

Cross-Cultural and International Contacts in Ethnomathematics: A Tribute to Claudia Zaslavsky

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1973

Papua New Guinea – A land of sea
and mountains – The Land of the
Unexpected



Most village areas only have walking tracks to airstrips or a rough dirt (muddy) road, no power, bush material houses, bush material elementary schools with 40 children per class on the floor with slates, one exercise book, one pencil, stones and sticks for maths, all pictures and reading written by the teacher on the board



Every walk, wet feet; fast flowing rivers, high erosion, steep mountains





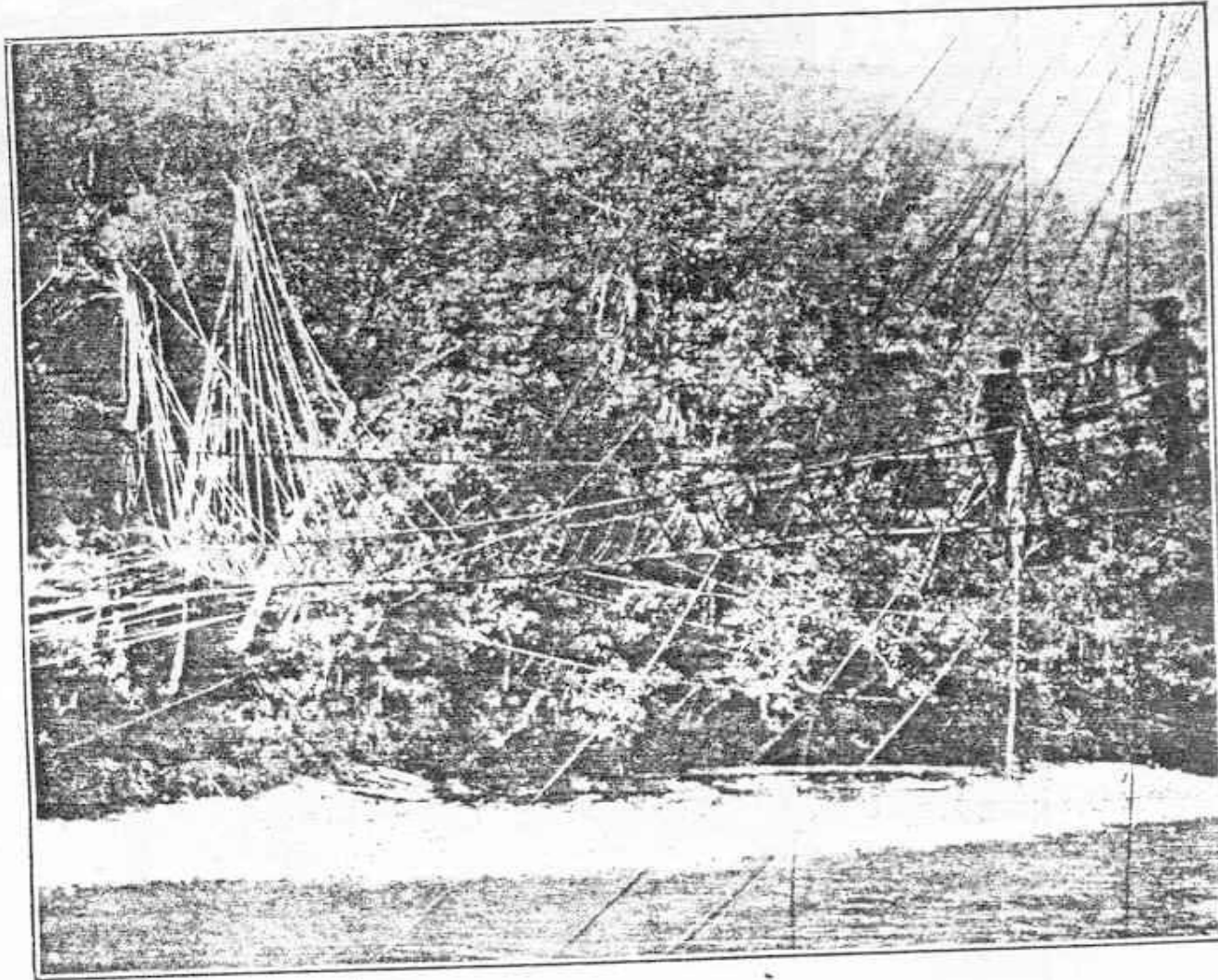


Plate 1.

Swing bamboo and vine bridge, still built and used today,
from Chinnery

800 languages



Bukawa, my first village singsing experience



A Bena Bena Goroka group



Asaro mudmen



Hagen highlands women group hoping to win and gain money for their group - includes the local bank manager



Celebration in a village, pig sharing to important helpers including expatriate workers who encouraged and raised funds in NZ



Sharing the food in the celebration



Children sing with actions – Tok Pisin

Thanksgiving PNG style – note the different cultural groups







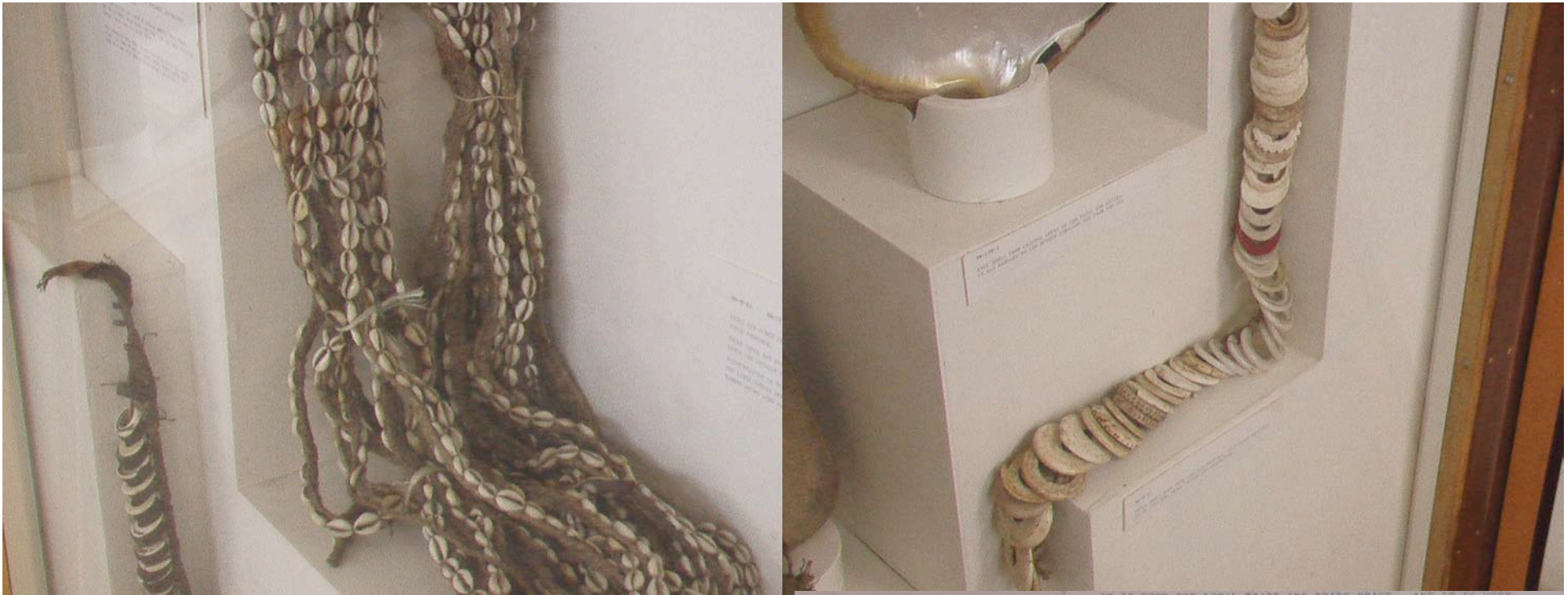
Pottery varies around the country and a trade item. Mostly used for storing sago and cooking



Masks vary but are common in many cultures; Museum

Carvings by Sepik carvers
from designs from each
province on poles for UOG
library





Various forms of shell money including fathoms, kina shell (Courtesy: Goroka Museum)





Bainings dancers, E. New Britain; (*Paradise*, 51, 1985)

Mathematical knowledge is intuitive and unspoken, like religious ideas ?

Claudia used her own personal experiences and anecdotes from others to enliven her accounts

Pawpaw buying, Saxe's Oksapmin with tradestores.

Claudia outlines the significant use of gestures in counting in Africa

Ethnomathematics enriched Claudia's understanding of mathematics as it has mine and all who worked in PNG

Mathematics Education Centre at PNG
University of Technology

Spatial mathematics and nursing mathematics

Nuffield, Monash, many well known maths
educators

Closed around 1986, fire burnt all materials in
mid 1990s

University of Goroka – 2000

Glen Lean Ethnomathematics Centre

Claudia used documents which were often well synthesised and she gives details.

She took care to check as much as possible.
Sometimes modifying the work of others – on-going.



Glen Lean used documents but usually linguistic records, he checked extensively, surveys.

Modifications

5-, 20- cycles



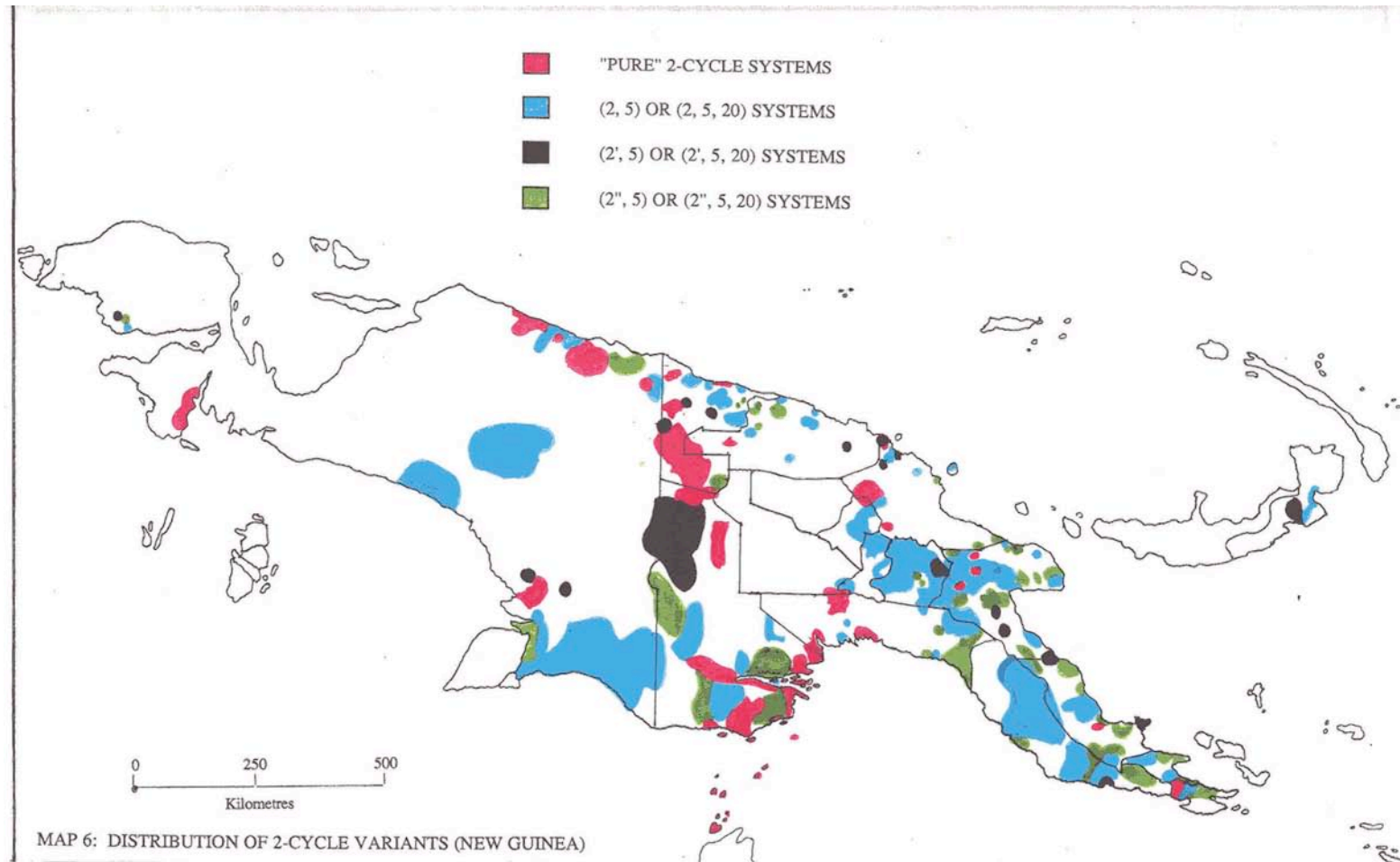
Wilfred Kaleva



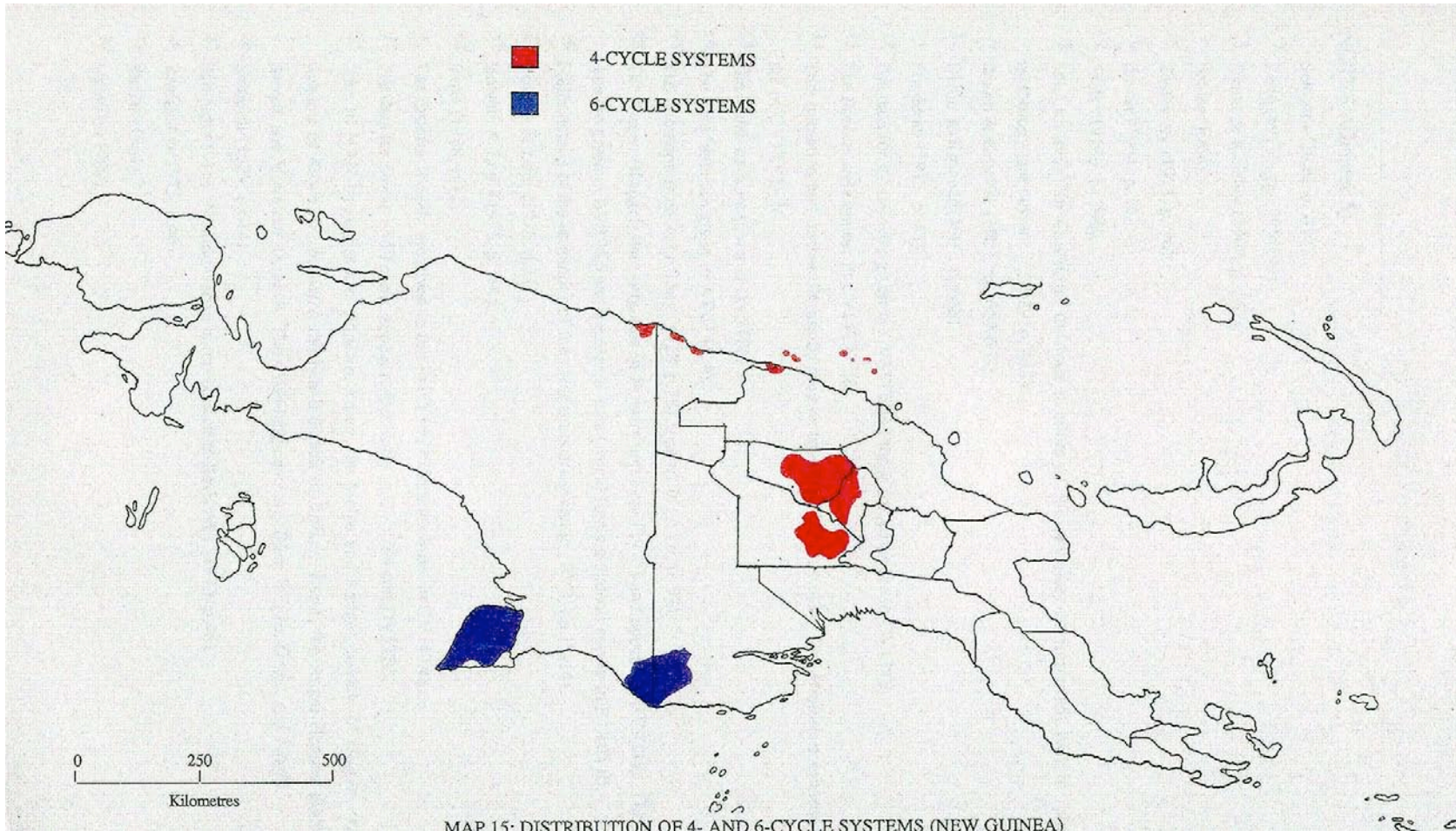
Geoffrey Saxe
opens the Centre,
Rex Matang, the
Director, looks on

Support from US
NSF

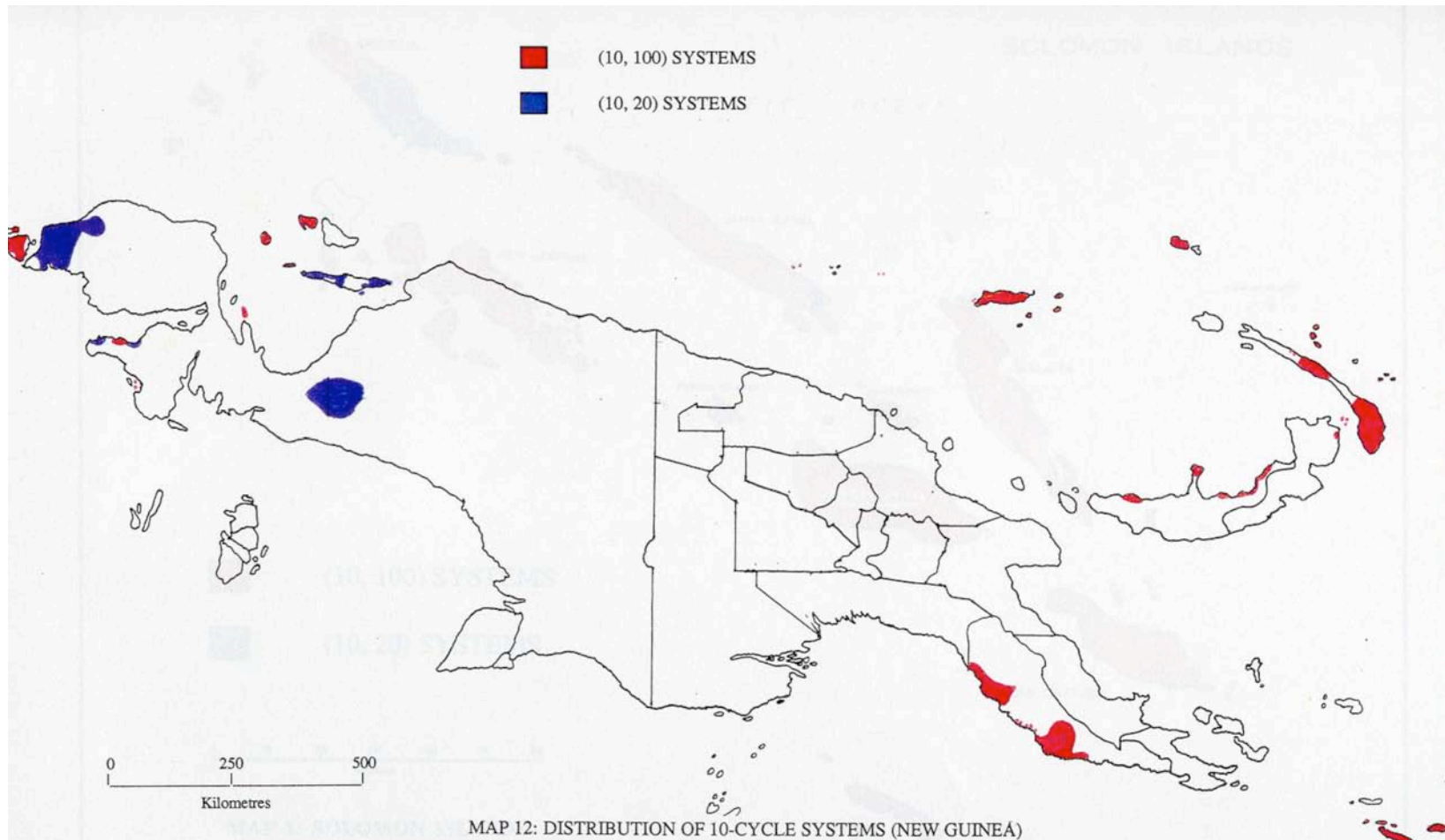
2, and 2, 5 and 2,5,20 cycle systems

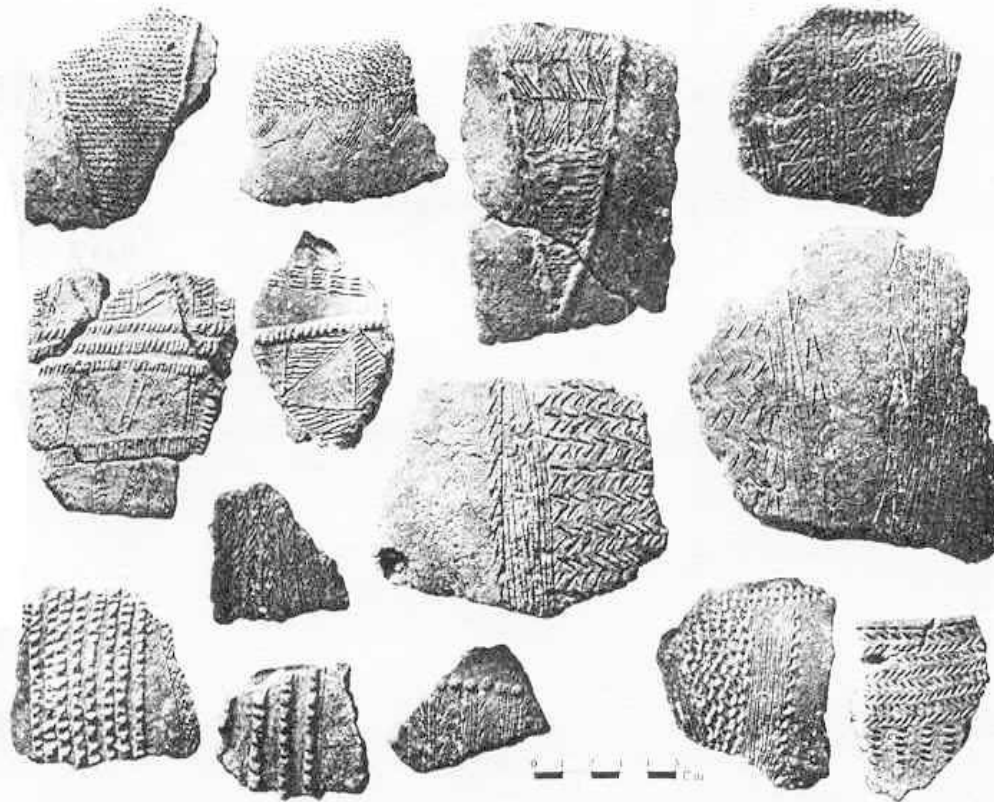


4 and 6 cycle systems



10, 100 and 10, 20





1.6 Early Mangaasi incised and relief pottery from the central New Hebrides. This style was current from about 500 B.C. to the middle of the first millennium A.D. (Photo courtesy of J. Garanger.)

3,200 km of the Pacific Ocean from Samoa to settle the Marquesas Islands, where a few tiny sherds have been found in the very earliest levels, and possibly also the closer Society Islands, the traditional cultural center of Polynesia. Further isolation followed by dispersal from at least these two centers then took place in eastern Polynesia (see Chapters 5 and 8).

In eastern Polynesia after the middle of the first millennium A.D., following a period of isolation in the Marquesas and

land. Included are one-piece fishhooks of bone or shell, two-piece trolling hooks, tanged adzes, imitation whale-tooth pendants, bone reels (except Hawaii), and open-court temples (see Chapter 13). All of these items are absent or rare in West Polynesia, or are present in different forms; for instance, West Polynesian adzes are untanged, and temples were constructed as god-houses rather than as open courts.

In the isolation that followed initial dispersal into East Polynesia, a number of sig-

Glen also recorded Oceania languages and theorised about the spread of the counting systems

Claudia - unspoken e.g. not giving the word for a number

2- cycle example - amazement both ways

Importance of supporting good reforms like elementary education in the vernacular

Political stand to have ethnomathematics in all education levels

The importance of international links for all cultures

Claudia gave a strong lead to us in this area.

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<http://www.uog.ac.pg/glec/index.htm>

Glen, Wilfred, Rex's theses, MEC papers, my
papers on Glen's work and many other
documents (Saxe, Marcos' African work)

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