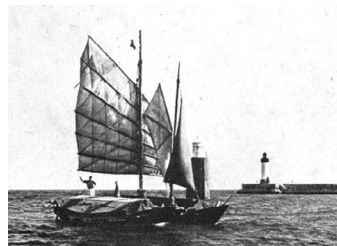
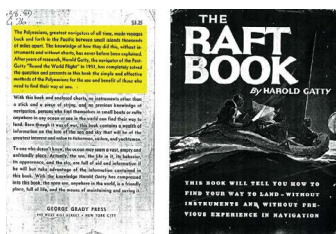


on Waikiki beach in Hawaii with hull lines based on a Tuamotuan voyaging canoe and sailed her successfully across the Pacific, Indian and Atlantic oceans back to France, an incredible voyage of experimental archaeology, proving the seaworthiness and sailing abilities of the Polynesian double canoe. His book *The Voyage of the Kaimiloa* was published in England in 1940.



*Eric de Bisschop's double canoe Kaimiloa.*

In 1943 the US Hydrographic Department published the widely distributed *Raft Book* by Harold Gatty for downed wartime airmen in the Pacific. In this book he explains clearly how Polynesians navigated without instruments and how airmen afloat on a raft could trust this method to guide them to safety. He gained this information from Pacific islanders who still had this knowledge. Indeed, this navigational knowledge is still there as can be seen in the *Lapita Voyage* film.



*The Raft Book by Harold Gatty.*

These two books, published more than 10 years before Sharp, refuted all his negative claims.

To many it is known that I was inspired by the voyages of Eric de Bisschop and Thor Heyerdahl and, myself, made two experimental Atlantic voyages on double canoes from 1955 to 1959 to show to Western sailors that the Pacific canoe form craft was safe and seaworthy and could become a suitable cruising craft for modern sailors. My voyages also refuted Andrew Sharp's theories.

My pioneering work in the offshore sailing capabilities of the Pacific double canoe contributed to the development of the now widely accepted modern sailing craft, the catamaran.

The organizers of this conference asked 'Could experimental voyages have influenced the technological choices for the future?' The development of the modern catamaran is proof that they have.

As a result of my pioneering Atlantic voyages on canoe craft I became a designer of such craft for Western people. Where I was unique from the other upcoming catamaran designers was that I recognized the importance of the Stone Age design principles that made the Pacific canoe form craft so seaworthy, ie hull shapes that had innate windward ability without using keels or centreboards, flexibility in hull connections and low, flexible but windward rigs. The *Lapita Voyage* boats showed how these principles actually worked.

Thousands of my designs have been self built all over the world and many have made long ocean voyages, again and again proving the seaworthy design features of the canoe form craft of the Pacific.



*The 14m Wharram Oro Kiskadee at the end of her round the world voyage (1977-1982).*

These voyages also showed the innate wish of some of mankind to lead a nomadic lifestyle on the sea. These modern sea nomads and the voyages they achieved are an indication of how the early migration voyages in the Pacific could have been achieved by small family groups on moderate size boats. By the mid 1970s half a dozen had sailed across the Pacific and many more across the Atlantic.

While these first Western sea nomads were crossing oceans on their Polynesian double canoes, a separate revival of Polynesian ships began in Hawaii in 1974.

The Polynesian Voyaging Society was formed to give the Polynesian people of Hawaii a cultural heritage.

On the big island group of Hawaii the destructive influence of the missionaries and American Western culture had been the greatest and by

the 1970s the original Polynesian population was a small minority and very little remained of their Polynesian culture.

The ships that had been there in Cook's days were gone; so was the knowledge of how they worked and sailed. The only canoes remaining were those used for paddling competitions and tourists.

To the people that joined the Polynesian Voyaging Society the double canoe was the heroic symbol of their cultural heritage. Ben Finney has called this sailing development Cultural Identity Voyaging.

However, the Pacific Ocean is not only inhabited by the Polynesians, who suffered the worst destruction of culture; there are the huge areas inhabited by Filipinos, Indonesians, Melanesians and Micronesians. Most of these people are still using canoe form craft for fishing or local transport and still carry the memories of their fathers' or grandfathers' sailing days.



*Measuring a canoe in the Maskelyne islands in Vanuatu.*

We experienced this when we sailed through the Melanesian islands of Vanuatu on our 63 ft double canoe *Spirit of Gaia* in 1996. We had many discussions with canoe using people. We would sit under a sun shelter and discuss sail design, windward ability etc with groups of old men, scratching drawings in the sand.



*We would sit under a sun shelter with the old men, discussing design.*



*Wharram designed Melanesia outrigger canoe, built from 2 sheets of ply.*