Hypo-modernity: Traditional Carolinian Navigation as Critique and Aesthetic[1]

Vicente M. Diaz
University of Michigan

Screening and Lecture, History Department, State University of New York, Binghamton, October 2001

I. Preface

This presentation is about Pacific Island indigeneity in transit across time and space, including its jaunt through a century of American imperialism and colonialism in the Pacific. It is also about how the surviving elements of an ancient tradition of native travel, including its revival, can help us theorize and engage culture, identity, and history from native perspectives (Diaz and Kauanui, 2001).

This presentation has three parts. Part I opens with a poetics about the role of Carolinians in the revival of seafaring elsewhere in the Pacific. Part II continues through the stories of three contemporary Micronesian seafarers as represented in my documentary, Sacred Vessels: Navigating Tradition and Identity in Micronesia (1997, 29 mins). Part III seeks to articulate a Micronesian aesthetic and critique for the twenty first century, one that I'm tempted to label, provisionally, "hypo-modern". In contrast to hypermodern island sensibilities – those that might very well qualify as postmodern for their tendency to rush past modernity, to beat it to the punch, so to speak, I dwell instead on those aspects of indigeneity that not only precede, and exceed, but more importantly, choose ferociously to engage modernity, but on

[1] This text is designed as a supplement to the viewing of the documentary, Sacred Vessels: Navigating Tradition and Identity in Micronesia (1997).

native epistemological and cosmological terms that privilege a steady, slow, deliberate pace.[2]

Before I proceed let me give the setting, and cover some cultural terms. **[Overhead: Map of the Pacific]** The material I'm presenting comes from the survival of traditional seafaring practices of canoebuilding and open ocean navigation from the island of Polowat in the Central Carolines, and their revival in Guam, in the Mariana Islands.

Guam has been a possession of the United States since 1898, and a territory of Spain since the 16th century. It is about 400 miles northwest of Polowat, and both are part of a region commonly referred to by outsiders as Micronesia – "tiny islands" – of which Guam is the largest at 36 miles long and about 200 square miles. Polowat is actually a group of atolls that is now part of Chuuk State, one of four states (with Yap, Pohnpei, and Kosrae) that comprise a neocolonial construct called the "Federated States of Micronesia (FSM)." The islands in the FSM, along with neighboring microstates (the Republic of Palau, the Republic of the Marshalls, and the Commonwealth of the Northern Mariana Islands) were once districts of another (slightly) older colonial construct called the "Trust Territory of the Pacific Islands (TTPI)" which the United States "administered" from 1946 to the mid 1980s.

---

[2] The difference between hypo and hypermodernity – hinging on tempo-- is not merely one of essential opposition but of context and situation, for both are forms of engaging modernity with materiality outside of it. Postmodern, if not hyper-modern, indigeneity can be spied in the work of Gerald Vizenor (date). The "hyper" of postmodernity, describes a native form of engaging modernity that features the rhetoric of hyperbole and excess, and a chronotope of warp-speed, the result of which is a particular form of hybridity that defies conventional (modern) categories of identity and culture. Hypo-modernity is a form of engaging modernity that is also hybrid, but one that works both "traditional" native culture and modern, western, mostly American, practices by privileging "traditional" modalities of movement and being in a very slow, deliberate, even-keeled progression. This, to me, describes, at the risk, or in appropriation of essentialist terms, the figure of the Carolinian navigator from the Central Carolines. A new generation of bi-lingual, increasingly college-educated, navigators from the region furnish the materiality for this exploration of hypomodernity.

Some key Polowat terms[3]: first there is "waa waniru" [Overhead: terms]. Polowat canoebuilders claim that they alone, in the entire Pacific, learned how to build canoes that could actually fly. But there is nobody alive today, nor has there been anybody in the past century, that knows or knew how to build such aeronautic vessels: sadly, the last of skilled builders had passed on before the end of the 19th century. Next there is the "utt" or canoehouse. Then there is "merek heki" which translates to "unfolding the woven mat" and "opening up your heart." Merek Heki is about pedagogy and commitment of student and teacher alike. Within merek heki there are many specific subjects such as the following three: "paafu" is the order of rising and setting stars used for marking time and location; "alean pongi maram" are the phases of the moon, turned months, turned seasons, and are the bases for forecasting and divination. And then there is "wofanu", the *range* of stars underwhich an island can roam, depending on the viewer's vantage point. For example, when peering into the southern horizon from Guam, Polowat sits under the constellation "Tan Up", better known as the southern cross at a 45 degree tilt. But from Satawal island in Yap state, Polowat sits under "Tan Mailap", or the rising Altair, which is due east. Wofanu names the star paths that help locate islands below, making the celestial canopy nothing less than a heuristic and cosmic map of the earth and for mapping all creatures in it. The poem is entitled 'The Return'.

[3] Terms from the "school of Werieng" as told and spelt by the late Sosthenis Emwalu. For a survey of existing canoehouses and number of navigators in the Central Carolines in the late twentieth century see Ridgell, Ikea and Uruo, 1994.

II. The Return: A Poetics of Revival

The Return
Hote
Flies
The white man's waa waniru
beak to the past
tail to the future
Lands in a strange utt
unfurls the heki
mereks the heart
Returns
To those who have lost
paafu and
alean pongi maram above
wofanu the islands that move below
Awakens
the spirits of voyages long
forgotten

I wrote this poem for "Hote", better known as Sostenis or Soste Emwalu, the late Polowat navigator who travelled to Guam in 1996 where he did merek heki for students in history and anthropology at the University of Guam. [Overheads: PDN clippings]. With two weeks left in the semester, Sosthe was diagnosed with advanced cancer. He died five weeks later at 42, one of Polowat's youngest navigators.

Soste's voyage to Guam was fraught: some say his death was the result of breaking tradition. If true, then why is Mau Piailug, famous Satawal navigator and older brother/cousin of Soste, still kicking? Just months ago, his voyages would take him to Washington D.C. and the Smithsonian to receive some big Folk Heritage Award (or something). Or likewise, with Rapwi

Yuluwairh, another highly respected Polowat navigator, and also brother/cousin of Sosthe.

Like their younger brother, who was only following in their steps, Piailug and Rapwi had each broken the long tradition of keeping merek heki within the family. In the mid 1980s, following the implementation of the Compact of Free Association with the U.S. and its unrestricted travel allowance to American metropoles, younger men from Polowat began to flock to Guam and Hawai'i and thus began to miss their traditional lessons in the utts, which were simultaneously losing the older teachers to age and death. In response, Rapwi began to conduct "public" merek heki in Polowat to anybody who wanted to learn. In stark and startling contrast to custom and protocol, Rapwi could be seen walking the island's footpaths with mat and stick tucked under his arms, and this alone was enough to beckon children and young men to follow for the day's lessons. In Polowat, the thick lines between private instruction and public knowledge had become permeable: tradition, under new demands, and constraints, continues its flow.

Piailug, on the other hand, travelled bigger circuits, and began much earlier. The result would be that Mau Piailug has become a household name for any contemporary Pacific Islander and non-islander even faintly familiar with the vibrant and inspiring – sometimes perspiring -- story of the revival of seafaring across the Pacific (Finney 1994)[4]. Unfortunately, the fame has also too often been misconstrued as his being either the only, or worst, the "last" navigator left in the world (Thomas 1987).

In the early 1970s Piailug had been contacted by University of Hawai'i anthropologist Ben Finney, who had founded the organization "Polynesian Voyaging Society" as part of a scientific project to resolve, once and for all, a long-standing debate about the origins of the Polynesians and the question of their abilities to sail vast distances in purposeful voyages that spanned the remote tips of the

[4] Perspiring, for the tendencies to regard seafaring in romantic and ahistoric ways. See Roubillard (date).

so-called Polynesian triangle: Hawai'i to the north, Rapa Nui to the east, and Aotearoa/NZ to the south. Finney and his associates built a modern replica of an ancient Hawaiian double-hulled canoe with reliable information from the historical record. They would name it the Hokule'a. But they had one small problem. If they had a seaworthy vessel, they had no navigator. They could not find in Hawai'i or elsewhere in Polynesia one who knew how to use the natural elements to voyage long distances the way they believed the ancestors had (but see Lewis 1970)

On the other hand, the seafaring prowesses of men from the tiniest of the obscure islands of Micronesia, particularly from a people self-identified as the Re-Metau/People of the Sea, had already received a good amount of scholarly attention by other anthropologists like William Alkire (1970, 1978), Ward Goodenough (1953), and Thomas Gladwin (1970). Most active among the re metau were the navigators of Polowat and Satawal.

In short, Ben Finney contracts Mau Piailug, who becomes especially close to the Hawaiian crewmembers who begin to stake their own (legitimate) claims to the Society's endeavor and to the Hokule'a. In 1976 Mau would wow the world and end the debate by successfully navigating the Hokule'a to Tahiti using only traditional concepts and principles. Moreover, Mau would also agree to teach the young Hawaiians – the most famous, but not the only one, was Nainoa Thompson, who would go on to navigate the Hokule'a on future voyages to other parts of Polynesia. These epic Hawaiian voyages of rediscovery – mediated through an adventurous Micronesian navigator from a tiny obscure atoll, and made possible by the interests and advocacy of anthropologists – would themselves launch new generations of double hulled canoes and navigators from all points in the triangle. In 1999 the Hokule'a joined two other Hawaiian double-hulled canoes, the Hawai'i Loa (built from timber from the Pacific Northwest Indian lands, (The Voyage Home, 1996) and the Makali'i (which had earlier in the year sailed from Hawai'i across Micronesia in tribute to Mau), and together they sailed to Rapa Nui, where they joined other Polynesian canoes to close off the triangle.

The epic voyages did not stop, nor start, in Polynesia. In 1996, Soste's "return" of ancient knowledge and technique of native travel to contemporary Guamanians – local residents of Guam including native Chamorros and non-native others -- was also only the latest jaunt in regional efforts by Carolinians displaced in the Marianas to reconnect their ancestral ties through voyaging. In the 18th and 19th centuries, Carolinians had begun to sail up to the northern Mariana islands specifically to plant new settlements in lands that had been cleared of the original Chamorro owners by Spanish conquistadors back in the 17th century. In the history of the Marianas, Chamorros from the northern islands such as Saipan, Rota, and Tinian, were forcibly relocated to the southernmost island in the archipelago — Guam — to facilitate colonial control. Carolinians and Chamorros had for millennia traded amongst themselves but discontinued at the time of European contact and conquest (Driver and Perry 1996). Upon the subjugation of the Chamorros, which included their removal from the northern islands to Guam, Carolinians began to settle the northern islands with permission from the Spaniards. By the 1960s, transplanted Carolinians in the Marianas began to rekindle their connections with their relatives back in the atolls through revived voyages (Brower 1983; Lieweila 1998). When Soste agreed to come to Guam in 1996, this time at the University, he saw this as nothing new; it was for him, in fact, an extension of old voyages.

At about the same time that contemporary Carolinians began to explore new homes in Guam, Hawai'i and even California in the mid 1980s, increasing numbers of Chamorros who had also dispersed elsewhere through the particularities of their own histories, had begun to exhibit the desire to return home in geography and in aboriginal discourse. Rob Limtiaco and Gary Guerrero, the Chamorro subjects of Sacred Vessels, had spent half their lives traveling between Guam and the "mainland", as we call the continental United States in acts of colonial naming that betrays our diminished sense of ourselves. We so easily refer to the United States as the "mainland" as if it were naturally the case that we were some "minorland." At any rate, by the early 1980s, disenchanted and

disillusioned with the American Dream, Rob and Gary independently return to Guam and seek out the last of the Chamorro canoebuilders. Their search brings them into contact with each other, and with Polowat men now living in Guam. From that point on, Rob and Gary spend the ensuing decades travelling back and forth between Guam and Polowat where they learn how to build and navigate under Polowat mentors. Both have even married into Polowat clans and now extend Chamorro Polowat lineage into the 21st century through five Chamorro-Polowat children between them.[5]

In what follows, I seek to capture the fluidic lines between Chamorros and Polowatese, between land and sea, culture and history, past and future, among many other indigenous realities in the late twentieth century.

[5] More recent voyages include Voyages 2000 and 2001, featuring treks from Yap, Polowat to Guam and the Northern Marianas, and including training men from the Marianas.

II. Sacred Vessels (screen, 29 mins.)

III. Towards a Critique and Aesthetic

Sacred Vessels examines the survival of traditional canoebuilding and navigation in Polowat and their revival in Guam through the tales of brothers Tino and Soste, and Rob Limtiaco respectively. Where Tino and Soste grew up in the water, building and sailing canoes the traditional way, Rob grew up in modern Guam and spent many years stateside. On the surface, the islands they call home are strikingly different, occupying opposite ends of Micronesia's experience with colonialism. Where Guam gives Waikiki a run for its money in the tourist and military industries, Polowat "lacks" power, running water and automobiles. Where Chamorros curse traffic jams in an island that serves as a hub for air traffic flow in the western Pacific and the Far East, the Polowatese lounge in *utts* walk footpaths to taro patches and routinely tap their *faluva* or coconut toddy. Where Guam looks hopelessly modern, Polowat seems helplessly primitive.

But through the lens of Soste, Tino and Rob's stories, the indefatigable canoe culture re-emerges to implode these superficial stereotypes, especially the binary oppositions on which knowledge about cultural life in contemporary Micronesia is built. Through their stories and efforts we sense the tenacity of ancient values and traditions today, especially as they rub up against equally tenacious modern systems. This tension could also be stated in terms between globalization and localization, and between this tension and that of a deeper, older, indigenous "local"[6]

My own work in this watery field ranges from organizing and networking with traditional canoebuilders and navigators from the region, to fundraising, to interviewing and documenting practitioners and practices, to studying the skies and oceans,

[6] See Finney 1999 for a good discussion of traditional seafaring in the context of this debate.

and finally, to working on and sailing canoes. As I speak, our organization is busy constructing an utt, and we have raised half the money to purchase our own voyaging canoe. In the spring we set sail to Polowat and back.[7]

But my own "work" also includes tacking back and forth between traditional concepts and practices and academic concepts and practices as located, for instance, in Micronesian Studies, or in Pacific Cultural Studies. Let me illustrate with two concepts or practices, *etak* and *pookof,* and then close with moments in Sacred Vessels which feature systems not simply at odds, nor simply in harmony, but systems engaged in a relationship that are situated in "productive tension" with each other. Tension can be a good sign; its underlying energies can be harnessed.

Etak is a Carolinian term that translates roughly into "moving islands," and is the concept that inspires the name of our production company. Etak is a technique used for reckoning one's position at sea by calculating distance traveled from point of origin using a mobile third reference point. It is also used for controlling for drift. It works like this: you depart island A in favor of island B, for which you steer in the direction of B's rising stars. Off to the side you select island C (or it could be a reef) as a third reference point. Island (or reef) C need not be visible but it is imperative that you know under which star it sits upon departure and under which star it must end up upon arrival, for as you might imagine, the stars underwhich sit a given island differ according to where

[7] Update: Voyage 2001 (May), sponsored by the University of Guam Seafarers club, involved the canoes "Halametaw" and the "Quest", which sailed from Polowat to Guam, and onwards to Saipan. The purpose of the voyage was to give UOG members sailing experience, and to deliver the Quest to its new home, a traditional canoehouse built in Hagatna, Guam, by the club. Thus, the voyage also celebrated the "launching" of the that canoehouse, called Fachemwan Sahyan Tasi, a mix of Polowat and Chamorro terms whose translation means "Place of Meeting Old Spirits/Vessel of the Sea." In May, 2002, another voyage is planned from Guam to the Northern Marianas, and the plan is to meet up with another flotilla of canoes sailed by Chamorro and Carolinian voyagers from Saipan, who will be sailing up from Polowat and Yap.

you are located. In the example given earlier, viewed from Guam, Polowat sits under the tilting 'southern cross', but if you are in Satawal, Polowat sits under the star *mailap* (the big bird). As you sail away from your island of origin and set your course towards your island of destination, you also uproot and move the etak island along its own required course. The effect of this practice, wrote David Lewis in his pioneering study of traditional navigation in the Pacific, is the feel that the canoe is stationary while the islands move by. Thus the concept of moving islands. Incidentally, western observers who have encountered this sensation in their studies of Carolinian navigation have been quick to point out that, of course, the islands are not *actually* moving, but that this is a cognitive operation. But I want to assert emphatically that the islands *are* moving, tectonically, as well as culturally and historically.

Pookof is a second technique that is a small but very important component of the method of land-siting. Recall that pookof is the inventory of species indigenous to a given island, as well as the knowledge of these creatures' habits and behavior. Pookof is part of a larger method of land-finding by way of *expanding* the islands -- a method devised as much out of creativity and adventure as for sheer necessity given the relative "smallness" of atolls in the Micronesia. And so when you sight a given species of bird or fish, and you know who belongs where and how they behave -- the pookof of an island -- you also then know into whose island home you have sailed. Thus are islands known by dint of the furthest travels of their indigenous creatures. I should add that the notion of expanding an island also includes knowing the distinct look of clouds above and around an island, the character of currents and waves as they deflect around islands, and of course, the group of stars associated with an island and the range of stars underwhich an island can travel, as for instance, in etak. Finally, as my colleague Becky Stephenson once reminded me in

conversation, as in the case of the Cook islands, navigators can also *smell* an island long before they can see it.

If I may summarize then, islands are not confined to the circumference of their (ever shifting) shorelines, nor their (rising and setting) highest landmarks. For traditional navigators, the sky is the limit, the horizon is the boundary. In Carolinian cosmology, the horizon marks the edge of the universe, as does the edge of the utt, or canoe house. What does it mean that for traditional seafarers, their horizon constitutes their boundaries?

Here, on land, and in the classroom, I want to open a kindred line of inquiry: what happens when we transpose these ancient techniques of travel onto academic practice, especially so called experimental modes of ethnography and historiography, of self-fashioning? What happens when we define culture in terms of distance traveled in time and across space? Island culture then becomes defined by dint of the furthest travels, the furthest reaches of its indigenous people.[8] So to understand Chamorro culture would necessarily involve learning how to move and keep up with Chamorro communities relocated across the oceans, say in San Diego, or even *further*, say in northern Guam, like Yigo, or even in Kaiser, Dededo -- two particular on-island sites commonly viewed as having forfeited their Chamorro culture and heritage on account of their urban development and their demographic makeup. To continue my critical trajectory, what happens when we conceive of islands as not stationary, affixed on some point intersecting a grid of latitude and longitude, but rather as on the move? What happens is that we get an altogether different kind of cartography of island life and possibilities. One whose islands refuse to keep still -- like the oxymoron, "restless natives," whose restless ancestors arrived onboard canoes to people the world's largest body of water, to cross the widest expanse of space millennia before Europeans stumbled out

[8] For ways to see culture and identity through the lens of travel: in Cultural Studies see Clifford and Dhareshwar 1989 and Clifford 1997; from the indigenous Pacific, see Hau'ofa 1993 and Teaiwa 1997.

of nations not yet imagined. In this particular, customized, native form of reconfiguration, our islands, indigenously theorized through metaphors of movement and expansion, become not the world's smallest but the world's largest entities. With peaks in the stars, we should say not just the largest entities in the world, but entities *out* of this world.

Allow me to digress for a flight of fantasy: I visualize this strategic inversion of big and small with an image pilfered from the blockbuster hit Titanic. In the movie, the ship that imaged and symbolized in epic proportions the technological wonders of modernity in the beginning of the twentieth century now narrativizes (in epic proportions and revenue) the crisis of modernity at the end of the century. It tells (and profits from) this late-twentieth century anxiety through the startling image of a big sinking ship and the drama of what humans will do to survive, or what they will do when they discover they don't have much time to live. In my fantasy a future video project will feature clips from the Titanic, specifically the climactic scene from the moment that the ship plunges into its watery grave, to the horrifying carnage and frozen bodies whimpering in the icy waters of the Atlantic ocean. There, amidst the carnage and debris of humans and wood, through the fog and mist, begins to appears a fleet of *Micro*nesian outrigger canoes, like a ghosts from the past, except they are contemporary. As I imagine it, this fleet would have been exploring this part of the earth for some months because their island homes were being threatened by rising sea levels due to global warming and because the westcoast of the Americas had crumbled into the sea. Luckily for the survivors of the Titanic, these canoes do not sink. Thus would come, in my fantasy for a future movie, tiny, wooden, sacred vessels to the rescue.

We all know the classic line "no man is an island." It was penned by the famous John Dunne as an early and enduring insight to western epistemology's flawed view of man as an intrinsically autonomous, independent, agent. This critique would later be sharpened by post-modern and feminist deconstruction of "man" as

a universal and timeless bundle of essential social, political and cultural characteristics. Nonetheless, one conclusion we might learn from Dunne's reminder is that nobody can work in isolation, and that we are interdependent.

But from the foregoing you should also get the more pertinent impression that *no island is an island either, or to begin with.* For no island nor man -- in the art, science, religion, philosophy, political theory, sociology, anthropology, history, biology, geography, oceanography, astronomy and public administration of indigenous navigation -- has ever been understood as an autonomous, fixed, stationary, independent entity. And so herewith I pen a phrase that I hope might become classic one day and in the process make me famous too: *No island is a Man*.

In making Sacred Vessels I wanted to capture in form and content these dynamic and critical sensibilities as they are thrown further into flux in contemporary Micronesia. In Sacred Vessels we get an interplay between opposition on the one hand, and interplay and tension between realities commonly thought to be mutually exclusive on the other. For example, in one moment, Christianity is shown to threaten the pwo ceremony -- the ceremony marking completion of studies and entry into master navigator status -- and its spiritual world, but in the next moment, men who went through pwo are also likened to Catholic priests. In one moment men fish and sail the oceans, while women work the land; in the next, the canoe turns out to bring the two together. In Sacred Vessels, we show that men who have gone through the pwo ceremony -- an identity, process and ritual likened to the refinement and perfection of pounded breadfruit -- are also described as "superman" or "ninja." In Polowat, men who have gone through the pwo ceremony, like breadfruit that has been pounded to perfection, are said to be "complete" in the double sense of being finished and being well-rounded, like the infamous "Renaissance Man" that ushered in Europe's age of Enlightenment. And yet, in Sacred Vessels we try to draw attention to that which is unmarked: if navigators are men who are refined, complete, like perfectly

pounded breadfruit, what does it mean that women are the "pwo-pounders", the ones who are responsible for the labor. In marking women's labor in the pounding of pwo, as well as their chanting and dancing, we hope to demonstrate yet another instance of how both men and women actively participate in the canoe culture even while in public discourse men and women alike say that the canoe is "a man's thing".

In yet another instance, culture is represented through an oral tradition that is understood to be superior to literacy as a form of recording and teaching navigation. Yet, Sacred Vessels also follows how, in the hands of a new generation of navigators, literacy and cameras, and even regional university classrooms and planetariums, become methods of preserving and maintaining, indeed, developing, the ancient traditions. Hence traveling to college, whether as young students in the 1970s, or as visiting instructors in the 1990s, become only the latest form of an ancient tradition of travel.

Over in Guam, or earlier, in Colorado, the Chamorro seafarer Rob Limtiaco seems to employ Polowat and its traditions as a kind of late-twentieth century etak that enables him to reckon the distance he and his indigenous heritage have traveled, from Guam to Colorado, or collectively, from the 16th century when Polowatese and Chamorros engaged in regular trade, to the late twentieth century when new waves of Micronesians continue to travel the world. Building canoes, concludes Rob, is "not about the past, it's about now", another particular chasm reconnected in struggle and tension.

Let me moor this vessel. For now.

REFERENCES

Alkire, William. 1970. "Systems of Measurement in Woleai Atoll, Caroline Islands, Anthropos 65: 1-73.

Alkire, William. 1978. Coral Islanders. Arlington Hts, Ill: AHM Press.

Brower, Kenneth. 1983. A Song For Satawal. New York: Penguin Books.

Clifford, James and Dhareshwar, Vivek. 1989. "Preface" in Traveling Theories/Traveling Theorists. Inscriptions 5. Santa Cruz, CA: Group for the Critical Study of Colonial Discourse (now Center for Cultural Studies Electronic Bulletin, University of California, Santa Cruz)

Clifford, James. 1997. Routes: Travel and Translation in the Late Twentieth Century. Cambridge: Harvard University Press.

Diaz, Vicente M. and J. Kehaulani Kauanui. Forthcoming. "Native Pacific Cultural Studies on the Edge" Special Issue, The Contemporary Pacific, Vicente M. Diaz and J. Kehaulani Kauanui, guest editors.

Driver, Marjorie G. and Omaira Brunal-Perry. 1996. Carolinians in the Mariana Islands in the 1800s. Saipan and Mangilao: Historic Preservation, CNMI and Micronesian Area Research Center, University of Guam Press.

Finney, Ben. 1999. "The Sin at Awarua." The Contemporary Pacific 11:1 (Spring), 1-33.

Finney, Ben. 1994. Voyage of Rediscovery: A Cultural Odyssey Through Polynesia. Berkeley: University of California Press.

Gladwin, Thomas. 1970. East is a Big Bird. Cambridge: Harvard University Press

Goodenough, Ward. 1953. Native Astronomy in the Central Caroline Islands. Museum Monographs, Philadelphia: University of Pennsylvania Press.

Hau'ofa, Epeli. 1993. "Our Sea of Islands" in A New Oceania: Rediscovering Our Sea of Islands. Suva: University of the South Pacific.

Lieweila: Navigator's Children. 1998. Produced by Beret Strong and Cinta Kaipat. (57 mins)

Lewis, David. 1970. We, the Navigators. Honolulu: University of Hawai'i Press.

Ridgell, Reilly, Manny Ikea and Isaoch Uruo. 1994. "The Persistence of Central Carolinian Navigation." Isla: Journal of Micronesian Studies 2:2 (Dry Season), 181-206.

Teaiwa, Teresia. 1997. Yaqona/Yagona: Roots and Routes of a Displaced Native, Dreadlocks in Oceania 1, S. Mishra and E. Guy, eds. Suva: Fiji: University of the South Pacific.

The Voyage Home. 1997. Video Documentary produced by Karyn Williams.

Thomas, Stephen. 1987. The Last Navigator. New York: Henry Holt.