**The Mystery of Easter Island**

On Easter Day 1722, Dutch explorers landed on Easter Island. A civilisation isolated by 4,000km of Pacific Ocean was about to meet the outside world for the first time in centuries. The strangers were about to find something very strange themselves - an island dotted with hundreds of huge stone statues and a society that was not as primitive as they expected. The first meeting was an immense clash of cultures. (Bloody too: the sailors killed ten natives within minutes of landing.) Where had the Islanders originally come from? Why and how had they built the figures? Modern science is piecing together the story, but it is far too late for the Easter Islanders themselves.

They were virtually wiped out by a series of disasters - natural and manmade - that brought a population of 12,000 down to just 111 in a few centuries. The Island's inhabitants today all have Chilean roots, making solving the mysteries even harder. There is no one to ask about the first people of Easter Island. Although fragmentary legends have been passed down, only science can hope to explain the rise and fall of this unusual civilisation.

**#1: From where did they sail?**

Genetic science has resolved the first great question: from where did they sail? In the 1950s, the world famous explorer, Thor Heyerdahl demonstrated that it was possible to cross the open ocean from South America to Easter Island. Plenty of other scientists felt that the seafaring Polynesian people were more likely to have made such an awesome journey. Only recently though has DNA evidence provided proof of the first Islanders' origins. Erika Hagelberg has studied the DNA of skeletons unearthed on Easter Island. They contain a genetic marker, the so-called Polynesian motif, characteristic DNA that categorically shows the link between Polynesia and Easter Island's first settlers. They came to the Island from the west not the east, a journey which marked the furthest outpost of Polynesian society. Heyerdahl's hypothesis has been disproved.

Carbon dating of artifacts on Easter Island shows the Polynesians landed around 700 CE. It seems they lived an isolated existence for the next thousand years on an island measuring 22x11km, roughly the size of Jersey. The society flourished with abundant sealife and farming to feed a growing population, estimated at up to 12,000 people. The people's success manifested itself in a way that has become the Island's iconic trademark: hundred of immense stone figures - *moai*.

**#2 The statue builders**

The *moai* have intrigued all who have seen them since 1722. None was standing when scientists first arrived, those upright today have been re-erected. But how did an ostensibly Stone Age society ever make, move and raise them in the first place? And why?

There are nearly 900 *moai* on Easter Island, in various stages of construction. Opinions differ widely on how they were moved and raised (Some think they were walked; others that they were pushed on log rollers.) but no one disputes the years of effort involved in getting the statues carved and into place. Some stones weighed 80t, twice the weight of Stonehenge's, and were transported 16km from the quarry.

It was an Easter Islander's local knowledge that helped unlock the reason for their construction. Archaeologist, Sergio Rapu, matched coral fragments with a traditional name for the *moai*, 'living face of our ancestors' and realised that the figures had once had eyes. He believes the statues were overseeing the people, part of a Polynesian tradition of ancestor worship but on a scale seen nowhere else. Each totem was different to immortalise a particular chief, halfway between the living and the gods. With their backs to the sea they could inspire and protect the Islanders.

**#3: Scarce, violent times**

That protection fell apart in the 1600s. The *moai* were torn down. Legends talk of a time of hardship, terror and cannibalism. Archaeological evidence includes wooden carvings of emaciated people and the appearance of a new implement - spear tips. Examination of skeletons from that time confirms the violence that took hold in the Island's society. He describes the people of the time as, "at war with themselves."

The civil war coincides with changes in the diet. The Island's bird life seems to have disappeared as does evidence of people eating porpoise and tuna. The wood carvings were made by starving people. A land of plenty had become desperately short of food. Had the population overexploited natural resources? It seems there is a simpler answer - the felling of the last tree.

**#4: A parable for the world?**

John Flenley's studies of pollen from lakebeds shows Easter Island was once covered with palms. Yet the Dutch in 1722 described an island devoid of trees. The disappearance of tree pollen coincides with the civil war. The society relied on wood to make canoes. Treeless, their ability to fish for food was limited.

Making *moai*, too, must have used huge numbers of trees. The statues had been getting more elaborate at that time, which must have depleted the forests ever more rapidly. Flenley believes Easter Island is an amazing example of total deforestation, sparked by obsession. The Islanders' cult of ancestor worship cost many of them their lives. Soil erosion with no trees severely hit farming. And there were no canoes in which to escape. Trapped in a hell of their own making, the Islanders turned on each other. It was a self-inflicted ecological disaster.

**#5: Back from the brink**

But if a violent, even cannibalistic, society had emerged in the 1600s, why did the Dutch in 1722 report fields of yams and healthy, fit people? The key to the recovery lies at a place called Orongo, a cliff between a volcano and a small offshore islet. There, carvings in the stones from just after the catastrophe show a birdman.

Historical accounts describe a contest between tribes - the challenge, to swim across a mile of sea and climb a cliff to bring back a bird's egg. Whichever tribe won got first call on the Island's diminishing resources. In place of warfare there was an orderly distribution of food.

#6: **Final assault**

The real killer of the original Easter Islanders came across the ocean. After 1722, it became fashionable for explorers to visit Easter Island, bringing their own diseases. Syphilis appears in the bones of the native people for the first time. But the final blow came in 1862 when slave traders landed from Peru and took away 1,500 people, a third of the population. Transported to South America, within one year all but 15 were dead. They were brought back to their homes. Little did the Islanders know with what they had returned. A smallpox epidemic left only 111 alive by 1877.

Against the guns and germs of the modern world, what chance had the birdmen stood? Jo Anne van Tilburg regards their story as one of triumph over adversity, a hymn to the human spirit. Others like anthropologist Charlie Love point to a testing ground for the development of remote societies, one that reached equilibrium at a bloody end. The mystery of Easter Island is also a story of terrible folly.