

Traditional and Indigenous Knowledge and its Potential Use for Disaster Management

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Transmission of Knowledge: Folklore, Proverbs and Legends



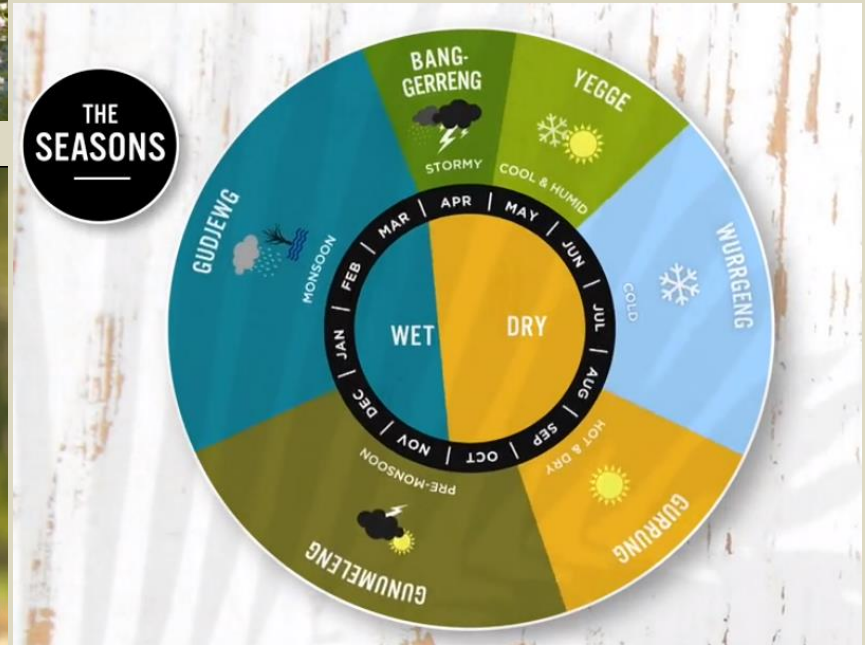
Sources of Knowledge : Observation and Experience



Seasons and Food

(Kakadu National Park)

(ABC Gardening Australia)



Science and Legend



**Loss of Knowledge:
How does Traditional Knowledge Become Lost?**

Traditional Structures: Nakamals (Vanuatu)

58



Men's house (note that the wooden wall is on right inside), Nabuturiki, north Erromba.



Bwaiatua, village, north Pentecost.

59



Men's house in Hog Harbour area, east coast Santo.



Family house, Talamako, Big Bay Santo.

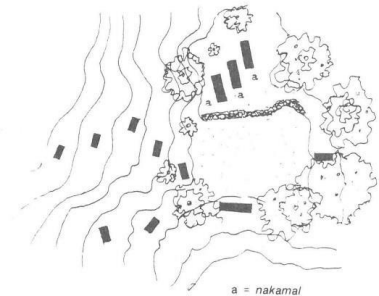


Fig. 69 Partial schematic representation of the village of Bunlap, Pentecost (from a photo by K. Muller, 1971, p. 72).

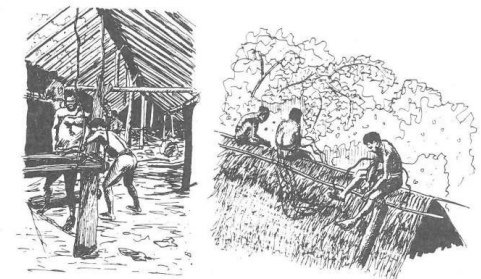


Fig. 70 Men working at the construction of a house-frame at Bunlap (from a photo by Muller, p. 74).

Fig. 71 Men securing the roof beams with pandanus leaves, Bunlap (from a photo by Muller, p. 74).

Traditional Structures: Hurricane Nakamals (Vanuatu)

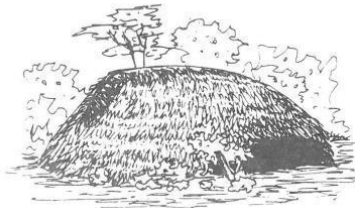


Fig. 175 Hurricane shelter, Matarisu village, Efate (from a photo by Coiffier).

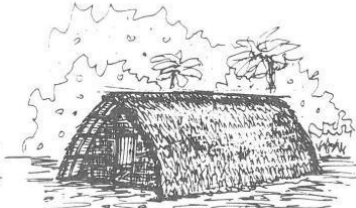


Fig. 176 Village plan, Saama, Efate in 1979 (from a photo by Coiffier).



Fig. 177 Dwelling at Leleppa, Efate (from Speiser, pl. 18 (1)).

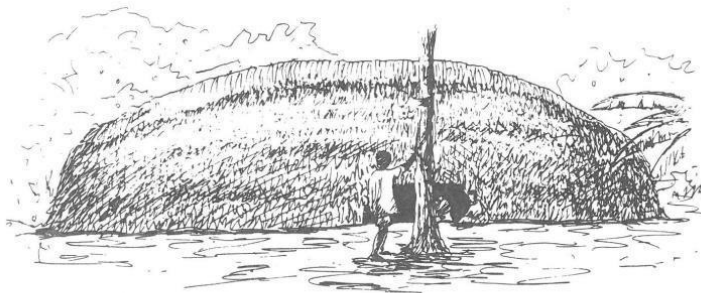


Fig. 178 Hurricane shelter at Ifira, Fila Island (from a photo by Beattie, in *Vanuatu*, 1980, p. 17).

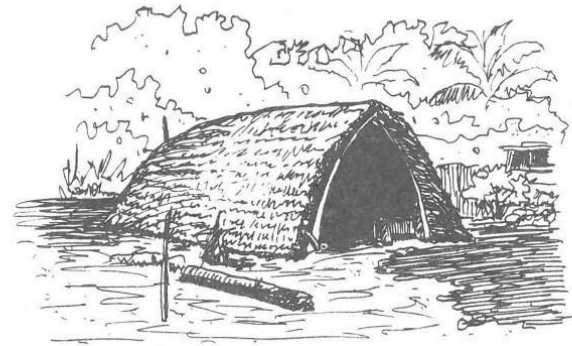


Fig. 162 Hurricane shelter at Mara, Emae (from B. Hebert, 1965, p. 12⁹¹).

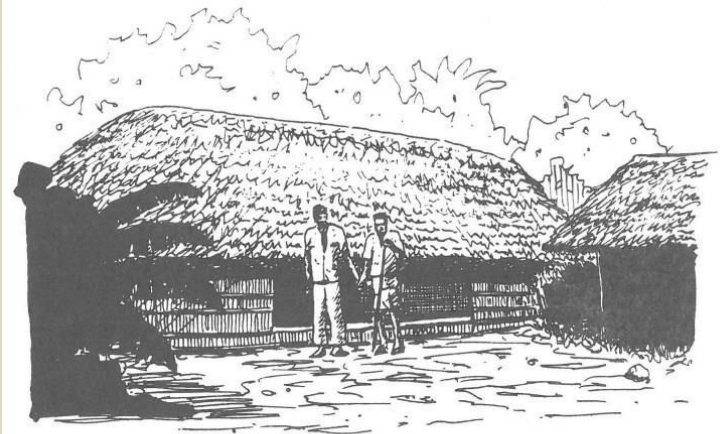
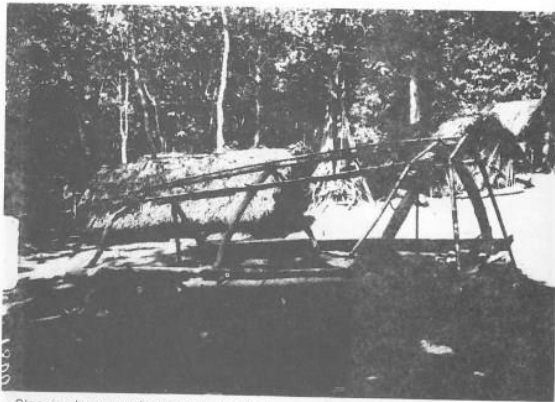


Fig. 163 Family house (*na suma*) at Mulool, Buninga (from Hebert, p. 13).

Traditional Structures: Nakamals (Vanuatu)



Men's sacred house on dancing ground, west Ambrym



Sleeping house under construction, Ambrym.



Living house, Efate.



Village houses (one on right under construction), south Malakula.



Fig. 99 Ponarat positioned at the roof ridge of a men's house (from a photo by J. Bucher, *Sculpture monumentale d'Océanie*, Paris, 1961, p. 45).

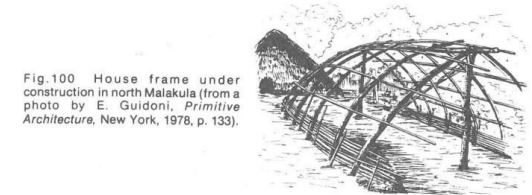


Fig. 100 House frame under construction in north Malakula (from a photo by E. Guidoni, *Primitive Architecture*, New York, 1978, p. 133).

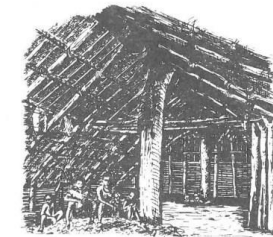


Fig. 101 Interior of a namei at Amok, north Malakula (from a photo by F. Drihnon, *Le peuple inconnu*, Paris, 1955, p. 65).

Use of Traditional and Indigenous Knowledge

Australian Aboriginal Use of Fire

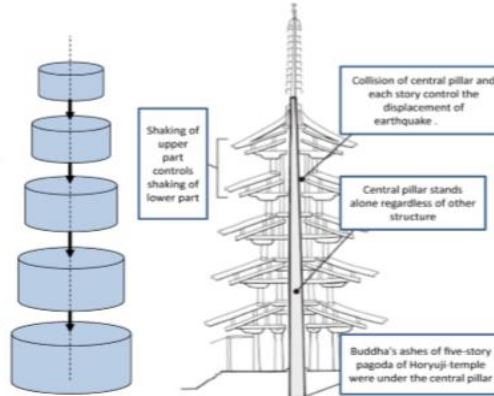
(Kakadu National Park)
(ABC Gardening Australia)



Japanese Five-Storey Pagodas

1

- There is no continuous column and each story is piled up.
- Restoring force for overturning of each story resists against heave.
- Central pillar will not be weighted and control big gap



Reference : Added to "History of Architectural Institute of Japan" edited by AIJ

2

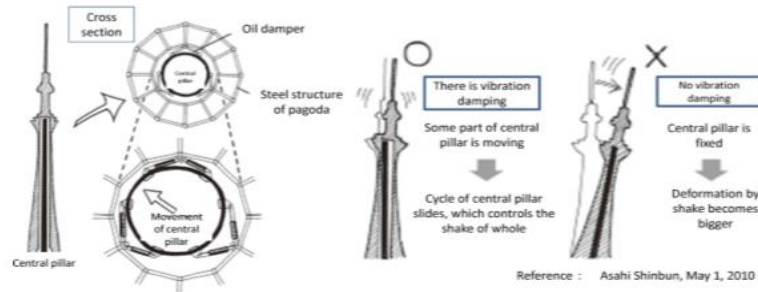


Fig. 1. Earthquake-resistant mechanism of five-story pagoda and application in modern tower building.



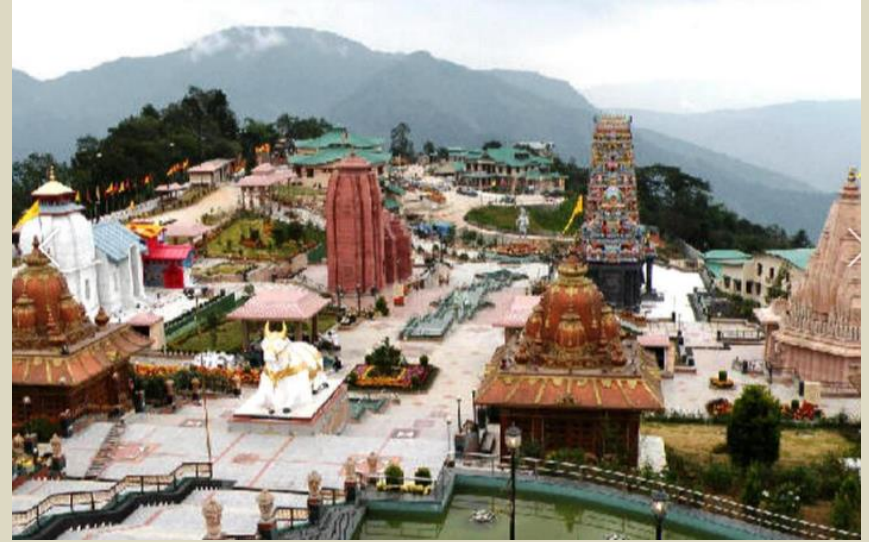
Fig. 2. Concept of overturning restoring force to restore deformations.

Recovery of Traditional Knowledge

Future Use of Indigenous and Cultural Heritage

Science and Traditional Knowledge
Working Together

Traditional Knowledge and Social Organization



Instinct and Training – Resilience and Integration



Thank you.