



Conservation
Assessment of the
Joachim De Brum
House, Likiep Atoll,
Republic of the
Marshall Islands

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DISCUSSION

ikiep Atoll is unique in the RMI. This circumstance has arisen from the manner in which it was acquired, developed and managed by the partners in A. Capelle & Co. Between its purchase in 1876 and Adolph Capelle's death in 1905, it developed more in association with the business interests of the Capelle and De Brum families than anything else. Mason (1947) shows that whereas Likiep had previously been supervised by three *iroij erik*, following its acquisition by the company it was supervised by the three partners of Capelle & Co.

Following the agreement between Jortoka and De Brum, islanders living on Likiep (many had moved to other atolls after the earlier typhoon) were given a choice of remaining or migrating to another atoll under Jortoka's control. However, if they chose to stay they had to assign all *traditional* rights, title and interest applying to themselves (and their descendants), to the new owners and agree to remain as "...peaceful and orderly tenants..." (Mason 1947, p. 171). Capelle & Co. agreed on their part to pay each worker two dollars a month in trade plus some additional necessities. This method of direct payment was a fundamental change to previous arrangements where chiefs were paid and responsibility for further distribution was left in their hands.

The Capelle and De Brum partnership had enormous impact as the atoll developed into a single economic and social unit. Distinctive characteristics of Likiep village and atoll communities reflect that impact today in various ways including architecture, agriculture, commercial, engineering and industrial. Lee (1984) describes it succinctly as a "...unique, yet representative microcosm of Pacific history" and suggests that it exemplifies European influence on Pacific Islander culture and life.

Traditional Marshallese principles of land ownership involved a hierarchical structure. Interlocking layers of responsibilities, rights and benefits extended through all levels of society from the *Iroij lap lap* down (Milne & Steward 1967). These traditions were set aside when José De Brum purchased the atoll and ownership was transferred to the principals of A. Capelle & Co. Subsequently ownership has been passed down to the descendants of Adolph Capelle and José De Brum.

Introduction of intensive copra plantations throughout the atoll modified pre-existing vegetation patterns and, coupled with its associated infrastructure contributed to Likiep's development as a single cohesive economic unit. Copra was produced on each of the islands and then transported to Likiep Island for storage in the Capelle & Co. warehouse from where it was shipped to overseas markets.

Joachim De Brum

However, most significant cultural property extant on Likiep from the colonial period originated during Joachim De Brum's lifetime. Largely self-educated, he was deeply interested in

an extraordinary range of subjects and is still regarded with profound respect by the inhabitants of Likiep. He studied medicine and dentistry, provided medical services to local communities (Figure 46), and established medical dispensaries on several islands at his own cost (pers. comm. Leonard De Brum, October 1999).



Figure 46: Medical Chest; Joachim De Brum House, Likiep, RMI

His library was expansive, containing some 1,600 books on many subjects, and was regularly updated and extensively used. He operated a successful trading and plantation business that, even after the Japanese company, Nan'yo Boeki Kaisha, took over all the assets and operations of Jaluit Gesellschaft (Peattie, 1988, p. 121), was able to continue operating. He built several houses and established internationally respected shipyards, producing about 100 ships up to 80 feet in length – all handcrafted. He became a photographer of great skill, building his own darkrooms and taking, developing and printing thousands of high quality photographs with very high cultural and historical significance. He built and installed his own gas generator to provide lighting for the main house. By any measurement, he was a remarkable man.

With his breadth of interests and activities, Joachim De Brum has contributed enormously to the extent and variety of cultural property remaining on Likiep. He has left detailed notes, letters, weather and tide measurements, ship plans, superb cultural, medical and general photographs, business records and diaries originating from a period of approximately fifty years from 1880. Together they provide extensive data on community and business life on a small and isolated coral atoll in the latter nineteenth and early twentieth centuries.

In his will³ Joachim stated that his tools and books should be "...kept as a memorial..." of him. This simple request provides a fascinating insight into this remarkable man. He was not interested in large marble tombstones or statues, he expressly requested that he be buried "...in a *small* plot of ground by the Protestant Church, Likiep" (my emphasis) which he and Edward Capelle had built together in 1906. Buried with his wife, their simple, shared headstone merely states their dates of birth and death.

The sheer variety and number of historical items remaining as part of this site are most extraordinary, particularly in view of the rapidity of decay in the tropics – Joachim died in 1937 and the family left the house in 1947. Regular maintenance effectively ceased then and yet so much highly significant cultural property remains.

Furniture

Through chemical processes initiated by photodegradation, the silk covering of a four-panel, hand-carved teak divider has faded from its original blue to green. Other furniture, some made from oak and mahogany as well as teak, needs urgent attention including cleaning, oiling and repair. Wood has dried, glue has failed, joints have loosened, and some sections are missing, cracked or broken. Temporary repairs have been made to some pieces. For example, loosened arms on two of the superb teak armchairs have been wired to the chair frame using black coated wire in an attempt to match the teak colouring. This discrete but inappropriate attempt to repair the chairs temporarily has not been successful and further damage is likely as glues continue to fail.

The central table, carved from teak and inlaid with marble, is intended to revolve but no longer does so easily. The lantern hanging above the table is designed to be raised and lowered as required, but it is also stiff, unresponsive and corroded. Other items of furniture such as beds, chairs and furniture for every-day use were used but are no longer present.

Photographs

During the 1977 stabilisation project, a large wooden chest containing approximately 2,600 glass photographic negatives was found, together with 30 cameras (Jelks & Jelks 1978). In an undated report containing internal evidence of preparation in late 1986, Schilt (n.d. p. 1) describes these photographs. They include scenes of shipping, daily life, architecture, natural disasters, individual and group portraits, and photographs of other Pacific islands. She suggests that this unique collection is "...among the most historically valuable and culturally significant... known...". Jelks claims that Joachim De Brum was a "...genius with the camera...", and states (Jelks & Jelks 1978, p. 19):

"In both artistry and historical content his photographic documentation of Marshallese scenes, cultural activities, and personalities are on a par with those of Mathew Brady and the other great historical photographers of the nineteenth and early twentieth centuries."

Schilt (n.d. p. 4) suggests there are 16 broad categories in De Brum's portfolio of photographs – agriculture, animals, architecture, business, dance, disasters, domestic life, education, ethnic

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³ Copy held by Leonard De Brum

culture, geography, music, plants, people, religion, transportation and work. A seventeenth category may be added, that of medical, to cover the many photographs of lesions, tumours and other subjects of medical interest. This impressive collection is also reported (Schilt n.d. p. 4) to be in "outstanding condition". Approximately 2,100 of these photographs have been loaned to the Museum for treatment, documenting and printing and are now stored by Alele Inc. (Office of Planning and Statistics n.d. b).

Acknowledging the significance of these photographs, the Australian Government recently announced a grant of \$18,000 (through the Australian Agency for International Development) to the Marshallese Cultural Society so the entire De Brum collection may be preserved.

The Library

Joachim De Brum's remarkable collection of books, documents and manuscripts is very clearly under great threat from several elements of decay. When the bookcases were opened silverfish scuttled in all directions, termite frass covered the shelves and books, and damp and mould were obvious. Decay continues at an increasingly rapid rate, and unless it is stopped in the very near future, may soon culminate in the library's destruction as an extremely valuable cultural resource. For these processes of decay to be successfully stopped, professional curation is required. This will involve a combination of several factors including environmental change, fumigation, selection of books to be retained (some already appear to be too badly damaged to be salvaged) and institution of appropriate management practices.

Maintenance

The first major project to preserve the Joachim De Brum house occurred in 1977 under the supervision of Edward B. Jelks from the University of Illinois (Jelks & Jelks, 1978). The second occurred in 1984 when, under the supervision of Gerald R. Knight, further preservation and maintenance of the site was completed (Roberts, 1984). Most of the work planned for both projects was completed (Jelks & Jelks 1978; Roberts 1984), however, there were insufficient funds to permit all planned tasks to be done. Some materials used have also proven to be unsuitable under Likiep's tropical conditions. Comparison of photographs taken during the 1977 and 1984 projects with photographs taken during this research, strongly suggests that maintenance has not been as comprehensive as required by a site of such significance. Doubtless, while Joachim lived, maintenance was regular and effective.

Paint is badly weathered, particularly on the eastern or weatherly side, where extensive areas of timber are now almost totally stripped of protection from the elements. Perusal of Figure 12 will clearly show the difference in paint quality between the leeward or western side of the house and the less-protected southern side. Figure 53 shows how constant trade winds have stripped paint from the eastern veranda wall leaving it unprotected.

Furniture

Table 3 lists major items of furniture inventoried during this survey. Their condition was checked and the inventory compared with that of earlier research (Jelks & Jelks 1978) to highlight obvious discrepancies. Some items listed by Jelks were not found but may have simply been moved from the house for use elsewhere.

Table 3: Furniture in Joachim De Brum's House - 1999

1977	1999	DESCRIPTION
Х	Х	Revolving table and three armchairs, intricately carved from teak (Figure36)
x	x	Hanging ornate Kerosene Lamp (Figure 40)
x	x	Four carved Teak chairs
x	x	Round carved teak side tables (2)
x	x	Carved teak cabinet
x	x	Carved teak and silk screen (Figure 37)
x	x	Carved teak shelves (2 large & 2 small)
x		Carved teak nesting tables
x		Wooden ship hull models
x	X	Roll top desk
x	X	Four carved teak shelves
x	X	Carved teak elephant (Figure 39)
x	X	Barometer
x	X	Brass clock under glass bell jar
x	x	Microscope under glass bell jar
x		Various ornaments including bronze stag, marble statue
x	x	Bronze Bell
x		Gramophone
X		Magic lantern
X		Cash Register
Х		Long wooden office table
Х		Antique fans
X		Wooden table with money drawer

Observed Elements of Decay

Decay factors may be categorised very simply on the basis of their origin and speed of action. If origin is regarded as either anthropogenic or non-anthropogenic, and speed of action is either fast or slow, then an elementary two-dimensional matrix comprising both results (Table 4).

Table 4 : Significant Tropical Decay Elements: Adapted from Baer (1998)

ANTHROPOGEN	IC ELEMENTS	NON-ANTHROPOGENIC ELEMENTS		
FAST ACTING	SLOW ACTING	FAST ACTING	SLOW ACTING	
War	Pollution	Tectonic	Biologic	
Accidents and Fire	Use	Weather - Cyclone	Weather – Heat & Humidity	
Urbanisation	Benign Neglect	Tsunami	Chemical	
Vandalism	Disinterest	Erosion – storm event	Erosion – Wind, Wave, Current	
Salvage & Reuse		Land, Rock or Mud Slides		

Other issues may contribute substantially to the strength of these processes. For example, physical relocation (Spennemann 1992; 1993) of cultural property may be caused by erosion, subsidence, earth movement, or tree roots, each of which may damage physical structures while also providing opportunities for other decay factors to operate. Determining possible combinations of *elements* of decay involved in any *process* of decay is an essential step in planning effective preservation management. Historic property remaining on Likiep, moveable and immovable, continues to deteriorate despite international recognition of its significance and various programmes to manage its preservation. Table 5 lists several decay elements that were active on Likiep.

The Joachim De Brum house has been sealed in a manner that detracts from the site's visual appeal and ambience and contributes to further deterioration, but would not greatly hinder someone who was determined to enter. All external doors are locked and barred, windows are sealed, locked, and have shutters nailed across them. The front steps have a piece of heavy plywood nailed to the veranda posts blocking access to the veranda. Nine strands of barbed wire (Figure 47) have been nailed to the outermost wooden piers under the house to restrict access to the underfloor area.

Table 5 : Observed Decay Factors

DECAY FACTOR	ELEMENT	EXAMPLES
WEATHERING	Mechanical Chemical	Paint stripped from exposed timber by trade winds
BIOLOGICAL	Moulds and Fungi	Likomju De Brum house
	Higher Plants	Joachim De Brum Storage Shed
	Insects	Joachim De Brum veranda - termites
	Animals	
Anthropogenic	War	Likomju De Brum house - bullet holes
	Salvage and Reuse	Joachim De Brum Dining Room/Kitchen
	Vandalism	Joachim De Brum house - graffiti
	Tourism	New hotel – Likiep Plantation Haus (sic)
	Construction/Maintenance	Airport runway and access road
CLIMATOLOGICAL	Moisture	Water leaks into several properties
	Wind	Broken and missing roofing panels
	Sun	Joachim De Brum furniture - phototropic damage
CHEMICAL	Biological	Decomposing breadfruit contributing to development of rot in storage shed floor.
	Salt	Concrete housing piers
	Corrosion	Corrugated iron roofing panels
EROSION		Cemetery
NATURAL DISASTER	Tropical Cyclones	Coral blocks and strand wall

Explaining why this security had become necessary, Leonard De Brum (pers. comm., October 1999) related the following event. Two European visitors sailed their yacht into Likiep Lagoon and anchored in Likiep Cove offshore from the village. The following morning they were welcomed in typical islander fashion and taken on a tour of the house by family mem-

bers who were proud of their heritage. Apparently later that evening the tourists returned quietly, removed a valued family heirloom from the parlour, and promptly departed Likiep early the following morning. The item concerned, a bowl on a pedestal, was included in the inventory prepared by Jelks (Jelks & Jelks 1978) but its theft was not noticed for several weeks.

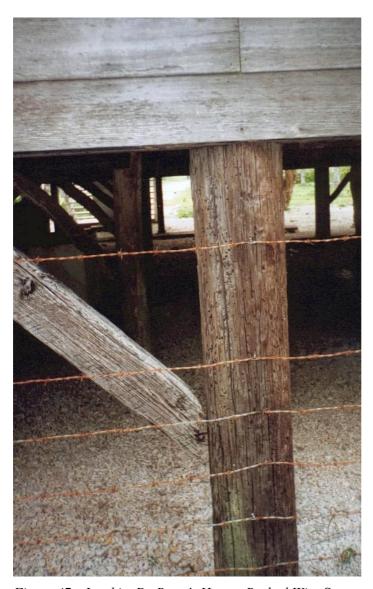


Figure 47 : Joachim De Brum's House: Barbed Wire Security; (Photo: Facing west)

Unfortunately, these measures detract from the appearance of this highly significant property and in some cases contribute to further decay. Apart from the physical damage caused by nailing timber planks to window frames and veranda posts, and a consequent and highly negative visual impact, other damage is occurring from follow-on influences. For example, air movement within the northern and southern rooms has been greatly reduced by the closed windows and shutters. In the library, the situation is worse as bookcases that are also shut and locked reduce airflow even further while retaining warmth and humidity for extended periods. These conditions are ideal for mould and fungi to grow rapidly, and for insects such as termites, silverfish and others to thrive.

An attempt has been made to protect the northern veranda from weather by fastening a sheet of rubberised canvas extending the length of the veranda from roof to floor and to the facia, handrail and floor (Figure 48). The southern veranda has a smaller section of the same material fastened from the western

corner for approximately six metres and extending from the floor to the handrail. This well meant but misguided attempt to protect the veranda has had the opposite affect. Conditions were established where a micro-climate that is ideal for termite infestations could form, and the northern veranda is now infested for its entire length (Figure 49).



Figure 48 : Rubberised Canvas on Northern Veranda; Joachim De Brum House, Likiep, RMI: Facing southeast



Figure 49: Termite damage under rubberised canvas on north-eastern corner of veranda; Joachim De Brum House, Likiep, RMI: Facing south.

The northeastern floor of the veranda was replaced during the 1977 project by lengths of Californian Redwood to maintain continuity with the original material (Roberts 1984). However,

because it was not available in the same size (twelve inches by one inch) or quality as that used by Joachim De Brum, smaller (six inches by 5/8 inch) and lower quality timber was used instead. It is now so badly affected by termites and rot that the north-eastern section of veranda is unsafe to walk on. Figure 50 maps areas at floor level that were found to be suffering from decay caused by various agents.

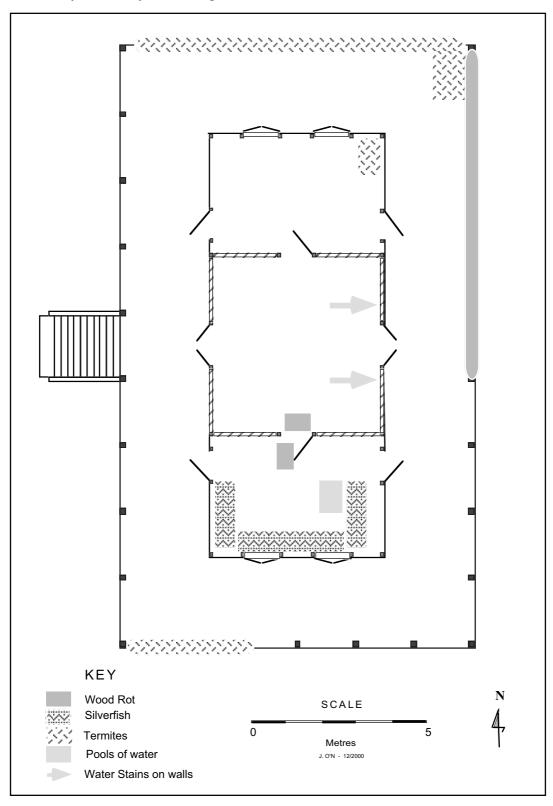


Figure 50 : Joachim De Brum House; Observed Decay

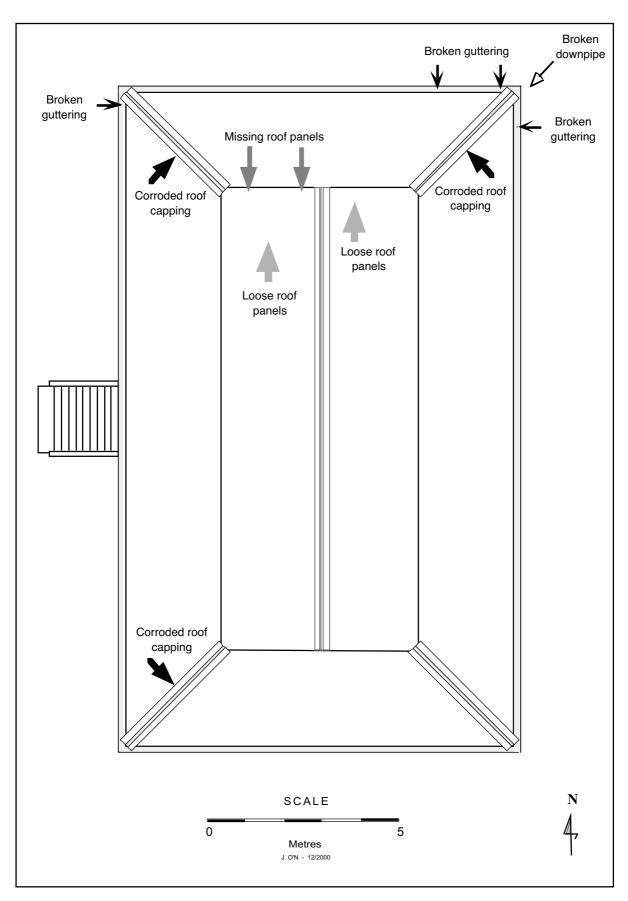


Figure 51 : Joachim De Brum House; Roof Damage

The roof was replaced with aluminium roofing panels in 1977 (Jelks & Jelks 1978) but it appears that corrugated iron was used for ridge capping. Due to galvanic corrosion, this material has deteriorated badly permitting water to enter through the ridgelines. Some roof panels are missing and guttering damaged permitting further water ingress (Figure 51).

Many underfloor piers, joists and supports have decayed as would be expected after almost 100 years. Some were repaired in 1977 and 1984, but deterioration is continuing with water, insect and fungal damage, and graffiti evident on several timbers (Figure 52). A weathered house pier with a timber brace that can no longer support anything because of its extensive decay can be seen in Figure 47.



Figure 52: Underfloor Decay and Graffiti; Joachim De Brum House, Likiep, RMI: Facing west

The effect of weathering from a combination of direct sunshine and prevailing trade winds is illustrated in Figure 53 as veranda timbers that were once protected by paint have been stripped bare.

So much historic property originating from colonial times has been retained that, from an historic preservation viewpoint, the entire Likiep Village Historic District is highly significant. Many buildings constructed between 1905 and 1920 not only still stand but are still being used. Some are disused but remain in a condition from which they can be conserved. Others have been largely destroyed and only ruins remain.



Figure 53 : Weathered veranda timbers; Joachim De Brum House, Likiep, RMI: Facing south-west

Little historic property originating from the Pacific War of 1941-1945 exists on Likiep Atoll - it was not a major Japanese base and was only lightly protected. No bunkers, airfields, storage facilities, gun emplacements or other military structures were built. Consequently, it escaped the extensive damage suffered by atolls such as Jaluit, Wotje, Maloelap, Mili and Kwajalein (Naval Analysis Division 1947) that were extensively damaged by aerial and naval bombardments. There was none of the "…incessant pounding…" (Hezel 1995, p. 227) or "…fire-storm of aerial and surface bombardment" (Peattie 1988, p. 267) that other atolls suffered. Even the bomb craters that are so evident on Jaluit and elsewhere are missing from Likiep.

CONCLUSION

eonard De Brum has been the driving force behind preservation of this unique Marshallese historic site. This energetic and proud Marshallese has been at the forefront of every preservation project conducted on Likiep Island. He was instrumental in achieving national and international recognition of the heritage value of this site in the mid-1970s. He played significant roles in both preservation projects funded by the United States National Park Service. He has chaired the Joachim De Brum Memorial Trust Corporation since it was chartered by the RMI Government in 1982, and he has personally assisted with every historical survey conducted on the site.

Although he has now lived on Majuro Atoll for many years, the house-that-Joachim-built is unquestionably his home. Each visit to Likiep involves personal time sitting quietly in the parlour... remembering... reabsorbing... reconnecting. The past with all its complex associations hustles and bustles its endless parades before him. As the now elderly "youngest son", he knows that each visit may be his last and wondering who will continue the work after him, he quietly makes his plans. Who will provide the vision and enthusiasm needed to protect this important piece of Likiep and Marshall Islands heritage for future generations?

Davison and McConville (1991, p. 12) suggest that the selection, restoration, exhibition and interpretation of heritage items is a "... creation of the present." When interpreting the past westerners frequently assign meaning and value to heritage in processes that have been described as "heritage business" (Davison 1991). This development has not been so evident on Likiep where connections with its European/Marshallese past are still powerful elements of today's culture. As many of the houses and structures Joachim De Brum built continue in use, this powerful social figure retains a strong presence in the village. Candacuzino (1996) noted that tangible historic property needs to be useful and valued if it is to survive. The truth of this observation may be clearly seen in the dichotomous example of Joachim De Brum's house and his kitchen/dining room. The difference between historic property that is wanted or used (and thus valued) and property that is no longer wanted or used can be very stark.

The RMI Government is committed to developing the nation's infrastructure as rapidly as possible and so fulfil the electorate's expectations. It also recognises the importance of preserving Marshallese heritage. However, the RMI economy is not yet able to generate sufficient funds to permit both development and preservation. Nor are there sufficient numbers of trained and experienced Marshallese personnel available to preserve remaining historic property. For the most part therefore, preservation of historic property in the RMI depends on this recently independent nation-state receiving sufficient resources from international providers. Of those nations that previously exercised administrative or colonial authority over the Marshall Islands, only the United States provides realistic levels of assistance today.

One of the major difficulties facing those responsible for preserving heritage has always been determining ownership. In general, the peoples of Oceania do not regard historic property remaining from the 'colonial period' as their responsibility. It is not perceived to be part of their heritage and they feel little sense of ownership or association with it. Consequently, it is unrealistic to expect that emerging nation-states of Oceania should use their generally scarce resources to preserve heritage with which they feel little connection. However, Likiep Island-

ers maintain a close association with their Capelle/De Brum history. They also evidence a strong desire to preserve some of the physical evidence remaining from the remarkable times of Joachim De Brum. Although these feelings may not be held quite so strongly elsewhere in the RMI, they are nevertheless clearly apparent.

The historical and cultural value of this unique site is recognised locally, nationally and internationally. The will to preserve it is strong locally and nationally. The sense of ownership is particularly strong locally though less strong nationally. It is the resources that are missing.

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