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## **THE JOACHIM DE BRUM HOUSE, LIKIEP ATOLL, MARSHALL ISLANDS** **An outstanding example of Micronesian plantation architecture**

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Decay caused by the tropical environment and the ravages of World War II have seen to it that wooden structures dating to the beginning of the twentieth century have become rare in Micronesia. The Joachim de Brum House on Likiep Atoll is the major property of its kind surviving in the Eastern Micronesia. This paper discusses the significance of the house, its contents and its associated structures against the background of its owner, Joachim de Brum.

From the point of view of historic preservation throughout Micronesia, it is regrettable that so little historic property from the late nineteenth and early twentieth centuries remains. Several factors have combined to cause this: great damage occurred from military operations during the Pacific War, extreme weather conditions, eg. tropical cyclones, have devastated some islands, and environmental decay is a continuous process (Look & Spennemann 1993a; 1994, Spennemann & Look 1994). Development and human neglect, derived from changing demands on housing and settlement location (urbanization), are also taking a heavy toll. Tangible and intangible cultural property will decay and disappear wherever it is not considered to have current value because processes for its preservation will not be managed effectively in times when preservation funds are limited. As a result, examples of European plantation architecture are have become rare in Micronesia.

The purpose of this paper is to describe an outstanding example of such architecture, the

Joachim De Brum House on Likiep Atoll, Marshall Islands, and to discuss its significance for Micronesian heritage and architecture.

### **LIKIEP ATOLL**

Likiep Atoll (figure 2) is part of the Ratak Chain of the Republic of the Marshall Islands and is located approximately at 10° North and 169° East, about 450 kilometers northwest of the capital, Majuro. Likiep Island is at the eastern end of the atoll while the Likiep Village Historic Site is at the island's northernmost extremity – the area least vulnerable to damage from tropical cyclones or typhoons.

Two expatriates, the German Adolph Capelle and the Portuguese José Anton De Brum played key roles in the development of present-day Likiep. Independently of each other, they decided to live in the Marshall Islands and married Marshallese women. Subsequently, they joined forces in what was to become a highly effective and enduring partnership that passed beyond merely commercial transactions.



*Figure 1 : Likiep Cove, c. 1910 looking east across the island to the open ocean; Photo: De Brum Collection, Alele Museum, Majuro; with permission Leonard De Brum.*

De Brum purchased Likiep Atoll in 1877 from his Maloelap wife's chief, Jortoka (the *Iroj laplap* of the Ratak chain).

He paid with goods that were then valued at \$1,250 and transferred title to A. Capelle & Co. the next year for \$886.73—the wholesale value of the trade goods paid to Jortoka (Mason 1947, pp. 170-171). Both men produced large and influential families that between them may almost be described as a modern Marshallese dynasty, and their social, political and commercial legacies remain highly significant in the Republic of the Marshall Islands of today.

Capelle & Co went into bankruptcy following several business reversals in 1883 and all assets and interests (except Likiep Atoll) were transferred to the Deutsche Handels- und Plantagen-Gesellschaft der Südsee Inseln zu Hamburg. However, with a third partner, Charles Ingalls, Capelle and De Brum continued to trade through the Ratak Chain from

their base on Likiep. Ingalls died in Honolulu sometime in the 1890s and his share of the business was transferred to the Jaluit Gesellschaft because Capelle and De Brum were unable to fund its purchase (Mason 1947, pp. 171-173). Subsequently it was returned to them in a complicated long-term commercial arrangement involving trading operations in the Ratak Chain. In 1914, this debt was paid off and ownership transferred in full to the De Brum and Capelle families shortly before Japan declared war on Germany.

Between its purchase in 1876 and Adolph Capelle's death in 1905, Likiep developed more in association with the business interests of the Capelle and De Brum families than anything else. The few islanders living on Likiep at the time of purchase 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). Because the atoll was bought with all traditional rights, a different form of land tenure could develop on Likiep, with Capelle and deBrum asserting the rights of *irooj*, *alap* and *dri-jerbal*. 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.

While Likiep is undoubtedly Marshallese in character and origins, it has several elements that make it unique. This uniqueness rises from the apparently deliberate retention by its inhabitants of social, cultural and historical links to many late nineteenth and early twentieth century colonial and trading activities. Likiep's great heritage value results directly from several factors. First, its history since European arrival on the atoll is intriguing. Second, the extent to which two European immigrants were absorbed into the local culture and the rapidity with which it occurred is remarkable. Third, the social changes they triggered have been widespread.

Many houses were built on Likiep Island between 1890 and 1920 which remain in use by descendants of those for whom they were originally built. Most drinking water comes from rainfall stored in cisterns, several of which remain from the early part of the 20th century. Many houses retain their original curtilage with the same wells, the same outbuildings, and the same coral blocks bordering the same paths of crushed coral. Other structures on Likiep that are associated with the Capelle /De Brum business operations or Marshallese social activities remain in good condition. Without doubt however, the single most outstanding structure on Likiep is the Joachim De Brum house with its associated outbuildings.

## JOACHIM DEBRUM

Largely self-educated, Joachim De Brum 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, and established medical dispensaries on several islands at his own cost (pers. comm. Leonard De Brum, October 1999). His library was expansive, containing some 1,600 books on many subjects, and was regularly updated and extensively used (Spennemann *et al.* in prep.). 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 (Jelks & Jelks 1978; Schilt n.d.). He built and installed his own gas generator to provide lighting for the main house. He ordered books on surgery, dentistry and medical ailments, and, based on his self-study, dispensed medicine and executed minor surgery and dentistry—the first and only health care outside the German capital of Jaluit. By any measurement, Joachim De Brum 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 (Jelks & Jelks 1978; Pangelinan 1978; Schilt n.d.; McGrath 1973).

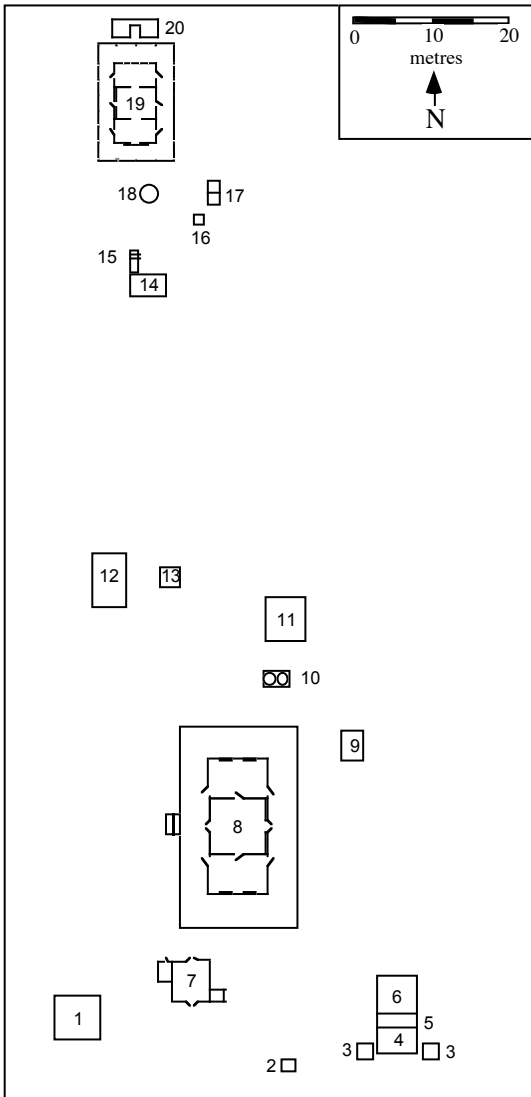


Figure 2 : Spatial Relationship of Joachim and Likomju De Brum Houses. Legend: 1 - Dispensary & sleeping quarters.; 2 - Well; 3 - Two small cisterns; 4 - Kitchen Foundations; 5 - Breezeway Foundation; 6 - Dining Room Foundation; 7 - Storage Shed; 8 - Main House; 9 - Gravesw; 10 - Twin cisterns; 11 - Large Cistern; 12 - Raymond De Brum's House Foundations; 13 - First Darkroom; 14 - Likomju De Brum's Kitchen/Dining Room; 15 - Concrete steps and path; 16 - Well; 17 - Washbroom; 18 - Cistern; 19 - Likomju De Brum's House; 20 = Fishtank

In his will 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" (our 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 (pers obs).

### THE JOACHIM DEBRUM HOUSE

In the early twentieth century Germany administered the Marshall Islands as part of her colonial empire and Likiep Atoll had become an important cog in its commercial and social network. During this time (1904/05) an imposing house—considerably larger than any other on Likiep—was built in the small village at the northern end of the island. It was destined to become the social hub of Likiep and the administrative, economic and industrial centre of a very successful business empire. Although simple in concept and structure, the Joachim De Brum house is several times larger than any other house on Likiep and its sheer size and height dominates the surrounding village.

The Joachim De Brum house and curtilage includes remains of other constructions (Figure 2). Part of Joachim's original kitchen/dining room is there as are several water cisterns ranging in size from very large to small. A small cemetery is situated only a few meters from the house. Foundations of other houses, wells, Likomju De Brum's house, and remnants of several other buildings are also present (Figure 2).

The Joachim De Brum House was designed and constructed by Joachim De Brum from a mix of local and imported material (figure 3). Elevation on short concrete piers was characteristic of Joachim De Brum's construction methods (US National Park Service 1984). The architectural style he usually employed was a combination of Germanic and Marshallese and incorporated a simple design of three rooms with surrounding verandas and an external kitchen and dining room. Decorated balusters,

high ceilings and a high peaked roof were also characteristic.

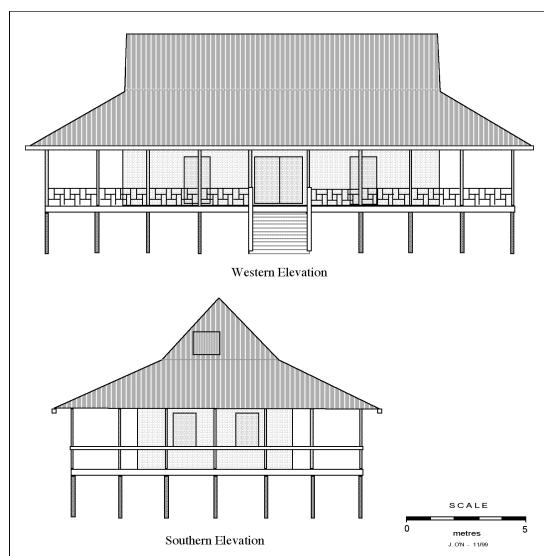


Figure 3 : Joachim De Brum House - Southern & Western Elevations

With a total length of 17m and a width of 10m, it is the most imposing structure on Likiep Atoll, and was one of the largest houses during the German colonial period, at the time possibly only surpassed by the house of the German administrator (*Landeshauptmann*) on Jaluit.



Figure 4 : Main House with Thatched Roof; c. 1910; Photo: De Brum Collection, Alele Museum, Majuro; with permission Leonard De Brum

The house is erected on 54 piers of local timber, 38 of them on *kōno* (*Cordia subcordata*) and 16 on *kkon*, (*Terminalia samoensis*) (not blue

gum as asserted by Jelks & Jelks 1978). Only along the presentation side of the building facing the lagoon have the timbers been squared off. The squared underfloor supports utilize similar materials.

The room plan of this single story timber-framed house comprised a rectangular central parlor and a bedroom on either side. Original floorboards of this house were made from high quality Californian Redwood planks sawn to a width of 30.5cm and a thickness of 2.5cm. External walls were of the same timber, with planks 15.25cm wide and 2.5cm thick being fastened horizontally to the 10cm by 10cm studs that are also braced by diagonal timbers of the same size. Some floorboards in areas of the veranda were replaced during a stabilization program carried out in 1977. Although the timber used was Californian Redwood so that a level of historical accuracy could be maintained, it was of a lower quality, narrower and thinner than the original.

The parlor has no external windows and the doors on either side of the house are solid. The northern and southern rooms both have two large external windows opening onto the veranda (figure 7). Ceilings have been installed in all three rooms at a height of approximately 3.5 meters using beaded planks 15.25cm by 2.5cm. The veranda has also been ceiled on all four sides. The current paint scheme is white with grayish-blue used to provide accent.



Figure 5 : Main House after Iron Roof Installed – c. 1915; Photo: De Brum Collection, Alele Museum, Majuro; with permission Leonard De Brum

It is worth noting that the parlor has an internal lining of similar Redwood planks as those used for the external cladding. On the eastern and western walls it has been laid horizontally while that of the northern and southern (internal) walls has been fastened vertically. This simple method of construction with its multiple layers of cross-bracing, provides maximum strength and rigidity with minimum weight. This has created a cavity wall which would have had an effect on temperature control in the main living area. Likewise, the very high ceilings in the bedrooms and parlor add to temperature management.



*Figure 6 : Joachim De Brum House, 1999: Western veranda, facing north-east*

The roof of the house is quite high with a substantial pitch. This is a desirable design as it creates a heat sink in the roof space that adds to the cooling of the house. As a further measure, the walls of the building are shaded by a 2.54m wide verandah supported by 10cm square wooden posts. Today the house is erected on 1.8m high wooden supports, which create a breeze area underneath the house. In its original state the De Brum house was supported on short concrete piers and exhibited a high thatch roof (figure 4). This roof was replaced by a corrugated iron roof in about 1915 (figure 5) and the house raised on its current wooden posts in about 1929 (figure 6).

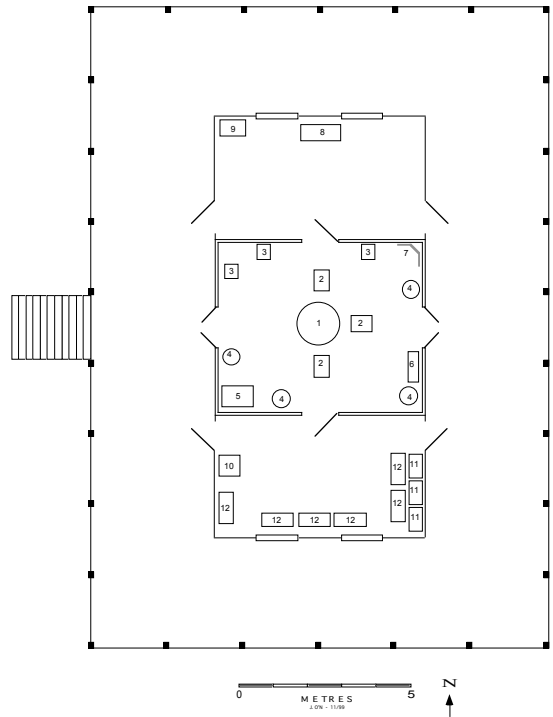
The wide verandah is bounded by a geometrically decorated baluster. Historic photographs show that shade sails were slung to further shade the bedroom walls and to create sleep outs on the verandah (figures 4 & 5).

## FURNISHINGS

Major items of furniture remain in the main house (figure 7). The large parlor was dominated by teak furniture. The largest and heaviest items were a revolving circular table with three matching arm-chairs, all ornately hand-carved with a Chinese dragon motif (Figure 8).

Other teak furniture, all featuring the same motif, was placed around the room and includes smaller straight chairs, wall mounts, stands, several small tables, and a large wall stand.

A teak room divider, again carved in the dragon motif, has silk panels that have faded through phototropic deterioration, but retains an evocative elegance. Several other items have marble or ivory inlays. Originally purchased by Joachim De Brum from China early in the twentieth century, this elegant furniture contributes substantially to the cultural ambience of this remarkable home by providing a major connection with Joachim's 'trader' lifestyle.



*Figure 7 : Joachim De Brum House, 1999: Room and furniture plan. Legend: 1 - Large Teak Table; 2 - Teak Arm Chairs; 3 - Small Teak Chairs; 4 - Small Teak Table; 5 - Roll Top desk; 6 - Open Fronted*

Teak Cabinet; 7 - Teak and Silk Divider; 8 - Glass Front Cupboard; 9 - Medical Chest; 10 - Storage Cupboard; 11 - Sea Chests; 12 - Bookcases



Figure 8 : Parlour; Joachim De Brum House, Likiep, RMI; facing east.

Other items include a carved teak elephant with ivory inlays and a roll top desk (Figure 9) with several other artifacts including a chronometer, microscope, and a clock work recording (one week) barometer. The walls are covered with framed pictures, both photographs and replica oil paintings. An ornate enameled cast iron lantern hangs in the centre of the parlor. It replaced a four-jet gas lamp that was fed from an acetylene gas generator designed and built by Joachim. The gas also fuelled lights on the verandas, one on each of the southern and northern sides and two on the western veranda. Although corroded, original gas pipes run from the southern veranda up to the loft and across the house before feeding into lines to the parlor and northern veranda.

Leonard De Brum (pers. comm. October 1999) advised this arrangement allowed his father to entertain the islanders with food and dancing, something he “loved to do” regularly. He would play selections from his library of cylinder records on his gramophone and almost everyone would dance and sing. Lee (1984, p. 16) reports that approximately five hundred cylinder recordings were retrieved and preserved – it is not clear whether these have been documented. Most of the records are wax cylinders and are badly deteriorated with heavy growths of mould. Others are made from bakelite and are reported to be in a generally excellent condition. Lee also notes that when

the wax cylinders became worn or damaged they were washed in kerosene and subsequently re-recorded on-site on Likiep. If this is correct, these locally recorded cylinders have enormous significance and may be among the first sound recordings made in Micronesia.

Joachim De Brum maintained a large library, which is the focus of separate study (Spennemann *et al.* in press). Pangelinan (1978) reported there were approximately 1,500 books stored on shelves in the house in 1977. In 1999, only 736 books that could be separated and catalogued individually were found in the bookcases. The identifiable items range from religious books (38.6%), technical and ship building items (16.1%), science (3%), medical (2.5%) and General / Travel books (12.5%) to books with historical & biographical themes (8.5%). Fiction and literature made up about one fifth of the identifiable quantity (18.7)%.



Figure 9 : Parlor - Roll Top Desk and other Items ; Joachim De Brum House, Likiep, RMI.

#### ASSOCIATED STRUCTURES

Associated buildings include: the remains of a separate dining room and kitchen with two small cisterns, a functioning well, a storage shed, larger twin cisterns and another even larger cistern, a small cemetery, and the remains of Joachim’s original photographic workshop. Joachim De Brum’s private sleeping quarters and dispensary were built southeast of the house but little now remains.

Ten meters northeast of the house are some remains of the foundations of a house built by

Joachim for his eldest son Raymond. Unlike several other houses on Likiep, it was built on short concrete piers made from a mix of cement and crushed coral that now show the effects of salt induced decay. It is reported to have accidentally burned down in the 1920s (pers. comm. Leonard De Brum, October 1999). Immediately behind these ruins to the west, and directly north of the northeastern corner of the main house are concrete foundations of Joachim's first photographic darkroom.



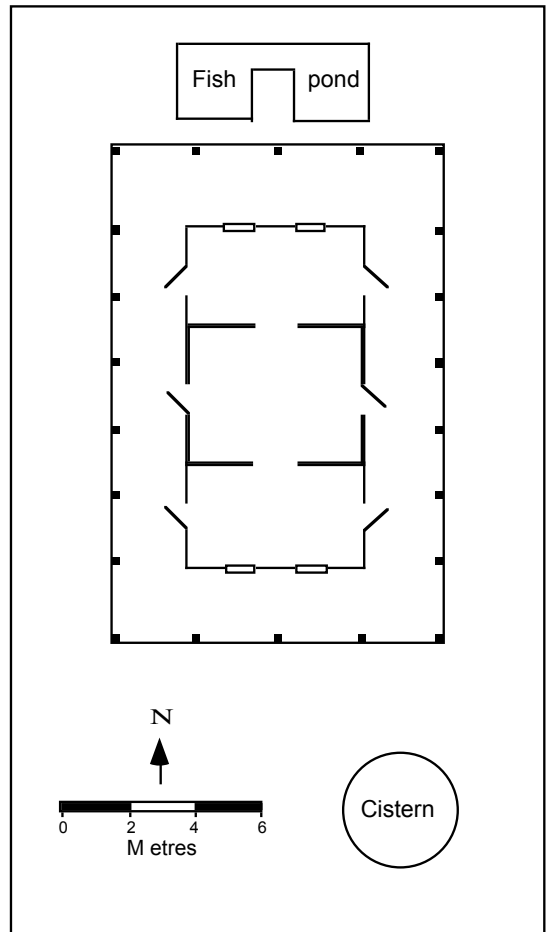
*Figure 10 : Likomju De Brum's House; Likiep, RMI; facing northeast*

Directly north of the northwestern corner of Joachim De Brum's house are two small in-ground circular cisterns now disused. A much larger concrete cistern is several meters further north again. Joachim built an office on top of this cistern with steps attached to the southern wall, the anchoring points for which remain visible. Another darkroom was built against the northern wall of the cistern using the natural cooling provided by the water filled cistern to preserve photographic chemicals.

The dining room and kitchen were constructed separately about 14 meters southeast of the main house. The building was originally elevated on short concrete piers. Later this elevated floor was replaced by a concrete floor poured over a core of sand. Two small cisterns were installed, one on the eastern and the other on the western sides of the kitchen. Between the kitchen on the right or southern end and the dining room on the left or northern end, a breezeway ran parallel to the prevailing winds for maximum cooling effect. The dining area

was itself cooled by the unrestricted flow of air through open slatted walls. A storage shed with large double doors at both the northern and southern ends but no windows, is situated several meters directly south of the main house.

Approximately 85 meters north of the main house, Joachim built a house for Likomju De Brum in 1907 (U. S. National Park Service, 1984). Using the same highly functional concept of three rooms with a wide veranda on all four sides, Likomju's house differed from the main house by being built on a poured concrete slab rather than on piers (figures 10 & 11). Again, the roof consisted of corrugated iron and the balusters carried a simple geometric design. When surveyed, this property was found to be in a very much poorer condition than was Joachim De Brum's house.



*Figure 11 : Likomju De Brum's House; Likiep, RMI; Floor plan*



Outbuildings associated with this house including kitchen, dining room, a well and a bathroom, remain.

The buildings and their contents were and continue to be subject to tropical decay and are suffering from deterioration. A conservation study and repair was carried out in 1977 (Jelks & Jelks 1978), followed by a second project in 1984 (Roberts 1984). A recent assessment showed that environmental decay has continued and that further mitigation will be required (O'Neill & Spennemann 2000).

### SIGNIFICANCE

As the only surviving house of its kind in the Marshall Islands, the Joachim deBrum house is clearly of a national significance to the Republic of the Marshall Islands. During Trust Territory times it was nominated for inclusion on the US National Register of Historic Places because of its significance for the entire TTPI (listed 1 February 1977).

However, because of its historical associations, the house also has far wider significance that encompasses the Pacific and Europe. The entire Likiep Village Historic site including all of its associated material (hoses, paths, library, photographs, diaries, records, business archives, tools etc) is a unique collection of highly significant historical property. It is representative of a dynamic Marshallese culture during a period of rapid change and is also remarkably intact miniature of Micronesian and Pacific history. With its associated buildings and remains, it gives a strong sense of the thriving economic unit Likiep has become by the early 20<sup>th</sup> century and exemplifies the processes by which European entrepreneurs and colonial administrations deliberately or accidentally influenced Pacific cultures. Consequently, its significance does not consist only of local and national elements, but international as well.

Notwithstanding its international significance however, the cultural resources remaining are principally Marshallese in character and are highly valued as local and national Marshallese heritage. The RMI Government is committed to developing the nation's infrastructure as rapidly as possible and so fulfil the

electorate's expectations. It also recognizes 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.

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Jon O'Neill has an Applied Science Degree in Parks, Recreation and Heritage with First Class Honours. He has conducted research in several Micronesian political entities including Guam, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia and the Republic of the Marshall Islands. He is a doctoral student at Charles Sturt University where he is presently researching heritage issues in Micronesia. Particular attention is being given to: changes in preservation management that may have occurred following self-government, evolving Micronesian perceptions of heritage values and the extent to which indigenous decision-makers have been empowered.

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Dirk HR Spennemann is Associate Professor in Cultural Heritage Management at Charles Sturt University, Albury, Australia. His main research interests are German colonial heritage in Oceania, in particular Micronesia, and historic preservation issues in Micronesia in general. His second focus re threats to heritage posed by natural and human hazards and threats posed by managers in their efforts to counter these hazards. Ethical Heritage Planning and Policy are the cornerstones that need to be understood and addressed if our past is to have a meaningful future.

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