flat. You can see some air between the piece that touches the surface and the other parts, the ends of the curve. But in order for it to sit flat, it's going to end up sitting flat against the hard surface. And this works with a whole pot. So if we get a hard surface here, and we get a the pot against the hard surface, it doesn't sit flat. But if it does, then we can work out from the hard surface the angle, which is called the orientation angle, the angle which is called the orientation angle from that horizontal hard surface.*

*So we're going to apply that principle to the archaeological specimens from Kevioki. So what we have here is a small piece. We get a hard surface. This is obviously not the angle in which it sits, and we'll find the angle of minimum air between the rim and the hard surface. Once we find it, we can say this is the shape of the pot, of the original pot.*

*And we've designed a little tool here by which we can get this angle. And it's just lines at 5-degree intervals. And if we sit this against this hard surface, and then all we have to do is measure from there the angle of the line, in this case 10 degrees. We can give this 10-degree information to the artist, to the computer artist, And from that, they can reconstruct the rest of the pot. They know how it sits. They just extend this line to the midpoint of the width of the pot. And then they can reconstruct a mirror image of the other side.*

This particular piece is an inverted bowl and would have been used for cooking.

The radiocarbon results date the pottery to between 1500 and 1550 AD.

This is the beginning of the recent era in Hiri trade ceramics, but also tells us that at this time the shoreline was almost 2 kilometres inland as the village and pottery was located on beach sand and the pottery was only traded coastally.

But what of the canoe hulls, how old are they and what is their story? This is a far more complex thing.

There are six factors that help to tell us how old they are.

Firstly, samples taken from the outer wood of each hull and radiocarbon dated tell us that they are somewhere between AD 1800 and 1950.

Then there is a presence of sharp axe cuts inside the hulls. This can only have been made with a metal axe which weren't available in the Gulf region till the late 1800s.

So this narrows it down to approximately 1880 to 1950.

Then there is the evidence of the moving coastline.

The dates of the pottery show that about 450 years ago it was 2 kilometres inland, and within living memory of the villages, the coast has been moving rapidly southward.

With the site being very close to the existing coast now, it is likely to have sunk within decades, not centuries.

This shortens the time period to the early 1900s to 1950.

Remembering that the longevity of the canoes wasn't that long. There wasn't very much time between when they were built and when they eventually succumbed to the treacherous sea and weather conditions.

Then we have the proximity of the find below the coconut palms.

The holes were found directly below the root ball of some coconut palms blown over in a storm.

Based on their size, the coconut palms were approximately 60 to 80 years old or so. Which narrows at our time frame down to around 1900 to 1940.

Then there are historical records. For reasons we will look at shortly, a large number of canoes are known to have been wrecked in the 1930s.

This doesn't give us a date of these hulls, but it does give us a strong likelihood.

And finally, we have the find itself.

Two hulls were found, but no pottery, with the exception of one single shard.

If it was a motuan lakatoi from what is now Port Moresby, travelling west, it would have been laden with pots. It was therefore most likely an eastward travelling vessel laden with degradable materials such as sago.

However the lakatois travelling home typically had extra hulls lashed to them as the trees they are made at made out of weren't available in their local area.

So this leads us to another kind of canoe known as a bevia. A bevia is basically an imitation lakatoi made by the people of the Western Gulf region.

A lot of bevias were made and known to have sunk in the 1930s, but why is this?

In 1919, in the broader region just West of Epemeavo, around the Vailala river, there began to be a belief that the people's dead relatives and distant ancestors would return on a steamer laden with tobacco, calico, knives, foodstuffs and other cargo.

When this failed to eventuate, the people became violently disenchanted with the old beliefs and customs.

What became known as the Vailala Madness broke out and all the long houses, ceremonies and ritual objects were destroyed by the villagers themselves.

With life now no longer based around these cycles of ceremonies, some of which took years to complete, the villagers had a lot more time and individual freedom, but also the need for a communal purpose.

Out of this process came the manufacture of the bevias, which reached its height in the 1930s.

The aim was to sail the canoes east into Motuan territory and obtain shell ornaments, trade goods and money, especially from the now established colonial centre of Port Moresby.

However, the bevia were poorly made copies and the villagers were not experienced sailors and so the bevia frequently sunk, and this is undoubtedly the fate that befell the two found here in Epemeavo.

The two canoes now stand in the village as a testament to a bygone age and their attempt by peoples to adapt to a rapidly changing cultural environment.

Within another decade or so of the manufacture of these canoes, the great hiri trade and the reverse eastern trade on the bevia, the halu trade, had died out.

However the importance of their presence, and that of the pottery as well to the villagers cannot be over stated as Francis Coory explains.

*It's important for the community because community actually, our generation, we have lost our past tradition also and stuff. Therefore, in presence of people like this, on the site, we would experience such portrayal and any other stuff concerning tradition and environment.*

*So it's good for our generation to sort of understand and learn from other people that we come from a land, a culture, a tradition. But these later times, our parents never taught us what the culture is and what's the tradition and all those.*

*That's why we need you guys here, so we requested for all those stuff to come, get ourselves exhibited to the world so that we are community, we are people, we own the land.*