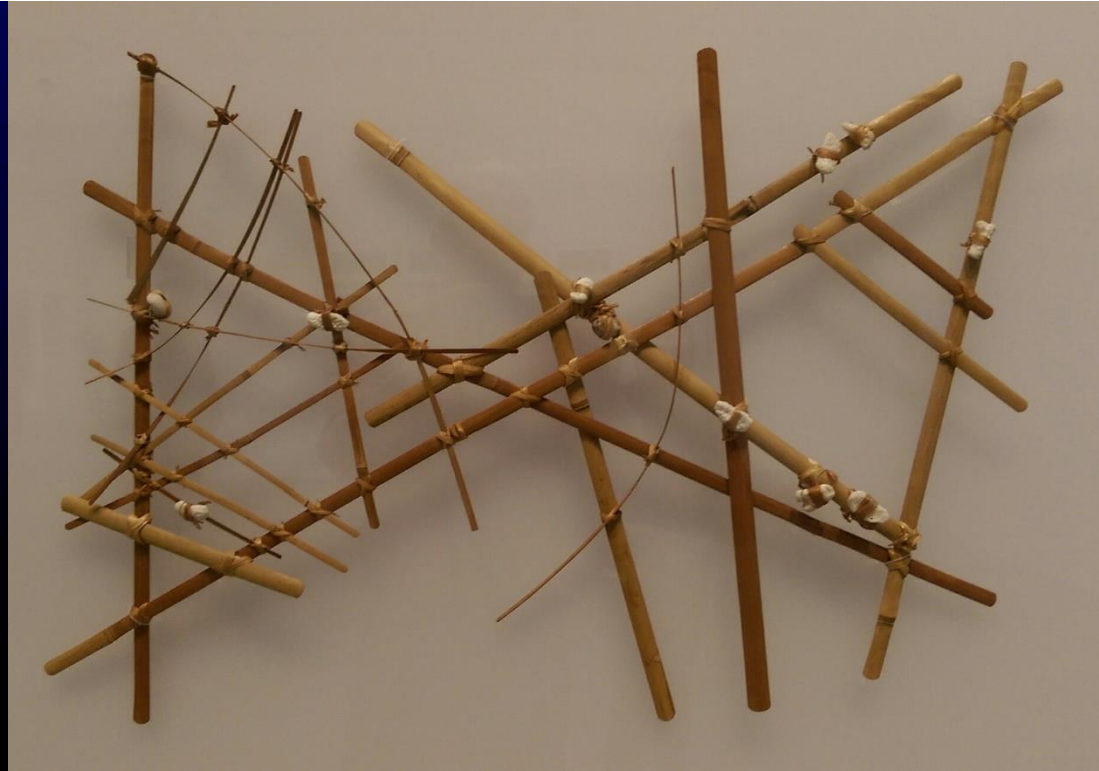


Traditional practices combined to science-based management tools used for the governance of marine areas of the Pacific ocean

Virginie Tilot de Grissac



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**A cross-cultural approach to representations of Nature
in the pre-industrial era**

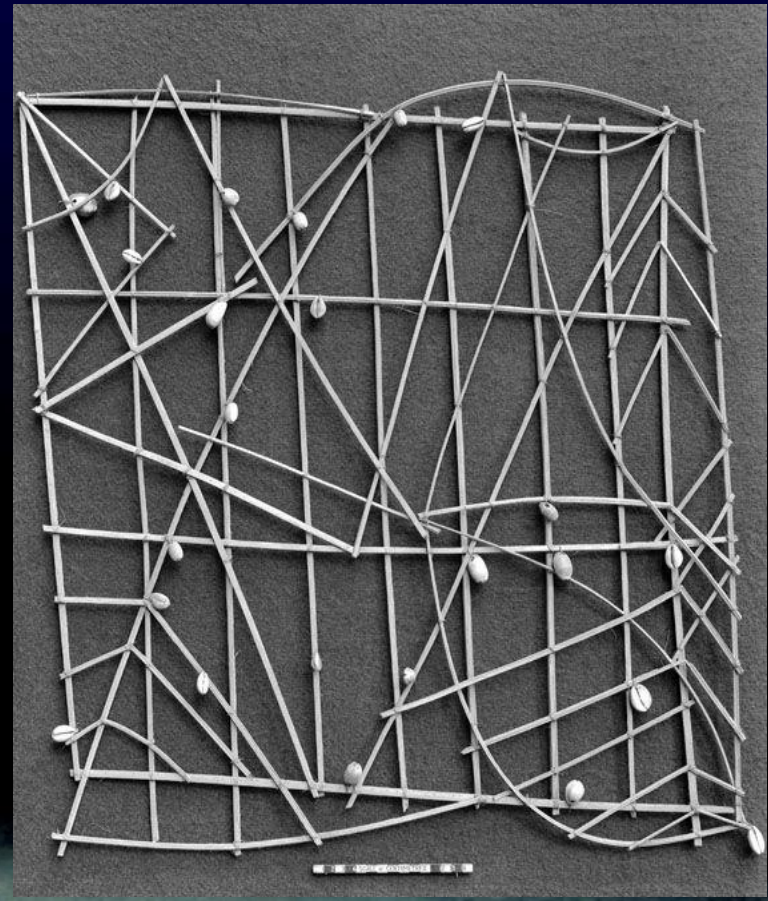


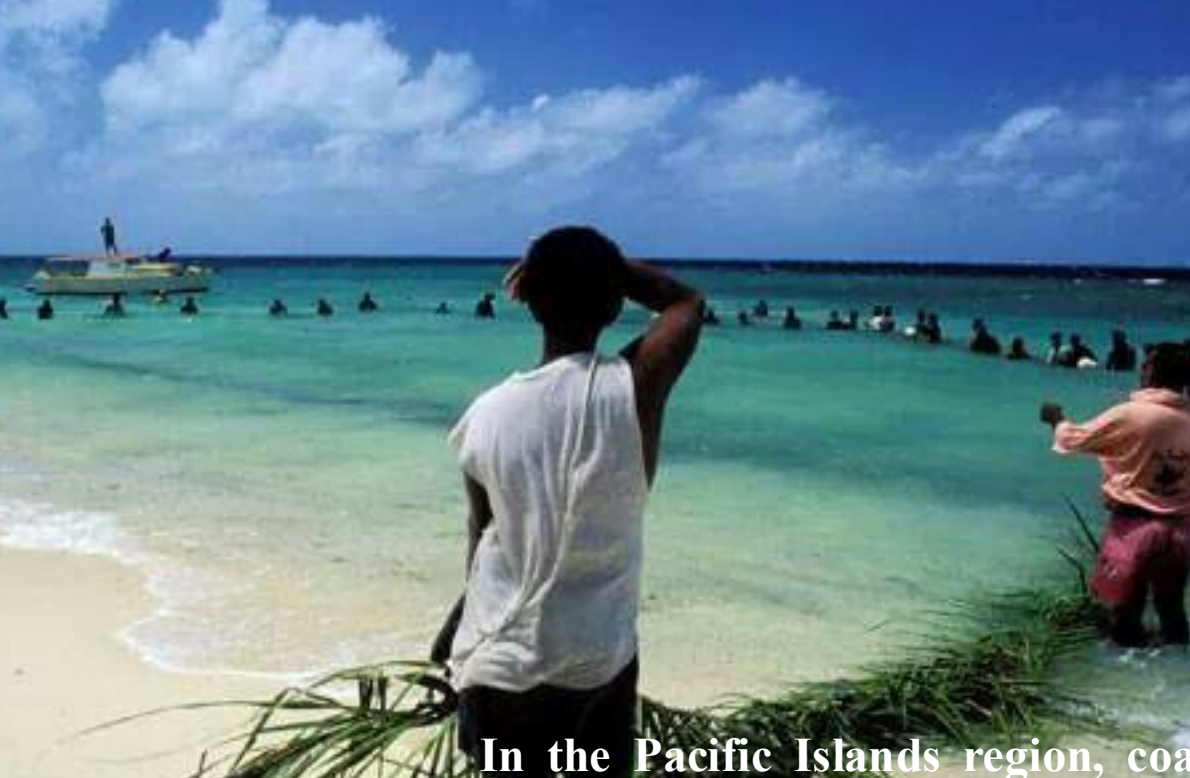
Map of the Pacific Island Countries including the 200-mile Exclusive Economic Zones and the international waters within the region.

The indigenous art of navigating using only one's own senses and knowledge passed by oral tradition from master to apprentice, memorizing the motion of specific stars, reading the shape of clouds, the colors of the sea, wildlife species, the shape of waves, the currents and the water temperature checked by hand..



The last grand master wayfinder, Mau Piailug, is using the star compass to teach navigation to his son.



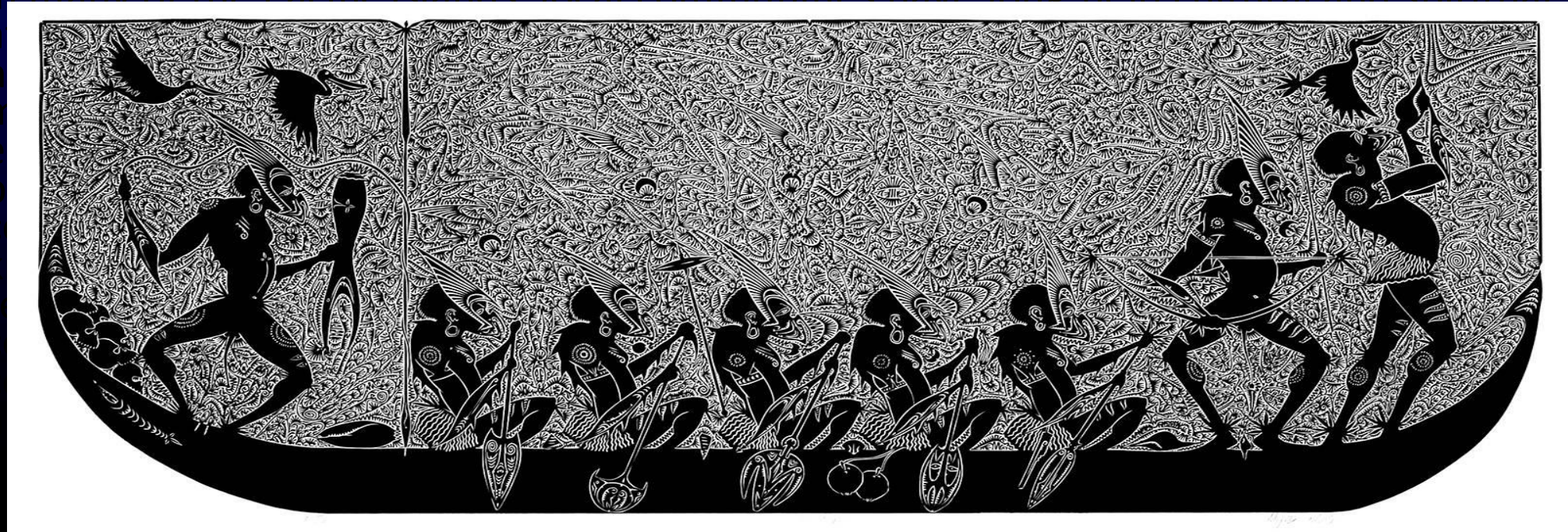


In the Pacific Islands region, coastal fishing is mainly artisanal and for subsistence, supplying domestic markets and deep-water, bottom fisheries are the most active, export-oriented.



Traditional insights towards marine resource management

- In many of the Pacific Islands, local communities have long-held cultural and spiritual

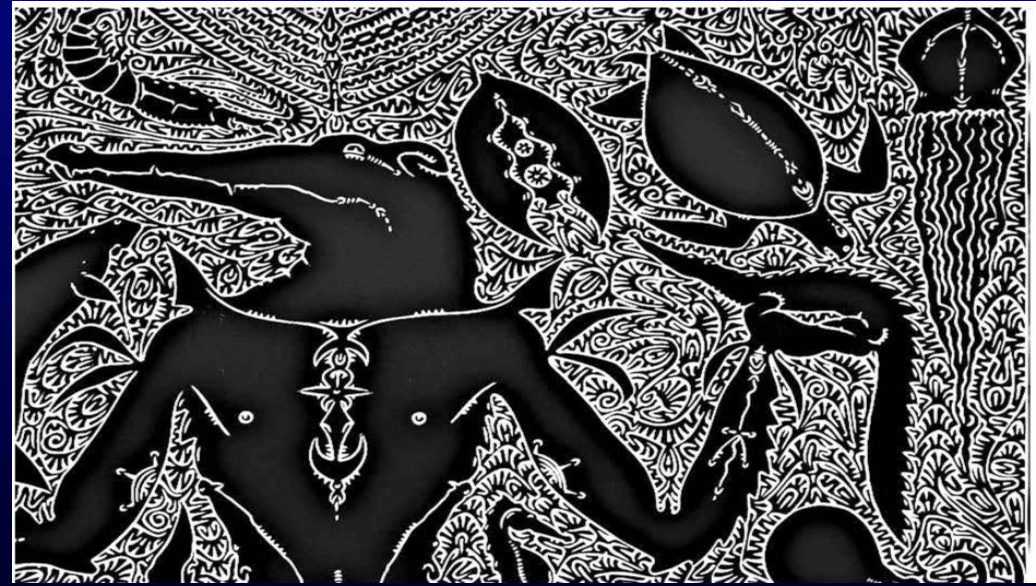


A canoe carries eight men through the ocean at night. These men are the Zugubals, spiritual beings of the Torres Strait. Five seamen, each distinguished by their individually carved oars.. The zugubals navigate by the stars of their ancestors.

For Pacific island people, the ocean is of ontological (human-nature relationships) significance for their socio-economic development as well as for their rituals, traditions and cosmology.

It is because of their vital relationship with their marine environment that they are likely to view its destruction as a destruction of their culture and way of life, The “Pacific Way”.

The “Pacific Way” promotes shared local values, including the respect for the Vanua encompassing the sea. It relies on an “unanimous” mode of decision-making, that stems from facilitating dialogue among the members of the community.



With their emphasis on relations and interconnections, The “Pacific Way” regards land and its surrounding waters as a continuum, a whole: the *vanua*, which includes deities, animals, plants, places and peoples.

People are thus tightly bound to their *vanua*, they belong to one another. Even after death, spirits would not fade out of existence, but rather remained as part of the *Vanua*.

These spirits are superhuman in their strength and deeds even controlling the moods of the sea..

In their polymorphic character these deities and their myths embody a deep knowledge of ecological relations and emphasize interconnections such as outlined by present scientific evidence

The understanding of these intricate social and ecological relations was the basis for *Tapu* and *Rahui* concepts through which traditional leaders managed defined areas of the *Vanua*, with the mandate to ensure the ongoing well-being of the people and their environment.

- *Tabu* are a complex system of rules and prohibitions regulating interactions between specific peoples and specific organisms.
- *Rahui* are customary rules regulating temporal or spatial access to places or species, taking into account social and ecological events.
- *Mana*, involves ecological, social and spiritual aspects perceived as supernatural and sacred and protected by supernatural sanctions.

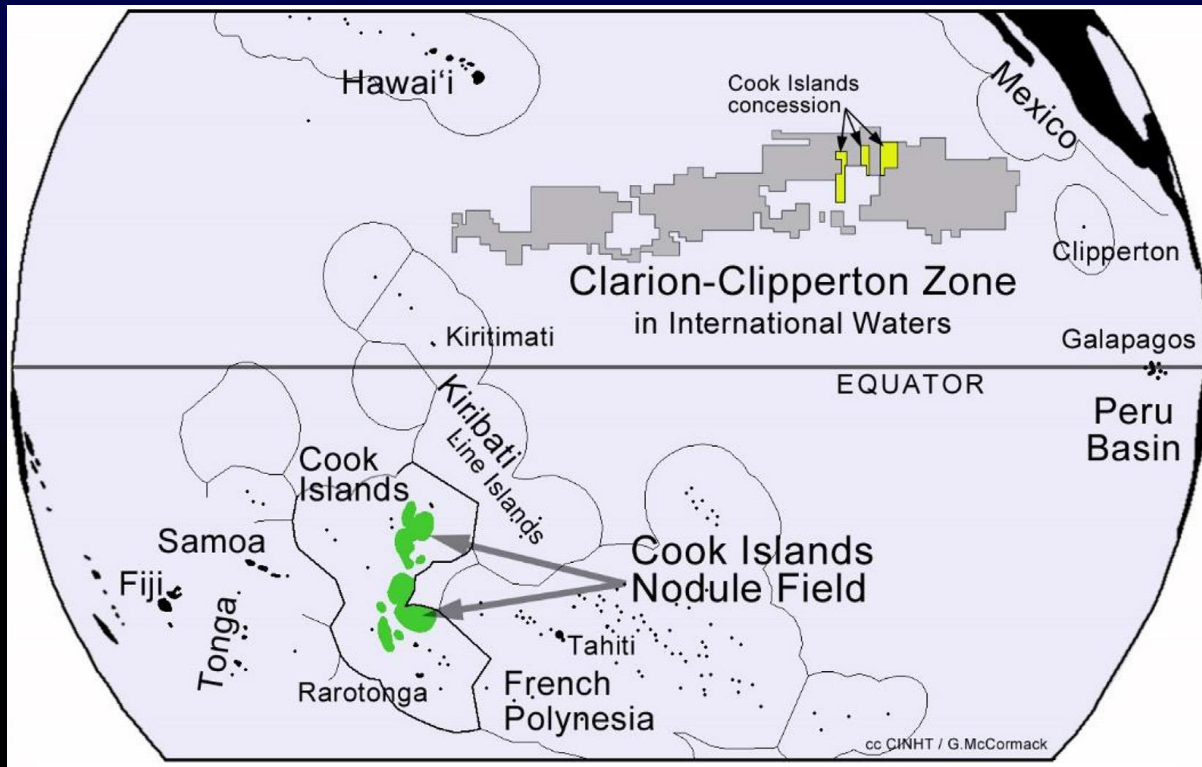
While the Western tradition long regarded the resources of the ocean as inexhaustible until the reality of “the Tragedy of the Commons” (Hardin, 1968), the peoples of Oceania have never ceased to develop and appreciate the fragile bond that unites them with their marine environment.

To conclude, in most cases, customary marine management practices serve to provide an opportunity for depleted marine resources to recover and to help ensure that benefits from marine conservation efforts will accrue to equitably to the local communities in perpetuating tradition and spiritual beliefs.



‘Kaygasiw Usul’ This sculpture refers to star constellations and their relation to the movements of the shovel-nosed shark, aboriginal art from Torres Strait.

Cook Islands



Cook Islands have obtained in 2014 a contract from the International Seabed Authority to explore for polymetallic nodules in the Area and in 2017 for exploration activities on their own continental shelf.

Traditional dimensions of seabed resource management are clearly integrated in the national laws of the Cook Islands. In 2017, they set up a vast marine park, covering their entire territorial sea and exclusive economic zone which encompasses a huge share of the world's currently known cobalt (Cook Islands Marae Moana (=sacred ocean) Act 2017).

The Marae Moana Act has the primary purpose of protecting and conserving the ecological, biodiversity and heritage values of the marine environment and to promote the shared use and sustainable development of the Cook Islands. It includes a network of MPAs, some of which are “ra’ui”.

Thus the Cook Islands balance the economic interests like tourism, fishing and deep-sea mining with conserving marine biodiversity and ecology, in order to maximize the benefits for the current and future generations of the Islanders.

Other Pacific Island states

When addressing DSM in national legislation or policies, other Pacific Island States, (such as the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Solomon Islands, Tonga, Tuvalu, and Vanuatu), generally recognize the precautionary principle/approach as well as the applicability of prevailing standards of international law, particularly with regard to averting, minimizing, or remedying harm to the marine environment.

Discussions

Presently, there is a recognition that many Science-based sectoral and top-down approaches for managing marine resources have not always adequately and holistically protected species, habitats and ecosystems.

Many traditional marine management practices offer selective and adaptive restrictions/limitations of access and use. These can be applied either alone or with other science-based tools and approaches such as Ecosystem Based Management or Environmental Impact Assessment, permits or the control of techniques and gear..

Traditional knowledge and community-based marine managed areas have a central role to play in reaching national, regional and international MPA targets, and this role is explicitly recognized in the Convention for Biological Diversity CBD work Programme on island biodiversity (especially the biocultural heritage component)

These island states characterized by minimal institutional capacity and large maritime domains provide an important example of the benefits of regional and sub-regional cooperative approaches.

Conclusions 1

Traditional knowledge has complemented science in :

- the protection of biodiversity (Convention of Biological Diversity (CBD), development of the Nagoya Protocol, designation of EBSAs, ILBI/BBNJ instrument, IPBES assessments),**
- the climate action (Paris Agreement, New Zealand Climate Change Response (Zero Carbon) Amendment Act 2019),**
- the fisheries management (NOAA <https://voices.nmfs.noaa.gov>),**
- the mineral resources management (Inuit Circumpolar Council),**
- the damage compensation (Local Communities in China),**
- and recently in the High Seas Treaty (the agreement on Biodiversity Beyond National Jurisdiction) signed at the United Nations in June 2024.**

Conclusions 2

Also, the implementation plan for the UN Decade of Ocean Science for Sustainable Development defines “Ocean science” broadly to include “local and indigenous knowledge” alongside western science and “recognizes, respects and embraces local and indigenous knowledge.”

It is now commonplace that Island states of the Pacific have the obligation to incorporate Traditional Knowledge into their national marine policies and the duty to consult and involve Indigenous peoples and local Communities (IPLCs) in decision-making relating to offshore activities. They would indeed be directly affected by such activities or /as an encroachment of their spiritual and cultural connection to the marine environment, including pertaining to the protection of culturally significant marine species that migrate through the high seas (e.g., whales, dolphins, sharks, seaturtles, dugongs..).

Conclusions 3

On the national level, relevant laws of the Pacific island states clearly try to embed the traditional visions and interests of local communities, implicating innovations, cooperative planning and the involvement of all stakeholders. e.g. Cook islands play a pioneering role with their laws on marine spatial planning and seabed resource management and including Rahui in MPAs.

The policies and practices developed in the Pacific could well serve as a suitable model to reconcile commercial, ecological, cultural and social values within the context of deep sea mineral exploitation as well as to sustain the Human Well-being and Sustainable Livelihood (HWSL) of the Pacific communities and the health of the Global Ocean.

*Thank you
for your
attention*

