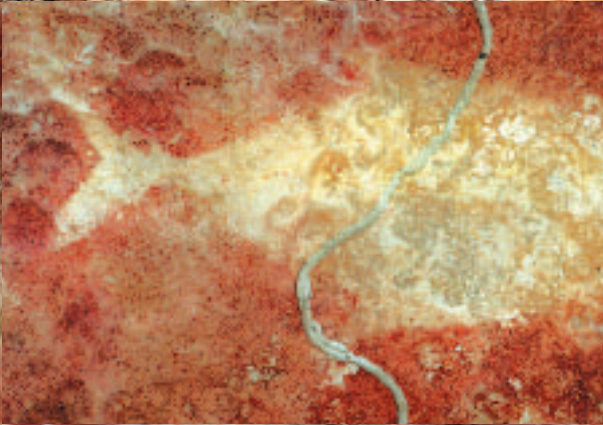
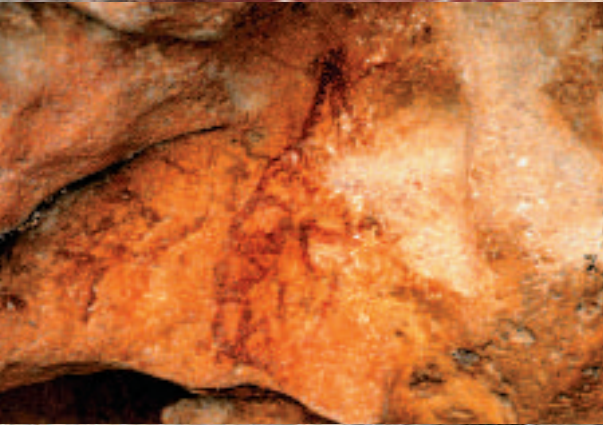
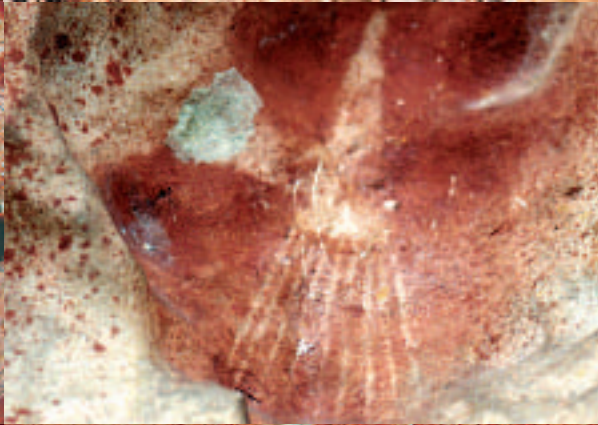
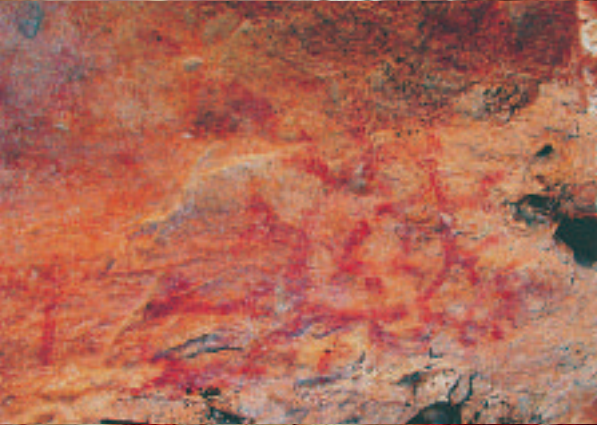
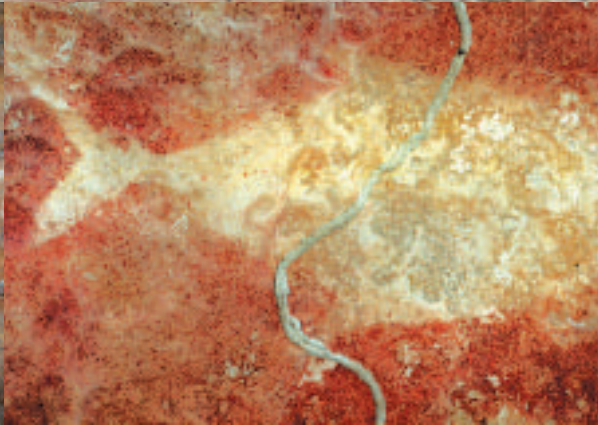
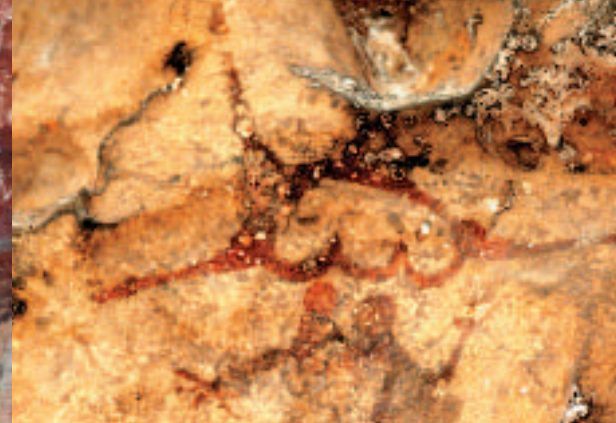


# Rock Art in West Papua

Karina Arifin  
Philippe Delanghe











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**Karina Arifin:**

**For my parents Winarsih and Chalid Arifin**

**Philippe Delanghe:**

**In memory of Professor Dr Jacques A. E. Nenquin  
and for my beloved son Alexei Delanghe**



# About the Authors



**Karina Arifin**

Karina Arifin was born in Jakarta on 8 December 1959. She obtained her first degree in archaeology at the University of Indonesia, Jakarta. After completing her Masters Degree at the Australian National University (ANU), Canberra, she became involved in the 'Kayan Mentarang Culture and Conservation Project' under the auspices of the WWF in East Kalimantan. Her passion for Kalimantan prehistory led her to undertake further research at the upper Birang River of the Berau District in East Kalimantan. Currently, she is finishing her Ph.D. thesis at the School of Archaeology and Anthropology at ANU with Professor Dr P. Bellwood.

Karina's interest in rock art started at ANU where she attended the courses on rock art of Dr Andree Rosenfeld in 1988. After attending the First Australian Rock Art Association (AURA) Conference in 1988 in Darwin, she was confronted for the first time with the richness of Australian rock art in Arnhem Land, followed by visits to other sites such as those in Laura, Carnavon Gorge and the Sydney Region. The UNESCO initiative to survey the rock art sites in West Papua gave her a great opportunity to explore rock art sites in her own country. Karina is lecturing at the Department of Archaeology at the University of Indonesia where, amongst other courses, she teaches rock art.



**Philippe Delanghe**

Philippe Delanghe was born on 26 December 1965 in Louvain, Belgium. During and after completing his Masters Degrees in Prehistory, Archaeology and Anthropology, Philippe assisted in periodic archaeological excavations at Pessinus, Turkey, with an excavation team from Ghent University, Belgium (1989–92). After a short period at Ghent University, Philippe joined the UNESCO Office in Jakarta as an Associate Expert for Culture early in 1994, concentrating his work on tangible and intangible heritage conservation.

With a specific interest in prehistory and rock art, he started surveying rock art sites in the region from 1995 until today. In 1998 he organized in collaboration with the Australian Heritage Commission the first 'UNESCO Training Course for Rock Art Conservation for South-East Asia and the Pacific' during which a Regional Network for Rock Art Conservation was established.

Since 1998, Philippe has been Programme Specialist for Culture at the UNESCO Office in Jakarta and works and lives with his family in Jakarta, Indonesia.

# Preface

It was just over one hundred years ago that Émile Cartailhac, the famous and influential French archaeologist, overcame his doubts and finally recognized the authenticity of prehistoric rock art in France and Spain. The publication of his landmark article 'Mea culpa d'un Sceptique' in 1902 was a decisive turning-point for rock art research. Widespread scepticism suddenly turned into acceptance and positive interest, and a new discipline within archaeology was born. Following the early discoveries of Altamira (Spain) and Lascaux (France) in Europe, the discipline quickly reached other continents such as the Americas (North and South), Africa, Asia and Australia.

UNESCO's specific interest in rock art started just twenty years ago when, through the launch of the World Archive of Rock Art (WARA) project in 1983–4, it urged experts to compile research data on a worldwide scale. This enormous task sought to bring together important documentation on rock art from over 160 countries. The WARA project is ongoing and continues to receive close attention and support from UNESCO.

Another significant development, beginning in 1981, was the inscription of rock art sites from around the world on UNESCO's World Heritage List. The first two sites which received this honour were the Kakadu National Park in Australia and the Archaeological Park and Ruins of Quirigua in Guatemala. Recent nominations include the uKhahlamba/Drakensberg Park in South Africa (2000), Tsodilo in Botswana (2001) and the Rock Shelters of Bhimbetka, India (2003).

Through this publication, UNESCO has the opportunity to increase knowledge and awareness of the rock art sites in the virtually unknown and very remote territories of West

Papua (Indonesia) and Timor Leste, UNESCO's newest Member State. Not only has their remoteness sustained our ignorance; in addition, difficulties of terrain and territorial sensitivities have kept them from the scientific community as well as the larger public. UNESCO is therefore grateful to the Indonesian and Timor Leste Governments for their collaboration and contribution, which were indispensable in bringing this research to fruition.

The scientific importance of the subject may be illustrated through what it reveals about the distribution of rock art and migration patterns in the South-East Asia region, the Island of Papua New Guinea and Australia from the last Ice Age to the present.

Equally important, UNESCO invites, through this work, the world community, to pay greater attention to two of the poorer parts of the South-East Asia-Pacific region. The general need for development is obvious. But development should address the needs of local communities, which are often a forgotten factor. In West Papua and Timor Leste, where people survive mainly on fishing and slash-and-burn agriculture, the rock art sites could become a factor contributing to their daily subsistence. Education, awareness-raising and capacity-building are certainly needed as a foundation for a balanced process of community development, involving local communities in the preservation and conservation of the sites and an adapted form of tourism development. The involvement of local communities in the preservation and conservation of their inherited past would also contribute to the survival of our common heritage.

While history and geopolitical developments have tended to separate Timor Leste and West Papua into two distinct entities, a primary aim of this work has been to bridge that divide by focusing on the links and similarities of the rock art to be found in these localities. What follows is an account of an exciting discovery that offers clues to meaning and significance of the prehistoric art and intangible cultural heritage retained in the region to this day.

**Koïchiro Matsuura**  
Director General of UNESCO

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# Foreword

The publication of *Rock Art in West Papua*, with its exhaustive visual presentation of rock 'art' expressions, is an important contribution that significantly increases our knowledge of the field. Its coverage of the whole West Papua region in Indonesia complements other publications on rock art that have focused mostly on other areas of the world. For this we are grateful to the two authors of this book, who have taken pains to visit and document all the rock art sites, many of which are found in out-of-the-way and inaccessible locations. They present a general overview which takes an essentially archaeological approach whilst also employing occasional anthropological perspectives; an approach that could also be an inspiration for a specifically anthropological study on the West Papuan communities.

This book also gives glimpses of rock art located on different islands around the Sea of Arafura. Interrelatedness can be surmised among the rock arts of, for example, Papua, Timor, Flores, Kei and Muna, indicating the role played by the sea – in this case the Arafura – as a mediating, possibly also unifying, factor for the many related ethnic groups. It can thus be interpreted, or conjectured, that the rock art expressions found today on the rocks in all these places are in a way the imprints of past inter-ethnic communications.

It is also a challenge in itself to inquire about the continuity or discontinuities of the use of those cultural expressions on rock. Have there been changes of dwellers around the rock art sites? Were there changes of function? The existence of superimposed figures, or lines, on the rock art paintings indicates the history of the site, which may imply a change of function or a change of users. These open problems are revisited throughout the book.

The present practical problem is one of conserving rock art sites. Conservation methods so far applied still need to undergo a thorough and careful study of security considerations, while any scheme also needs to study the effect of deterioration agents. The vastness of location demonstrated in this book gives conservation authorities a clearer idea for the design of any working plan. One vital conservation issue that must be considered as a part of any scheme is the fact that some rock art sites are still used by the communities around them as sacred sites.

This book, being a reliable catalogue of the many 'styles' of rock art in West Papua, may also serve as an essential data resource for a comparative study on rock art. Geographical spread could be seen in correlation with stylistic classes, which could also be sought for their correspondence with racial or ethnic affinities. An integrated comparative study, moreover, could in the future be ventured, incorporating studies of pottery, megalithic monuments, language, traditional architecture, weaving patterns, and so on. May this book on rock art be a good inspiration for other, further studies!

**Edi Sedyawati**

1. Among others, the publication of Michel Lorblanchet (Editor), *Rock Art in the Old World; Papers presented in Symposium A of the AURA Congress, Darwin (Australia) 1988*, published by The Indira Gandhi National Centre for The Arts, New Delhi, 1992. This book contains papers on rock art in Africa, Asia (mainland) and Europe, with no presentation on Indonesia.



# Foreword

One hot day in August 2000, after several strenuous but exhilarating weeks spent looking at Aboriginal rock art sites in the Kimberley and Arnhem Land, I bathed in the Sea of Arafura. Tens of thousands of years ago this sea was a vast plain that extended to and included West Papua. I found myself thinking of the pioneers that peopled Australia between 50,000 and 60,000 years ago – who gradually spread from south-east Asia through the whole of Indonesia, crossing deep and wide bodies of water on makeshift rafts or small boats.

Several caves with fantastic rock art – mostly hand stencils, many of which were decorated inside with geometric motifs – had lately been found by a French team (Jean-Michel Chazine and Luc-Henri Fage) in the deep jungles of the West Papuan island of Kalimantan. Some of this art was strongly reminiscent of the Australian rock art I had spent the last few weeks examining. The geographic location of Papua made it a certainty that there was far more rock art to find. There had been some fairly old publications on the subject, but I knew next to nothing about it.

This is why I was so pleased when Philippe Delanghe got in touch to tell me about the work he and Karina Arifin were undertaking. Together, they have written a groundbreaking book on one of the least-known regions of the world concerning rock art – in spite of its crucial strategic importance. To carry out the fieldwork great practical difficulties had to be overcome, as one can easily imagine. The precise descriptions and the excellent, colour

photographs now provide a wealth of information that will be extremely helpful to both interested people and specialists.

Occasionally one comes across images or comments that strike a chord. For example, the stencilled boomerangs are closely linked to those in Australia. Rightfully, the authors widely quote one of the best Australian researchers on rock art, George Chaloupka, who has worked extensively on Arnhem Land and more generally on northern Australia.

As to the lizards (and crocodiles), which in the Berau region carry connotations of wisdom and strength, one cannot help thinking of the important supernatural role assigned to lizards by many Indian tribes in the American South-West. At times, some images of lizards exhibit an identification with humans. Composite creatures, that is, animals with human characteristics (or the reverse), are to be found in many bodies of rock art all over the world. They testify to the age-old beliefs held among traditional societies that the boundaries between the human world and the animal world are not as strict as we understand them today in our materialistic Western society.

The forms of beliefs change naturally from one traditional society to another. Sacred stories are not identical: gods and spirits have different names and functions, while some animals will be sacred or powerful in one type of society and others elsewhere. Rock art testifies to all this as well as to the way of life of a given society at a given time. No two bodies of art in different parts of the world can be exactly the same.

Convergences do happen, however, and fall under two types. The first type of convergence occurs when one motif or series of motifs or conventions and/or techniques are found in distinct areas that may previously have had contact in times long past. This is what must have happened between West Papua and northern Australia in Palaeolithic times when the sea level was much lower than it is today. The second type of convergence happens as a result of similarities which have their roots in commonalities in thinking; in considering the world and dealing with what is visible or invisible in it. A belief in composite creatures is one such universal paradigm. There are others, such as the representation of hands through stencilling, sometimes with all fingers described, sometimes with incomplete fingers.

Rock art thus testifies to the unity of the human species as well as to its diversity. It is the oldest surviving form of art, although today it is fast disappearing. This is one of the great, largely unheeded tragedies of our modern age. Let us hope that the advice given by the authors – that the art be protected so it may be studied in depth – is heeded in the years to come, as the rock art of West Papua undoubtedly constitutes a rich, profound and precious heritage for the whole of humankind.

**Dr. Jean Clottes**

Conservateur Général du Patrimoine  
French Ministry of Culture  
Former President of the International  
Committee on Rock Art (ICOMOS)



# Introduction

## A Worldwide Phenomenon

The public generally knows rock art from extraordinary and famous prehistoric sites in Europe and more particularly in France and Spain. The famous caves of Lascaux, Chauvet and Cosquer in France and Altamira in Spain are amongst the grandest of them all. Many of these late Palaeolithic arts dating back to 30,000 BC are often executed in a very sophisticated manner with advanced techniques still in use today, such as polychrome painting.

In the nineteenth century – the era of the first upper Palaeolithic rock art discoveries – and the early twentieth century, a forceful debate occurred about the antiquity of this art. Most people, including scientists, still believed in the creationist principle and refused to accept evolution. This concept changed with Darwin's publication *On the Origin of Species* in 1859. Although there was a lot of animosity towards his theories, they opened the door for thinking in terms of our ancestors.

It took roughly another fifty years before the scientific community accepted that rock art could actually be related to these ancestors living in the upper Palaeolithic age. In 1879, de Sautuola discovered the rock art site of Altamira in Spain, and published his *Brief Notes on Some Prehistoric Objects from the Province of Santander* (Lewis-Williams, 2002, p. 31).

De Sautuola was not to enjoy success of the kind that Darwin garnered with *On the Origin of Species*. On the contrary, the implacable and virulent scepticism that he encountered is today considered one of the great scandals of the study of upper Palaeolithic art. The elaborately executed art on the ceiling in the Altamira cave did not fit current notions of Palaeolithic



Map 1. Rock Art in Indonesia

'savagery'; it was too 'advanced' for the period. Members of the archaeological establishment were therefore quick to denounce Altamira as a fraud.

(Lewis-Williams, 2002, p. 31)

It was only in 1902, when Émile Cartailhac, a leading French archaeologist and prehistorian, published his paper, entitled 'Mea Culpa d'un Sceptique', that things changed. Meanwhile, the idea of upper Palaeolithic art was generally accepted. It is, however, the *raison d'être*, the reason for its existence, that launched a major debate. That debate will be integrated only very briefly into this book in view of the book's different purpose, namely to make known to the scientific world and larger public an almost undiscovered part of rock art in the Asia-Pacific region.

Rock art in Europe consists, besides paintings, of engravings as well as low-relief sculptures (Pfeiffer, 1982, p. 5). It depicts various animals such as horses, bison, deer, ibex, mammoth, bear, and large feline creatures. Other animals are also depicted, but to a lesser extent, such as fish, reptiles, birds and insects. Human representations, or parts of them, can be found in figures

of the head, the hands (stencils or prints), the vulva and so on, but are exceptions. There are also many human-like representations that cannot be identified positively as human, but rather appear to be a combination between human and animal figures, called 'therianthropes'. In Europe most of the animal representations were drawn in greater detail and executed more beautifully than the human figures. Only few human figures can match the finest animal images in detail and beauty (Bahn and Vertut, 1988, p. 136). Non-figurative images are also abundant and represented by various lines, dots, spirals and geometric designs, which often cannot be interpreted.

Previously it was believed that this late Palaeolithic art was known only in Europe. The discoveries of rock art in various places around the world, including North and South America, Africa, Asia and Australia, has however shown that the presence of rock art encompasses different cultures and environments, each region characterized by its own uniqueness.

Rock art in South Africa, for example, differs from its European counterpart. Most of the rock art in Europe is found in caves, often hidden deep in the eternal darkness and reached only through very narrow passages. In South

Africa rock art is found in open rock shelters and most of the paintings are smaller than in Europe, often a few centimetres long, but executed in great detail (Lewis-Williams, 1983, p. 11). Moreover, South African rock art shows many narrative scenes, such as dancing, fighting, hunting or the performing of ritual activities, while European rock art is more passive (Lewis-Williams, 1983, p. 11).

In Kakadu, in the Australian Northern Territory, the rock art consists of a complex body of styles that can be dated back to more than 30,000 years ago. It is represented by different styles and objects, such as various imprint objects, large naturalistic animals (including those now extinct) and humans (Chaloupka, 1984). The latest style of paintings is the most complex, consisting of X-ray paintings of humans, animals and even inanimate objects, with internal organs and other structures shown within their external features (Chaloupka, 1984, p. vii). This style was still executed by the Aborigines in the 1960s and is often associated with mythology.

Interestingly enough, although each region has its own characteristics, there are striking similarities in representation of certain figures all over the world. The most common one is the hand stencil.

## Rock Art in Indonesia

The importance of Indonesia's rock art has been seriously underestimated and overlooked, especially as it occupies a crucial position on the crossroads between South-East Asia and the Pacific. The rock art research conducted in this region is expected to reveal underlying cultural exchanges, patterns and similarities between people living in this vast part of the world.

Sites are mostly found in the Eastern Indonesian Archipelago, in the islands of Sulawesi, Muna, Buru, Ceram, Flores, Lomblen, Timor, Kai, West Papua, and recently Kalimantan. Most of the publications on rock art in this region only contain descriptions of the sites, some exceptions aside.

So far rock art in Sulawesi has been mainly reported in the southern part of the island, although hand stencils



Plate 1. Two pigs and a boat (?) at Sumpang Bitu Cave, Pangkep, South Sulawesi

Plate 2. An anoa (*bulabus depressicornis*), a miniature water buffalo, which lives only in Sulawesi, is depicted with hand stencils at the site of Sumpang Bitu Pangkep, South Sulawesi



**Plate 3. Collage of pig and hand stencils at Sumpang Bitu Pankep, South Sulawesi**

**Plate 4. Two dark red paintings of pigs at Sumpang Bitu Pangkep, South Sulawesi**



from Tomini Bay, Central Sulawesi were reported by Norman Edwin in 1982 (pers. comm.). Van Heekeren reported the first rock art discovered in South Sulawesi. It was found at Leang PattaE, Leang Burung and Leang JarriE at Maros in 1950 (Heekeren, 1957, 1958). The paintings are mainly red hand stencils.

In the 1970s and 1980s many more sites were discovered and recorded by the branch of the Archaeological Office of South Sulawesi as well as by students from the archaeological section of Fakultas Sastra Universitas Hasanuddin (Faculty of Letters, University of Hasanuddin). A new rock art complex was found north of Maros in the Kabupaten Pangkep and has been documented since 1987 by students and staff from the Archaeological Section, Fakultas Sastra Universitas Hasanuddin as well as the National Archaeological Research Centre (Sumantri, 1996, pp. 48–9), (Plates 1–4).

Most of them are unpublished, including the S1 theses by M. Ramli (1987) who wrote about the rock art of Gua Sakapao, A. A. Nasution (1994) who identified animal paintings from Gua Sakapao, and Mursida (1994) who identified human motifs from Sapiria (Sumantri, 1996, pp. 48–9, 80–1), and S2 theses by I. Sumantri (1996) on settlement patterns in prehistoric caves of the Biraeng Pangkep area, B. Suprpta (1996) who studied the meaning of rock art in Mesolithic life from the Pangkep region, E. A. Kosasih (1995) who wrote about the rock art in South Sulawesi as a reflection of life in society, as well as a series of unpublished reports by the National Archaeological Research Centre (from 1985 to 1995).<sup>1</sup>

The difficulties in obtaining these data and the obvious language barriers help to explain why these areas have been completely ignored by Western scholars when discussing the rock art of this region.

Harun Kadir (1985) mentioned only briefly what has been depicted in nine sites in Pangkep, including hand stencils, babi rusa, turtles, fish, humans (depicted marching, running or holding something in one of their hands).

Most of these paintings were executed in red ochre, with some in black pigment. Further short notes on some of the rock art from Pangkep can be found in a series of papers written by E. A. Kosasih, who mentions that rock art in Pangkep is more varied than in Maros (1986, 1989, 1995). The theses and unpublished reports provide more detailed information; however this is difficult for an outsider to access. It is most likely that many more sites could be found in the region.

Muna Island, which is located south of the south-east leg of Sulawesi Island, contains a different style of rock art from South Sulawesi (Plates 5–6). The art was found in seven caves and two rock shelters, reported mainly by Kosasih (1978, 1982, 1984, 1995). They are made entirely in a brown colour, executed in a simple manner and with stiff representations, but often showing narrative panels. The motifs include humans busy with various activities

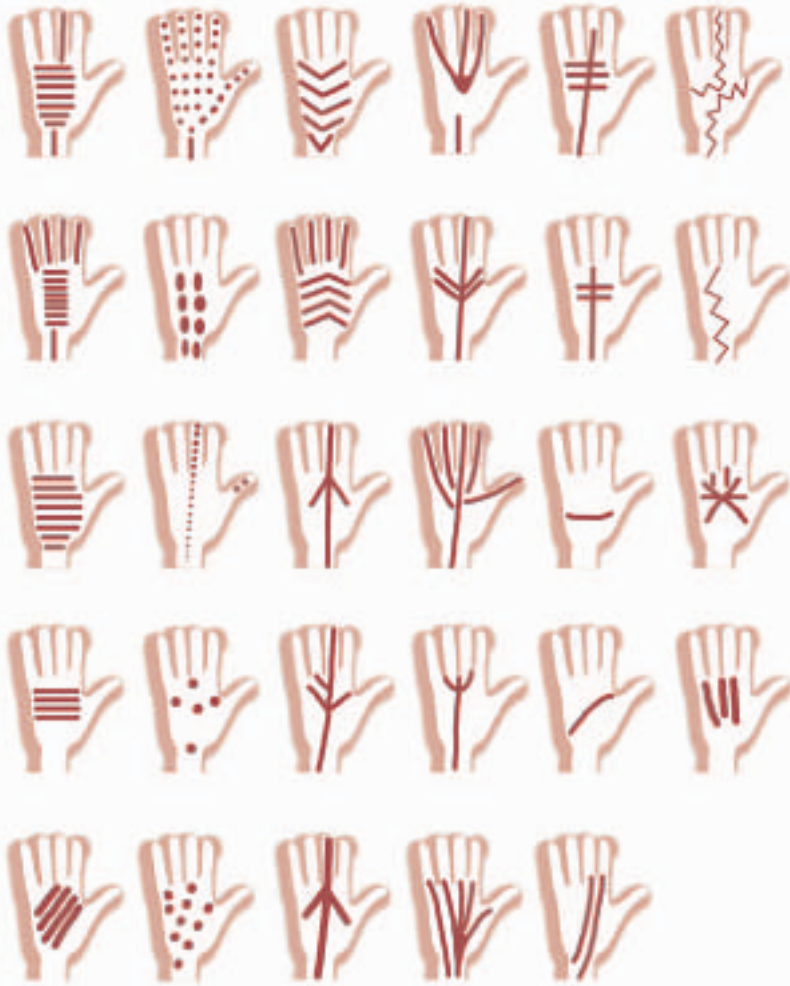


**Plate 5. Human figure at Muna Island. Photo by E. A. Kosasih. (National Archaeological Service)**

**Plate 6. A human figure with dress, holding weapons (?) at Muna Island. Photo by E. A. Kosasih. (National Archaeological Service)**

1. S1 is Bachelor Degree and S2 is Masters Degree.





**Figure 1. Hand stencils containing different types of 'symbols' from East Kalimantan. Figure after Kalimanthrope, 2001. After Jean M. Chazine, 2001**

(running, fighting, dancing, riding or leading a horse), a selection of animals (horse, deer, pig, dog, chicken, snake, monitor lizard), some being speared (deer), vegetables and fruits such as corn and coconut trees, boats, and geometric patterns such as the sun and abstract motifs.

Rock art discoveries in the Nusa Tenggara region (Lesser Sunda) are rather limited. In Flores, rock art was found on a number of boulders on a small plateau near Nua Mbako village in central Flores.

However, only the engravings on a large boulder called Watu Weti (pictured rock) have been published

(Verhoeven, 1956). They represent a boat, fish, bronze axe, dagger, and human figure. Verhoeven also reported some rock paintings of simple lines on a wall at Liang Mbikong and at two other sites (Verhoeven, 1963).

From the small Island of Lomblen, east of Flores, rock art was reported at Lemagute village, Kecamatan Ile Ape. It consists of a red human figure and a white boat on two andesine boulders about 100 m from the coast (Sumiati, 1984).

So far Timor Leste is the only island in Nusa Tenggara with numerous rock art sites. In the 1960s, Almeida and Cinatti described four rock art sites in Timor Leste: Tutuala, Lene Hara, Ili Kere Kere and Sunu Taraleu at the end of the Portuguese colonial period (Almeida, 1967; Cinatti, 1963). Only two sites with paintings, Lie Kere and Lie Siri, were described by Glover (1986). Apart from some brief research carried out by the Indonesian Government in the late 1980s and early 1990s – material that was never published – new discoveries were made only in 2000, 2001 and 2002. Almost simultaneously teams from the ETAP (East Timor Archaeological Project, Australia) and UNESCO (United Nations Educational, Scientific and Cultural Organization) Jakarta office, started surveying the region for sites. As a result nine additional sites, Lie Baai, Lie Kere 2, Verulu, Lene Cecé, Lene Kichi 1,2,4,5,6, were reported by Sue O' Connor, a team member of ETAP (O' Connor, 2003). The UNESCO team recorded and reported to its headquarters Lene Kichi 1 and 2 in 2001, overlapping with the discoveries of ETAP, and two additional sites outside the ETAP discoveries, Ili Kere Kere Chaialoro and Hi O, were reported in 2002. Only the latter four and the sites already described by Cinnati and Almeida are described in detail in this book. The reason is that the results of the ETAP discoveries only reached us days before the first draft of this script had to be sent to UNESCO headquarters in Paris. These discoveries bring the total number of sites known in Timor Leste to seventeen, and indicate that there are more to find.

The Moluccas probably contain more rock art sites than have been recorded. Only the rock art at Ceram has been reported, while the presence of rock art at Buru Island (Matgugul Kakun) has been mentioned briefly in

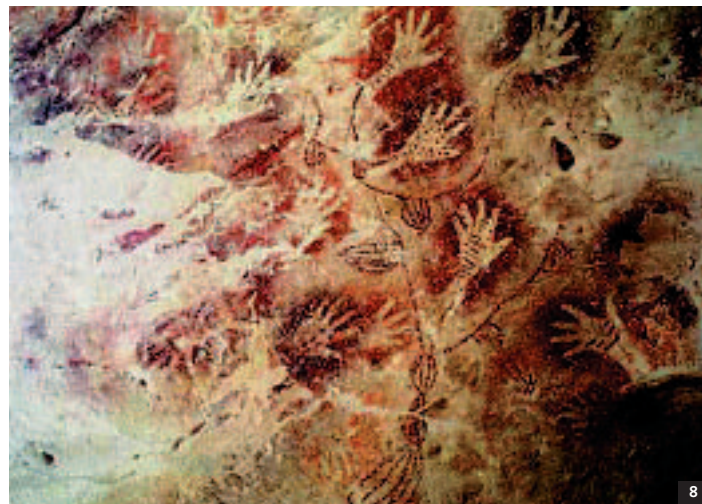


**Plate 7.** A panel dominated by dark red and orange hand stencils. A black deer can be spotted in the upper left-hand corner, at Gua Tewet, East Kalimantan. Photo by Kalimanthrope, 2001.

Ballard's list of rock art sites in Eastern Indonesia (Ballard, 1992, p. 100).

Röder described in detail the rock engravings found at Wai Tala and Wai Lau Kecil Rivers, and also mentioned briefly the rock engravings from the confluence of Wai Oti and Wai Tala in Ceram (Röder, 1938*a*). He also recorded rock paintings at five locations near Rumasokat village, in Seleman Bay. The rock engravings consisted mainly of various geometric figures, humans and boats, while all of the rock paintings were executed in red and showed cassowary birds, beachcombers, lizards, humans, hand stencils, and various geometric figures such as dots and circles.

At the Kai Islands, rock paintings were found in Kai Kecil, on a limestone cliff near Dudumahan village, on the north coast of Nuhu Rowa Island. Ballard made a detailed description, although a number of reports from the



**Plate 8.** A panel of hand stencils with different markings on the palms at Gua Tewet, East Kalimantan. Photo by Kalimanthrope, 2001.



**Plate 9. A unique composition of two opposite hand stencils separated by an anthropomorphic figure. At Gua Tewet, East Kalimantan. Photo by Kalimanthrope, 2001.**

nineteenth century already briefly mentioned the existence of this rock art (Ballard, 1988).

The paintings are mainly made in red ochre; a few are in yellow and one in black. Large parts of the paintings are non-figurative designs, and the figurative designs include anthropomorphic figures (both complete human or only face or mask), hand stencils, boats, various artefacts such as spears, bows, daggers, axes, and probably shields, fishing nets, and fish.

Most rock art sites reported in Indonesia are concentrated in West Papua. Western traders have reported the existence of rock art in West Papua since the seventeenth century. However, the more detailed reports

were mostly made during the 1930s to 1960s. Descriptions of rock art in this particular region will be discussed further in Chapter 2.

Until 1992, when a French team discovered rock art in Kalimantan, Sulawesi was known as the western boundary for the existence of the rock art sites in the region. Rock art, however, had been recorded and material concerning it published on the other side of the border, namely in the provinces of Sarawak and Sabah, belonging to Malaysia.

In Central Kalimantan, Chazine recorded rock art at Liang Kaung (Kapuas Hulu), (Chazine, 1993a; 1993b; 1994). The motifs represented include various anthropomorphic figures, lizards, deer, fish, and geometric

figures such as circles. Rock art in West Kalimantan was also discovered by the National Archaeological Research Centre at Batu Cap (Ketapang) in 1993, and further research was conducted by the Archaeological Department of Bandung (Yondri, 1996; Prasetyo, 1997).

The rock paintings were made of red ochre and white pigment and represented hand stencils, humans, animals (fish bones, centipede and snake), boats and geometric designs (circles, concentric circles, sometimes with rays, spirals and horizontal, vertical or oblique lines). The team also recorded other rock art sites (Gua Tengkeyu, Batu Bakil and Batu Kadok) at Sungai Sungkung village (Sambas), near the border with Sarawak. These sites contain representations of swords, arrowheads, spears, shields, birds, four-legged animals and humans.

Since 1993, Chazine and his team have recorded about twenty rock art caves in the limestone formation of Sangkulirang, Kabupaten Kutai and East Kalimantan. Most of the paintings depicted are hand stencils, some of them quite unique in composition (Figure 1; Plates 7–9). Other paintings represent deer, wild boar, lizards and human figures (Chazine et al., 2001).

The Archaeological Department at Banjarmasin accompanied by the National Archaeological Research Centre found Mardua III Cave during their survey in the Sangkulirang area in 1995 (Kosasih and Prasetyo, 1995/6). On the wall of this rock shelter, various hand stencils, spiders, reptiles and trees were painted in red ochre (Kosasih and Prasetyo, 1995/6; Prasetyo, 1997, p. 46).

The late discovery of rock art sites in Kalimantan is mostly because of the harsh condition of the island and the fact that most of the limestone formations where rock art sites are situated are extremely isolated and difficult to reach.

Today, however, West Papua is still known as the richest place for rock art in Indonesia. We fully realize that on the other side of the political border a lot of rock art is present and a lot of research has been conducted and implemented. We believe, however, that within our regional approach, and the quasi non-existence of documentation on West Papua, it was more appropriate to fill in the blanks existing in the region.

## Indonesian Rock Art in a Western Pacific Context

The concentration of rock art sites in Eastern Indonesia has led Specht and Ballard to include them as part of the Western Pacific tradition. They claimed that the Eastern Indonesian rock art sites are a distinct group in the Western Pacific region (Specht, 1979; Ballard, 1992).

Specht (1979), in his review of the rock art of the Western Pacific, listed 383 sites recorded by Europeans since 1858 in the area from Ceram in the west to Samoa in the east. In his review, Specht included engraved as well as painted rock art sites in coastal and highland regions. Specht (1979) knew of eighty-four sites in Indonesia, east of Sulawesi (Ceram, Kei Islands as well as West Papua). Specht was trying to propose a new approach in studying rock art with its context and not the symbolism of the art as its prime concern. He explained that ‘the rock art sites should be regarded as areas of past human activity and not simply as congregations of symbols’ (Specht, 1979, p. 60). Since the interpretation of the meaning or value of a symbol can only be conducted through an informant who is closely associated with its origin or use, it is more objective to study the purpose of the rock art. Therefore, Specht pointed out that ‘if rock art had a purpose, it should be our aim to define that purpose, however vaguely this might be achieved’ (op. cit., p. 61). He suggested that examining the rock art should be in terms of what, how, where and when.

Specht saw that there is a striking difference in technique distribution between the western and eastern sections of the region. The western section is dominated by painted sites in caves, rock shelters or cliffs, while the eastern part is dominated by engraved open sites on boulders (op. cit., p. 63). The painted sites are dominated by the colour red. He also mentioned that the painted sites are concentrated in valleys or hill slopes as well as on beaches and sea cliffs, while the engraved sites tend to occupy spaces close to river courses and the sea (op. cit., p. 69). He added that very few rock art sites are located within current habitation areas (op. cit., p. 70). Specht pointed out that information on site location including



the extent of the site, accessibility, economic value and altitude could indicate how studies of rock art sites might proceed (op. cit., p. 72). Certain patterns that might become apparent from these studies could lead to the understanding of what factors were involved in selecting the sites, and therefore could narrow the range for functional interpretation (ibid.).

Most of the rock art research is concentrated only on the description of sites, and very few analyses have been made of the regional distribution, especially concerning the different styles. Specht mentioned that in some areas regional rock art styles seem to exist. He pointed out that there are a number of engraved sites in the eastern section of the region showing similarities in designs, as well as being all situated on boulders or open rock faces, near water courses or the sea, and located in areas where Austronesian languages are spoken today (Specht, 1979, p. 74). These sites can be regarded as having the same rock art styles. Most of the other engraved sites, as well as painted sites, could not be grouped into such large region-wide styles. Instead they might be grouped more locally, such as each of the styles identified by Röder in the Berau Gulf region (ibid.).

Specht added that large region-wide styles may occur in this region, especially when identification of such styles is achieved by comparing them with archaeological artefacts, which show similar designs to the rock art, for example pottery (Lapita) or bronze (Dongson) decoration.

More than a decade after Specht's publication, Ballard (1992) investigated the relationship between rock art, topography and language groups in Western Melanesia (from Timor in the west to Bougainville Island in the east) and included 187 sites in his study. His research was a preliminary attempt to understand the role of rock art in Western Melanesian prehistory. Of Ballard's 187 sites, 78 were located in Indonesia, mainly in West Papua.

Ballard's study was limited to painted rock art sites in coastal and lowland inland areas. Based on the study, it is obvious that a large number of sites on mainland New Guinea, Eastern Indonesia and the Bismarck Archipelago are located on the coastline, while only a few are situated in the interior lowland (and highland) areas (Ballard, 1992,

p. 95). Further, he concluded that painted sites on the coastal areas prefer cliff topography, while most inland sites are in caves or on boulders (op. cit., p. 96). The most interesting aspect in Ballard's analysis is the correlation of painted site locations with the current distribution of Austronesian-speaking (AN) people. He pointed out that sites within AN-speaking areas are almost all situated on or close to the coast, with only 9 per cent of the AN sites located 10 or more km inland (op. cit., p. 97). Such a phenomenon is very obvious in West Papua. Ballard also states that in Eastern Indonesia, including Timor Leste, the non-Austronesian (NAN) sites comprised five of the six sites in Timor Leste and three in West Papua (Lake Kamaka, Wonggosten and van Rees Mountains), (ibid.).<sup>2</sup>

The association of the coastal painted sites with AN-speaking people could lead to speculation about the antiquity of the art. Most of the local inhabitants claim they do not know about the art, or that their ancestors were responsible for it. Only in very few places, such as Boieng, New Ireland and Berau Gulf, where rock art was still being executed – at least at the time they were recorded – local traditions were still associated with the art, as Ballard explained:

Assuming that the roughly parallel distributions of much of the painted art and of AN settlement are not simply the coincidence of a pre-AN tradition and subsequent AN selection for identical locations, the currently accepted date of approximately 4000 BP [Before Present] for the possible movement of AN-speakers into the Bismarck Archipelago (Kennedy 1981) might be taken as a *terminus post quem* for the art in this area at least. . . .

If the symbolic tradition represented at these sites formed part of the cultural baggage accompanying the initial spread of AN-speakers, we might expect some divergence of motifs and of locational characteristics, particularly over the time lapse between 4000 BP and the date of about 2000 BP for initial AN settlement of the South Papuan Coast (Allen, 1984: 430). . . .

However, if the preliminary descriptions of close formal continuity in the art prove accurate, there is the possibility that

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2. However, Ballard did not include two coastal sites, the Kaimana area near Sisir village and Cape Warpati, as these are located in the NAN-speaking areas.

the spread of the symbolic tradition informing this rock art postdates the initial AN movement, reflecting a rapid transfer through existing networks of communication among established AN-speaking communities.

(Ballard, 1992, pp. 97–8)

Ballard added that further indirect evidence might tend to favour the latter model. This includes the similarities of the rock art motifs to those from bronze artefacts, especially in Eastern Indonesian sites. There is no reliable dating available for the presence of bronze in Eastern Indonesia, but in Western Melanesia, direct dating on bronze was available from a bronze artefact on Lou Island in the Manus group, about 2100 BP (Ballard, 1992, p. 98). There are also similarities of rock art motifs from the Papuan South Coast with motifs on painted pottery excavated from the sites in that area (*ibid.*). The basal layer where the pottery was found in the decorated rock shelter of Eriama 1 has been dated to 1930±230 BP (*ibid.*). The date of 4000 BP can be regarded as the upper limit to the appearance of the painted rock art associated with AN speakers. However, indirect evidence showed that the antiquity of the rock art came from a later period, approximately 2000 BP.

Ballard concludes that the sites on the Vogelkop (Bird's Head), especially Berau Gulf, show the greatest concentration of distinctive painted coastal rock art sites, which postdates the spread of Austronesian-speaking people within Western Melanesia (Ballard, 1992, p. 98). However, he also stresses that further studies are necessary to validate this claim.

## Current Research

Originally this book was meant to focus only on West Papuan rock art, especially on the Berau Gulf area where Röder has made detailed recordings, the rock art complex in the Kaimana area, south of Berau, and the inland sites of the Baliem valley. The survey was conducted within UNESCO's framework of cultural heritage conservation and its special worldwide focus on the conservation of rock art. Therefore, the main purpose was to survey the

existing sites, assess the damage that had occurred to them, especially for the Berau Gulf area, compare Röder's records with ours, and suggest actions to be taken to preserve the art. Although the Kaimana area has been mentioned by other scholars, the extensive distribution and richness of its rock art was not recognized earlier. Therefore, by describing the art, we expected to stir interest and awareness on the rock art of the region as well as government attention and responsibility.

During the progress of our writing we became increasingly aware that such rich documentation on rock art could only be given its thorough meaning within a wider regional context. Previously, Specht and Ballard had incorporated the coastal rock art of West Papua in the art of the Western Pacific. In particular, Ballard has mentioned the correlation between the painted coastal sites and the spread of Austronesian speaking people. However, both Ballard and Specht never associated the coastal West Papuan rock art with Northern Australian rock art.

Only Chaloupka has mentioned the possibility of similar, even shared cultural traditions between both regions. Such a possibility is not surprising, knowing that New Guinea and Australia were once connected through a land bridge. The presence of an early land bridge, and the much later migration of the AN-speaking people, thus become important issues in understanding the spread of rock art in the region.

It is known that during the glacial periods of the Pleistocene (1.8 million–11,000 BP) when the sea level dropped about 65 m, most of the western islands of South-East Asia, including Sumatra, Java, Bali and Borneo, merged with the Malayan Peninsula into one big mass of land known as 'Sundaland', while New Guinea, Australia and Tasmania became Sahul. The seabed between Sundaland and Sahul, known as 'Wallacea', never dried during the glacial periods. Therefore there never existed a land bridge connecting these two continents. One needs to take into account, however, that the distance between these landmasses was not large.

These glacial periods occurred several times during the Pleistocene, with an average sea level of 65 m below that of today. The Last Glacial Maximum occurred about



21,000–15,000 years BP, a period during which the sea level was about 130 m below that of today (Mulvaney and Kamminga, 1999, p. 114). This made the Australian continent one-third larger than its present size, with the Arafura Sea and the Gulf of Carpentaria becoming a large plain connecting Australia and New Guinea. In the middle of the Gulf of Carpentaria was the huge Lake of Carpentaria, about 70,000 square km, fed by the ancestral rivers of the Northern Territory, Western Queensland, and New Guinea's Fly River (op. cit., p. 113). After the Last Glacial Maximum when the sea level rose, Sahul shrank and the present coastline began to form about 6000 years BP (op. cit., p. 119). But, even at a sea level only 10 m below that of today, 'New Guinea apparently remained largely connected to Australia at the Torres Straits' (Voris, 2000, p. 1164).

It is believed that New Guinea and Australia were initially occupied by people coming from the Indo-Malaysian Archipelago at least 50,000 years ago (Bellwood, 1997, p. 92). In the case of Australia this date is more than confirmed through radiochronologic dating of the bones of the human fossil Lake Mungo 3 (LK3) at 62,000 BP  $\pm$  2000 (Vandermeersch, 2001, p. 446). A more recent migration occurred from 5000 BP onward and is marked by the expansion of the Austronesian-speaking people into the archipelago. From archaeological and linguistic records, it is deduced that the Austronesian people settled on the Island of Taiwan by 5000 BP, expanding to the Philippines and Eastern Indonesia by 4000 BP and arriving probably by 3500 BP in Western Indonesia (Bellwood, 1997, p. 92).

The first migration(s) populating New Guinea and Australia presumably followed the shortest island routes in the archipelago before reaching New Guinea and Australia. Birdsell proposed two alternative routes to reach New Guinea and Australia: the northern and southern routes (Mulvaney and Kamminga, 1999, p. 108). The northern route was via the islands of Sulawesi, Sula and other Moluccan islands to New Guinea, to reach finally the northern part of Australia, and the southern route was via Bali, Lombok and other Lesser Sunda Islands before reaching Timor Island and Australia. The last sea barrier, between Timor and Australia was the longest distance.

The initial human occupation of New Guinea and Australia may presumably have coincided with one of these glacial periods, when the distance between islands in the Indonesian Archipelago was reduced and this made hopping from island to island by raft or primitive boat shorter and easier. During this time people from New Guinea could also cross the Arafura Sea by foot to Australia. This land bridge presumably even still existed at the beginning of the Holocene (10,000 BP to the present) as a narrow passage in the Torres Strait.

However, during the second big migration wave, the AN migration, which took place in the mid-Holocene, the climate and topography of the Indonesian Archipelago was similar to that of today. This means that these people must have been adapted to open sea journeys and equipped with seafaring vessels. Also interesting to note is that this AN migration wave never settled in Australia.

It is hoped that the spread of the AN-speaking people, who brought distinctive cultural traits with them, is also reflected in the rock art, as suggested by Specht and Ballard. We can speculate that a pre-AN tradition would differ from the AN one. This could especially be expected from the inland sites of New Guinea, located securely in NAN territory. However, those located in the coastal areas could also contain rock art from the pre-AN period, even if located in AN territory. To identify these two traditions is not easy. Only detailed and extensive studies could do this. There are, however, hints that could lead us to explore the possibility of identifying certain forms or styles from the two traditions.

Similar motifs were found between Timor Leste and West Papua, and between the latter and Australia. So far there are no similarities discovered between Timor Leste and Australia, but in the future these may not be excluded. Timor Leste is located on one of the possible shortest migration routes to Australia during the Last Glacial Maximum. It is also the last island before the final journey to Australia. According to Birdsell the migration route from Timor Leste was not only to the Kimberleys in Northern Australia, but also to Tanimbar and the Sahul shelf near the Aru Islands (Flood, 1983, p. 34). Another reason is that most rock art sites in Timor Leste are located in NAN

language areas. Outside New Guinea, the NAN languages belong to the Trans New Guinea Phylum, only found in central Timor and Timor Leste, Alor, Pantar (all located in the Lesser Sunda), Morotai and the northern half of Halmahera (in the Moluccas), (Bellwood, 1997, p. 124).

As mentioned earlier, during the Last Glacial Maximum Australia was part of New Guinea in the Land of Sahul and it could therefore be expected that cultural similarities may have occurred between these now separated landmasses. We believe it is therefore probably sensible to try to find a connection and resemblance between the rock art sites in the northern part of Australia and the southern part of West Papua.

As we will illustrate, the discussion on antiquity and *raison d'être* is very much alive in the Asia-Pacific region. In this book we accepted the challenge to compile the existing possibilities and connections through field survey, analogue and digital field recording and careful scientific literature analyses. However, it is not an attempt to answer all questions that may be asked. The explanations proposed are far from final. On the contrary, they open up new and more searching questions throughout the book.





# Rock Art in West Papua



**Figure 2. The painting from Speelman Gulf, south of Fakfak. Source: after Tichelman and Gruyter (1944).**

## Rock Paintings in the Coastal and Inland Region

The oldest known record of rock art in West Papua (referred to as Dutch New Guinea or West New Guinea in early literature) concerned a cliff in the Speelman Gulf, south of Fakfak. In 1678, the merchant Johannes Keyts wrote in his diary that on the journey from Banda in the Moluccas to the west coast of New Guinea he passed a cliff at Speelman Gulf, where he found human skulls, a wooden bust, a shield and other artefacts (Tichelman and Gruyter, 1944, p. 11).

The cliff was covered by red paintings. Keyts also made a sketch of the paintings, which was reprinted by François Valentijn in the *Oud en Nieuw Oost Indien III* in 1726 (Figure 2). Keyts' diary was again published by P. A. Leupe in 1875, later cited by Arthur Winchman in *Nova Guinea* in 1909 and reprinted in Tichelman and Gruyter in 1944, complete with the illustration of the paintings. This cliff has not been rediscovered.

Other early reports of rock art in the coastal area of West Papua came from the MacCluer Gulf (now Berau Gulf) region. In this area travellers, government officials and merchants made accounts of rock art sites. For example, in 1878 T. B. Leon, a merchant from Buitenzorg (now Bogor), in his journey aboard the ship *Oregon*, reported the existence of hand stencils and other paintings on the cliffs of several islets on the southern side of MacCluer Gulf (Tichelman and Gruyter, 1944, pp. 12–13). On one of the cliffs in a small island west of Arguni, Leon saw a picture of a white hand surrounded by red dots and white figures which looked like writing, and on the



Map 2. Rock Art sites in West Papua

cliffs of another two islets there were also several hands surrounded by similar 'hieroglyphs'. Leon associated these paintings with the Hindu culture. He also mentioned that the hand stencils were located c. 22 metres above sea level and that local people regarded them as made by the ghosts. He further stated that the height of these paintings, coupled by the absence of places for the painters to stand, supported the explanation that they were made by ghosts. However, he suggested that these paintings were made a long time ago when the cliff was not as high above sea level (*ibid.*).

Other recording in the area was done by D. F. van Braam Morris, the Resident in Leon's time. He reported hand stencils from an islet east of Arguni Island (Tichelman and Gruyter, 1944, pp. 13–14). He mentioned that the sea eroded the cliff, forming a gallery 90 cm to 1.5 m high about 1.5 m above sea level, and hand stencils were found in this gallery. On the floor of the gallery he found small boats, about 1 m long or less. The King of Rumbati and Pattipi who accompanied him explained that the place was meant for discarding the dead bodies of the

mountain Papuans. After the deceased was first placed in a small hut, the dried bones were put in a small boat like the one found in the gallery (*ibid.*). Although Islamic influence was already established in that region a few hundred years ago, several such burials were still conducted in the 1880s.

Hand stencils and other paintings were also reported by de Clercq, a former Resident writing in the same period, who had seen them on six islets in the MacCluer Gulf (Tichelman and Gruyter, 1944, p. 14). He noted that the hand stencils were mainly of left hands and the red colour was from a betel nut. These were done on an unreachable cliff, 3–4.5 m above sea level, and he regarded these paintings as burial decoration. In the other islands along the coast to the east in the direction of Darembang he found similar hand stencils, with niches in the surrounding cliffs occupied by human remains. According to Dutch sources, until the 1880s the local people wrapped a corpse in a mat and put it in a shallow cave inside a wooden coffin that looked like a boat and was placed on a wooden scaffolding (*ibid.*). Formerly pottery, shell ornaments, amulets, polished stone axes and tools for making boats



were left in the cave with the dead. At the time of Röder's visit (from August to October 1937) most of the artefacts were already broken and trampled.

In 1887, A. G. Ellis, captain of the steamboat *Java*, reported and illustrated rock paintings near the abandoned village Bedewaäna. The paintings were located on the cliff of a small island facing Arguni Island. He also mentioned the presence of other paintings in the villages of Torin and Darembang (Tichelman and Gruyter, 1944, pp. 14–15). In the years 1890 and 1891 the *Java* stopped at several places in the Namatote area, approximately 175 km south of the MacCluer Gulf. It was reported that in the steep cliffs there were shallow caves containing paintings (ibid.). These paintings were thought to be decorations for the dead. It is noted that in this area the Papuans deposited the deceased in a cave until the body dried, before the bones were moved to a small pandanus box, which was then stored in the house above the hearth.

Reports on rock art were common in the early 1880s, for example in the journal *Tijdschrift Bataviaasch Genootschap* from 1880 to 1884 (Tichelman, 1939b, p. 88). Although there were plenty of articles noting rock art on the western coast of New Guinea, especially the MacCluer Gulf region, most of them were not scientific. It was not until 1937 that the rock art of the MacCluer Gulf region was studied carefully, when J. Röder, a member of the Frobenius expedition, made detailed descriptions, together with a study of the local culture.

Röder published a number of articles in 1938, although his comprehensive book of the MacCluer Gulf rock art came out twenty-one years later because of the Second World War (Röder, 1938, 1939, 1956, 1959). He described the rock art in detail and divided the paintings into four different styles according to their superimposition. Röder also discussed the origin, meaning and function of the paintings using the local folklore and compared them with other symbols known by various local peoples. His writings were completed with meticulous drawings and plates made by A. Hahn.

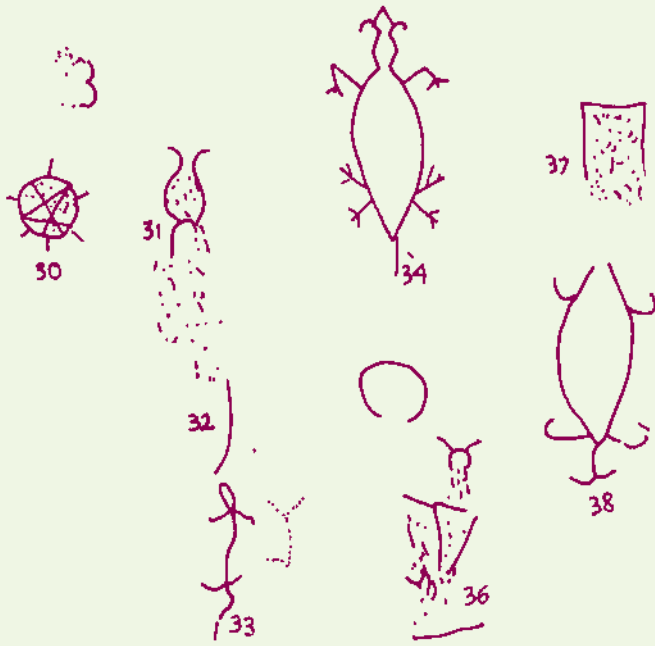
Röder's first publication focused world attention on this region and stimulated other researchers outside West Papua. W. J. Cator (1939) noted that interest in

West New Guinean rock art was developing in a broader environment. F. L. S. Bell (1940) noted similar paintings to those reported by Röder, on the north coast of Boeing Island, Bismarck Archipelago.

The journal *Man* published several comments on rock art in its correspondence section. For example, Rowe (1940, p. 16) attacked Röder's association of the hand stencils with local myths, suggesting that such an interpretation was not appropriate and 'both hand-prints and figures were done just for the fun of the thing'. Lord Raglan responded on behalf of Röder: 'the fact is that none of us, whether savage or civilized, ever does "for the fun of the thing" anything that is not sanctioned by tradition' (Raglan, 1940, p. 32).

One of the most notable writers on rock art in this period was G. L. Tichelman who reviewed the rock art discoveries for the whole region (Tichelman, 1939a, 1939b, 1940, 1953–54, 1954–55a, 1954–55b; Tichelman and Gruyter, 1944). Most of his articles were reviews of other people's work, in which he discussed the meaning of rock art. He used a large amount of Röder's material from the MacCluer Gulf as well as from Ceram, especially in the small book *Nieuw-Guineesche Oerkunst* (1944), in collaboration with W. J. de Gruyter.

W. J. Cator, the Fakfak Assistant Resident at that time, also visited the MacCluer Gulf rock art sites and published a short article in which he compared its paintings with the Namatote rock art (1939). He explained that the paintings in both areas have similarities, but he did not describe in detail the paintings depicted, except that both Namatote and MacCluer Gulf paintings were dominated by hand stencils and a number of other motifs, such as lizard, fish, stylized kangaroo, human, ship and spirals. In his article Cator was concerned with the origin of the people who inhabited the region, as well as the rock art and its antiquity. He used local folklore as well as historical reports on trading activities in this region by local and European traders. Cator also compared or used Röder's descriptions in his explanation. His article was completed with pictures, photographs and maps, although most of them represented the rock art in MacCluer Gulf region and only one photograph referred to a cliff gallery near Namatote.



**Figure 3. Some of the paintings found at Mumamuran Island. Since not all of the paintings are in good condition, Galis recognized some of them as lizard (no. 33), lizard-like figure (no. 34) and lizard without the head (no. 38).**

Source: after Galis (1948).



**Figure 4. The lizard from Cape Suaja, Humboldt Bay.**

Source: after Galis (1952).

In the post-war period of Dutch administration, K.W. Galis, Assistant Resident in Manokwari actively recorded rock art in West New Guinea. In *Oudheidkundig Verslag* (1948), he discovered and reported in detail rock paintings from Mumamuran, an islet situated between Purupi Island and the isthmus of the Vogelkop in Geelvink Bay (now Cendrawasih Bay). The paintings were located in the eastern part of the island, on a vertical cliff, 5 m above sea level. In his report he attached pictures of every single painting found in detail, complete with numbers and explanations of the motifs (Figure 3). In 1952, Galis published a book with a picture of a lizard in Cape Suaja,

Humboldt Bay, near Hollandia (now Jayapura), (Galis, 1952). The illustration of the lizard was printed under the table of contents in his book, on page 8 (Figure 4).

In 1957, Galis reported a number of rock art discoveries in various places in West Papua (Galis, 1957a). The article included a map and picture of one of the paintings found in Bitsyari Bay, a note that W. J. O. M. van Dijk had found three red primitive human figures on a cliff on the western coast of Kamaka Lake, in the *onderafdeeling* Kaimana, and a report of two discoveries made in 1954 (Galis, 1957a, pp. 207–8). In February 1954, J. J. W. Dubois was shown a number of red and black paintings on Roon Island, situated in the northern part of Cape Wandamen, near the village of Kajob. Dubois thought that on the nearby islands of Job Meos and Angra Meos there must have been additional paintings, but Galis noted that when he visited Angra Meos in 1949 he did not find any paintings, except red stalactites. In March 1954, an army patrol spotted a number of light red paintings on a big white wall, approximately 1 km from Bitsyari Bay, and the painting was illustrated in Galis' article.

Records of rock art from Bitsyari and Maimai are also found in articles by Souza and Solheim, and Goenadi Nitihaminoto which were published much later (Souza and Solheim, 1976; Nitihaminoto, 1980). Souza, Solheim and Nitihaminoto were actually members of the same research group. G. Chaloupka discussed the rock art of the Cape Bitsyari and Namatote region briefly in K. Muller's book (1996). For a more detailed description see the section in this book entitled 'Rock Art in the Kaimana Region'.

In 1957 Galis published two articles on rock art in *Nieuw-Guinea Studiën*. The first (Galis, 1957b) concerned red and black paintings in the limestone cave of Guwaimit, near Yegriffi, in Yafi district, about 75 km south of Hollandia (now Jayapura), (Figure 5).

This was the first inland rock art discovery in Dutch New Guinea. In the central highlands of eastern New Guinea such paintings had long been revealed, for example in the Chimbu Valley and Kutubu Lake (Galis, 1957b, p. 19). Galis noted that the rock paintings from Yafi were different from the ones found in the MacCluer Gulf. In the latter place, paintings such as hand and foot stencils,

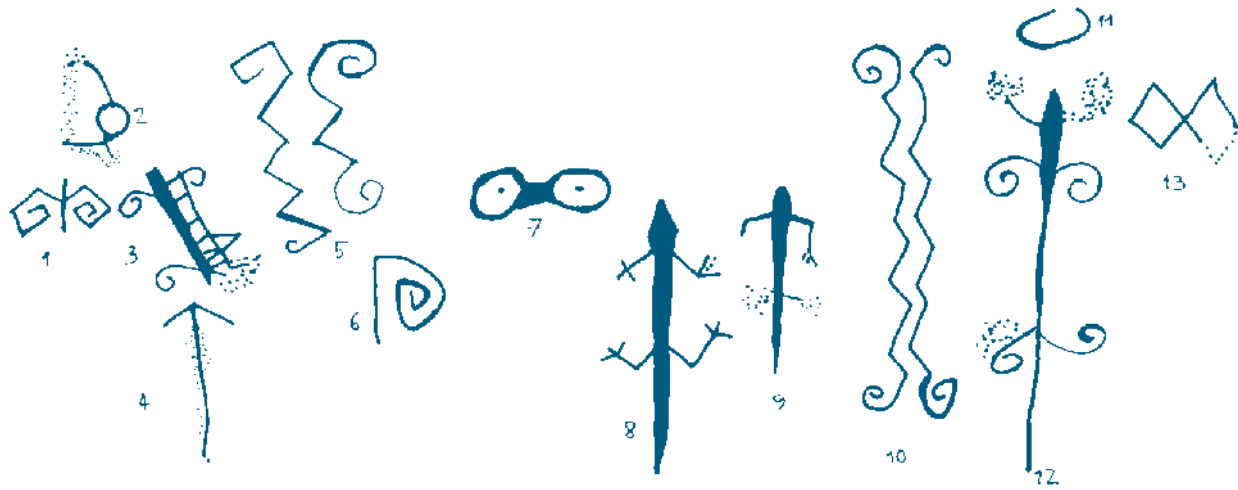


Figure 5. Some of the paintings from Chamber B, Guwaimit Cave, Yegriffi.  
Source: after Galis (1957b).

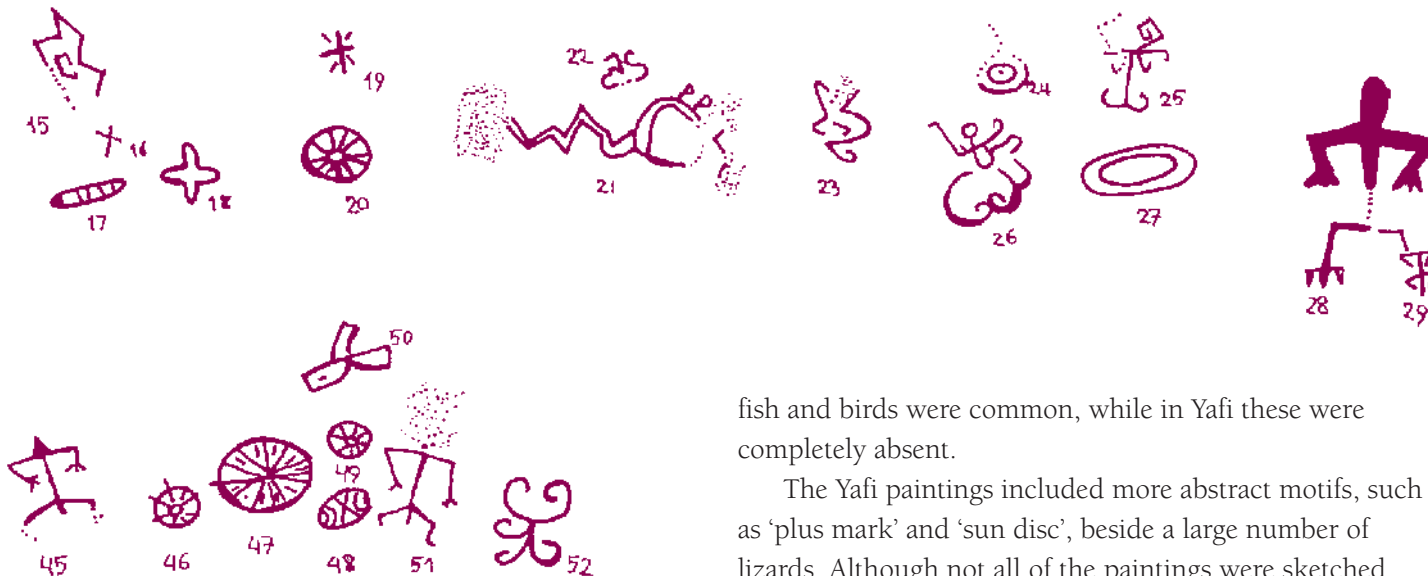
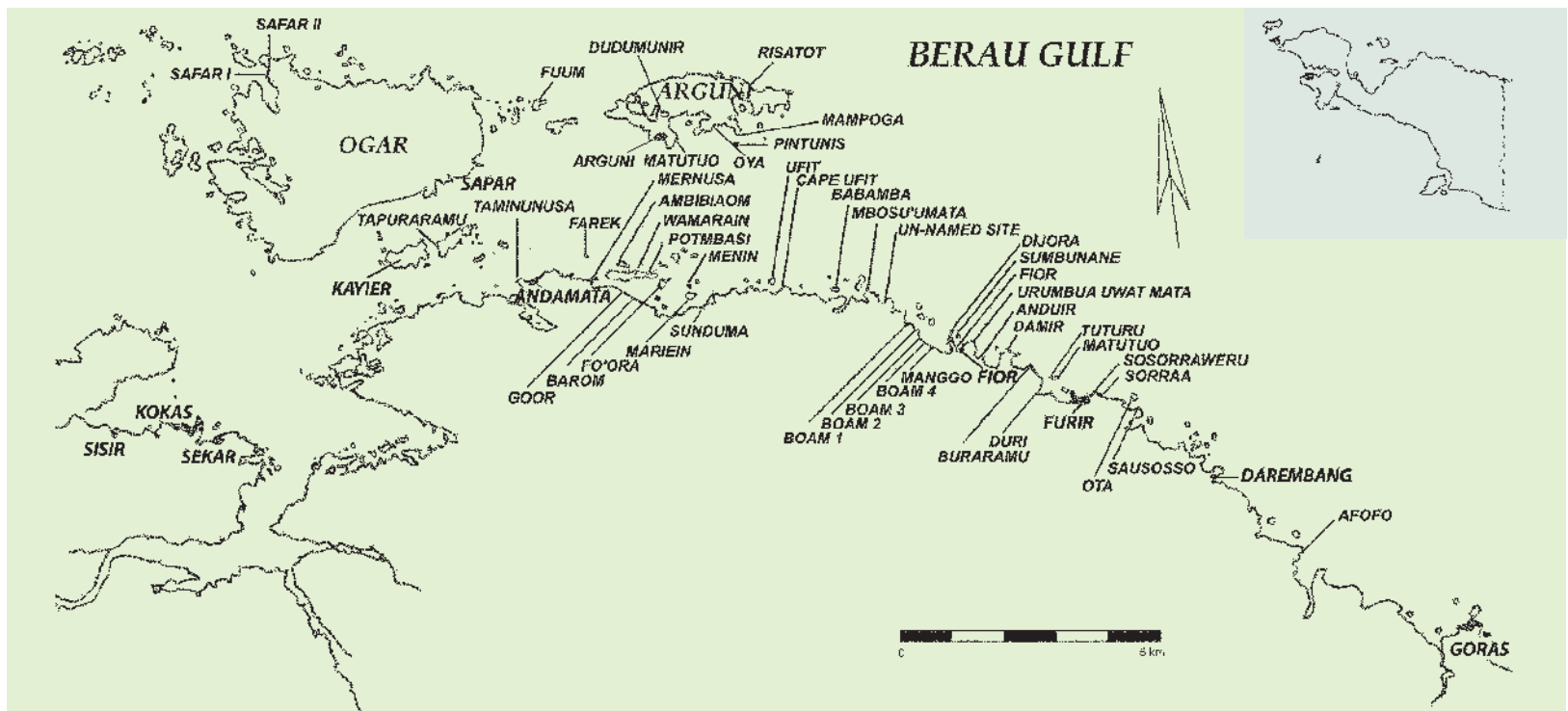


Figure 6. Some of the paintings from Pinfelu Cave, Tainda.  
Source: after Galis (1957c).

fish and birds were common, while in Yafi these were completely absent.

The Yafi paintings included more abstract motifs, such as 'plus mark' and 'sun disc', beside a large number of lizards. Although not all of the paintings were sketched, the ones that were illustrated were numbered and each was described. He also included a map of the cave.

The second article (Galis, 1957c) concerned black and red paintings of the Pinfelu cave near Tainda, not far from Guwaimit (Figure 6). Galis noted the striking similarity of these to certain New Caledonian rock carvings, such as lizards, plus signs, linear patterns, masks, fish and snakes (op. cit., p. 122). On the other hand the paintings had no resemblance to those found on the western coast of New Guinea. He also mentioned a myth related to the painting of this cave. He noticed that all the New Guinean sites were marked by the combination of cave paintings with water, burial places and mythical ancestors or demons, and he considered these characteristics to be typical for New Guinea. He also assumed that the paintings were related to



Map 3. Rock Art sites in the Berau Gulf, West Papua. Alteration and improvement of Röder's map by the UNESCO team, 2002.

ancestral, fertility and initiation rites. As in his first article, Galis illustrated the report with a map of the cave as well as drawings of the paintings.

A great number of rock art reports during the late 1950s and 1960s were only notices of their presence, but Galis produced several articles which dealt with rock art in detail (1957*b*, 1957*c*), and published a compilation of rock art discoveries in West Papua in 1964 which included several new sites, summarized below.

Paintings were described from a cape, approximately 3 m above sea level, on Rumberpon Island, north of Jari-ari (Galis, 1964, p. 260). The paintings were black, white and blue and consisted of five motifs, such as crocodile and turtle. Galis received this report in 1948 but he did not visit the site himself.

In the subregion of Raja Ampat, the Controller R. Stephan visited three rock art sites in 1957 (*ibid.*). One site was a cliff by the sea in the eastern part of Asoker village, to the north-east of Waigeo Island. The motifs depicted were not clear and the local people did not know their origins. They merely stated that their ancestors had made them. Goenadi Nitihaminoto (1980) also mentioned this painting and stated that the local inhabitants called it *sapormerek* (*sapor* = cape, *merek* = picture) meaning painted cape, but he wrote that the painting was by a river.

On Waf Island, south of Misool Island, there were two red fish on a cliff, but the local people knew nothing about the painting. At Fafanlap village, near Pana-Pana Strait, east of Misool Island, there was a painting that had already been described by de Clercq in 1887 (Galis, *op. cit.*, p. 262).

In 1958, the Resident J. van Bodegom and Controller M. O. Woelders saw several hand silhouettes and a number of unclear signs on a slippery limestone cliff, about 8 m above sea level, at the beginning of Alyosi Bay, approximately twenty minutes by boat from Selpele village (Galis, *op. cit.*, p. 262).

In 1959, Galis received a report from M. Kasiepo, leader of the Biak Papuan, that on the southern coast of Biak, near Samberi, there was a cliff with red paintings (*ibid.*). Not far from there, in Padwa village, there was a boulder with red paintings, and further east, in Urfu village, naturalistic paintings of turtle, fish, and octopus were found.

In 1960, Father P. Frankenmolen discovered and photographed paintings on several cliffs near Indangan and Menggau villages, 110 km from Jayapura (Galis, *op. cit.*, p. 263). Both were located near Amgotero village. The paintings at Indangan were made on a limestone cliff called *Kumbiam*. The local people were not afraid of the paintings and no religious ceremonies were known for this site.

Most of the paintings, about 100 figures, were done in black, although red and white pigments were also used. Four men were supposedly responsible for making this painting at the beginning of the twentieth century. The painting at Menggau was made in a cave named *Amuambia* close to the border of West Papua and Papua New Guinea. It was done with white, red and black pigment, seemed to be very old, and there was superimposition. The local people feared the site.

In 1961 the Bureau for Demographic Affairs in Hollandia (Jayapura), reported a rock painting site at Bentuni Bay (Galis, op. cit., p. 263). It was located on a cliff near Jensei village, east of Bentuni Bay.

## Rock Paintings in the Highlands Region

Galis (1964) listed discoveries of highland rock art in the 1960s. In 1960, a police patrol found some cave paintings in the mountain range between Bukisi in the Iris Bay and Warombain to the south. The Bukisi people formerly used the cave for funerals. However, not much information was collected (ibid.). In 1962, A. Blokdiijk and W. Westerink found paintings on the dark protruding wall above an old trading pass in the central highlands, south of Wamena, about 3,859 m above sea level (Galis, op. cit., p. 264). The red painting, which was in very good condition, depicted some animals, but there was no further information about the species. Galis suggested that the paintings were associated with a fertility ceremony because neither water nor funeral remains were present around the paintings.

In early 1963, G. Oosterwal found some red and possibly black paintings in the Van Rees Range, east of Memberamo River (Galis, ibid.). The painting was associated with ancestor cults and 'cargo cults'.

P. Matthiessen (1962) discovered rock art in the Baliem Valley. His book, *Under the Mountain Wall*, an account of everyday activities in the Baliem Valley, is written like a novel. However, it includes valuable information on the rock art. Matthiessen mentioned two places, one near Abulopak village and the other near Lokoparek village, not far from Tabara Stream. The rock art near Abulopak was found in a limestone sinkhole with a sheltered wall.



Plate 10. Engraving of a fish figure at Doyo Lama

The apparently casual drawings in charcoal included humans (man and woman), a rock crab, and several lizards. According to Matthiessen the red pictures near Lokoparek were very complex. Most of them were superimposed and were unrecognizable.

Rock art has been discovered in other parts of the Baliem Valley. K. G. Heider (1970) discovered red-pigmented rock paintings in six different places in Dutabut Hill, the Dugum Dani territory, and in the Subula Hill, the central region of Dugum Dani village. He divided these paintings into two categories, sacred for the red paintings and profane for the black paintings. Heider provided sketches and photographs.

R. Gardner and K. G. Heider (1968) published further information on Baliem Valley's rock art. However, the rock art was mentioned only briefly in a caption to four photographs: 'For amusement, boys draw casual charcoal figures of people, garden plots, lizards and even ghosts on rock overhangs in the forest above the valley floor' (Gardner and Heider, 1968, p. 30).

R. D. Mitton (1972) discovered another highland rock art site. The painting consists of a number of red marks, situated on an overhanging cliff, on the slope of Mandala Mountain, approximately 3,500 m above sea level.





Plate 11. Engraving of a fish  
at Doyo Lama



Plate 12. Representation of  
a fish and other unknown  
figure (probably fish) at Doyo  
Lama


## Rock Engravings

In 1903 L. F. de Beaufort and P. E. Moolenburgh found some engravings on an islet called Sosena, near the village of Ayapo, in the eastern bay of Lake Sentani (Galis, 1964, pp. 264–5). Galis obtained information from I. Deda of Ayapo who named the rock engraving as *talipo* and said that it had disappeared. Deda noted that children liked to scratch pictures on the rock and wiped them off later.

The first rock engraving studied in Irian Jaya was reported by Galis at Doyo Lama, in the western valley of Lake Sentani, approximately 50 km from Jayapura (1961), (Plates 10–12). He made a very detailed record of the engravings, completed with a list of motifs, a map and photographs. Bintarti made a more general description of the same site more than twenty years later (Bintarti, 1982).

Another rock engraving site was found in the district of Arso, on a steep wall by the River Uyapi (branch of Sekanto River), between the villages of Girwage and Sawia (Galis, *ibid.*). A government doctor, A. H. Meijer, spotted these engravings in 1959.

R. D. Mitton briefly described a third rock engraving site. A large boulder near the village of Nabunage, close to Karubaga in the central highlands, was mostly covered by rows of pecked holes, but there was also a crude face and what appeared to be a figure (Mitton, 1972, p. 11). Compared with those found in Doyo Lama, the Nabunage engravings were cruder; not only in shape but also in the way they were executed.



## ■ The story of Omimin

A long time ago there was a man and two women, one black and the other white, who travelled from the east to the west. In the beginning they were blind, therefore they had to grope with their feet and hands to find their way. When they moved to the west and reached the Berau Gulf, their eyes gradually opened and they became sighted. They regarded this region as their territory and became the ancestors of the indigenous people of the region. Omimin, the white woman, did not stay in this region but moved further to the west where she gave birth to the descendants of the Western people who have paler skin.

The story was collected by Röder in 1937. Röder's informants told him that the local people believed the hand and foot stencils, and even the whole paintings of the region, had been made by Omimin. Some said that Omimin painted on the cliffs all the animals that she ate during her journey. Other sources said that it was Omimin who created the sky, earth, sea, trees and so on.



# Rock Art in the Berau Gulf Region

## Environmental Setting

A concentration of rock art is situated in the southern part of the Berau Gulf, formerly known as MacCluer Gulf, between Kokas – the regional capital/Kecamatan – and Goras, extending for approximately 30 km (the name Berau Gulf will be used for the rest of the text). The northern part of this gulf is covered by mangrove swamp, while the southern part, from the Onin Cape to the gulf, is limestone sea cliff. Some of the cliff is about 40 m high, and in some places the cliff is broken by patches of a few hundred metres with white sandy beaches where villages can be found. In this gulf tiny islands are scattered along the southern coast. The two biggest islands, Ogar and Arguni, are occupied, while others, mostly very tiny, are uninhabited. Most of these islands stand like giant mushrooms, since they have limestone cliffs that have been undercut by the sea. On these cliffs, approximately 2–4 m above current sea level, lies the old wave cut that forms galleries on the capes of the main island and around the islands. This type of gallery, about 2 m deep and 1 or even more than 2 m high, is often decorated by hanging stalactites or pillars which divide it into small rooms. Sometimes the galleries are only a few metres long, but often they can be more than 10 m. In almost all such galleries rock paintings can be found (Plates 13 and 14).

When galleries are not present, the cliff forms a steep wall, mostly impossible to climb and on these walls rock paintings also occur, sometimes in very high (30 m above sea level) and unreachable spots. This kind of cliff is easily visible on the southern coast and paintings are observable (Plates 15, 16 and 17) on almost all of these cliffs.



13



14

It seems that some of the islets were formerly part of the main island. Erosion cut off these small capes and formed the tiny islands. Caves can also be found in this region, and some of them have paintings as well. Most of the caves have cultural deposits on their floors. For example Dudumunir Cave in Arguni Island was excavated by Röder. The caves we visited, such as Dudumunir and Sosoraweru, were inhabited by the local people (who were under Japanese occupation during the Second World War), and therefore they are full of recent cultural debris and most parts are covered by black soot from the fires the people made in them.

In some areas, between the steep cliffs, sandy beaches extend a few hundred metres and make suitable places to land boats as well as to settle villages. Between Kokas, which is situated in a bay, and Goras, there are four small villages, Andamata, Furir, Fior and Darembang. All of these villages are well planned. The houses are arranged in lines with considerable space between them and separated by wide sandy streets. The gardens are often covered by grass and bordered by simple wooden fences, which consist of two horizontal wooden bars connected at both ends to vertical wooden bars that are planted in the ground. In some villages these wooden bars are absent; however the regularity of the village plan gives a very nice impression of their pleasant environment. The villages look healthy, as do the inhabitants (Plate 18).

Large numbers of the houses are of wooden construction. Those located by the beach stand on wooden poles, while those inland are on concrete platforms or just shelly sand. The walls are made of *gaba-gaba*, sago palm stem, and the roofs are either sago, coconut leaves or corrugated iron.

The original inhabitants of this area formerly lived in caves instead of houses (Röder, 1959, p. 12). The arrival of the Ceramese people from the west stimulated the local inhabitants to leave their caves and build houses in fortified villages on the coast of the mainland or on the islands. These villages, especially those on the islands, were abandoned because of the peaceful atmosphere created during the Dutch colonial period. The most

recent villages are no longer fortified and are situated on beaches on the mainland and a few of the big islands.

The small harbour at Kokas is the only place in the southern Berau Gulf where large ships moor. This town was established when the area became part of a shipping route before the Second World War. Kokas, a small town, has plenty of brick houses with corrugated tin roofs. The town is situated in the bay, on a grassy area of hills in contrast to its forested surroundings. Kokas actually consists of three villages: Kokas, the current administrative centre, in the middle, Sekar to the west and Sisir to the east. Formerly the administrative villages were Sekar and Sisir. Most of the inhabitants of this area are Muslims, but there are also Catholic and Protestant churches. During the Second World War, the Japanese who erected fortifications and underground tunnels through the hills occupied the town. Today, iron bars close these tunnels.

The inland part of Cape Onin was very well known for its spices, especially nutmeg. This product attracted traders from various places for many centuries, including the Moluccans, who started to inhabit this region approximately 400 years ago (Röder, 1959, p. 120). Javanese knew the area in the fourteenth century, being mentioned in the book of *Nagarakertagama* written by Prapanca. Canto 14, stanza 5, line 3 of *Nagarakertagama* describes a number of places put under the sovereignty of King Hayamwuruk from Majapahit in East Java, including Wandan, Ambwan, Maloko and Wwanin (Pigeaud, 1960a, p. 17). Wandan has been identified as Banda, Ambwan as Ambon, Maloko as Ternate (Moluccas proper), and Wwanin as Onin at Berau Gulf (Pigeaud, 1960b, p. 34).

Several different language groups inhabit the region. The people of Kokas speak Sekar, those in Arguni Tafer, those in Furir Yangkidai, the people of Fior Mepuen, and the people of Darembang and Goras Jariman. Therefore it is often difficult to find the name of a certain place, since every language group may have its own.



15



16

**Plate 13. The wave-cut gallery of Ota**

**Plate 14. The painted gallery of Afofo**

**Plate 15. The steep and uneven wall of Mbosu'umata. Most of the rock art can be found on the lower part of the cliff, but some is higher up.**

**Plate 16. The open and steep wall of the east cliff of Goor. Most of the paintings on this cliff have deteriorated since Röder's visit.**



17



18

**Plate 17.** The steep and unreachable cliff of Boam 2. The rock art is mostly found under and on the overhanging wall.

**Plate 18.** One of the villages in the Berau Gulf area

## Röder's Research

From 1938 onwards, Josef Röder published a number of articles on Berau Gulf rock art. The data that he used for these publications were collected personally during the Frobenius expedition to that region between August and October 1937. It was not until 1959 that his monograph on these sites was published, due to other commitments and the Second World War. During the Second World War the Frobenius Institute, where most of the artefacts collected from the Berau Gulf were stored, was bombed and burnt and most of the collections, including the drawings of the rock paintings, vanished. Therefore, when at last the book was published it was not as complete or accurate as it could have been. However, it is still the only book describing the history and culture of the Berau Gulf people, especially the archaeological aspects. Its importance is heightened by the comprehensive drawings of the rock art made by the expedition's artist, A. Hahn.

## General Archaeology

Röder began his book (1959) with the history of rock art discovery in Dutch New Guinea, especially the western coastal part of the island, which goes back to the seventeenth century. He described the regional setting, the history, population and political situation of the region, as well as the material culture, including settlement patterns, architecture, clothes, food, transportation, craft, trade, customs and religion. Besides rock art, which was the main subject of his book, he also described the other archaeological remains in caves, fortified villages and graves that he encountered in this region.

Caves are plentiful in this region; Röder visited few, but all showed occupational debris. One of the caves, Dudumunir on Arguni Island, was excavated and revealed stone tools, pottery, Chinese ceramics, and animal and human bones. Unfortunately most of the material collected from this excavation as well as the field notes were destroyed during the war. Röder still managed to describe the soil layers and the artefacts from these layers using material that survived the bombing.

Röder noted that the old fortified settlement sites were named *kota* (city) by the Malays and *otem* by the Papuans. Coarse dry-stone walls made from limestone readily available on the spot also protected these naturally defensive island sites. Such fortified islands are Ora and Fuum, which had been inhabited by Arguni people; Fior Lama and Mambamber, formerly inhabited by the people from Fior; and Darembang Lama and Ota, which were previously inhabited by Darembang people. Röder also recorded Afdagof, a *kota* on the mainland, on a steep hill further inland from the present Furir village previously inhabited by the Furir people. According to Röder (1959, p. 52), when the present village of Furir was attacked the inhabitants retreated to Afdagof to take refuge. However, this *kota* could only support twenty to twenty-five people and there was no water available.

At Röder's time, there were only two islands, Fuum and Ota, which still showed remains of these fortified *kota* in good condition. Both show similar topography. Since Fuum looked most complete, Röder made a



Plate 19. Burial remains on the wave-cut gallery of Afofo



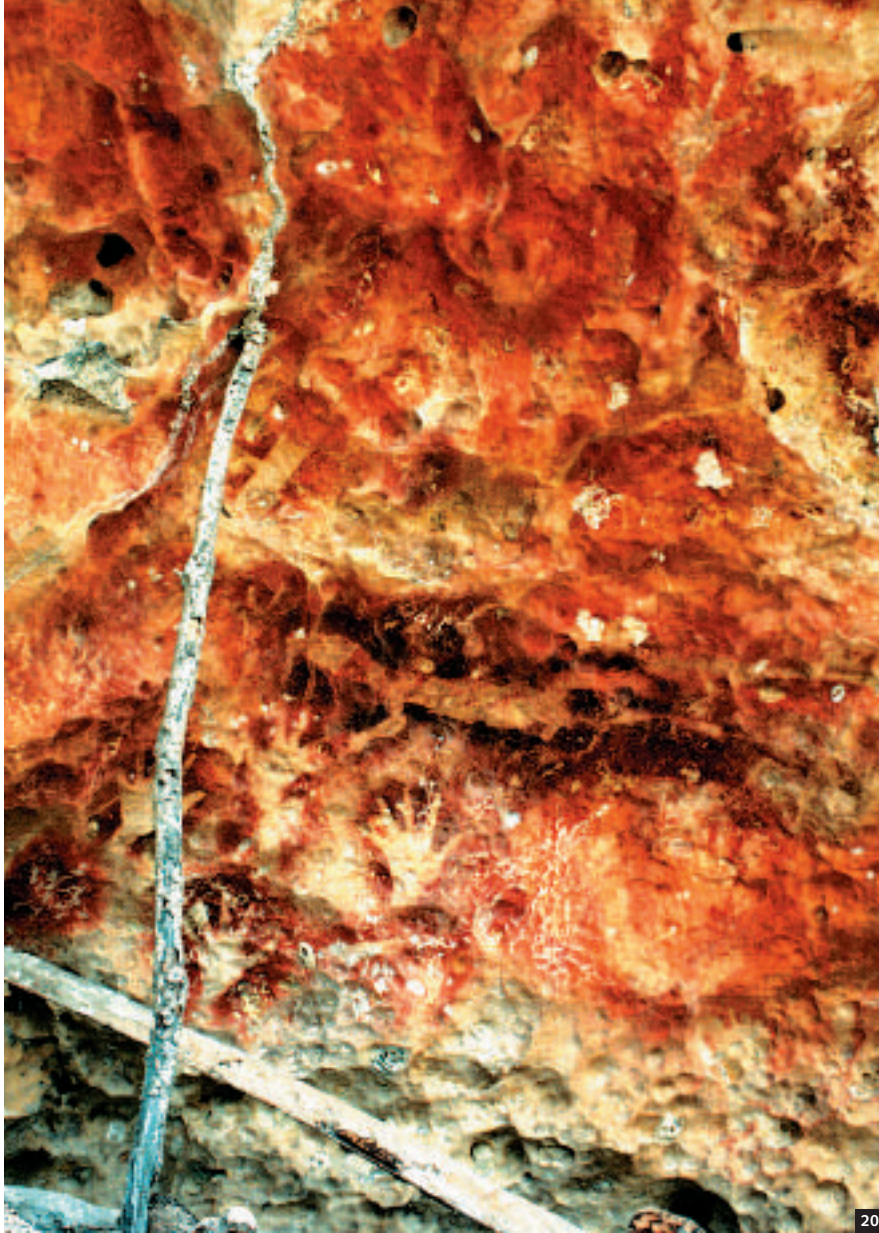


Plate 20. The classic Tabulinetin style at Afofo is characterized by paintings in various hues of red, which are spread all over the walls.

detailed study of this island, with a map of the fort, and sketch of the reconstructed *kota* on the whole island.

Another interesting subject discussed by Röder is burial. Old burials were differentiated into two categories. The first had a pile of stones over the body, with distinctive stones put at the head and feet position, representing Islamic influence that entered this region several hundred years ago. Secondly, 'animistic' burials were found in caves further inland or in old wave-cut galleries. Some of the burials in the caves were still kept secret and regarded as sacred and therefore could not be visited, while those found on the wave-cut galleries, sometimes also decorated with rock paintings, were visited. Röder noted that the people buried in the galleries were not identified locally, unlike those buried in the Islamic graves, but he presumed that this burial custom was still conducted during the nineteenth century. Röder also noted that the burials found in the wave-cut galleries originated from the era when people left their cave dwellings due to Austronesian influence. Such burials, associated with rock art, can be found at Mampoga and Risatot in Arguni, Tapore, Damir, Taba, Duri, Sora and Abba, as well as on other islands and the old settlement sites, such as Fior Lama, Furir Lama, Matutuo and Ota. Röder speculated that the rock paintings were associated with these burials (Plate 19).

Röder saw wooden coffins in some of these galleries. A few stood on wooden scaffoldings, but most of them had already deteriorated and the bones were scattered on the floor, mixed with burial gifts such as Chinese ceramics, potsherds, and sometimes silver bowls.

The wooden coffins could be differentiated into two categories, a 'typical' oblong coffin shape, or one shaped like a boat. The deceased was put inside the coffin with the legs bent. Besides these kinds of coffins, Röder also found some exceptional ways of interment. For example, in Ota a large wooden bed was used as a container, while in Mampoga he found an earthenware potsherd filled with a mixture of child and bird's bones.

### The Rock Art

In his research, Röder recorded forty rock art sites scattered along the southern coast as well as on the islets of Berau



Gulf, between Kokas and Goras. Some sites were grouped into one name, therefore in his map there were only thirty-six sites listed.

The rock art was recorded by tracing the painting with transparent paper, then adjusting the tracing to a flat surface, before copying onto thick drawing paper, with completion on the spot. However, because of the time limit, some of the paintings were not done in colour, therefore the copy was completed with notes about the colour and other important features. In the copying process, parts of the paintings that were obscure were indicated as such. Therefore the paintings were copied accurately, including the water drip lines, rock cracks and other features, without change, addition or reconstruction of missing parts. Careful attention was paid to rock

**Plate 21.** The Tabulinetin style at Sorraa. It shows a leaf stencil and an unknown object, which was regarded as a decorated comb or a headdress by locals (Röder 1959, p. 141).

**Plate 22.** Matutuo figure in the Tabulinetin style at Sorraa



**Plate 23. The Tabulinetin style at Afofo. The lizard-like figure probably represents a leaf-tailed gecko.**

colours, and to achieve the best result before copying, the rock was cleaned or the work was done by waiting until the sun lit the rock. Besides copying the paintings, photographs were taken.

Röder differentiated the paintings into three categories based on colour: red, black, white, and further grouped them into several styles to indicate their chronological order. These three colours were often found overlaid. Black and white were always found on top of red. Röder suggested that the chronological order was red, black and white, although white was rarely found and never on top of black. His conclusion was based on seeing women and children painting on the cliff, using lime paste. The style of these paintings was similar to other white paintings found in this area. However, not all of the white paintings had been made recently; some of them had already deteriorated and Röder estimated that they derived from quite a remote time. In Röder's discussion, all these white paintings were excluded.

The red paintings were separated into four styles, based on regions and age: 1) Tabulinetin, 2) Manga (the name

'Manga' is derived from the site of the same name, which is known today as Manggo), 3) Arguni, and 4) Ota I. The black paintings consisted of only one style, Ota II, with a regional style variation that he termed Sosoraweru.

The oldest style, Tabulinetin, was represented by various hues of red paintings which were spread all over the wall and were always overlaid by other paintings, of the same red style or other younger styles, red, black or white (Plates 20, 21, 22 and 23). The most common motifs presented were stencils of hands and other objects such as lizard, boomerang, comb, fish and abstract objects. The technique used to make these stencils, sprinkling the pigment on top of the objects, created a red background and made the wall, almost completely covered by this colour, very conspicuous from a distance. Besides these stencilled objects there were other motifs, such as a half-human and half-animal figure (known as 'matutuo' by the local people, and visualized as a lizard form), spirals, geometric designs, and other abstract or unknown motifs. Röder considered that the Tabulinetin style had high artistic value, mainly because of the hand stencils. He evidently felt that such paintings were of a particular technique that made them outstanding. Röder also suggested that the Tabulinetin style survived for a long period, because many paintings had deteriorated and were overlaid by other paintings of the same style but in a better condition. Paintings of this style were found in Tapuraramu (Röder: Tabulinetin), Sora and Afofo (Röder: Abba).

The Manga style was completely different from Tabulinetin. The motifs depicted were not painted over a red background nor overlaid. Röder considered that the Tabulinetin style had changed into a style with ordinary lines (Röder, 1959, p. 69). Most of the motifs depicted intricate spirals. Röder described this style:

There is an abstract, almost inartistic coldness in these paintings. The maker or makers of the most uncompromising expressions of this art must have been engravers rather than painters, and one is inclined to believe that most of them must have been wood-carvers. There are no pictorial qualities; even their symbolic language is clear and unemotional.

(Röder, 1956, p. 494)



## 1. Stencilled objects

Stencilled objects are commonly depicted in the rock art of the Berau Gulf area. They are dominated by human hands, although other objects such as human feet, fish, lizards, boomerangs, combs, leaves and things as yet unidentified are also present.

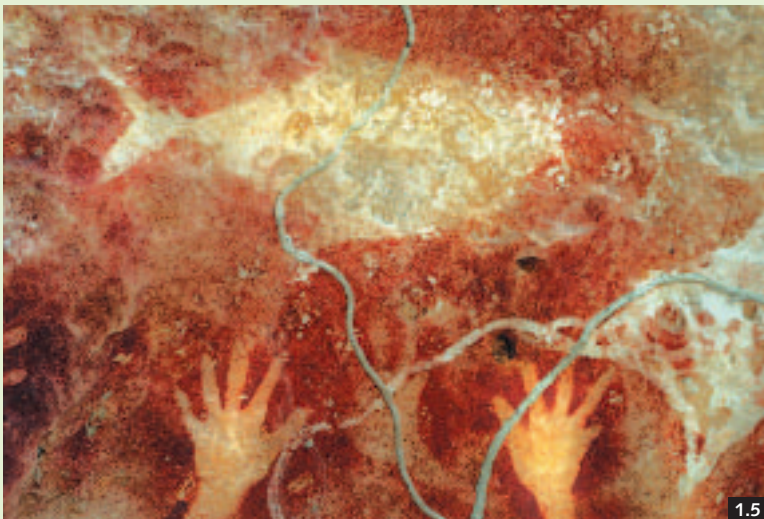
Hand stencils are found at almost every site. They are often depicted either complete with the arms or with only the palms (see Plates 1.1–1.6). Both right and left hands are present, including those





belonging to adults and children. Some of them have incomplete fingers, which might have been intentionally mutilated in mourning rituals (Plate 1.3). Such rituals are still present in the Baliem Valley. The hands are often found in a cluster. Generally there seems to be no association between hand stencils and other figures, but some of the hands are exclusively associated with other stencils, such as those from Sunduma (Plate 1.1), Wamarain (Plate 1.4) and Tapuraramu (see Box 4, 'Boomerang') and Afofo (Plates 1.2 and 1.5). At the latter there seems to exist a relationship between hand stencils and fish stencils. In some sites they are also depicted close to boomerang stencils (see 'Boomerang'). Only a few foot stencils are found in the whole region (Plates 1.6 and 1.7).

The fish stencils are positioned vertically with the head at the top, like many fish drawings found in the



1.5



1.6

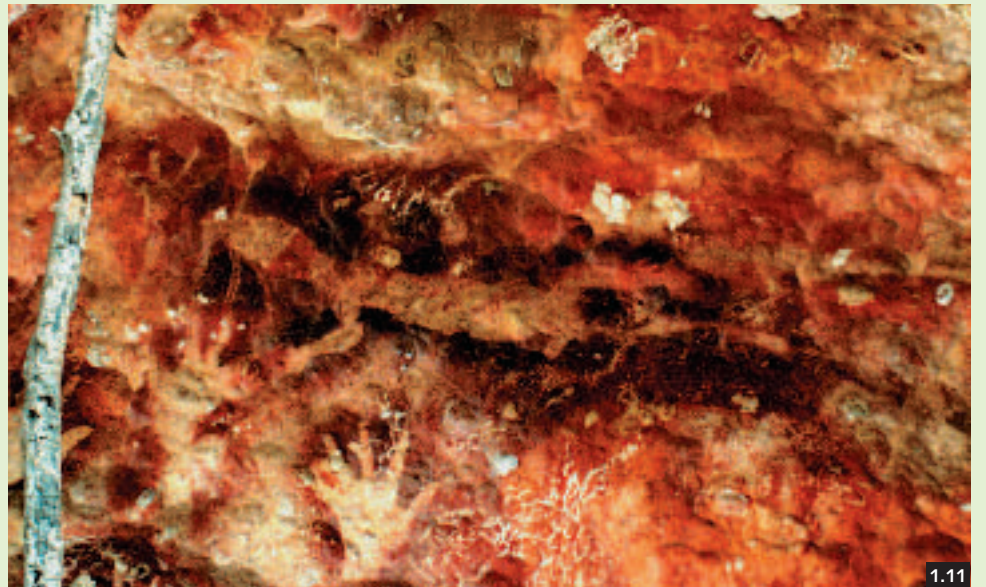
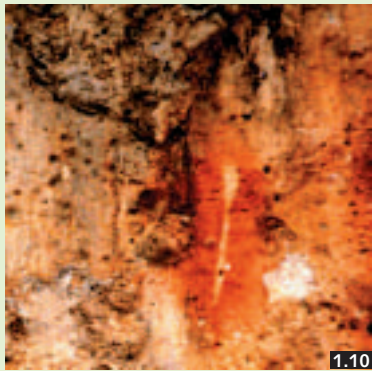
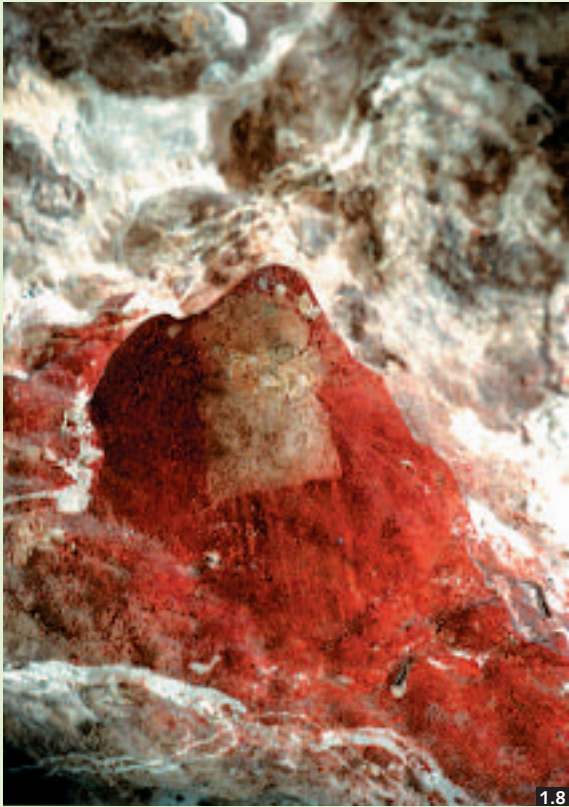


1.7

region (Plate 1.2, from Afofo), or horizontally (Plate 1.5, from Afofo). Combs similar to those still used by the Papuans have been stencilled in Afofo and Sorraa (Plates 1.8 and 1.9).

The stencil of a large lizard can be found at Afofo (Plate 1.11). The spray of dark red paint on this lizard is different from the red pigment around it and has made this stencil outstanding. It is also the only large lizard stencil found in this region.

An elongated object from Wamarain (Plate 1.10) with the upper part thicker than the lower was regarded as a knife by the locals, but it reminded Röder of a lice scratcher (Röder, 1959, p. 114). The stencil of a leaf can be seen at Sorraa (Plate 1.12).





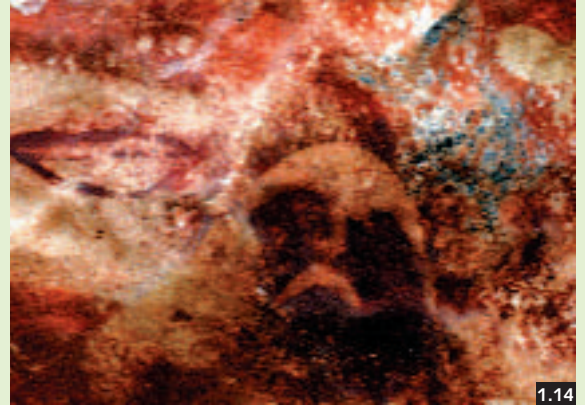
1.12



1.13



1.16



1.14



1.15

Peculiar crescent-shaped objects with various shapes are found in the Berau Gulf (Plates 1.13 and 1.14; both from Afofo). In his book, Röder illustrated a range of such objects that reminded him of the bronze axe (or arrow point) of the Dongson culture (op. cit., 1959, pp. 71, 92).

Röder (op. cit., p. 97) mentioned that the locals regarded such stencilled objects as representations of the moon. These artefacts are still unidentified. Other unidentified stencilled objects are present in the Berau Gulf, which may be found (Plate 1.15, from Damir), oval (Plate 1.1, from Sunduma), or irregular in shape (Plates 1.16, from Duri; 1.17, Afofo; 1.18, Sorraa; 1.19, Buraramu and 1.20, Tapuraramu). Röder's informant identified Plate 1.19 as a decorated comb (Röder, op. cit., p. 141).

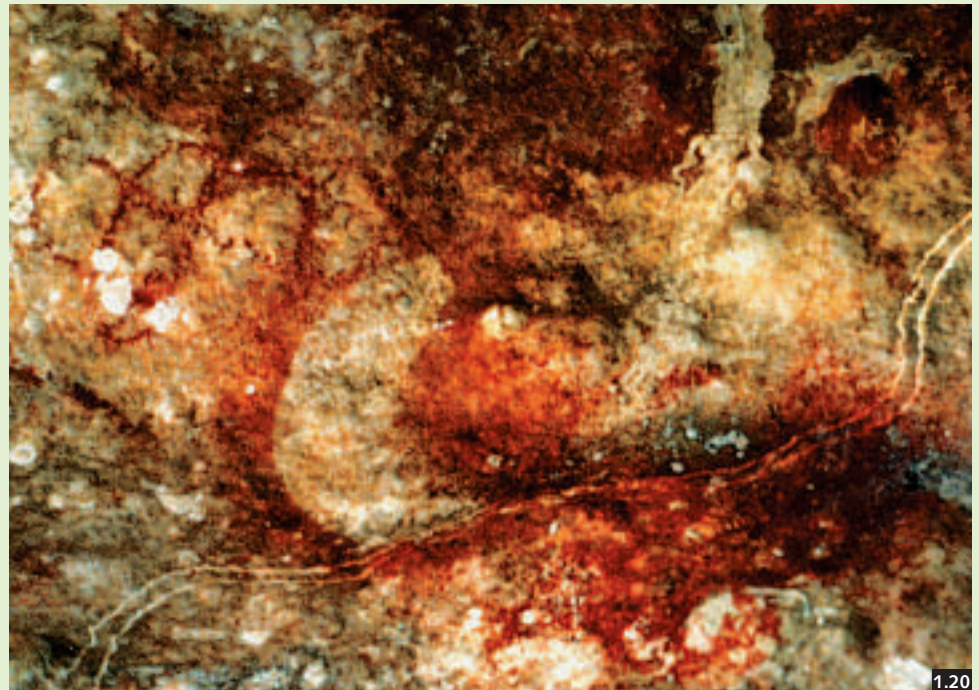
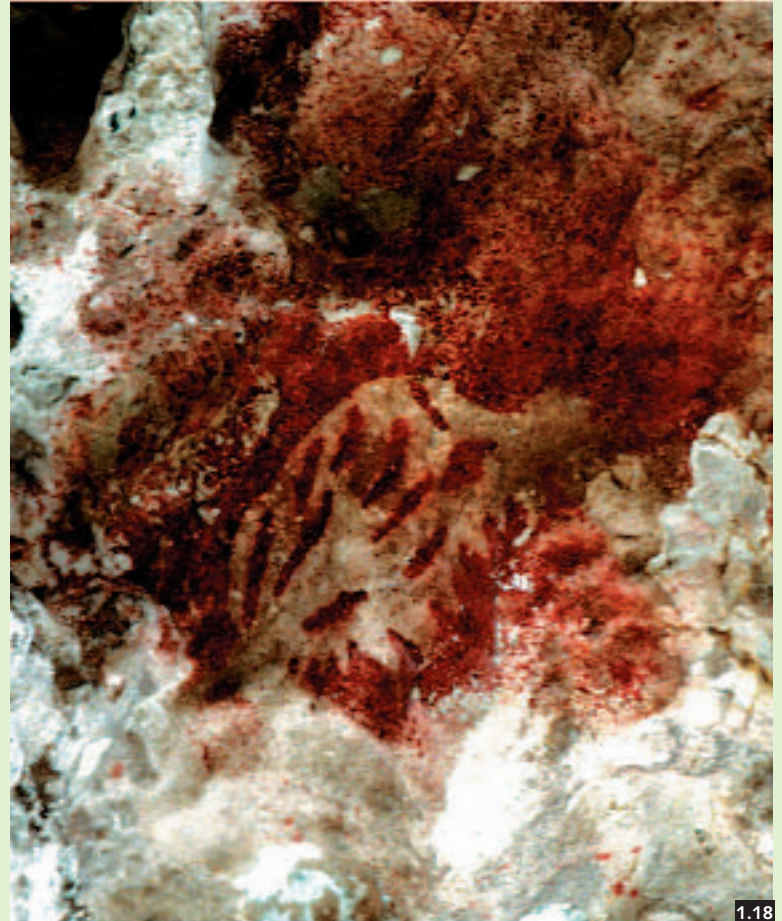
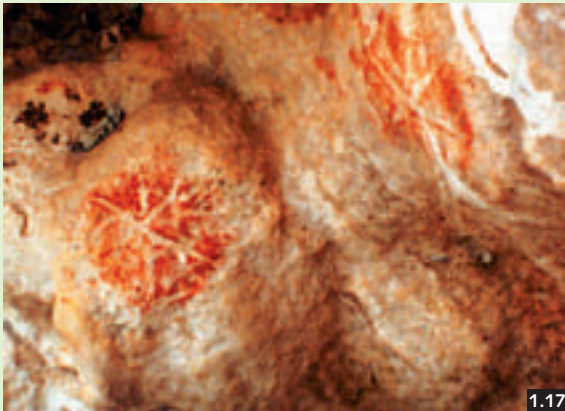






Plate 24. The Arguni style at Mampoga. Most of the paintings on this panel are already faded. They represent unknown objects.

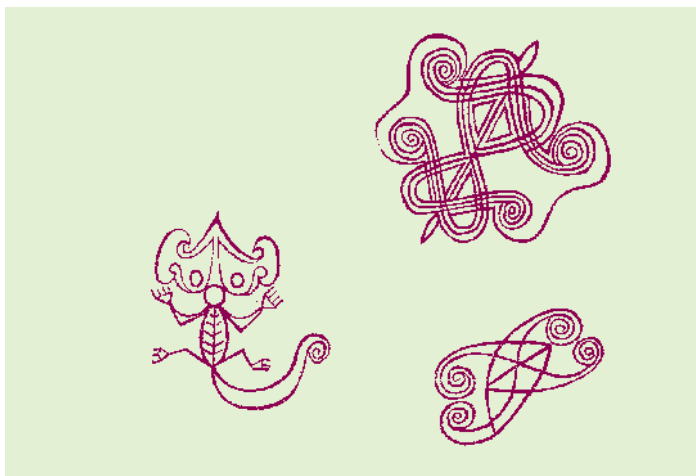


Figure 7. Manga style of the original site Manggo. These figures are painted on a high cliff and today only the top part of the headdress and the tip on the spiral tail of the beautiful matutuo can be seen; the rest has faded.  
Source: after Röder (1959).

Röder thought the most beautiful paintings of Manga style were found at Manggo and Boam (Figure 7). Unfortunately, nowadays, most of the paintings have deteriorated (Plate 34).

Arguni style was similar to Tabulinetin, but with stiffer and cruder motifs and mostly already very faded. Based on the painting's quality, Röder was convinced that this was the end point of artistic deterioration. In the last stage of this style, use of black and red was combined and presented in very poor quality drawings. Paintings of this style were found in Mampoga and Risatot (Plates 24, 25 and 26).

Ota I was regarded as contemporary with the Manga and Arguni styles, often with big, simplified, and clumsy motifs, dominated by a swastika form (Plate 27). Röder noted that Ota I was similar to Manga, but much cruder. He felt that the Ota I style had degenerated badly, and considered it the final stage of the rock art in this region. Röder considered the best example of Ota I style could be found at Ota and Safar, including a big lizard painting from Tapore (Röder, 1959, p. 68), (Plate 28; see also plates in Catalogue no. 1: Safar 1 and no. 44: Ota).

Besides these four red styles, Röder noted that there were many other red paintings. He added that although there were some similarities between these paintings and the four styles, or mixture of these paintings with different styles, their relationships were uncertain. Therefore, these paintings were not discussed in his book.

Black paintings were not as common as red and not as impressive. Almost all of the black paintings were made by applying a dry pigment on the surface wall, but wet pigment was also used. Some of the black paintings were made in Manga style.

The Ota II style was thought to be a continuation of Tabulinetin and Arguni, but simpler and often developed into unidentified lines. Motifs from older red styles were black and therefore placed in this style, but most were seen as faded outlines. Some of the figures, especially human, were already blurred. Paintings of this style were mainly found in Ota.

Röder placed the black paintings found in Sosoraweru Cave in their own regional style. However, he cautioned that the difference should be regarded as ethnic differentiation rather than chronological. Some new presentations were found, but the main object of Sosoraweru paintings was a range of boats, different from Ota II (Figure 8). The boats were made by thick lines and could be seen clearly. These boat motifs were closer to the representation of boats from various parts of Indonesia, rather than those found from the bronze kettledrums from an older tradition. Human motifs were similar to Ota I and older styles.

The most peculiar motif of this region in any style was a therianthrop, locally named *matutuo*, which was often shown with its animal characteristics. Also characteristic of the region's rock art were the stencils. Hand stencils were the most common paintings, but foot stencils were also present. Limb stencils belonged to both adults and children. Other objects were also stencilled: comb, fish, boomerang, axe (?), an oval-shaped object, and other strange, unknown objects. The drawings include masks, clothes, jewellery, shields, boats and animals. The animals were dominated by fish, which were practically naturalistic. Turtles, birds, lizards and crocodiles were

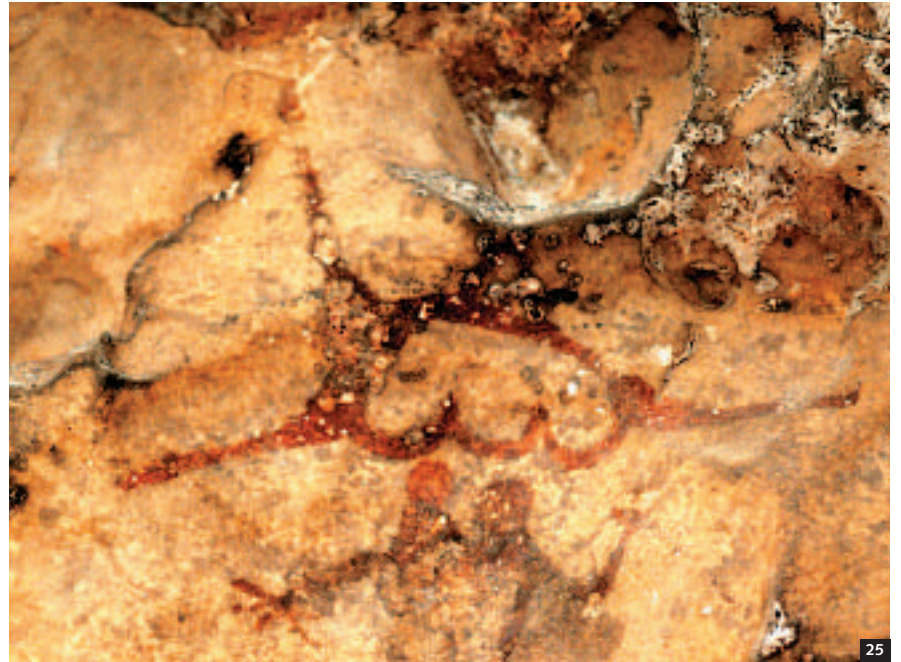


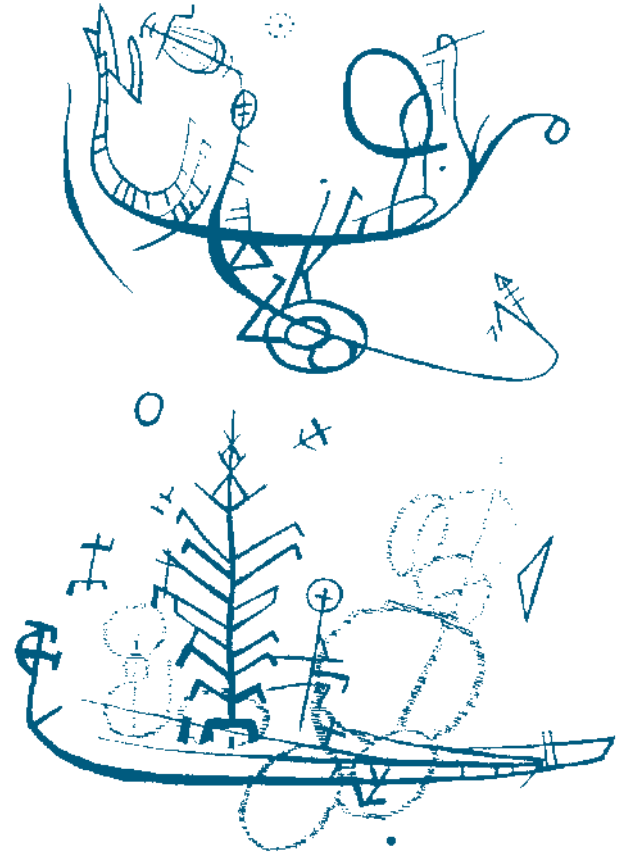
Plate 25. An unknown object at Mampoga in the Arguni style

Plate 26. An unknown object at Mampoga in the Arguni style



Plate 27. A swastika motif of typical Ota I style at Ota. At the bottom, a faded matutuo.

Figure 8. Sosorraweru style: the black painting of boat motifs from Sosorraweru. Today, none of the paintings can be seen.



also depicted. The animal motifs were often made by solid infill or outline with infill. Some of them were drawn like an 'X-ray' (Plate 29) or dotted decoration (Plate 30). Other symbols were common, including spirals, labyrinths, circles, rectangles, dots and intricate lines, as well as combinations of various different motifs.

In his book, Röder also tried to estimate the age of the red and black rock art. The geological situation of the paintings could not be used to determine the age because there was simply no scientific information available on the formation of the sites. The styles provided some information. Röder suggested that most of the black paintings belonged to the period when the local people used boat-shaped coffins for burials and put them in the wave-cut galleries, used sacred stone villages, and occupied fortified settlements (Röder, 1959, p. 85). These black paintings were thought to represent a long period of time,

which Röder suggested was from the seventeenth to the nineteenth century.

The date for this 'culture' was based on the reasonable estimation that fortified settlements, such as Ora and Fuum, were derived from those off East Ceram where early European forts had influenced local architecture and village planning. It was known that Ceramese people had colonized the Berau Gulf region in approximately the seventeenth century, and their presence led the indigenous people to move from the caves to wooden houses in the fortified villages.

Röder tentatively suggested that the Arguni style was as old as the black paintings, and that Manga and Ota I were probably a bit older (*ibid.*). If the supposedly older Tabulinetin style was much older than these, then he 'guesstimated' the oldest paintings at 1000 BP. His archaeological investigation revealed that the cave habitation era had been long, and most of the red paintings belonged to this era. But this cave dwelling was still remembered strongly by the local inhabitants during Röder's visit, so it may have endured until quite recently, and was probably related to the influence of the Moluccans in this region (*ibid.*). Therefore dating the styles by association with cave dwelling was not practical.

Röder also tried to date some of the rock art by identification of stencilled objects with objects of stratigraphical significance from elsewhere (Röder, 1959, p. 71). He illustrated a series of stencilled artefacts that are similar to axes or arrowheads from the bronze age of South-East Asia or Indonesia (*op. cit.*, p. 92). In Röder's time, research on the origin and dating of these artefacts was still in progress, but he suggested that the final phase of this bronze culture in various parts of Indonesia persisted with the Hindu-Java culture until at least the end of the first millennium A.D. Therefore, if those axes were illustrated in the rock painting, they could not be used as an indication for their age, especially since such axes were often handed down from generation to generation and kept as sacred objects. Röder added that, based on external appearance, the rock paintings of this region did not have any connection with the original ornaments of the bronze age of Indonesia.



**Plate 28.** The Ota I style at Mbosu'umata (Röder: Tapore/Bosugo). A lizard or human figure (more than 1 m high), drawn in the middle of red and yellow spots; some of these spots are spread in a row along the cliff for about 20 m. A large cross is located on the right side of the lizard or human figure. Röder speculated that this figure might be a representation of a simplified matutuo figure.

**Plate 29.** An X-ray drawing of a big white bird at Wamarein



2.1

## 2. Tattoos

All around the Indonesian Archipelago and further east in Oceania, tattooing is a common practice among the indigenous people. For some tribes tattoos are more often applied to the men than the women; for others the reverse applies. It can be applied in several stages, from an early age onwards, or at a certain occasion, such as puberty initiation ceremonies or after conducting a certain event, such as head hunting.

The motifs depicted are also varied, from natural figures of animals or plants to geometric and stylized designs. It seems that almost all of the geometric and stylized designs are derived from a naturalistic object such as a bird, lizard or fish.

The tattoo has many functions. For some tribes tattoos are used as clan identification, not only for society but also for the ancestor spirits, so they will recognize a person as their descendant when he/she arrives in the world of spirits. For other tribes tattoos are regarded as a mark of a particular behaviour in life. So the tattoos applied on someone's body can be regarded as the history of the person's life.



2.2

Röder was aware of the fact that some black paintings at the Berau Gulf were actually tattoo marks. Some of them are found at Afofo (Plates 2.1–2.3). The motifs probably represent lizard-like animals, such as the ones in Plate 2.3, while Plate 2.1 probably depicts copulating animals.

Röder mentioned that the Papuan people from Bintuni Bay visited the rock art gallery at Afofo to copy the tattoo paintings as an example (1959, p. 25). He added that Hahn had recorded the tattoo marks of the Berau people, which are similar to the rock paintings (Figures 2.4 and 2.5). Unfortunately no information is available on the meaning of the motifs. Similar tattoo marks can also be found in the Humboldt Bay region, as illustrated by Kooiman and Hoogerbrugge (1992, p. 75), (Figures 2.6–2.10). They are ‘the most common motif tattooed on the backs of Humboldt Bay men [that] suggested a frog and was called a karau’ (Kooiman and Hoogerbrugge, *ibid.*).



2.4

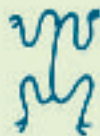


2.5



2.3

These tattoo motifs presumably were also applied in other media, such as bark cloth, drum, carving and pottery. Only further anthropological research could clarify their meaning and help us in analysing the rock art.



2.6



2.7



2.8



2.9



2.10



Plate 30. Animal figures from the Berau Gulf area often have infill, like this turtle at Mampoga, which was made with dotted infill

Röder also examined the oral tradition and history of the local people in order to gather information on the origin and meaning of the rock art. He collected stories and traditional beliefs that were known and practised by the local inhabitants.

### After Röder

Röder's book popularized the art of the Berau Gulf and still has an influence on the tourism to the area. However, since Röder's visit no other field research has been done in this area. Many publications featuring the rock art of South-East Asia and Melanesia quote Röder's work: Holt (1967), Berger-Kirchner (1970), Soejono (1990), Kusch (1986), Rosenfeld (1988), Ballard (1988) and Kosasih (1991).

A few interested tourists have visited the region with Röder's book as their guide. Schneebaum's (1994) account of a recent visit does not mention anything new. The Australian rock art specialist, Chaloupka, who visited the region in the early 1990s, wrote a brief introduction to the rock art of the region in *Irian Jaya: Indonesia New Guinea*, one of the Periplus adventure guidebooks. He has not published an account yet. However, in a draft report, he mentions that he found some of Röder's sites and that a number of paintings that Röder recorded no longer exist. He also found, but did not describe, some new minor sites not mentioned in Röder's book (Chaloupka, 1993b, p. 6).

Today, the Berau Gulf is a relatively popular place for Western tourists. They arrive by speedboat in groups, sometimes in large numbers. However the potential for tourism is still very limited, as the region is quite isolated. It takes eight hours by boat from Fakfak to Kokas, and the trip is expensive. Since the road from Fakfak to Kokas has been finished, the opportunity for tourists to visit the region will increase, tours will be cheaper and more intensive, and the Kokas region will be accessible throughout the year.

The increase of tourism in the region could be threatening for the conservation of the rock art, since there are no regulations yet on how to treat and visit the sites. Some tourists were not only enjoying the paintings from their boats, but also climbing up the galleries. During our

### 3. Matutuo (Berau)

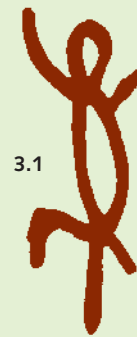
During his journey to Ogar Island, Röder visited a cave called Bisuri Katak. Not long ago this cave was still occupied by the locals, and the big stalagmite standing in the middle of the cave has played an important role for its inhabitants. There was a story of a man who once dreamt that he was visited by someone who claimed to be the king of the fish, and this person told the man that if the inhabitants wanted the fish or other animals that they hunt to be abundant, they would have to put aside part of the animals they hunted as an offering for the king of the fish.

When the man awoke, he still could see the king of the fish and he wanted to embrace him, but instead he embraced the stalagmite standing in the middle of the cave. Since that time, the stalagmite was regarded as the place of the king of the fish and has to be given offerings. The king of the fish was called Matutuo and was regarded as the great ancestor.

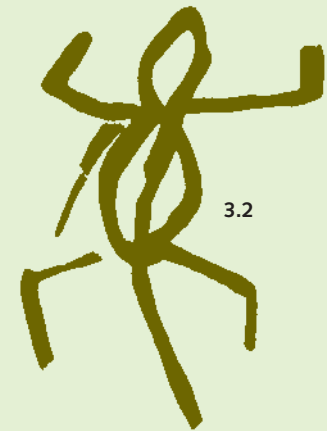
When Röder visited Cave Bisuri Katak, offering for the king of fish was no longer practised. However at Goras, at the Cave of Owai, which was also previously occupied by the locals, this tradition continued (Röder, 1959, p. 32). Röder found an erect pole made of a peeled wooden log, with its top carved with a human head, made by the people of Darewa. A kind of rounded headdress made from the same wood was put on top of the head.

This sculpture was called matutua, which clearly can be identified as Matutuo, the name more commonly used by the people in the region. Matutuo is regarded as the great ancestor spirit of the whole Goras region. A kind of altar for placing the offerings was made around the matutuo. The offerings consisted of betel nut, tobacco, parts of clothes, shells and fish bone. By giving these offerings the inhabitants were expecting that Matutuo, together with the ancestors' spirits, would drive shoals of fish to the inhabitants' nets.

Röder clearly mentioned that there was a difference between Matutuo, the great ancestor spirit, and other ancestor spirits that were often gathered around the matutuo. He added that in the



3.1



3.2



3.3



3.4





old burial sites people often found many human sculptures representing the ancestor spirits with both legs folded, the knees up and the elbows leaning on top of the knees. Such sculpture is known as Maro. Röder mentioned that not long ago Maro sculptures were still kept in the houses, but Muslim leaders urged the locals to take them away and put them in the burial caves (Röder, 1959, p. 37). Maro sculptures were common in this area, and in the Kepala Burung, formerly called Vogelkop Peninsula, north-west West Papua. Such sculptures are known as Korvar, the ancestor figure.

Röder found that matutuos were also made of sago palm stem or of wooden sculptures consisting of several separated parts assembled together in the shape of a small human being. These figures were placed close to the fishing areas and were given offerings. Better quality sculptures were completed with outreaching hands.

These sculptures were sexed, male and female. As well as the sculptures, the rock paintings of human or half-human and half-animal representations, which are very common in the Berau Gulf region, were also called matutuo. These figures were also of the great ancestor, protector of the fish. Usually this figure was depicted in frontal view, resembling a gecko or lizard or crocodile, with both legs wide apart and various hand positions. Röder mentioned that the most peculiar position was with both hands across the body as if in prayer. However, more often both hands were held up beside the head or down, or only one up (Figures 3.1–3.4: various representations of matutuos from Tuturu, Tabulinetin, Safar 1 and Sorraa; after Röder 1959).

According to the local people the headdress of the matutuo was often of a conical shape, and this was characteristic of male matutuo (Röder, 1959, p. 72). Such male matutuo can be seen at Boam (Figure 3.5, after Röder, 1959; Plate 35). The matutuo from Fuum was regarded as female by Röder's informant, as indicated by the position of the legs (spread out) and the absence of the conical hat (Figure 3.6). The matutuo figure can be found in various styles, from simple and clumsy to elaborate and complicated. Its human characteristics were often very prominent; only sometimes was the animal representation more dominant.



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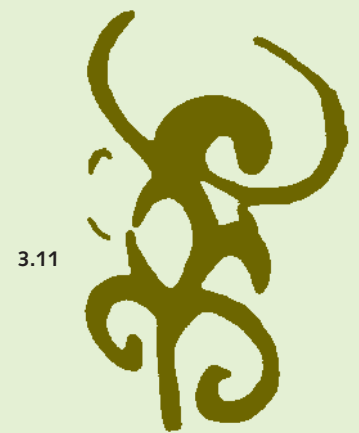
Confusion often occurred when a matutuo was depicted as therianthrop, since it was difficult to trace what was the animal part and whether an exaggerated human penis or tail was represented, as at the site of Mbosu'umata (Figure 3.7). The tail is often depicted straight but some are curly and often exaggerated, such as the one from Risatot (Figure 3.8), the masterpiece figure of Manga style from Manggo (Figure 3.9), and the lovely figure from Tapuraramu with each hand holding a boomerang and a shield-like artefact (see Figure 4.6 in Box 4, 'Boomerang').

The curly-tailed figure from Manggo is also depicted with an exaggerated headdress. One of the matutuo figures from Afofo has its tail's end in the shape of a leaf; presumably it is a leaf-tail gecko, which is common in the region (Figure 3.10). A peculiar human figure with an exaggerated penis is depicted in profile (Plate 39). Such representation of a human being is very rare in this region. It is not clear whether this figure can still be regarded as matutuo, a human, or another important being or spirit. Stylized figures such as the one from Sausosso presumably can still be regarded as matutuo (Figure 3.11, after Röder, 1959, Plate 140).

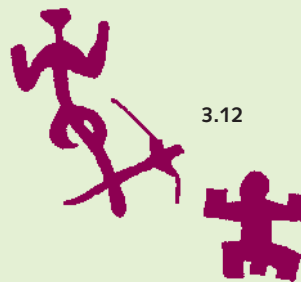
A simplified figure such as the one from Afofo can probably also be classified as matutuo (Figure 3.12). Some matutuos have their body depicted in 'X-ray' such as the classical Manga-style figures from Boam 1 (Figure 3.5) and Duri (Figure 3.13, after Röder, 1959). The one from Duri, c. 65 cm high, is depicted very clearly in Röder's book. Now the inner lines of the body are blurred leaving an uneven red infill. The lower parts of the body (especially the legs) are no longer visible (after Röder, 1959; compare with Plate 35).



3.10



3.11



3.12



3.13



**Plate 31.** Chipping or peeling of the rock surface is quite common in the Berau Gulf rock shelters, such as Dijora. A large part of the already faded red painting has suffered from this. The black painting has also deteriorated and is not as clear as in Röder's illustration (inset).

**Plate 32.** Chipping as well as salt intrusion on the rock surface has occurred in several sites, such as Dudumunir where most of the paintings have been affected

stay in Fakfak, a hotel employee showed us several plate albums with pictures of Western tourists standing in the galleries and touching the rock art. More disturbing are the graffiti, mostly made by local tourists, which are drawn on top of the paintings.

### Berau Gulf Rock Art Today

Our survey was conducted following Röder's map. Once a site was found, Röder's information was confirmed by comparison with what was visible. Photographs were taken, the size of the site was estimated, and the number and variety of the paintings noted. The condition of the rock art was examined and the changes due to the environment were estimated by comparison with Röder's study.

Identification of the geographical names and sites was achieved through the local inhabitants. Information was collected from appropriate people for each area. For example, identification of the islands and capes around Andamata was done with the Andamatan people; while in Furir and Fior the local inhabitants were asked. This method was regarded as the best way to get the exact

location of a certain place, although the various people who live in this gulf know most of the places.

Problems were found with location and confirmation of the names of Röder's sites. Fortunately, it was easy to correct most of the errors because the illustrations in Röder's book were so accurate. Several sites were not found or were wrongly placed on Röder's map, and there were also sites with different names from Röder's, or which were unknown to the local inhabitants. For example Cape Taba (Röder: site number 26) had the rock art pictures described from Cape Duri in Röder's book. Cape Duri (Röder: site number 27) is situated nearby Cape Taba, but at this location no rock art was found. Another confusing place is Tabulinetin (Röder: site number 3), one of the most important rock art sites, which was plotted on the wrong island by Röder. The actual site should be located further east on a smaller island. Today the local inhabitants do not recognize the name Tabulinetin; instead the Arguni Islanders call it Tapure, while the Andamatans call it Tapuraramu. The Island of Batewa (Röder: site number 5) near Andamata is now recognized as Taminunusa and Wamerei Island as Wamerain. Ora Island is known as Fo'ora, while Cape Abba (Röder: site number 34) is known as Afofo by the people of Goras. Cape Manga (Röder: site number 18) is known as Manggo; Cape Tidora (Röder: site number 20) as Dijora; Beoraramu (Röder: site number 25) as Buraramu; Duduru Island (Röder: site number 28a) as Tuturu; Cape Soasose (Röder: site number 32) as Saososso; Ambibiao as Ambibiaom, and Betunis Island (Röder: site number 10) as Pintunis. The village Jangkidai (the Indonesian spelling today is Yangkidai) as it is written in Röder's map is actually the name for this place according to the Sekar people. However, the people of Jangkidai itself named the place as Patewa, while the Argunis call it Ianai. Today Jangkidai is known as Andamata which, according to the inhabitants, is an Indonesian name.

During the identification of Röder's sites, many new sites were also found. It is highly probable that with intensive surveys the number of sites to be found will increase further. However, not all of Röder's sites could be found. These include the confusing sites of Cape Taba and Cape Duri as mentioned earlier, and the beautiful painting



**Plate 33. The salt intrusion on the rock surface has ruined some of the rock paintings at Afofo**



Plate 34. Manga-style painting at Boam I. The infill of the matutuo figure is blurred and the lines can no longer be seen. Röder's illustration showed that this figure had X-ray infill (inset).

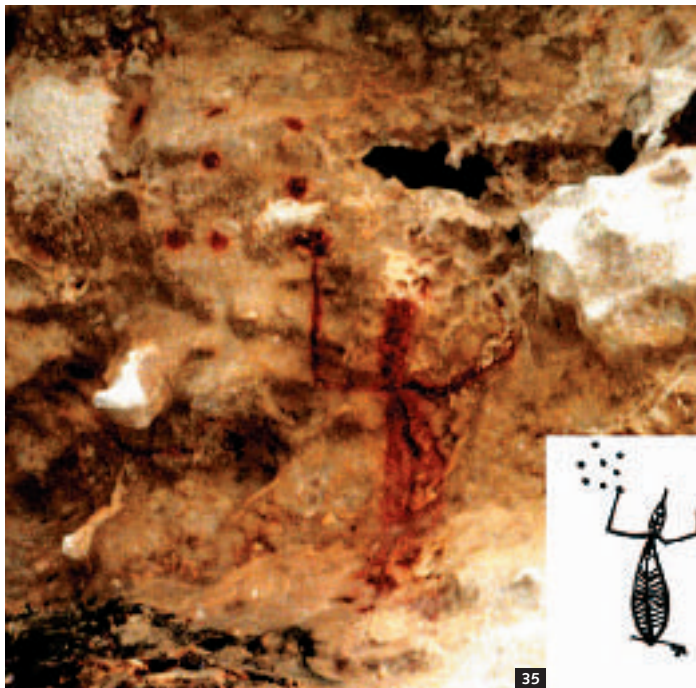


Plate 35. A faded matutuo figure at Duri (inset: the same matutuo figure from Röder's illustration)

of humans standing on a boat with oars in their hands from Risatot on Arguni Island. This particular painting was not found although the surrounding area was searched. Uruan, site number 33 in Röder's map, was not found either, nor were the sites east of Fior (Cape Omata, Odi Island, Cape Awu, and Sinanruma), which Röder grouped in one category (site number 22). Two inland sites, the Auramo (Röder: site number 35) and Siawachwa (Röder: site number 36) were not visited at all because of their remote location and the limited time available.

Some of the rock art sites are very spectacular, covering the whole wall and with the paintings often very clear, even 'fresh'. However, the condition of most of the rock art found is very poor. Many of those recorded by Röder have suffered from natural or human impact. Fading is what occurs most often to the paintings, especially in open spaces. However, often some paintings found at the same location as the faded ones are still in good condition. Many paintings found on small islands, such as Safar, Taminunusa, Mernusa, Farek, Menin and Mariein, or on capes on the southern coast of Berau Gulf, such as

**Plate 36. Water flow damage to an Afofo painting**

**Plate 37. This painted surface at Sorraa shows a matutuo motif that has been cut by water flowing across the rock face. Half of the matutuo's body has also suffered from chipping of the rock surface.**



Barom, Ufit, Sunduma and Fior, can now only be seen as blotches of red marks. Sometimes a few of them are identifiable, especially hand stencils, but more often they are unrecognizable.

Chipping or peeling of the surface of the rock art is another disturbance which occurs commonly in protected shelters. A number of paintings that have peeled are difficult to recognize without comparing them with Röder's illustrations, for example those found at Dudumunir, Dijora, Wamarain and Afofo (Plates 31 and 32). Paintings also suffered from salt intrusion from the rock, as shown at Afofo (Plate 33). Some paintings illustrated in Röder's book with clear lines are now blurred. Several Manga-style paintings, such as those found at Boam 1 and Duri, are a good example (see also description on the accuracy of the illustration in Röder's book below), (Plates 34 and 35). Water flows over the paintings, also contributing to substantial damage (Plates 36 and 37). Many of Röder's illustrations showed such damage.

In some cases the paintings are badly preserved and could not be identified. Such damage is found in many sites, such as Afofo, Sora, Damir, Manggo, Duri, Mariein, Menin, Fo'ora, Mampoga, Tabulinetin and Safar. Insect nests populating the surface of the paintings are another problem, although they did not occur in many sites. However, at Dijora these nests densely covered the wall and disturbed the paintings (Plate 38).





**Plate 38.** The destruction of paintings by insect nests is quite substantial at Dijora. Most of the paintings are also blurred or have suffered from salt intrusion or chipping of the rock surface.

Besides natural disturbances, many paintings have also suffered from human destruction. Several sites that are located along the local transportation route have graffiti, usually made by oil paint. One of the sites that suffered from such damage is Mbosu`umata. Scratching the painting with a sharp object has also occurred, such as to the painting of the male figure with the large phallus at Afofo (Plate 39). In a few remote sites, scribbles were made by tracing the outline of a faded painting with pencil, such as the human figure found in Fuum Island (Plate 40).

It seems that the damage was not inflicted by an ordinary tourist, but by someone who has a special interest in the paintings. Probably they were made by a number of European tourists who specially visited those sites with Röder's book in their hands. According to the local people, a few years ago there were a number of European tourists who asked them to be brought to certain rock painting sites, all of them mentioned in Röder's book. Therefore, they must at least have been aware of Röder's publication. This assumption is also strengthened by the fact that the washed walls at Sosorraweru are exactly at the spots where the paintings were located according to Röder's description. The Cave of Sosorraweru is known for

its specific black paintings, especially the boat. However, during Japanese occupation, the local people used this cave as a refuge. The soot from their hearths had covered the ceiling, including all of the paintings. A few years ago, several European tourists visited the site and asked the local people to wash the ceiling in three places. They used coconut husks, brushes and water to clean the ceilings. Today these three white spots look outstanding compared to the black surrounding. However, the paintings revealed are not clear and are incomplete. None of the magnificent boats illustrated by Röder is still observable. Only remains of lines of black faded pigment absorbed into the rock are left.

The illustrations in Röder's book by A. Hahn were very useful during identification of the sites because they are sufficiently accurate to be matched against the paintings *in situ*. They are very good but not exact: for example, of the paintings from Boam 1 (Röder, 1959, p. 123). Unlike most of Hahn's drawing, none of the figures from this site was executed accurately. Probably the original was destroyed during the war and the illustration in the book was based on the remaining sketches. One figure, the matutuo from Boam 1, should be noted. Hahn's illustration showed the

body infill made of clear lines. Today the body infill is not clear, which makes us wonder whether the X-ray painting in Hahn's drawing is only guesswork (Plate 35).

The long curly-tailed matutuo figure from Tapuraramu (Plate 4.6 and Röder, 1959, p. 96, Fig. 9) is another example. In Röder's illustration the infill of the headdress and tail is almost solid and the white dots are at random, which makes the original cross-hatching pattern unrecognizable. The tail is actually decorated with diamond infill, the sides of the diamonds touching the outline of the tail. The spiral pattern on the 'shield' is no longer clear, and it is difficult to reconstruct the previous pattern from what can be seen today. The palm of the figure's right hand is not supposed to be solid, nor is the thigh of the right leg. Considering these inexact copies of the rock paintings, people who are using Röder's book for style analysis should do so cautiously.

Evaluation of Röder's chronological styles has caused some problems. First, the paintings are not as complete as at the time of Röder's visit. Almost none of the black paintings from Ota can be found anymore, nor can those at Sosoraweru. These two sites are the most important sites for the black painting style. The red paintings, however, are also incomplete.

Second, there are a number of red paintings that were not taken into account in Röder's chronological styles, because Röder found them confusing. Therefore neither detailed description of the motifs, nor the information on their location, is available.

Third, there are many different motifs that are found solitary, not superimposed, and consequently they are difficult to categorize into a certain style.

It is impossible to judge the chronological order of these paintings based mainly on styles. In fact Röder's chronological styles are sometimes confusing, because he did not mention the criteria of a style in a clear definition with definite examples. He often did not differentiate clearly similar motifs from different styles, for example the matutuo figure. This motif is available in every style. What kind of matutuo is exactly represented in Tabulinetin or in other styles? What are the differences between those styles? Simplicity could not be used as a criterion because,



**Plate 39. The modern stencilling of this male figure with a large phallus at Afofo has caused essential damage to the painting**





**Plate 40. This human/matutuo figure has been drawn by pencil to trace the outline of the faded figure**

in the Tabulinetin style, the oldest one at least according to Röder, there are very simple matutuos as well as complicated ones (see Plate 4.6).

Since no exact date of the paintings is yet known, we could only rely on the stylistic chronology established by Röder. In view of the criticism in the above paragraph, that becomes very difficult. Further evaluation is urgently needed. Röder's estimation that the oldest paintings of the region are about 1,000 years old also needs to be appraised. It should be noted that in her review of Röder's book, Rosenfeld suggested a much older date for the rock paintings of the Berau Gulf.

Röder's analytical framework, in which he equated 'naturalism' in art with hunter-gathering subsistence, and increasing stylization with food production, can no longer be accepted. Thus his suggestion for a very early, pre-agricultural date for the earlier phase cannot be upheld. However, three distinct stylistic developments seem clearly established, and these correspond to significant shifts of emphasis in the subject matter depicted. Contacts with people to the north and west, in the Philippines or the Indonesian islands are indicated by the decorative motifs, the likely Dong Son bronze axes, and possibly by the introduction

of the 'ship of the dead' motif. If, as Röder suggests, stencilling is exclusively an early, Tabulinetin technique, then the axe stencils would imply a date no earlier than the latter half of the third millennium BP for the whole of this art.

(Rosenfeld, 1988, p. 123)

Of the total number of forty sites recorded by Röder, thirty were rediscovered in this survey. In addition, sixteen new sites were discovered, most of them found not far from those recorded by Röder. Sometimes it is quite surprising that these sites were not recorded by Röder, since their locations are very obvious and the paintings found are sometimes still in very good condition.

## 4. Boomerang

A boomerang is a bent or curved piece of wood used as a throwing-stick. A boomerang can be thrown much further than an ordinary throwing-stick because it is shaped to improve airflow.

A boomerang is a multi-functional implement. Ethnographic records from Australia show that the desert people of Central Australia, who only have very limited implements, used boomerangs as 'a knife, a hammer or club, a digging tool, for making fire by friction, for musical accompaniment as a percussion instrument – as well as its main function as a hunting or fighting weapon' (Jones, 1996, p. 34). A boomerang used for fighting and hunting could be returning or non-returning. Boomerangs were used to hunt terrestrial animals, as well as birds and fish. However there were also boomerangs that were never thrown, since they were used as fighting weapons, in hand-to hand combat (Jones, op. cit., p. 36).

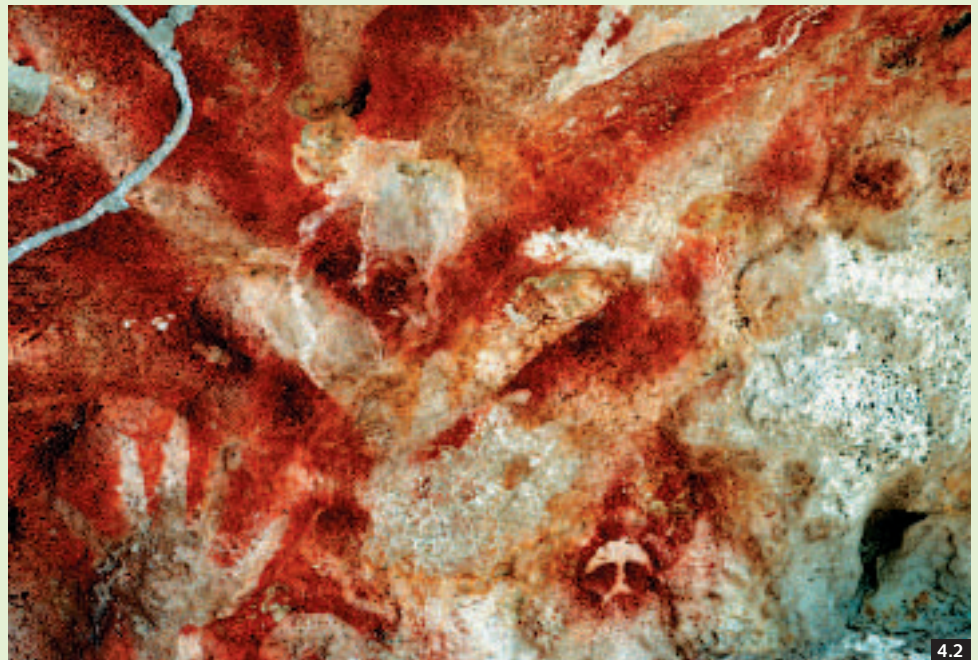
Boomerangs also have different shapes and sizes: from slightly bent and often asymmetrical to acute-angled, and from large ones measuring up to 2 m, such as those from the South Australian Museum, to tiny ones from east of Lake Eyre that were only 50 mm long (Jones, op. cit., pp. 36, 77).

People have generally recognized the boomerang as a typical Australian implement. It is in this continent that the oldest boomerangs, from about 10,000 BP, have been discovered. In a peat bog in the Wylie Swamp of South Australia, nine boomerangs together with other wooden implements and stone tools were excavated from a campsite on the shores of the swamp (Chaloupka, 1993a, p. 122). However boomerangs were not confined to Australia; they were also found in various places around the world. Ancient Egyptians used boomerangs for hunting wildfowl, as shown from depictions on a tomb mural dated back to about 4000 BP (Jones, op. cit., p. 8).

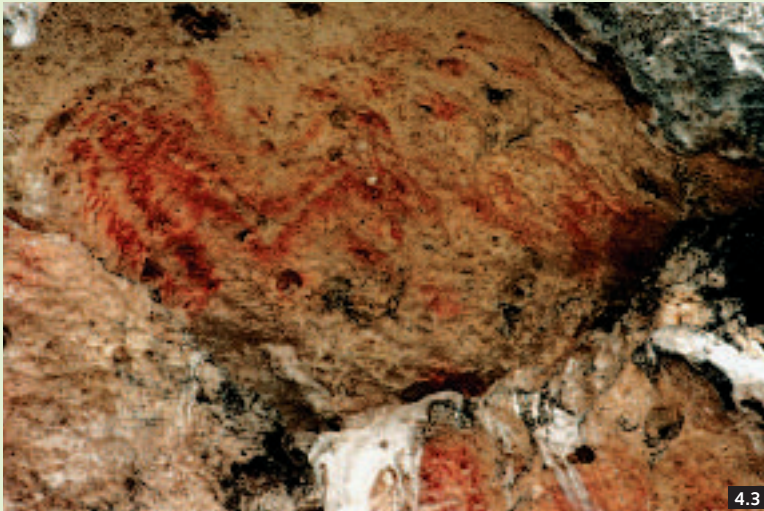
Boomerangs were also discovered in the tomb of Tutankhamun, the Egyptian pharaoh (Jones, 1996, p. 9). In North Africa, there are rock paintings of boomerangs dated to about 9000 BP (ibid.). The Hopi and Zuni Indians of Arizona, the Eskimos, and several tribal groups in India, Indonesia, Vanuatu, Denmark, Holland and Germany used boomerang-shaped non-returning weapons or throwing-sticks (Chaloupka, ibid.; Jones, op. cit., p. 7).



4.1



4.2



Boomerang stencils and paintings were also found in the Berau Gulf region, although today the locals do not produce them, nor have any knowledge of this implement. They are still manufactured in Australia, although in some places such as Arnhem Land, Cape York, Northern Kimberley and along the border regions of South Australia and Western Australia they were absent by the time of European contact (Chaloupka, *ibid.*). However, depictions of boomerangs in rock art have been found in those places, indicating that they were known formerly there.

In the Arnhem Land Plateau rock art, boomerang and boomerang-like objects occurred in a period Chaloupka has called the Pre-Estuarine. This period started during the Last Glacial Maximum, which had considerable aridity (Chaloupka, 1984, p. 17). The subsequent period, which Chaloupka named the Estuarine, commenced with rising sea level about 6000 to 7000 BP, which changed the landscape into a broad salt marsh environment close to the plateau where the rock art is found (*op. cit.*, p. 42). The change of environment can be seen in the rock art by the introduction of new animal and plant species, as well as new spear types and the appearance of spear throwers, who appear to have replaced boomerang throwers. The change of environment must have had a considerable impact on subsistence technology. It seems that the new spear types and the spear throwers were more adaptive than the boomerangs and their throwers. A similar situation may also have occurred in the Berau Gulf. During the Last Glacial Maximum both the Berau Gulf and Arnhem Land were dry and part of the Sahulland. Contact between the two regions could have been maintained during that period. Therefore, it is not surprising if they

shared similar cultural items. Boomerangs may have disappeared from the Berau Gulf region at the same period as in Arnhem Land, probably for the same reason.

The Berau Gulf specimens contained boomerangs with acute angles (Plates 4.1, 4.2, and 4.3). Plate 4.1 shows two acute-angled boomerangs. However, the right one seems to be a depiction of two different stencils, which overlay each other in a certain way so as to form an acute-angled boomerang-like figure. It is not clear what objects they are representing.

It is probable that the left part is a kind of a stick or throwing-stick. Acute-angled boomerangs were also depicted in Carnarvon Gorge rock art in Queensland, Australia (Plate 4.4). Here, the boomerangs, including the slightly curved ones, were depicted in pairs. This is in accord with the ethnographic records, which showed that boomerangs were often used in pairs during ceremonies and music making (Jones, 1996, p. 11). In Damir, an acute-angled boomerang was depicted together with a 'straight' one (Figure 4.3). A different shape of boomerang is found at Afofo (Figure 4.5). This asymmetrical boomerang has one side much wider than the other.



4.6



4.7

Again it is appealing to stress a relationship with hand stencils (as previously suggested, see 'Box 1, Stencilled Objects', Plates 1.1, 1.2, 1.4, and 1.5). The resemblance between the hand stencils and boomerang at Carnarvon Gorge (Plate 4.4) and the hand stencil on the left side of the boomerang-holding matutuo figure at Tapuraramu is peculiar. (Plate 4.6)

Boomerangs are also depicted carried by matutuo figures. The one from Tapuraramu (Plate 4.6) is carried by the right hand of a lovely matutuo figure with an oval headdress and a long curly exaggerated tail. The left hand carries a diamond-shaped object, probably a shield. The other matutuo is from Afofo and carries an acute boomerang (Plate 4.7).



5.1

## 5. Fish representations (Berau)

Representations of fish are quite usual in the Berau Gulf region. In fact, fish are the most common animal depicted here. Painted fish are more common than the stencilled ones. There seems to be a convention of drawing the fish in vertical position, with the head at the top. Artists in the Kaimana region also generally followed this convention. However, fish in a horizontal position and at an oblique angle are also found. Species such as dolphins and sharks can be identified in some of the paintings.

Most of the fish were drawn naturalistically, often showing movements that make the composition very much alive. An exceptional fish drawing can be found at Mampoga (see Mampoga in Catalogue I, Plate 80). This is the largest fish representation in the Berau Gulf area (about 1 m long).



5.2



5.3



5.4



Many fish were drawn with solid infill, such as those found at Mampoga (Plate 5.1), and Wamarain (Plates 5.2, 5.6). Fish drawn in outline are also present and usually they have line infill, such as the painting from Foora (Plate 5.5), which has a single line in the middle of the body, along the backbone. The fish drawing from Afofo looks like an X-ray photograph, showing the backbone in the middle of the body and other bones coming out of this backbone. However, these smaller bones were depicted in the opposite direction of normal bones (Plate 5.4).

In Afofo a group of five fish were drawn with their heads merging in the middle. Two of them were depicted without infill, and the other three with lines as infill (Plate 5.7).





## Chapter 3

# Rock Art in the Kaimana Region: Bitsyari Bay and Triton Bay

## Environmental Setting

Kaimana is a little town situated on the south coast of West Papua, to the immediate east of what is called the Bomberai Peninsula. It is a town well known to an older generation of Indonesians through the popular song *Senja di Kaimana* (Sunset in Kaimana), reflecting on an Indonesian soldier in love – at the time of Sukarno's attempt to annex Irian Barat (the name of the region at that time) in 1961 (Operasi Mandala) – looking at the romantic sunset (Plate 41).

There are approximately 6,000 inhabitants, mainly living from fishery and the sale of palm oil and crocodile skins. The latter products are generally provided by the people living in the little villages scattered along Arguni, Bitsyari and Triton Bays.

Subsistence agriculture, for which the forest is cut, and burnt (slash and burn technique) is widespread. There are no existing roads connecting the different villages, so all transport is by sea and over an immense network of rivers and streams (Plate 42).

The poverty of the local people is striking compared with that of the Fakfak region. This is reflected in an unbalanced diet of fish and vegetables and many diseases like skin infection or infections caused by hunger.

However, it is clear that the Indonesian Government is making efforts to develop the area. Roads are being built to ease transport, as well as communications and access for tourism being set up. These are facilities that could eventually contribute to an improvement in welfare.

The Kaimana region has a wet tropical climate, subject to the seasonal influence of the north-west monsoon from November to March, and the south-east winds from June

Plate 41. Sunset in Kaimana

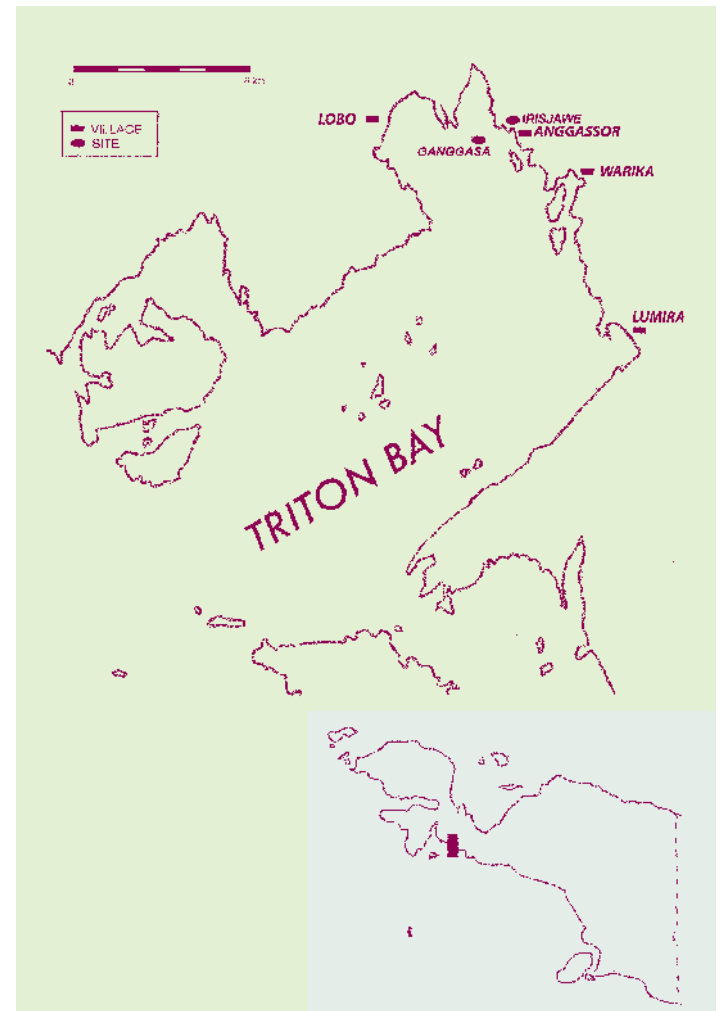






Map 4. Rock Art sites  
in Bitsyari Bay

Map 5. Rock Art sites  
in Triton Bay



to September. Temperatures are high, ranging from 23 °C to 30 °C in a consistently humid climate. Accordingly, humidity is high and annual rainfall ranges, according to locality, between 1,500 mm and 2,000 mm (Plate 43).

The best time to visit the rock art sites is during the months of September and October, when the sea is very calm, but the temperature rather hot. April and May, the beginning of the dry season, are also feasible although the sea may be rather rough at late afternoon. Because of the swampy environment, this coastal area and especially Triton Bay is well known for its high number of malaria cases.

On leaving the Bay of Kaimana in an easterly direction, a relatively high coastline of limestone cliffs is to be observed until Kayumerah and Lakahia Bays. Here the rough limestone disappears and makes way for large mangrove forests and tropical forest areas. In front of the

coast, a range of islands (such as Namatote in Bitsyari Bay) are characterized by the same geology and covered by dense vegetation. It is on these limestone formations – on steep flat parts, in niches, under overhanging rocks or in large wave-cut galleries situated a few metres above sea level – that the rock art is found. Excellent examples of these large galleries may be seen near the village of Maimai in Bitsyari Bay. Some of the paintings situated on flat parts and in niches can be observed up to 30–40 m above the sea level. One can indeed wonder, and try to imagine, how earlier generations carried out this art in these almost unreachable places. The paintings situated at the highest localities of Ganggasa Island in Triton Bay are examples of these inaccessible places.

The history of the population in this region is a very difficult puzzle of migration patterns, and a lot of research should be done to unravel its mystery. The origin of the paintings is obviously directly related to this problem. It is certain that millennia ago the Island of New Guinea was populated only by Papuans, derived from the Portuguese who called the island 'Ihle d'Paopuas', meaning island of the curly-haired people (Chaloupka, 1984, p. 2). Coming from the west, Austronesians invaded the coastal area of West Papua about 3,000 years ago and intermixed with the local Papuan population. Smaller migration on a sub-regional scale happened afterwards up to the historical period. It is also during the historical period, from the sixteenth century onwards, that Indonesian Muslims settled in the coastal areas. Today, a large number of the coastal inhabitants are Muslim. This explains the existence of Rajas as bearers of traditional Muslim rights, adat laws, and customs in the region. They often rule over large territories and are still regularly consulted by the local Muslim population – even politicians – over marriages, social gatherings, disputes on land rights and settlement.

Historical evidence of trade, specifically with islands situated to the west, such as Ceram, and later with the colonial intruders, existed for centuries. From the seventeenth century, trade accounts from the Dutch, English, Portuguese and French refer to this profitable activity, consisting mainly of barter in spices, slaves and the feathers of exotic birds, like the bird of paradise.



Plate 42. Local transport by dugout

Plate 43. A shower in the Bitsyari Bay area



Plate 44. Memorial for the Dutch fortress Du Bus

For a long time the area of Kaimana was subject to conflict between the Dutch and the English, both trying to gain control over the spice routes in the region. Because of this conflict, the Dutch built Fort Du Bus (1828) near the village Lobo in Triton Bay. The fort was named after the first Governor-General of the VOC (Vereenigde Oost Indische Compagnie, or Dutch East India Company), the Marquis Du Bus de Gisiegne, originally from what is now Belgian Territory. The fort lasted only six years until 1835 when the Dutch had to leave because of the very bad health conditions (Muller, 1996, p. 39). A memorial and the ruins of the fortress are still visible near the village (Plate 44).

It was during this conflict between the Dutch and the English that, according to local legend, British troops landed near the village of Lobo, wanting to kill the Garuda bird, which was believed to live on the steep hill behind. This hill is often mysteriously hidden in clouds (Plate 45).

According to the legend, the Garuda bird guarded a huge diamond and had thus been attracting the attention of the English for years. To ensure their success in their hideous attempt they threw a wolf as bait for the bird. As the bird came down for its prey the British shot it. The bird is believed to have been of extraordinary dimensions, able to pick up dugout canoes from the sea, eating the sailors afterwards. The *Kepala Desa* (village head) assured us that until a few years back the villagers guarded one of the huge bones of the Garuda. The bone, however, got lost and the question of whether the British eventually obtained the diamond remained unanswered.

One of the interesting aspects of the story of the village of Lobo is the complex origin of its name. According to the village chief the name 'Lobo' is derived from *loup*, the French word for wolf. But why would the English prefer a French name or could it have derived from a French expedition? Furthermore, since the village name changed a few years ago from Loubo into Lobo, one could suppose that in French it stood for *loup beau* meaning 'beautiful wolf'. Additional to that, in the Spanish language *lobo* means wolf. Could we presume Spanish visitors named the place? Each possibility could be the truth since each of those European colonizing powers – at least in the early

Plate 45. The village of Lobo



days – visited the area, eager to get a part of the spice trade in the region. But even if none of the accounts is the truth, it is none the less an interesting tale, being a good example of storytelling in the region, an important ingredient of Papuan culture.

The people living in the area between Kaimana and Triton Bay belong to the Mairasi-speaking group, a non-Austronesian language. The very isolated position of the villages, however, is one of the reasons that even within the Mairasi language groups a lot of local differences in spoken language and dialects exist. This was sometimes confusing during our survey because the name of a place or a site could differ from village to village.

Not very much is known about the local art in the region. As Chaloupka explained:

Early descriptions of local populations and their material culture made by the Dutch, mention that some individuals wore pubic coverings made of bark cloth or plaited fibre. The bark cloth coverings worn by women during ceremonies were covered with ornamental patterns usually formed of geometrical elements. Some aprons had the oval *mopere*, navel-like motifs (a design element common in the art of the neighbouring Mimika group), and circles with radiating lines usually interpreted as suns. Others include a dominant motif interpreted as a stylized human being. Males wore a penis-case made out of bamboo or the neck of a gourd. The penis-cases were decorated with patterns of dark incised lines consisting of symmetrical arrangement of lines, geometrical elements and curvilinear motifs.

The body decoration of men in local groups incorporated tattooing their left upper arms and their buttocks, and painting their faces red, black or white. Motifs decorating their arms included snakes, scorpions and crayfish, while the left buttock was decorated with a cruciform figure and the right buttock by a cross within a circle. Kooiman (1984:158) notes that the cruciform-shaped tattoo has its equivalent in similar figures recorded from Ceram and [asks] whether the presence of this motif in New Guinea is coincidental or an outcome of the influence by the Moluccan traders. Little else is known of the art of the Mairasi people in whose territory the Kaimana rock art complex is situated.

(Chaloupka, 1993b, pp. 8–9)

Nothing could be found during our research that indicated that any of these art forms still exist. It appears that even older generations do not know anything of these practices anymore. This is strange if we take the fairly recent Dutch observations mentioned above into account. A longer stay, giving the opportunity for more socializing and getting acquainted with the local population, would possibly have resulted in more information. All this is very much in contrast with the population inland, where men still wear penis gourds and also paint their faces. Being easily exposed to external influences in coastal areas and a faster development into modern society are certainly some of the causes for the fast disappearance of traditions in this region.



## 6. Abstract motifs

Abstract motifs are by far the most common motifs at the sites in Bitsyari and Triton Bays, and also occupy important parts of the surfaces at Subulah in the highlands.

Most of the abstract motifs are well preserved. They are often depicted in red and yellow ochre. Less common are black paintings. In each single case the figures have a very distinct character, leading to the assumption that, at the time they were made, people related specific values to each individual symbol or group of them. Their multitude also may suggest a ritual, spiritual and/or religious connotation. Clear examples of single motifs may be found at Esaromi (Plate 6.1), Netnarai (Plate 6.2), Memnemba (Plates 6.3, 6.4 and 6.5), Memnem nambe (Plates 6.6, 6.7 and 6.8) and Irisjawe (Plate 6.9).





6.5



6.6



6.7



6.8



6.9



6.10



6.11



6.12



6.13

Groups of motifs interlinked or separate can easily be observed at Ereretari (Plate 6.10), Netnarai (Plate 6.11), Sasere Oyomo (Plates 6.12–6.18), Tumberawasi (Plates 6.19–6.21) and Wefora IV (Plates 6.22 and 6.23). It is obvious in certain cases that the paintings are painted over different periods of time because of all the overlapping that occurs, the most obvious examples being Tumberawasi (Plates 6.20, 6.21 and 6.22) and Sasere Oyomo (Plates 6.12, 6.15, 6.18 and 16.9). In many cases the motifs are also associated with red and yellow dots (Plates 6.10, 6.11, 6.15, 6.17, 6.20, 6.21 and 6.23). It somehow suggests that there must be a specific meaning attached to them as well.



6.14



6.15



6.16



6.17





6.18



6.19

The web of lines formed at Sasere Oyomo is spectacular, giving the impression of a beautifully woven ceiling and walls, leaving the observer in amazement without giving away any of its secrets (Plates 6.13–6.14, 6.17 and 6.19). Other sites such as Tumberawasi display a different character where the abstract is interwoven with more realistic representations such as lizards, faces, matutuo-like and anthropomorphic figures (Plate 6.22).



6.20



It should be clarified that the term 'abstract motifs' has been chosen by the team as one that unites all paintings not classifiable under the other themes we felt necessary to identify.

Again, for the painters themselves these may not have been abstract motifs at all, but our lack of information and the lack of knowledge within the local population gave us little option.



## Earlier Research and Publications

W. J. Cator wrote the first article on rock art in the area of Kaimana in 1939. The document describes both the regions of Fakfak and Kaimana, and offers some hypotheses on the origins of the paintings.

According to Cator, it is unlikely that the paintings were made by the ancestors of the local coastal people (Cator, 1939, p. 248). In stories about their forefathers the paintings are either not mentioned, or described as alien, coming from the east with the Papuans and their specific culture. This leads to the idea that the indigenous Papuans are the producers of this art. Röder (1959, p. 24) also indicated this possibility. The fact that these people do not populate the coastal area any more could be explained by a migration to the inland mountainous area when Austronesians started entering the coastal area from islands to the immediate west, such as Ceram, about 3,000 years ago. An article by Galis in 1964 was merely a synthesis of rock art sites found in the region, mentioning major earlier discoveries in the Berau Gulf and Bitsyari Bay. What is interesting in this article is a new discovery found in 1954, at a distance of 1 km from Cape Bitsyari. At a height of approximately 30 m, light red paintings were observed, representing three human-like figures wearing a strange hat or hair decoration, standing among several dots and a diamond (fish-like) figure (Galis, 1957a, p. 207; 1964, p. 261).

It is also rather strange that the paintings were not reported earlier by Cator who mentioned the paintings near the village of Maimai, in Bitsyari Bay and could have easily spotted them. Coming from Kaimana, one actually has to pass Cape Bitsyari to reach the other side of the bay where the bulk of the paintings are situated. Other articles on the Kaimana region are rather scarce, and even quite recent ones do not provide a lot of information.

Kosasih gives a very general overview of rock art in Indonesia in his paper given during the first AURA (Australian Rock Art Research Association) Conference in Darwin in 1988 (Kosasih, 1991). The information however is in many ways confusing, especially for the Kaimana area. Kosasih (p. 73) says that the National

Research Centre of Archaeology has carried out research on the sites. Furthermore, it is not mentioned that the paintings near the village of Maimai are the same ones recorded much earlier by Cator and Galis. It is clear that little analysis has been carried out for this article. Kosasih should also have clarified that the expedition he is referring to during 1975 and 1976 was carried out in collaboration with the Institute of Anthropology of the University of Cenderawasih in West Papua and the Department of Anthropology of the University of Hawaii, as reflected in the article of Souza and Solheim (1976). This is the first article to give reasonably detailed information on the Kaimana sites.

The Archaeological Research Centre of Indonesia, the Institute of Anthropology of Cenderawasih University, Irian Jaya, and the Department of Anthropology, University of Hawaii undertook a joint archaeological survey in various coastal areas of Irian Jaya . . . in 1975 and 1976, supported by grants from the Ford Foundation. The field portion of the programme was divided into two parts, one in 1975 and the second in early 1976. This second field trip was under the direction of Arnold Ap for the Institute of Anthropology and Wilhelm G. Solheim II for the University of Hawaii, the latter assisted by his wife Ludy M. Solheim and son Edwin G. Solheim. Just three days before Hari Raya in 1976 this field party recorded a porti[o]n of a vast series of rock paintings near Kaimana, Irian Jaya, which was previously unreported.

(Souza and Solheim, 1976, p. 182)

The purpose of the survey was not to locate and study rock paintings but to locate archaeological sites in an archaeologically unexplored and virtually unknown area.

On the last survey of the second field trip the expedition planned to explore the region south of Kaimana. The fact that they were closing in on Hari Raya (a national holiday) hampered an extensive survey. The recording of their first discovery, 'a single very interesting painting on a limestone cliff', together with some twenty other pictures of 'specific rock paintings', unfortunately was lost in the mail (Souza and Solheim, 1976, p. 185). This leaves us with few clues as to what these paintings referred to.

The expedition spent its first night at the village of Maimai, where they asked the local inhabitants about old remains in the area. It appeared, however, that the locals knew nothing about the origins of the paintings or the people who made them. Visiting the sites, the expedition made quite accurate observations:

The paintings are on the back walls of long, horizontal wave-cuttings in the limestone cliffs. The cliffs about 40 to 60 metres high, at the mouth of the small Maimai bay extend perhaps 300 metres to the north and with numerous interruptions, for perhaps ten to fifteen kilometres to the south. The base of these cuttings, formerly at sea level, is relatively flat and two to three metres wide. In most areas the base is about five metres vertically above present sea level, whether the result of an earlier, higher sea level or a tectonic rise of the land. . . .

This constant overhang gives good protection to the paintings from the rain and it is high enough above sea level that even the largest waves do not reach the back wall.

(Souza and Solheim, 1976, pp. 185, 187)

The overwhelming number of paintings, however, required them to select one part, an isolated section of about 100 m in length, which they reached for detailed observation by means of a locally fabricated ladder.

From the article we also get a first rough attempt to date or at least put the drawings into a timeframe. Souza and Solheim distinguish two different layers in the paintings: red hematite and yellow ochre, and black (Souza and Solheim, op. cit., p. 191). Black clearly overlapped red, suggesting it must be younger. They also attempt to distinguish painting styles, basically reducing them to four categories. First are the hand stencils, followed by a beautiful, sensitive linear style, then a rougher, thick line abbreviated style, and paintings in black, less skilfully administered (Souza and Solheim, op. cit., pp. 191–3). One could wonder here if the expedition did rely on the efforts of Röder (see Chapter 2) to classify and date the paintings.

Souza and Solheim also elaborate on the different subject matters of the paintings. Whereas they already indicated that lizards, turtles, birds, fish, boats,

anthropomorphic figures and celestial figures make up the bulk of the representations, they state ‘the most overwhelming subject matter is the anthropomorphic figures’ (Souza and Solheim, op. cit., p. 192). The article ends with a rather nice presumption or interpretation on ‘why’ the painters paid so much attention to these paintings and their content:

A concern is illustrated here by the early inhabitants for what was important in their lives. The boats, fish, celestial signs, and sea creatures tell of their dependency upon the sea while the lizard appears to represent a tie to their spiritual world and the cosmos. The cliff walls contain a link between the distant past and today concerning ideas of fertility, initiations, death, etc. Here lies a display of evidence of an early stylistic language to be later developed in different directions by the inhabitants of Indonesia and New Guinea.

(Souza and Solheim, 1976, p. 195)

However, the article does not contain many illustrations or photographs. This information could have been very useful for our expedition, comparing the condition of the sites with a time difference of nineteen years. Returning to the colours and materials used we may take into consideration the observations made by Meyer in his *Oceanic Art*:

The most important aspect of art in New Guinea is the meaning and use of colour. The traditional basic colours are: black, which is produced from charcoal, sump oil, soot and certain vegetable saps; red which is identified with blood and hence life, and which is made from human blood, iron-rich soils and certain plant juices; and finally, white, the colour of death and also of the human brain, sperm, sago, and the fresh skull and which is obtained by mixing lime, water and certain vegetable-binding agents.

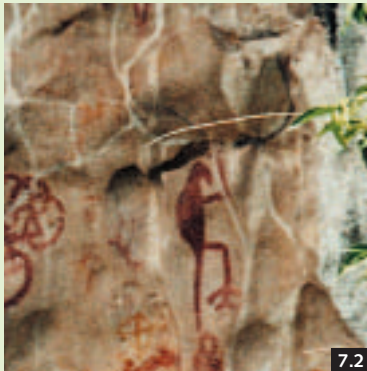
(Meyer, 1995, pp. 47–8)

It is interesting to note that these black and red colours are dominant in the rock art, together with yellow but not white.

Nitihaminoto published a second and last article on this joint National Research Centre of Archaeology,



7.1



7.2



7.3

## 7. Lizards

Lizards are a very common theme in the Indonesian Archipelago and Pacific Islands rock art. They are represented in a lot of woodcarvings, textiles and bark cloth paintings, and have a connotation of strength and wisdom. In Papua New Guinea and other islands such as East Timor this is also the case for the crocodile, often directly spiritually connected to the local communities, its families and family members. Once a person is spiritually connected to the spirit of the crocodile he/she becomes immune from its attacks. Their importance at the time the paintings were made, symbolic or real, is to be felt by their many representations and varieties at sites such as Esaromi (Plate 7.1), Netnarai (Plate 7.2), Omborcene (Plate 7.3), Memnemba (Plate 7.4), Tumberawasi (Plates 7.5 and 7.6) in the Kaimana area, and Subulah in the highland region (Plate 7.7). Representations at the highland site are somewhat different and less refined in style than the ones near Kaimana.



7.4



7.5



7.7



7.6

In many cases it is not easy to recognize a lizard from a crocodile (Plates 7.3, 7.4, 7.5 and 7.6 top and bottom). In other sites such as Esaromi (Plate 7.1) the painting consists more of a matutuo-like motif. This confusion shows the importance of a good classification system. The system developed by Röder based on styles alone, and earlier described for the Berau Gulf region, is clearly insufficient. The matutuo-like or matutuo motifs, being mixtures of human and lizard body parts, show the need to identify with the animal and enforce its spiritual character. In some cases such as Tumberawasi (Plate 7.6) a matutuo-like motif is depicted next to the lizard or crocodile. The texture of the paintings varies from site to site, from light red to dark red and almost black. Only at Memnemba (Plate 7.5) did the team find a bichrome (red and yellow) lizard/crocodile motif.



Cendrawasih University and University of Hawaii expedition in 1980. This article is more general, describing briefly various artefacts found on the survey, including shell tools and ornaments, stone axes, potsherds, megalithic remains, bronze axes and daggers, as well as rock art and burial places.

In the rock art section of his article, Nitihaminoto briefly mentioned the rock paintings from the northern part of Waigeo Island and describes in more detail the paintings from the Kaimana area. He mentioned that paintings could be found on the cliffs and in the wave-cut galleries along Cape Bitsyari. Paintings can be found in two places. The first group is situated about thirty minutes by motorboat from Kaimana. It consists of four pictures, three of them representing stylized human skeletons and another abstract motif (Nitihaminoto, 1980, p. 11). Nitihaminoto noted that each of the three stylized human skeletons has three horns on its head. In his sketch, dots are to be found scattered around the body. Concerning the colour used for the paintings, Nitihaminoto also mentioned that red and yellow are the most important colours. The second group of paintings is located on the wave-cut gallery in the direction of the village Sisir I. The paintings are facing to the east approximately 20 m above sea level, therefore it is difficult to examine them. They consist of only red coloured paintings, representing reptiles, tree, boat, two hand stencils, simple human figures and the sun (*op. cit.*, 1980, p. 12). A sketch of this panel is included.

The paintings from the wave-cut gallery of the village Sisir I represent abstract motifs, mostly in red although yellow is also present. Most paintings were damaged and those that can be recognized include animals (not specified), fishnets, fish, and plants (*ibid.*).

Nitihaminoto continues that the paintings on the cliff of Maimai village are located in five places, all of them situated on long and high cliffs. He states that paintings from the first place were executed only in red, while the others also contain yellow. Nitihaminoto did not describe the paintings from these five places in detail. Instead he only mentioned the paintings representing humans, one lying stretched out with an amputated foot, a pregnant woman lying stretched out, probably giving birth, a child

in a cage, a round human face with rays around it, humans in hunting position, yellow hand stencils, animal figures and so on (*ibid.*).

From Nitihaminoto's description there is no impression that the paintings from Kampung Maimai are actually spectacular, either in variation of motifs or in numbers. Also none of the paintings from Maimai village was illustrated in his article.

A last reference to the sites dates from 1993 from G. Chaloupka, Curator for Rock Art at the Northern Territory Art Gallery, Darwin, Australia, who carried out a quick survey in Bitsyari Bay in 1989 and tried to reflect the situation of the sites in as much detail as possible. One immediately observes the different approach in dealing with the enormity of the sites:

The twenty-four rock art sites provide a record of at least 2,512 images with number of paintings per location varying from four to approximately 1,000. However, a more detailed investigation could perhaps double this total. The majority of paintings were executed in varying chromes of red ochre, many tending towards a dark brown pigment. Others were in a yellow hue, with only two paintings found to be done in white, these being the most recent executed. Although previous investigators (*ibid.*, p. 193) record the presence of black images, I was unable to confirm this being unable to inspect the painted surfaces at a close range. Nor was I able to identify any representations of boats or Matutuo figures reported by them.

(Chaloupka, 1993b, p.10)

Chaloupka also observes that the larger number of paintings are of a non-figurative nature. They vary in complexity from single marks, lines differing in length and thickness, to circles with radiating lines, mazes and geometrical structures (*ibid.*). Also, there appears to be a difference in style compared to the paintings observed at Berau Gulf. The stencil technique is rather poorly distributed in Kaimana and mainly used for hands. Stencils of animals like lizards and fish are entirely missing. Again, compared with the Berau Gulf, no burial sites are associated with the paintings (*ibid.*). Chaloupka, however, suggests that several sites in the Kaimana region have

## 8. Matutuo (Kaimana)

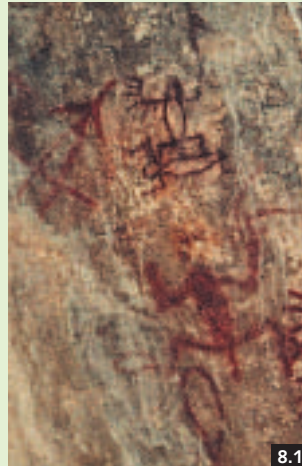
In the Berau Gulf region, Röder has described a lot of matutuo figures. These figures are strange mixtures of anthropomorphic figures and lizards, and would be, according to the local Berau legend, a fertility symbol. Matutuo were not only painted but also carved in wood and placed in the wave-cut galleries along the shorelines. Röder was still able to observe some of them, but they had all disappeared at the time of our survey.

It is rather strange that there is almost no reference to matutuo for the Kaimana region. The Souza and Solheim article (1976, p. 192) quotes:

Lizards are without doubt, the dominant animal. As they crawl over the cliff surfaces, they frequently are combined with anthropomorphic features, creating a lizard-man image (called *matutuo* in neighbouring areas). Their four feet generally have three toes in a cross shape. The front legs face forwards while the back legs spread behind on either side of a long tail. This pose, with elongated lizard body is seen in the more human-like figures. It is interesting to note that the lizard is the only animal with which the human has been joined to create another type of being. No two are alike, some are more lizard-like while others pull towards a more human resemblance, especially head and facial area.

Chaloupka, on the contrary, literally denies recognizing any figures that could be related to them. This is a paradox, because our team also discovered a lot of similar designs. At Ginana III, one of the first sites surveyed in the Kaimana region, this became obvious (Plate 8.1).

Three matutuo-like figures can be observed in the picture; one lying down in the middle and another standing on top of it. A large fully red ochre painted matutuo-like figure is to be seen as well in the right corner below. At Memnemnambe (Plate 8.2) several matutuo-like figures are visible: a dark red one in the centre, right leg faded, and a smaller orange one below. A little further (Plate 8.3) two similar structures can be observed. Similar figures are found on photographs (Plates 8.4 and 8.5) taken at Tumberawasi. Here the matutuo-like paintings (Plates 8.4 and 8.5) are carrying tools, likely to be spear, axe and dagger. Interesting is the little almost brown figure with a dagger or other object, likely to represent someone labouring the land. Other representations (Plate 8.6) are also common, explicitly showing male genitals. A unique and very







8.5



8.6



8.7

large bichrome matutuo-like figure was found at Werfora IV (Plate 8.6). The picture was taken from a great distance, since it was painted in the upper gallery. We would estimate it to be easily more than 1 m in length. It was painted in red and yellow ochre and it clearly has a tail or large penis. Several big red dots are visible above it.

It could be that the figures represented at Subulah (Plate 8.8) in the highland region have the same meaning: at least, if we follow the theory of Cator and Röder, that the paintings were not painted by the local coastal peoples' ancestors but by Papuans, the original inhabitants, who fled the region after the Austronesian immigration 3,000 years ago. The similarity is striking. Both figures in the left upper and right lower corner can easily be related to the anthropomorphic lizard-like creatures described for the coastal region. We know from Heider that the paintings are *wusa* (holy) for the local population, but nothing more. Especially, the three fingers at the end of each arm and leg in the painting (right below), and its tail or penis, display an uneasy resemblance. Or could it be that through trading contacts and/or other forms of communication these symbols were also exchanged during a later period in time? Apart from these, there is also a cross in the middle, another symbol that is widespread along the coast.

Returning to the Kaimana area, and as already indicated, there is a clear resemblance with the Berau Gulf region. Further research, however, should allow us to go deeper into the subject.



8.8

paintings that ‘visually and stylistically’ relate to an earlier commencement of this tradition here than in the Berau Gulf.

Certainly most paintings in the largest of the sites, located in the immediate vicinity of the Maimai village and accessible by land, seem to be of considerable antiquity.

(Chaloupka, 1993*b*, p. 11)

He also refers to similarities in the rock art between Northern Australia’s Arnhem Land and the Kaimana and Berau Gulf regions, especially for the techniques used at the sites (*ibid.*). Although a relation might exist he remarks that the tradition in Berau Gulf is probably younger than in Arnhem Land – a conclusion that can only be verified with a more detailed survey of the sites.

## Current Research

This chapter is the result of an archaeological survey which, together with the earlier chapters, should serve as a guiding instrument for future research, and preservation and conservation of rock art in this particular region. It is also a first attempt to bring all the existing information together and compare it with our recent findings.

The aim was to record as many sites as possible in the Kaimana area and collect data with relation to their exact position, name and contents. In contrast to the Berau Gulf region, which was thoroughly inventoried by Röder during the Frobenius expedition (1937–8), the Kaimana area has only been partially observed, most recently during the 1970s by the joint expedition from the National Research Centre of Archaeology, Cendrawasih University and the Department of Anthropology, University of Hawaii. This is reflected in the rather meagre publications of Souza and Solheim (1976), Nitihaminoto (1980), and in 1989 by Chaloupka (1993*b*).

As there were no detailed maps available, the team took a topographic map along and tried as precisely as possible to locate the different sites. GPS measurements and effective mapping will be needed to update the Kaimana area maps to be found in this publication. Time

limitation also forced the team to make an inventory of the sites with quick drawings, rough measurements and counting. All former expeditions, however, encountered the same problems. We were just lucky to have ‘more’ time. In spite of these disadvantages a full registration of the sites was obtained through photography, giving the team the opportunity for quite detailed and elaborate follow-up work.

The enormous quantity of paintings in this area restricted the possibilities for the team to describe in detail what was observed on site. This restriction, however, was partially overcome by modern technology. In a way we were lucky the publication took seven years to finish. Scanning of the photographs, Adobe Photoshop, and other graphic computer programs gave us the ability to crop and enlarge photographs or parts of them, often discovering figures that were not seen before. Computer programs also enabled us to reconstruct and complete sites or parts of them from fragmented photography, thus giving us a more or less original site situation or overview. These collages will also give readers an idea of the sometimes colossal numbers of paintings we were looking at, but will also provide them with pictures that we ourselves have barely seen, on site.

Upon arrival in Kaimana the price for a dugout canoe was negotiated and our trip started early in the morning of 11 May 1995. The survey was carried out for four consecutive days (Plate 46).

A lot of support from the driver and the local people made it possible to observe quickly and effectively. We started research near Cape Bitsyari, encountering three human-like figures, already observed by a military expedition in 1954 and recorded by Galis (1957*a*, p. 207) and Nitihaminoto (1980). We gave the site the name Cape Bitsyari. Our driver mentioned the existence of similar paintings situated at a short distance above the ones we had just observed. However, the painted limestone cliff collapsed about ten years ago and the paintings disappeared into the water. It is an interesting story that explains our confusion sometimes over earlier research and publications. Sites which have disappeared are hard to trace. It also triggers the question of why Galis did not



mention them if they were so close to the existing ones.

It should also be mentioned here that for the first time all the sites in the area observed were given names, following the indications of the local people.

The trip continued to the small village of Sisir. Arriving there, we explained our intentions and asked if some of the villagers could accompany us to show us the sites they knew about. Apparently we missed some painted sites on the way to Sisir, so we went back to where we had come from.

The first complex of sites after Cape Bitsyari carried the local name of Ginana. The site was thus baptized Ginana and divided into Ginana I, II, III, IV and V. A careful record was made through extensive photography. We crossed the bay in a north-eastern direction to the village of Morano. The owner of the boat told us – like so many educated older people in West Papua he spoke Dutch, making the

task easier for Philippe – that there were paintings in the neighbourhood of the village. He had visited the place before in 1964 with two Dutchmen, Jansens and Bruggekal, members of the former Nederlandse Koninklijke Landmacht Kaimana (Royal Dutch Infantry, Kaimana), but could not remember their exact position. In Morano we waited for an elderly man, who could come along and guide us properly. The village took on a playful atmosphere when a young boy caught an *ikan durian* (durian fish/local name) in the small bay (Plate 47).

A couple of minutes passed, the elder arrived, indicated the direction, and we were on our way for a place called Onomanusu. At Onomanusu a red faded ochre painting, revealing some similarities with Cape Bitsyari, was discovered. It was the only painting on the site. Our trip continued south-south-east, in the direction of the village of Maimai. We passed the small village of

Plate 46. The survey in a dugout canoe

Plate 47. A village boy caught an *ikan durian* (durian fish/local name)



Nanggaromi and a little further south we stopped at the small site of Weretwarom. After recording this, another site with the name Munfuriti – in the immediate vicinity of the village Arkasi – was discovered at a distance of approximately 1 km south. The site of Munfuritnus was discovered 50 m south-south-east of Munfuriti.

One of the most impressive series of paintings was seen in the neighbourhood of the village Maimai. Already described in several articles (Chaloupka, 1993b; Nitihaminoto, 1980; Souza and Solheim, 1976), the Maimai complex consists of five different sites on beautiful wave-cut galleries: Esaromi, Ereretari, Netnarai, Sasere Inabo and Sasere Oyomo. During the survey we drew almost the same conclusions as the others. There is however, one big difference: Chaloupka states that he was not 'able to identify any representations of Matutuo figures' (op. cit., p. 10).

During our survey, we became convinced that there were a lot of paintings of matatuo. A lot of human-like figures were found with both arms up, hands and legs with tree fingers and toes and rather large genitals, wearing headdresses and/or carrying weaponry. Of course, given the lack of background information, it is difficult to say whether the meaning of the figures is the same as in the

Berau Gulf region. To us, the figures in both areas had clear similarities in appearance, a remark also made by Souza and Solheim (op. cit., p. 194). Beyond the village of Maimai, the villagers indicated the sites Bombromenambi, Omborcene and Memnemba. The survey, however, was carried out far too quickly and we decided to return the next day.

In the early morning of 12 May we entered the village of Maimai. We took an older man of the village on board and continued the survey. It became obvious that at the end of the survey the day before we had felt too tired for detailed observation. Lerfis, a small site just before Omborcene, was not recorded. We continued along the coastline, passed Omborcene which we had already recorded the day before, and recorded a new site, Memnemnambe.

Further south, at a distance of approximately 2 km, another exceptional site, Tumberawasi, was observed (Plate 178). From north to south the whole complex of galleries measures approximately 100 m and is literally covered by paintings, several of which were found to be very interesting. The last sites we discovered were four complexes of galleries named Werfora. To distinguish the four different parts of the site the team decided to name



## 9. Anthropomorphic figures

The first figures to be seen, coming from Kaimana, are three anthropomorphic red motifs, one yellowish diamond-like picture, and lines of red dots crossing the paintings at Cape Bitsyari (Plate 9.1). The paintings had already been discovered in 1953 by a Dutch patrol, and Galis first published a record of this discovery (1957a).

The anthropomorphic figures do not have arms or legs and wear a specific kind of headwear. Whether it is a headdress, a ceremonial type of head or symbol, is very difficult to tell. Their bodies are rather long and small, and filled with red lines. Nitihaminoto (1980) describes them as skeleton figures. The diamond motif could represent a fish. Galis (1957, p. 207) suggests that the anthropomorphic figures may be representations of ancestors or demons. In this sense the two lines of dots crossing the other paintings might have an additional symbolic or religious meaning.

Anthropomorphic motifs, however, are depicted in many different ways, as may be illustrated with the other sites encountered. The motif at Netnarai (Plate 9.2) is the only one of its kind, and may refer more to a reptile than a human. It must be a symbolic representation of some kind. Also unusual is the red ochre filling of the body and the two eye-like motifs on the back. At Tumberawasi there are a lot of very refined, detailed and stylized representations.



9.1



9.2



9.3

The first figure (Plate 9.3) has a specific headdress and looks a lot like the figures at Arguni Island in the Berau Gulf, described by Röder as ancestral figures (Plate 9.5). A similar motif, but with an even more outspoken headdress (Plate 9.4), can be found further down at the site of Tumberawasi, but very different images are yet again shown at Tumberawasi (Plate 9.6). To the left, an anthropomorphic figure in motion is depicted under two boomerangs, and to the right of it is a rather large image of a human worked out in great detail.



9.4

The team considers this image to be of exceptional quality in comparison with other anthropomorphic figures depicted in the other sites. The description found in the article by Souza and Solheim is quite accurate:

He is coloured in on the arms and the knees down, possibly representing a form of body decoration. Fine fingers are spread on either side of his penis. His shoulders, one raised as if in a shrug, are topped by a wide, squarish head, embellished with spiral earrings, and a now familiar prong-like head ornament (or hair). This provocative two-toned image gives the impression of rising from a group of much simpler figures, some of whom appear to be gesturing towards him.

(Souza and Solheim, 1976, p. 194)



9.5



9.6

Matutuo-like motifs may be seen to the left and the right of this figure. Another interesting figure (Plate 9.7) can be found at Werfora III, again next to a matutuo-like motif. The anthropomorphic figure is standing straight up, arms along the body, which is coloured red ochre, in contrast to the face which lacks any colouring.

A walking figure (Plate 9.8) could be seen at the other part of Werfora III. The red ochre figure seems to be carrying an object or a tool. It is also wearing a rather large headdress, but quite different from the one observed at Tumberawasi (Plates 9.3 and 9.4).

The anthropomorphic figure depicted at Werfora IV (Plate 9.9) is painted very much in the same style as the moving figures under the boomerang at Tumberawasi (Plate 9.6). It lifts both arms in the same way and appears to be dancing. Legs, body and arms are again filled in with red ochre, and this is in deep contrast to the face. It is not clear whether the figure is wearing a headdress. Painted on top of the head is a thick line of red ochre.



9.7



9.8



9.9

them Werfora I, II, III, IV. Werfora IV, a double wave-cut gallery (Plate 183) is very impressive and gives a good idea of tectonic movement and the rising and dropping of the sea level during the past glacial and interglacial periods.

May 13 was going to be a special day. We decided to pioneer further along the coast to see whether there were any more places of interest. Villagers had indicated that there was another bay further east, Triton Bay. They were not sure about any paintings but we thought it worth trying. The trip was going to be long: a three-hour boat trip from Kaimana, meaning six hours of travelling. But the trip was a success: two new sites, never recorded before, were discovered, namely Irisjawe and Ganggasa. The discovery was made with the help of the *Kepala Desa* (village head) of the village of Lobo situated in Triton Bay. He sent some villagers along with us, who pointed out the two locations. To verify we went extensively through the bay but could find nothing else. We also decided not to go further east since the limestone formations along the coast gave way to mangrove forest.

On 14 May we went back to Bitsyari Bay to verify the notes we took on 11 and 12 May. At around 9 a.m. we arrived at Nanggaromi where we would start our verification trip. Liturgical music came from the chapel. The Sunday mass was being held. Nevertheless, some children appeared and a man was salting fish on a wooden board laid over his dugout canoe (Plate 48). Meanwhile, mass finished and more people came to see us. It was not a pretty sight. The village was very poor; houses were mere shacks and a lot of children obviously suffered from skin disease. A couple of people, including the *Kepala Desa*, would accompany us.

However, the departure was a little delayed. Starting the two outboard engines of the dugout seemed too much for the wood construction holding them at the back of the boat. A few metres were covered and the engines collapsed into the water (repair before verification). But as always there were solutions, and a bit later we were off with only the small 15 HP engine running. It would take us much longer to cover the area but a day would still be sufficient. What had been difficult – indicating the sites on our poor topographic maps – became frustrating. The maps were too



Plate 48. Nanggaromi: A villager salting fish

small, with the result that mistakes in positioning occurred all the time. With the aid of a compass, and the position of coral reefs, the location of the sites was transferred to the maps.

Better mapping material would have helped the situation a lot but we had to make do with what we had. Future prospecting with GPS positioning will certainly provide more adequate information, but the maps produced during this survey will no doubt be more than useful for future research.





## 10. Fish (Kaimana)

As in the Berau Gulf region there are a lot of representations of fish in the Kaimana area. The nicest representations in Bitsyari and Triton Bays are to be found at Netnarai (Plate 10.1), Memnemnambe (Plate 10.2) Tumberawasi (Plates 10.3 and 10.4), and Sasere Inabo (Plate 10.5). Most of the time (as illustrated in these photographs) the paintings are very realistic and leave no doubt about the subject, but then, fish would have been on the daily diet of the painters. In many cases the form of the fish represented suggests dolphins (Plates 10.1, 10.3 and 10.4). If so, these are mammals that occupied a special place in the life of these people. These playful creatures still play a rather important role in the daily life of fishermen living along the southern coastline of West Papua. We ourselves encountered many dolphins during our trip, more than once giving us a fantastic display of wildlife. Sharks are another fact of life in the Arafura Sea, and there are a lot of them there. The paintings at Sasere Inabo could contain representations of hammerhead sharks (Plate 10.5).

One evening, over the dining table with the Raja of Arguni, he elaborated on local fishing methods and what kind of fish they would normally be looking for. Catching sharks is a very lucrative business, especially because of the shark fins Chinese middlemen export through the whole of Asia. Profits



10.1



10.2



10.4



10.3



10.5



10.6

are high, US\$133 a piece (before the monetary crisis in 1998). Taking into account the poor conditions these people live in, such sums of money are more than welcome. There are many different kinds of sharks, often over 2 m in length. For shark fishing, the local fishermen go to deeper waters where anchors, small buoys and fishing lines with big hooks and loads of fish do the rest of the work. It is interesting that the same men also often go dolphin hunting. Dolphin meat is considered a delicacy by the sharks.

Other marine life such as turtles are less represented (Catalogue II: Werfora III) but are still very much caught today. Fish-like structures are also painted in the X-ray style such as at Tumberawasi (Plate 10.6). This style, also to be found at Berau Gulf, is rather common although its meaning is covered by the veil of time. It is also remarkable (as in Berau) that most of the fish represented are standing. No specific meaning could, however, be attached to this curious fact.



Plate 49. Lunchtime  
in Bitsyari Bay



49


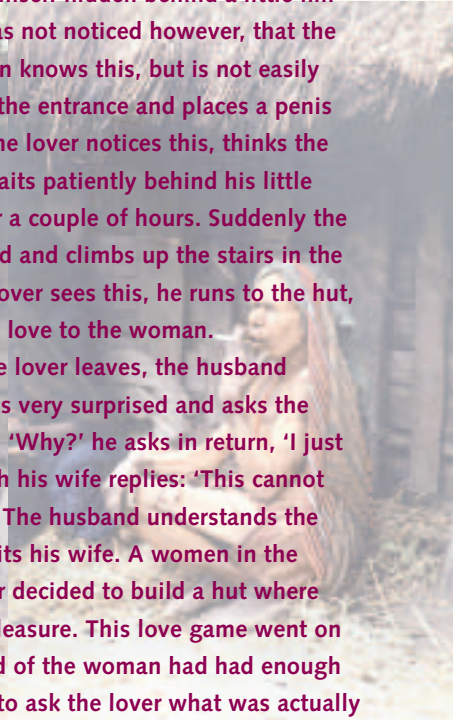
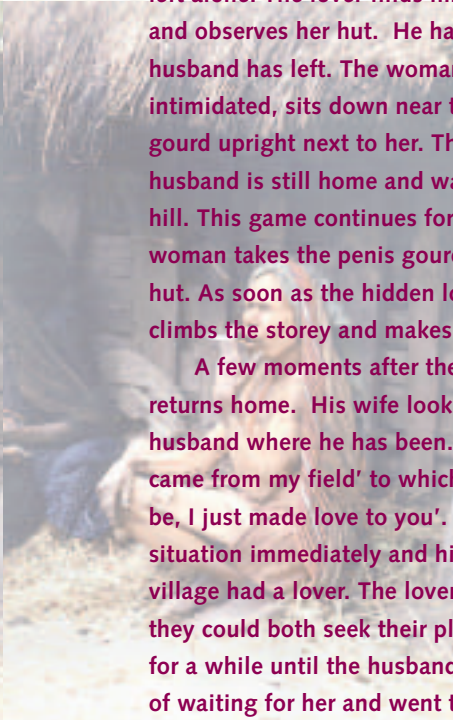

In the early afternoon the survey was done and frustrations were tempered, with some more pleasant aspects of life. Towards lunchtime Paulus, the owner of the boat, produced a line to catch fish. We were looking for a school of *tongkol*, a fish of the tuna family (but smaller) that swims in large groups at the surface of the sea. It was not long before we discovered such a school, and in no time Paulus had some fish on the hooks. A little beach was found, some wood and banana leaves gathered and a succulent meal was produced (Plate 49).

The day in the dugout reached its climax near the Island of Aiduma where we found ourselves in the midst of a school of dolphins, remarkable animals. We spent approximately half an hour among them and then headed back for Kaimana. The next day we had to catch our flight to the Berau area where a last verification of the sites would take place before the final trip back to Jakarta.


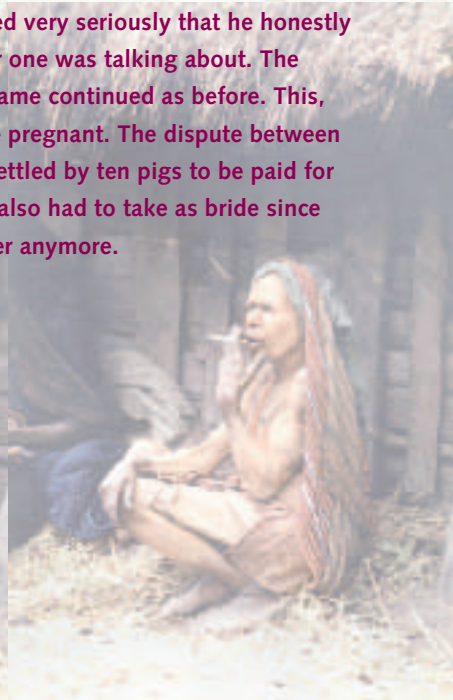
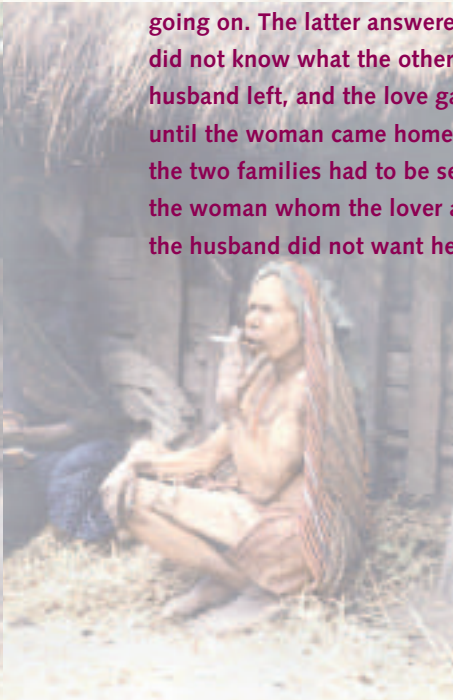



### ■ Dani stories about women

A man enters the men's hut and wants to tell his intimate story (about women) to his companion. At first his companion pretends not to understand his intentions, but after teasing a while, pushes the other to continue. What the storyteller does not know, however, is that the hut is full of other interested listeners. A married woman has another lover in the village. When her husband goes to the field, she is left alone. The lover finds himself hidden behind a little hill and observes her hut. He has not noticed however, that the husband has left. The woman knows this, but is not easily intimidated, sits down near the entrance and places a penis gourd upright next to her. The lover notices this, thinks the husband is still home and waits patiently behind his little hill. This game continues for a couple of hours. Suddenly the woman takes the penis gourd and climbs up the stairs in the hut. As soon as the hidden lover sees this, he runs to the hut, climbs the storey and makes love to the woman.



A few moments after the lover leaves, the husband returns home. His wife looks very surprised and asks the husband where he has been. 'Why?' he asks in return, 'I just came from my field' to which his wife replies: 'This cannot be, I just made love to you'. The husband understands the situation immediately and hits his wife. A woman in the village had a lover. The lover decided to build a hut where they could both seek their pleasure. This love game went on for a while until the husband of the woman had had enough of waiting for her and went to ask the lover what was actually going on. The latter answered very seriously that he honestly did not know what the other one was talking about. The husband left, and the love game continued as before. This, until the woman came home pregnant. The dispute between the two families had to be settled by ten pigs to be paid for the woman whom the lover also had to take as bride since the husband did not want her anymore.





# Rock Art in the Baliem Valley

## Environmental Setting

No account describes the environmental setting of the Baliem Valley better than the first page of Peter Matthiessen's book *Under the Mountain Wall*:

The snow mountains are the summit of Western New Guinea.<sup>1</sup> On the high flank in the central highlands lies a sudden valley: here the Baliem River, which had vanished underground some 20 miles upstream, bursts from the mountain wall onto a great green plain.

(Matthiessen, 1962, p. xi)

This valley, the largest on the Island of New Guinea, is situated at a height of 1700 m above sea level, and is 16 km wide and 60 km long. It is surrounded on all sides by mountain peaks varying between 2,500 and 3,000 m. It is one of the most fertile places in West Papua and is inhabited by the Dani people (Plates 50 and 52). The Baliem River continues its journey to the valley head.

Travelling over another distance of approximately 70 km the river drops into a gorge passing through the mountains, to subside at last in the vast marshes south to the Arafura Sea. The origin of the Dani people is unknown. They are called Papuan, or non-Austronesian speakers. Until the 1960s, when iron tools were introduced, they lived in the Stone Age as warrior farmers who used wood, flint and stone for their tools and weapons. With its extraordinary scenery and magnificent people the valley

1. Until 2000 named Irian Jaya, and since renamed West Papua.



Plate 50. A Dani village in the Baliem Valley

Plate 51. Children peeping from the women's kitchen



is one of the wonders the Indonesian Archipelago has to offer. Today, this culture is still unique and untouched in many ways (Plate 51).

### Discovery of the Baliem Valley

The American Richard Archbold, who led his third expedition into New Guinea, this time in collaboration with the Dutch colonial government, discovered the valley in 1938. The idea was to explore the largest remaining blank spaces on the map of New Guinea, namely the northern face of the Snow Mountain Range (Muller, 1996, p. 106).

The expedition decided to set up two base camps, one at Lake Habema at 3,225 m and one, called Idenburg Camp, in the 'Lake Plains' region north from the mountains at 50 m above sea level (ibid.). Aerial reconnaissance – the key to the success of the Archbold expedition – was done with a Catalina flying boat called the *Guba*, and was crucial in determining the best route between Lake Habema and Idenburg. The military patrols, under command of

Lieutenant Van Areken and Captain Teerink, were to leave each of the base camps and meet up in the Baliem Valley. This was how the first expedition made its way to the Baliem Valley and made the first real encounter between white men and the Dani people (ibid.).

The fact that the valley went unnoticed during the earlier years of collaboration was a mere coincidence. Before the Archbold expedition, six encounters with Dani people were registered during explorations of Dutch teams such as the 1909–10 expedition of Lorentz (Muller, op. cit., p. 110). In 1921, Kremer even crossed the Baliem River's head, trying to reach the actual Mount Trikora and missing the valley by a few kilometres. After the Archbold expedition it was mainly missionaries who entered the Baliem to Christianize the local people. Thanks to the efforts of Lloyd van Stone from the United States-based Christian Alliance, the first airstrip was built, and a few months later a landing site was chosen next to what was to become the Dutch government post of Wamena in 1958 (ibid.). But evangelical work proved to be slow going.

Christianity was not accepted very easily and was often seen as an enemy of the political power of the Dani in the Baliem Valley. Protestant missionaries encountered another problem with the arrival of the Catholic Franciscan Order in 1958. This order is still there today and occupies the strongest mission post in Wamena.

The first serious modern anthropological study in the Baliem Valley of the Dani started with the Harvard-Peabody expedition in 1961. This expedition included anthropologist Karl Heider and novelist Peter Matthiessen, and gave birth to some extraordinary publications such as *The Dugum Dani*, *Gardens of War* and *Under the Mountain Wall*.

## Earlier Research and Publications

There are no accounts of rock art in the Baliem Valley prior to the Harvard-Peabody expedition of 1961–2. This is partially because of the late discovery of the valley itself and its very slow opening to the outside world. But there is more to it. The sites are often very inaccessible and, in



**Plate 52. Environmental setting:  
a view of Wamena, capital of the  
highlands, in the Baliem Valley**

particular, the ones with red paintings are sacred to the local people. Heider gave the following account:

I knew the northwest slope and the crest well, but it was not until my twenty-fifth month in the Dugum area, when exploring the southeast face, that I discovered a unique series of red drawings, including positive and negative representations of human hands. . . .

The meaning of these red figures, which differ so from the black figures in location, style, and content is a puzzle. I never was able to observe the drawing of any of the red figures, as I did the black. In 1968 I revisited the red figures with an informant and asked many other important men about them. Those men who were of the Wida moiety professed ignorance and the Waija men simply refused to answer.

(Heider, 1970, pp. 184, 188)

These paintings, which Heider discovered in 1961 and revisited in 1968 at Dutabud Hill, represented adult hand





**Figure 9. Charcoal drawings of humans made by young boys.**

Source: after Gardner and Heider (1968).

**Figure 10. Charcoal drawings of garden plots made by young boys. Source: after Gardner and Heider (1968).**



stencils, both positive and negative, crescents, crosses, Xs and animals. He mentions only one other site, Subulah Hill, in the centre of Widaia Dani territory, indicating that the figures he observed were similar in form and colour to the red design on Dutabud Hill (Heider, 1970, p. 188).

These charcoal drawings are done in a most casual manner by boys or men passing the rock shelter. A few of the boys ten to fifteen years old are particularly responsible and could be considered the spare-time artists of the rocks.

(Heider, 1970, p. 182)

Robert Gardner and Karl Heider published other information on the Baliem Valley's rock art, again as a result of the Harvard-Peabody expedition and as homage to Michael Rockefeller (1968). It is, however, mentioned only briefly in a small caption and four photographs (Figures 9 and 10): 'For amusement, boys draw casual charcoal figures of people, garden plots, lizards and even ghosts on rock overhangs in the forest above the valley

floor' (Gardner and Heider, 1968, p. 30). Here again all paintings are black and have only a profane meaning.

Matthiessen, as a member of the expedition, also discovered rock art sites in the Baliem (1962). His book, an account of the everyday lives of the Kurulu Dani, gives some information on these sites including maps. Matthiessen mentions two places, one near Abulopak village and the other near Lokoparek village, not far from the Tabara stream. The rock art near Abulopak was found in a limestone sinkhole with a sheltered wall. The apparently casual drawings in charcoal include men, women and several lizards. According to Matthiessen the red pictures near Lokoparek were very complex, most of them superimposed and unrecognizable. However, nothing is mentioned about whether they are sacred or not.

### Knowledge and Attitude of the Local People Towards Rock Art

As indicated above, the creation of the black drawings is just amusement, during youngsters' and elders' playtime. All attempts by Heider to discover some deeper ritual or communicative significance failed (Heider, 1970, p. 188). Moreover, he was unable to observe any of the painting of these red figures. He could only conclude:

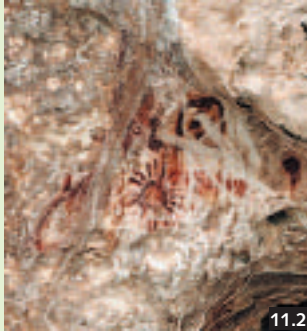
The red drawings are made in connection with the *waija hakasin*, the initiation of young boys into the Waija moiety. The ceremony is very *wusa*, as are the drawings. They are made by the Waija men while standing some sort of vigil on the Dutabud Hill in connection with the ceremony. The young boys are not present, and the red hands are certainly the size of adults, rather than the three to six year old initiates.

The red matter is the *bimut wusa*, sacred red clay, which is brought into the Grand Valley from the Jalemo for the initiation ceremony, used to draw a red stripe down the forehead and nose of each initiate, according to informants. The use of red recalls the worldwide prominence of blood or a red blood-surrogate in initiation ceremonies. But I could find nothing to suggest that the Dugum Dani make this symbolism explicit.

(Heider, 1970, p. 188)



11.1



11.2



11.3



11.4

## 11. Celestial figures

Celestial figures are abundant in the Kaimana region. This is not surprising, since in most cultures celestial objects play a very important symbolic and/or religious role. Being often considered to relate to birth, death, fertility and the hereafter makes them the core of many religions and belief systems. Entire societies, such as those of the Egyptians and communities at Stonehenge, evolved around them. Today, they are an intrinsic part of our existence. It is no wonder that, at the time these paintings were made in the region of West Papua, people paid much attention to them. We did not however have the capacity to find out their specific meaning. Mostly it is the sun, we observed, that is depicted in different ways and sizes, maybe as 'creator of life'.

The most familiar representations can be found at Ginana III (Plate 11.1), Memnemnambe (Plate 11.2) and Tumberawasi (Plates 11.3 and 11.4). Another interpretation may be found at Werfora II (Plate 11.5) where the bowl of the sun is filled with curved lines. Similar paintings can be found in the Berau Gulf region, but their meaning is unknown.



11.5

The conclusion was that high-ranking elders, and in fact the whole community, did not want to say anything that could indicate any significance with relation to the red paintings (Heider, 1970, p. 188). During our survey, which was much shorter than the extensive stay of Heider, we were confronted with the same findings.

## Current Research

From Heider's research in the 1960s it is obvious that the red paintings had a ritual meaning which was kept secret, especially by the community elders. Today, as we found out, the situation is very much the same. This environment made it rather difficult for us to carry out our survey. Heider merely saw these paintings by accident, or was taken there by an informant later on, and tried to discover their meaning without much success. Why were we then so attracted to undertaking this voyage?

It was actually a mere coincidence – as happens so often – that led us to this highland adventure. Discussions held in the course of 1994 with the Director of the NGO Sejati in Jakarta, Dea Sudarman, revealed to us the existence of extensive rock art sites along the southern coastline of Irian Jaya and the Baliem Valley. A couple of years earlier Sejati had shot film footage of one of the sites in the Baliem Valley – a site already mentioned by Heider – namely Subulah (*ibid.*). If we undertook an extensive survey of rock art on the south coast of West Papua, we could also try to include sites of the highland region. Careful research was carried out with meagre results. Locations of the rock art sites in the few books and articles that we perused were not really specified, and apart from the film footage of Sejati and the few black and white photographs from Gardner and Heider, we had no visual material (Gardner and Heider, 1968, p. 38; Heider, 1970, pp. 186–7). So there were a lot of unanswered questions left for survey in that particular region.

During the course of 1994, UNESCO contracted the NGO Sejati to make a short promotional video from the footage material on the south coast and highland region, not only introducing the sites to a larger public, but also trying to link them into their existing environment, and

raise interest from the scientific community, especially in Australia. There was interest, but little means for support in the field. Our Australian contacts nevertheless became vital as a source for scientific information.

As already indicated, the approach of our research in the highlands was a little different from our surveys on the coast. We knew that the interesting places were sacred and that we would have to go through the hierarchy of elders to obtain any positive result.

Rather than just describe what we found, we would like to share our approach with the reader. For interest, there is a detailed account of our experiences in the highlands from our arrival in the capital of the highlands, Wamena, to our departure for Jayapura in Appendix II.

The main reason for offering this material is that it represents an account of negotiations and mutual respect. These are important values that have, as we will illustrate, failed to be taken into consideration many times in the past and which we would strongly recommend be taken into account if any further research is conducted in this region. On many occasions we were informed that offering pigs to the community would be sufficient to enable us to look at the paintings. The following account and our experience related in Appendix II will prove the contrary.

Initial negotiations with the local guides to visit the sites proved to be very difficult. A lot of discussions were held in our hotel and the village of Jiwika, close to Wamena, where some of the elders who had to approve our expedition resided. The sites, however, seemed too sacred, and bad experiences in the past added to their reluctance (see Appendix II).

The situation became rather frustrating, then a surprising and hazardous initiative from one of the guides broke the deadlock. Wak, one of our guides and a member of the Kurulu Dani tribe living close to one of the sites, was told he could take Philippe's camera, go to some of the sites and take photographs. This represented a compromise where outsiders would not have to go into the sites but would have some material to go home with.

While Wak was going to visit the sites we were supposed to undertake a hike in the neighbourhood with our second guide, Mes (Plate 53). We would spend the

## 12. Lightning man

Namarrgon, the lightning man, like so many of the 'First People', entered the land on the northern coast. He was accompanied by his wife, Barrginj, and their children. They came with the rising sea levels, increasing rainfall and tropical storm activity. The very first place where Namarrgon left some of his destructive essence was at Argalargal (Black Rock) on the Cobourg Peninsula. From there, the family members made their way down the peninsula and then moved inland, looking for a good place to make their home. . . .

In the rock paintings, Namarrgon is usually portrayed with stone axes protruding from his head, elbows and knees, though the axes may be attached to any part of his body. A striped band, replicating *Alyurr's* bent antennae, extends on each side of his body from head to toe, representing *bamaihgeng* (the lightning). The stone axes are used to split the dark clouds, when he shakes the earth with lightning and thunder. He is capable of causing widespread devastation by arriving with a storm, shattering and uprooting trees, and frightening both the Aboriginal people and the Mimi, who bury their own stone axes in order to not attract the fury of this being. Sometimes Namarrgon strikes and kills people. (Chaloupka, 1993a, pp. 56, 58).

This extraordinary story of Namarrgon (the lightning man) is related here because in the Kaimana region we are confronted with two very specific types of anthropomorphic representations. The first kind is to be found at sites such as Ginana II (Plate 12.1) and Tumberawasi (Plate 12.2). At Ginana II we see a figure with something protruding from its head. From the picture it is not clear what kind of object this is. Both its arms are pointing upwards, and the right hand carries a kind of tool that could be a stone axe. Antennae/flashes are protruding from both elbows and it is clearly the representation of a male figure.



12.1



12.2



12.3



12.4



12.5



12.6



12.7

We could say that the figure at Tumberawasi is in some ways the same; arms upwards and antennae/ashes protruding from the elbows. The body itself however is stretched but again represents a male figure (Plate 12.2). Another type of anthropomorphic representation is to be found at Tumberawasi (Plate 12.3), Ginana II (Plate 12.4) and Omborcene (Plate 12.5).

Chaloupka indicates that Namarrgon is usually portrayed with a striped band, replicating *Alyurr's* antennae, which extends on each side of his body from head to toe, representing the lightning. There is a certain resemblance with the figures at Omborcene and Memnemnambe. The band, however, is not striped and is similar to a circle enveloping the body, touching hands and feet.

This is the case particularly at Omborcene. The style at Memnemnambe is slightly different. The band enveloping the anthropomorphic figure is more rectangular and something is protruding from its arms through the band (Plate 12.7). Although there is some resemblance, there are also a lot of differences.

Another explanation, at least for the figures at Omborcene and Memnemnambe, could be that they represent a part of the human lifecycle, the child in the womb. Caution needs to be observed in making any preliminary conclusion, and further extensive research is needed.

**Plate 53. Encounters with farming Dani women during the hike**



53

night in villages surrounding the sites, one of which was Wak's own village, Wam. Wak told us he would take pictures of four sites. This was beyond our imagination, since we had only heard about two, Subulah and Dutabud.

Going into more detail, it seemed that there was one rock shelter containing different sites. As he explained, the general name of the place was Suroba; the names of the sites were Wukugi, Itsugu Baga and Yagaroak. Never before had any of these names been recorded. A programme for the next seven days was put together.

Our first base camp in the mountains was the village of Wam. From here Wak was going to leave us to take the photographs. So on the morning of the fourth day of our stay in the highlands Wak took off with my camera while we went in a different direction.

In the early evening we went back to the village to find that Wak had already returned, and in his possession were twenty-six photographs on the film in the camera. Curiosity prevailed, but we could do nothing else than wait for our return to Jayapura for the development of the film.

Throughout our visit from village to village the following days, the message was the same everywhere: a council of elders was needed and many more meetings were necessary, and so on.

On the seventh day we decided to leave it there. A lot more time would be needed if we were to be successful in our endeavours. But it was far from a total loss: we had made contact with the local people, conveyed our intentions and had twenty-six photographs to take back home. Last, but not least, we received a little taste of the sites on this very last day of our trip in the highlands.

On the way to Wamena, Wak suddenly grabbed Philippe's arm and pointed to a mountain ridge. Looking carefully, at a distance of approximately 1.5–2 km, Philippe could distinguish red marks on a flat rock surface. It was Suroba, a splendid view. At least all the efforts were worthwhile. We not only had pictures; we also saw the site. The photographs taken by Wak were developed in Jakarta – concerned about the quality, we decided not to develop them in Jayapura – and revealed the Subulah/Suroba site,



## 13. Faces

Frequently, anthropomorphic faces appear by themselves. Some may be masks or refer to mask wearing, thus transferring the wearer into something other than his usual identity. These prehistoric faces (or masks) are important reminders of older ideas stressing the importance of the head, the place where the greatest life forces lie. It is understandable how the idea of head-hunting could be justified in order to capture the life power of one's enemy. (Souza and Solheim, 1976, p. 194.)

We begin our round trip at Weretwarom (Plate 13.1), where a face or mask in light red ochre looks at us. The inner lines forming the eyebrows and nose contours make the face or mask appear like an owl's face. Ereretari (Plate 13.2) confronts us with a rather different type of face. The two bearded bichrome faces – the left one much smaller than the right – happily smile away, giving a quite comforting feeling. Again we may point out the dots covering the site, among other bichrome abstract motifs.

The other bearded face at Ereretari (Plate 13.3) is very similar in its expression. It is however not a bichrome figure. More attention has been paid to its eyes and eyebrows.

The mask or face at Netnarai (Plate 13.4) has again a very friendly expression. The same kind of attention has been paid to its eyebrows, nose contours and eyes at Netnarai. In addition, however, the face is clearly painted or tattooed, reflected



13.1



13.2



13.3



13.4



13.5



13.6



13.8

with one dark ochre line on its left cheek (the tattoo painting on the right cheek may have disappeared) and two on its right.

The face painted at Omborcene (Plate 13.5) brings us closer again to the anthropomorphic figure depicted at Cape Bitsyari. We easily discover the same type of three-folded headdress and similar features of the face. Is it the face of an ancestor or just a mask? The motive at Memnemba (Plate 13.6) is quite extraordinary in its form and features. The outer thick line of the face is made using a negative stencil. The stencil must have been a rather square tool. The eyes are fitted in as two yellow ochre dots. This mask or face is unique in our survey, and one could even ask the question: 'Is it a face?'

The faces or masks at the site of Tumberwasi (Plates 13.7 and 13.8) are very similar to the ones at Ereretari (Plate 13.3). They are all bearded, smiling away with very expressive eyes. It is obvious that the face or mask played an important role in the society that left the paintings behind, but no ritual today refers to bearded masks or painted faces in the coastal region. Painted faces and bearded faces are, on the contrary, a daily sight in the highland region.



13.7

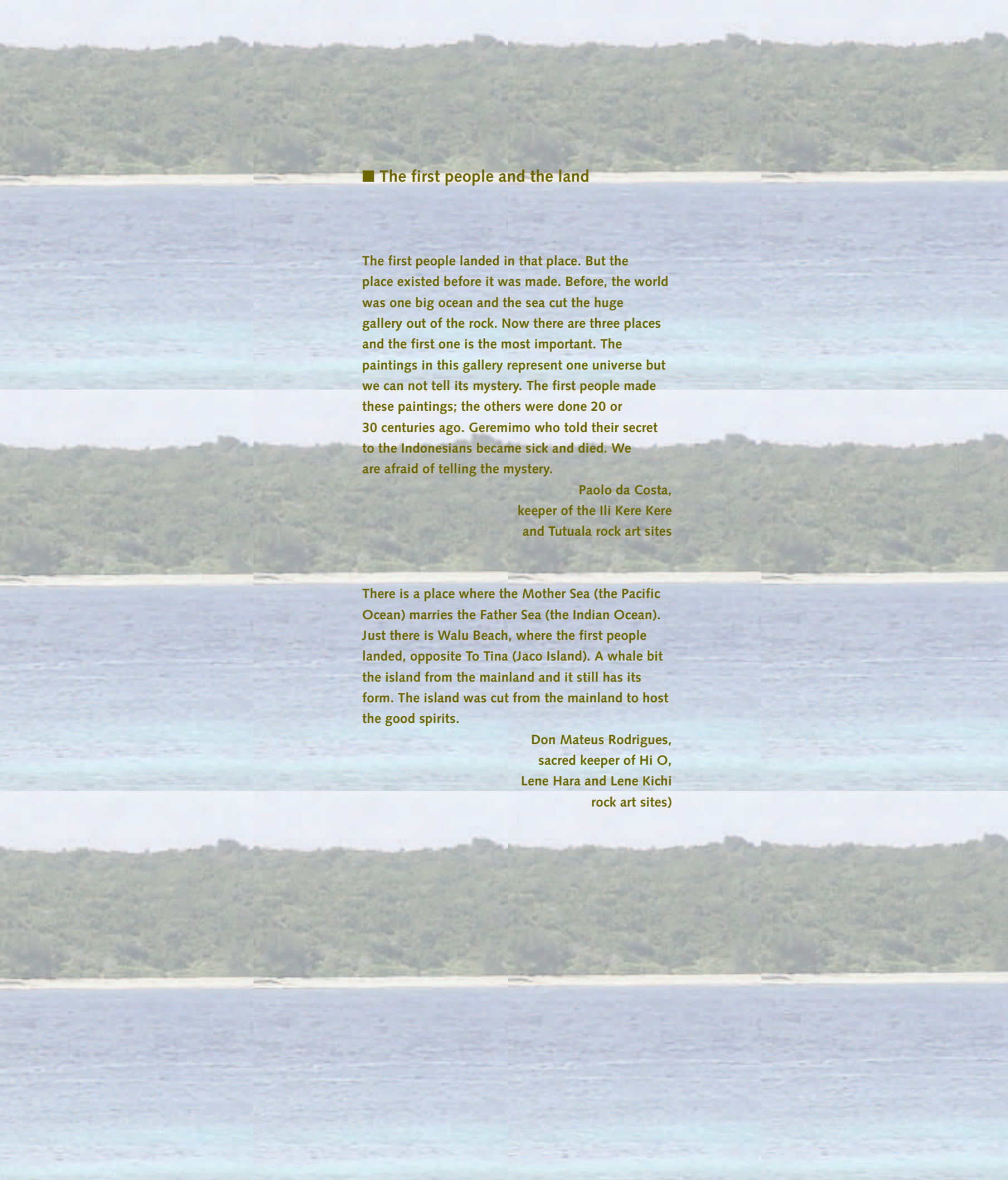




Plate 54. Red surface and snake-like figure from Subulah/Suroba

mentioned by Heider and filmed by Sejati (Plate 54). Our distant approach and respect for the elders had worked. The photographs revealed anthropomorphic figures, lizards, snake-like figures (Plate 54), crosses and more stylized paintings, which are described in detail in the catalogue.

It was not until October 1996 that we heard back from our Baliem contacts, and Philippe would catch up with them in the Baliem Valley on another three occasions: April 1997, August 1997 and December 1997–January 1998. Every time he was in the Baliem, Philippe made it a ritual to stop where Wak had grabbed his arm in 1995 on the way back from Dugum. On each visit Philippe would observe the site many times, zooming in with video camera or looking at it through binoculars, each time revealing less detail than the photographs by Wak. Philippe never got any more information on Subulah/Suroba or other existing sites, and by January 1998 he stopped asking. What better method of conservation and preservation could there possibly be?



## ■ The first people and the land

The first people landed in that place. But the place existed before it was made. Before, the world was one big ocean and the sea cut the huge gallery out of the rock. Now there are three places and the first one is the most important. The paintings in this gallery represent one universe but we can not tell its mystery. The first people made these paintings; the others were done 20 or 30 centuries ago. Geremimo who told their secret to the Indonesians became sick and died. We are afraid of telling the mystery.

Paolo da Costa,  
keeper of the Ili Kere Kere  
and Tutuala rock art sites

There is a place where the Mother Sea (the Pacific Ocean) marries the Father Sea (the Indian Ocean). Just there is Walu Beach, where the first people landed, opposite To Tina (Jaco Island). A whale bit the island from the mainland and it still has its form. The island was cut from the mainland to host the good spirits.

Don Mateus Rodrigues,  
sacred keeper of Hi O,  
Lene Hara and Lene Kichi  
rock art sites)



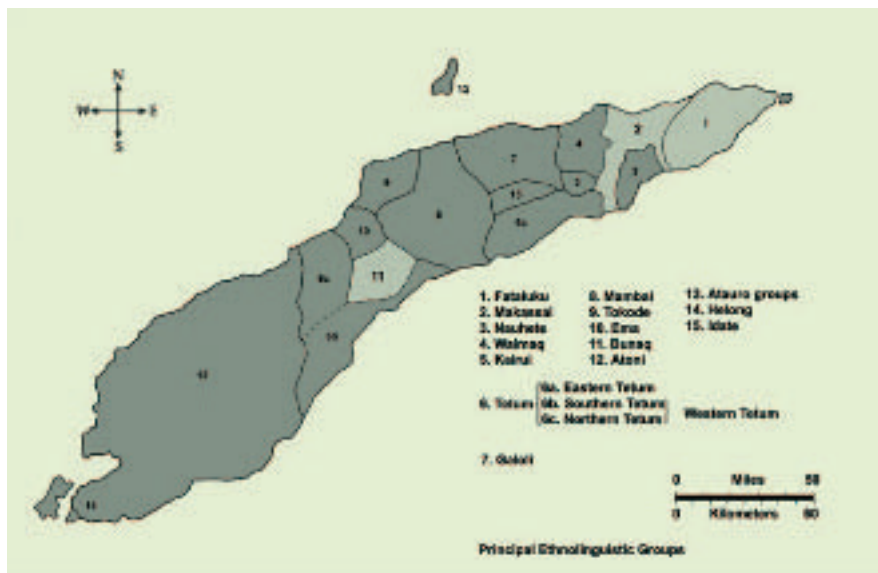
# A Comparative Study Between Rock Art in West Papua and Timor Leste

East Timor (known as Timor Leste since 2002) used to be part of the Indonesian province Nusa Tenggara (Lesser Sunda). It occupied the easternmost part of the province until a vote for independence in September 1999 brought the country under United Nations Administration (UNTAET: The United Nations Transitional Administration for East Timor) until its official declaration of independence on 20 May 2002.

In view of this particular situation, the opening up of the territory in 1999 put UNESCO in a unique position to survey as many sites as possible. The ongoing work on West Papua stimulated the team of the UNESCO office in Jakarta – since 2001, the official focal point for UNESCO in Timor Leste – to concentrate specifically on rock art sites. This survey was carefully carried out at regular intervals from April 2001 to September 2002.

The presence of rock art in Timor Leste has been recorded previously (Almeida, 1967; Cinatti, 1963; Glover, 1972, 1986). These few accounts, which were clearly early stages of research, were of course decisive factors in starting the survey. In addition, with all the information obtained in West Papua, it was tempting to look into similarities among the sites in both regions and eventually link them to migrations that happened in the region, such as the Austronesian migration. If similarities were to be found this could serve as partial evidence that both regions were visited by the same migration waves and therefore cultural influences.

Another possible link, explored in this book, is the contacts with the Australian continent, a link previously referred to by Cinatti (Almeida, 1967, p. 70).



**Map 6. Distribution of language groups in Timor.** Source: after Hicks (2000).

It took a lot of preparation with the local population in order to be able to visit the sites. As early as April 2000, the team started making contacts with the people living in the areas indicated by Ruy Cinatti and Almeida. After a lot of socializing, food sharing and discussions, the first site was visited in early 2001, always accompanied by local people, sometimes with villagers, sometimes with the sacred keepers of the sites themselves. This, however, was as far as it went, since at no time did they want to elaborate on the sacred meaning of the sites. Paolo da Costa, keeper of Ili Kere Kere, however, indicated to us that at regular intervals the people of Tutuala visited the site for ritual gatherings.

Our team visited a total of eight sites including the ones explored by Cinatti and Almeida (see Catalogue V for detailed description). Four sites, Hi O, Ili Kere Kere Chaialoro, Lene Kichi I and Lene Kichi II, were recorded. As we learnt much later, Lene Kichi I and II were almost simultaneously visited by ETAP while Ili Kere Kere Chaialoro and Hi O had never before been recorded.

## Environmental Setting of Timor Leste

When the Portuguese arrived in Timor in the sixteenth century they found a plentiful source of sandalwood. Their influence, however, did not extend beyond missionary activities until the early eighteenth century, when a local government was established. By that time there was conflict with the Dutch over control of the area, and the sandalwood

trade was in full flow. The Portuguese had to retreat to the east, while the Dutch stayed in the west. The difference in landscape between West and East Timor is stunning. West Timor is a low vegetated plain, while Timor Leste is the more mountainous part of the island, with a peak of a little over 3,000 m – the sacred mountain of Ramelau.

The Democratic Republic of Timor Leste now comprises the enclave of Oecusse in West Timor, Atauro Island (a small island north of Dili, Timor Leste's capital) and Jaco Island in the north-eastern part of the country. Ethnolinguistic studies have revealed that there are at least fifteen ethnolinguistic groups in Timor Leste. The Austronesian-speaking are the Aloni, Tetum, Ema, Mambai Kairui, Waimag, Ressuk, Raklung, Rahessuk, Galoli, Munhete, Tobode and Idate. The non-Austronesian-speaking are the Makussai, Bunag and Fataluku (Hicks, 2000, pp. 41–5) (see Map 6).

The language Tetum is widely spoken as well as Indonesian. Portuguese, however, has been chosen as the future national language for the country. The first religion is Catholicism, but animist traditions are still widespread.

In the Fataluku region a tradition of sacred sites, stories and sacred keepers is kept vibrantly alive. It is in this region, and especially in the area of Tutuala, that most of the rock art sites of Timor Leste are to be found. All of these sites are part of the living animist tradition and fulfil a special role within Fataluku society.

The rock art is situated on steep limestone galleries and caves along the north-eastern coast, most of them facing the sacred Island of Jaco. The size of the cliffs is sometimes extraordinary. A combination of tectonic activity and variations in the sea levels over a very long period of time has created these geological features with 120,000 BP, generally accepted as the Interglacial Maximum (Allen et al., 1977, p. 276).

The cave sites are not particularly large and one is very small. It is interesting that most of the sites are situated higher above sea level than those in West Papua. In particular, the sites of the 'first people' such as Ili Kere Kere and Tutuala are at least 30–45 m above sea level, sometimes providing extraordinary views over the neighbouring landscape.

## Earlier Research and Publications

Timor Leste, as with West Papua, was rather inaccessible for international scientific anthropological, ethnological and archaeological research ever since its occupation by Indonesia from 1975. But the research conducted under the Portuguese colonial administration was also rather scarce, with some minor exceptions in the 1960s.

Studies on the Timorese culture have been carried out occasionally since the mid-nineteenth century. Most of them, however, are limited to descriptions of habits and rituals. Anthropological studies in the 1960s started to provide information on the earlier people who lived in the island – until 1975, when all works were interrupted. After 1999 interest resumed, in particular for the Fataluku region, with the most recent excavations by a team from the ETAP at the Lene Hara site, near Tutuala (the far eastern end of Timor Island), providing new important information. The discarded shells when dated by radiocarbon indicated human occupation from about 35,000 years ago (O'Connor, 2003). That discovery is believed to have a direct bearing on the peopling of Australia. As a result, deeper and wider attention is expected in the Fataluku region, in particular by ETAP.

Surveys in the field of prehistoric rock art sites were also very limited. As mentioned earlier, the only existing accounts of these sites were published in the 1960s by Almeida (1967), Cinatti (1963), and Glover (1972, 1986) and they became the basis for this survey.

Although better known for his poetry and writing in relation to Timor Leste, Ruy Cinatti left us with some good documentation and interesting impressions on traditional culture in Timor Leste and, more particularly, the three rock art sites he visited.

I have found three sites with rock paintings, all three on the extreme east of the island, district of Lautem, and administrative post of Tutuala. One is in a cave, the other two are in coralligenous metamorphic walls of elevated coral banks.

(Stilwell, 1995, p. 302)

The description of the sites of Tutuala, Ili Kere Kere and Lene Hara is very detailed, as we learnt through our own visits (Cinatti, 1963, pp. 49, 51, 55–6, 58). This is a more accurate description than that of his colleague, Almeida. In his article, Almeida refers to the description of Tutuala, Ili Kere Kere and Lene Hara by Ruy Cinatti. He basically followed Cinatti's article without adding any valuable information, even in the case of Cinatti's conclusions.

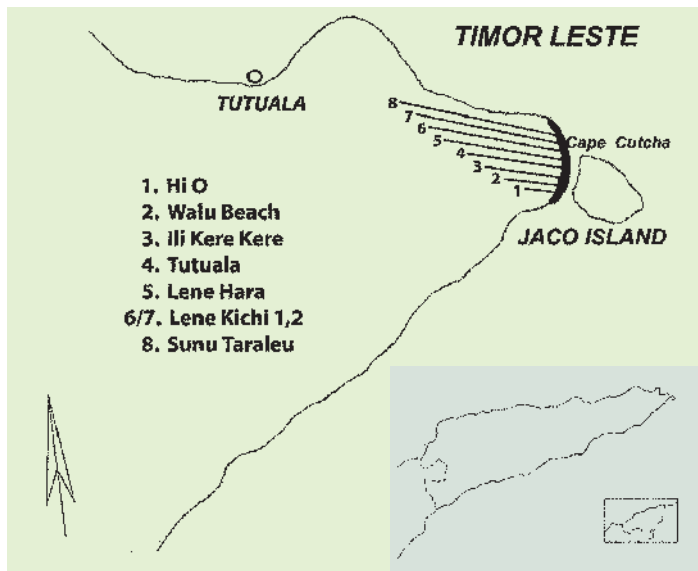
In Cinatti's opinion, these three rock paintings might be related, both formally and dynamically, to those found in Sunda Island and even to those of North Australia; the Tutuala and Ili Kere Kere paintings are, by their movement, like those of Niah (Sarawak; Harrison 1959: Pl. A, F) and the Lene Hara Cave paintings are similar to those of Ipoh (Malaysia; Matthews 1960) by the abstract symbolism of their representations. The totem feature is peculiar both to Indonesia and to Arnhem Land (Australia); the naturalistic character of some figurations is also apparent in the rock paintings of South Celebes, at Ceram, in the Kei Islands and in others, and it appears that in remote times some ethnolinguistic groups of Timor might have had some cultural connection with the inhabitants of those Islands.

(Almeida, 1967, p. 70)

Almeida also informs us about an excavation he undertook at Lene Hara in August 1963 and September 1964 without revealing any of its results. Interestingly however, Almeida visited a new site, Sunu Taraleu, but its description lacks accuracy, as we discovered during our survey.

The rock paintings of Sunu Taraleu Scarp are about four m. above sea level, in two large siles [sic] which are 0.50 and 0.60 m. high and 0.60 and 0.70 m. wide respectively, and constitute two shallow concavities, separated by rock saliences, which a sort of tester on the top of the rock preserves from the rain. Although they are in the open air, some of the pictures appear to have been executed only recently (Plate 5). The figures are depicted in four groups of panneaux, larger or smaller, on plane or mamelon-like surfaces.

(Almeida, 1967, p. 71)



Map 7. Rock Art Sites in Timor Leste

Sunu Taraleu is situated at least 60 m above sea level, but indeed constitutes shallow concavities. The pictures are not depicted in four groups but rather in two. Their origin is unknown and there are no related stories from the local people.

Almeida concludes:

In André Glory's opinion 'the pictorial assemblage at Sunu Taraleu is part of a ritual and religious tribal context of an ancient people, belonging, as is apparent, to the Australoid culture'. The pictorial characteristics do resemble particularly the paintings at the Tutu Ala and Ili Kéré Kéré Scarps and, even if less so, those at the Lene Hara Cave.

(Almeida, 1967, p. 73)

We would rather express another opinion, namely that Lene Hara seems to be of a completely different tradition, an opinion that we will develop further in this chapter. Glover discovered two painted sites during his surveys of the Baucau Plateau, Lie Siri and Lie Kere. The UNESCO team, in view of the voluntary decision to concentrate on the Tutuala region, did not visit both sites. For Lie Siri, Glover reported some negative and positive hand stencils

in different red pigment in two separate locations deep inside the cave. Only two prints were well preserved (Glover, 1972, p. 157). Lie Kere, situated north-west of Baucau, contained four paintings including a creeper, an anthropomorphic figure and an abstract motif (op. cit., p. 54).

Only recently, in 2000 and 2001, with a grant from the Australian Research Council, ETAP made some rock art surveys. Nine new sites were discovered and their publication is under way (O'Connor, 2003).

These discoveries were made separately, but almost simultaneously and partially overlapping, with the discoveries made by the UNESCO team. Exchange of information between the two teams was only achieved in late 2002, a situation that nevertheless allowed us briefly to mention the discoveries in this publication.

Both teams discovered the sites Lene Kichi I and II separately. Lie Baai, Lie Kere, Verulu, Lie Cecé, Lene Kichi 4, 5 and 6 were discovered by ETAP, and Ili Kere Kere Chailaoro and Hi O by the UNESCO team (Map 7).

## Comparative Study

It is time to look somewhat deeper into the late Pleistocene and Austronesian migrations and their linkage to the traditional societies at the rock art sites we find in north-east Timor Leste today and the rock art sites of West Papua.

It is interesting that on many occasions we were confronted during the survey with stories from the local people referring to their ancestors coming from the west, partially settling in Timor Leste and then partially migrating to the east.

The first story is about the first man and woman who came to the Tutuala region from the west. They had two sons. One stayed on the island and became as such the father of the people living in Tutuala. The second son migrated to Cenderawasih Gulf in West Papua and became the father of the people living there (information from Matheus and Evaristo Martines: the guides who took us to Lene Hara).

The second story relates to the totem found at the

host village of Lete Mampere. During the Indonesian occupation, the Indonesians tried to take it away. Local stories of witchcraft, ghosts and demons, however, gave them other ideas.

‘The seven horizontal planks of wood on the top of the totem represent the seven stairs to heaven’, explained Mario, our local guide. ‘Seven is a holy number and at the time, when a girl used to marry she needed a dowry of seventy-seven horses and seventy-seven buffaloes.’ The story reminded the author of biblical influence, but also of a similar practice in Tana Toraja, Sulawesi, Indonesia. Philippe asked Mario if he knew where his ancestors came from, referring to the story we heard in Tutuala. At this time Mario became mysterious. ‘My ancestors came from Sulawesi. There were two of them and they had two sons. As in the Tutuala story, one stayed in Timor Leste at Lete Mampere; the other one left to go to Australia’ (Mario: the guide who took us to the deserted village of Lete Mampere).

The third story was told during our visit to Piti Lete Lete, a sacred site in the form of a stone boat, representing the boat in which the first two people landed in Tutuala and in which they were eventually buried. They were two men, Noase and Peruase. The first stayed to become father of the Tutuala people while the second migrated to West Papua and then to Australia (Gonzalo: the guide who led us to Piti Lete Lete).

The fourth story is related to the first man who came to Tutuala and more specifically the rock art site of Ili Kere Kere. He did not come with a woman but had two sons. One stayed in Tutuala; the other left and took messages with him. The first one met a woman, they touched and ate from the forbidden fruit and procreated. The second one became a mystery. Until today the local people do not know where he went since he never came back (Paolo da Costa: keeper of Ili Kere Kere).

The fifth story was told to us at the newly discovered site of Hi O in a cave facing Jaco Island. The sacredness of the site was expressed by a special arrangement of stones and two wooden sticks (very similar to what we had seen at Piti Lete Lete) in homage to the first two people who landed on this spot in the Tutuala region. They came

from as far away as China and as soon as they reached the land they descended into the cave and made the sacred paintings. After this they went out and that was the beginning of everything (Gonzalo Pinto: who led us to the sacred site).

The sixth story was already referred to in the description of Lene Kichi. Don Mateus Rodrigues recalls his ancestors coming from Macau on the China mainland. (Don Mateus Rodrigues: the guide who took us to Lene Kichi).

The stories are clearly a mixture of traditional storytelling, belief and biblical influence, a fusion we encounter so often in Christianized parts of the Indonesian Archipelago. The first man to arrive in Timor Leste and his two sons could refer to Adam, Cain and Abel, while the forbidden fruit is yet another biblical connotation. But what if we look at the migration pattern they indicate? The migration of the people goes from west to east. Hypothetically – and following the different stories – one could say they came from China, passed through Sulawesi, occupied Timor Leste and travelled further, to West Papua and down to Australia. In the stories, the migration of the second son is always to the east. In a certain way all the stories we heard in the Fataluku region are consistent. It is of course interesting that – let us presume the stories are to be believed – they connect partially to the scientific evidence of the later Pleistocene migration – although it is very unlikely they are referring to the first migration – and the Austronesian migration. The migration to Australia from New Guinea during the late Pleistocene however is questionable in view of the two routes proposed to reach Australia (see ‘Current research’ in the Introduction to this book, plate 44). As for the Austronesian migration, it never reached the Australian continent. The stories also link with the similarities we discovered between Timor Leste and West Papua rock art, especially in the case of Lene Hara.

In fact, a case can be made that there are stronger affinities between motifs separated by great geographical distance and a lot of water than there are between representational motifs between and within the East Timor sites.





During the survey in Timor Leste it was striking how many similarities with West Papua one could discover on the one hand, but how many differences there were on the other.

The density of paintings in West Papua is far higher than our team discovered in Timor Leste and the paintings contain many more stencils, lizards, crocodiles and fish. But the geological situation of the sites is very similar, most of them – apart from the highland ones in West Papua – situated in limestone wave-cut galleries or caves along the coast. Ballard drew the same conclusion, as we indicated in the Introduction (Ballard, 1992, p. 95). In both regions the artists also paid a lot of attention to their environment.

Social activity, community life, as well as fauna and flora from both land and sea are favoured subjects in both areas. Human activity with its ceremonial, festive or daily accessories is abundantly depicted, yet in different ways and styles. West Papua is more expressive and coloured, Timor Leste more stylized and serene, revealing local outward cultural differences. It is however in the universe of imagination and symbols, interpretation of world and cosmos, maybe in belief and religiosity, that striking similarities can be observed.

Without making a statement, it is obvious that there is a link between both regions taking into account the identical paintings of fish figures (Plates 55, 56 and 57), celestial symbols (Plates 58, 59 and 60), matutuo-like figures (Plates 61, 62 and 63), ceremonial headdresses (Plate 64 and Figure 11), faces (Plates 65 and 66), combs (Plates 67 and 68), anthropomorphic figures (Plates 9.3, 9.4, and 9.5 in Chapter 3), and abstract figures (Catalogue I, Plate 125, and Plate 208 in Catalogue V).

Neither Cinatti nor Almeida made reference to these similarities, probably because they were not aware of the publication of Röder, and the other articles that followed on West Papua. But as we have seen earlier, Cinatti makes links to South Sulawesi, Ceram, Kai Islands and Australia. Chaloupka also makes the link to Australia, but only for West Papua and not for Timor Leste (Chaloupka, 1993, p. 246). Of course there are differences. The density and different styles in West Papua could suggest a much earlier and longer tradition in the use of the sites. The difference could also be time-related.

Contact between North Australia and southern West Papua would have been easier during the Last Glacial Maximum, which could clarify the presence of boomerang stencils at Berau Gulf and Kaimana.

A possible common cultural heritage between Timor Leste and West Papua (as we have tried to illustrate above) could date from a much later period, when seafaring Austronesians brought new rituals and symbols to West Papua. This possible connection, the rock art being the influence of the Austronesian migration, was already illustrated by Ballard (1992, p. 98) and taken up again by O'Connor (2003, p. 12). The only difficulty is that by far most rock art sites in Timor Leste are situated in the non-Austronesian (NAN) language-speaking parts. An annoying riddle, not easy to unravel. Almeida (1967, p. 71) mentions that the Makua people formerly inhabited this particular area.

Today only a handful of Makua speakers remain, all of whom live in the village of Mehara, west of Tutuala. In the past there was some debate regarding whether or not Makua was an Austronesian language. Recent linguistic work has confirmed its status as an Austronesian language, albeit an unusual one (Hajek and Himmelman 2001). It would appear therefore that the Tutuala region was previously occupied by AN language speakers and that the movement of NAN speakers into this region occurred in historic times.

(O'Connor, 2003, p. 13)

It could be an explanation, but there is insufficient documentation for this to be accepted as the only scientific evidence. If one relies on one very small AN-speaking group with a language that deviates from the regular pattern in AN languages, it is difficult to agree that the whole region, now NAN-speaking, should have been AN-speaking. More important, even more intriguing, is how to explain the NAN-speaking groups in the region regarding the sites as sacred.



## Fish figures

Plate 55. Fish figure at Memnemembe

Plate 56. Fish figure at Sorra. Röder suggested that this linear figure is a representation of an *ikan paus paus* (whale)

Plate 57. Fish figure at Lene Hara. Photo by Max Stahl, 2002.





### Celestial symbols

Plate 58. Concentric circles with rays figure at Tapuraramu.

Plate 59. Concentric circles with rays at Mampoga

Plate 60. Celestial figure at Lene Hara. Photo by Max Stahl, 2002.





## Matutuo

Plate 61. Matutuo-like figure at Tumberawasi

Plate 62. Matutuo-like figure at Lene Hara. Photo by Max Stahl, 2002.

Plate 63. Large matutuo figure on an open cliff at Tuturu





### Ceremonial headdress

Figure 11. Matutuo figure with elaborate headdress at Boam.  
Source: after Röder (1959).

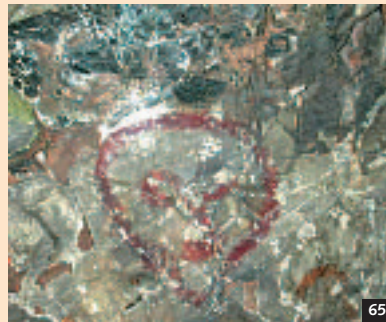
Plate 64. Anthropomorphic figure with ceremonial headdress at Lene Hara. Photo by Max Stahl, 2002.



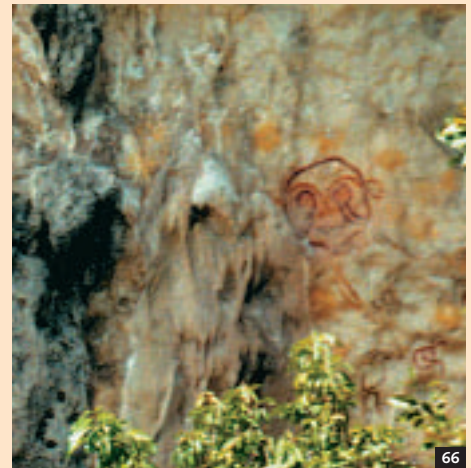
64

### Faces

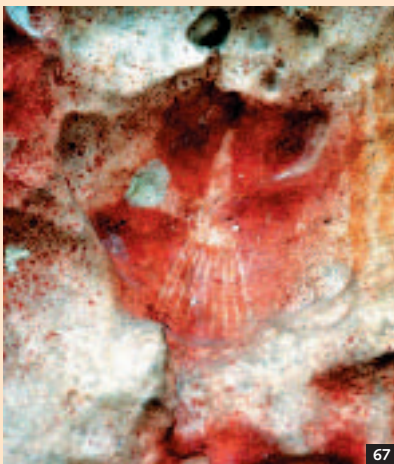
Plate 65. Face figure at Lene Hara  
Plate 66. Face figure at Netnarai



65



66



67

### Combs

Plate 67. Comb figure at Sorraa  
Plate 68. Comb figure at Ili Kere Kere Chaialoro



68



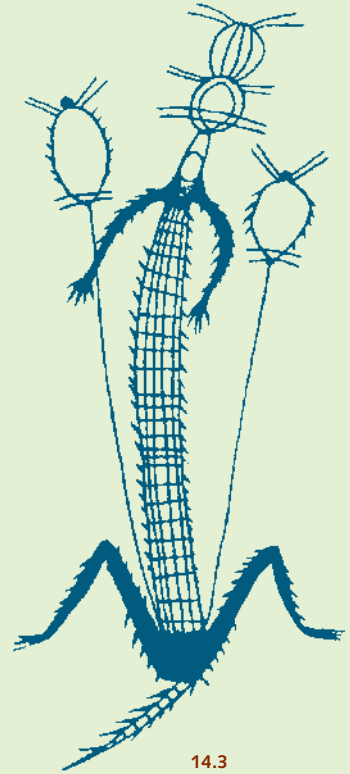
14.1

## 14. Yam figures

The wild yams, *Monocotyledonous angiosperms*, originating in South-East Asia, have been an important food resource for early humans in tropical and subtropical regions. In two areas of the world, West Africa and New Guinea, cultures based on the cultivation of yams developed and continue to survive today (Chaloupka, 1993a, p. 138). In these areas they not only provide the main staple food but also are connected to ritual and magico-religious practices (ibid.). The use of the wild yams or the commencement of cultivation is not archaeologically documented. In Australia the only evidence they were used early in history is in rock art sites dated as at least 8,000 years old (ibid., p. 139).

Reading the part of Chaloupka's article relating to the Kaimana region in West Papua (Chaloupka, 1993b, p. 11), the authors came to a passage with a reference to what might possibly be a 'yam tuber'. Chaloupka also informs us that there is a visible figure situated in a site near Maimai village (ibid.). The only site in the immediate vicinity of Maimai village is Sasero Oyomo. In going through this book, the only visible figure at Sasero Oyomo which showed a resemblance to the yam figures and gives, as Chaloupka points out, 'an Arnhem Land feeling' is a large dark figure (Plate 14.1). It could indeed be interpreted as a yam figure (Plates 14.2 and 14.4), but nevertheless varies from those of Arnhem Land (Figure 14.3).

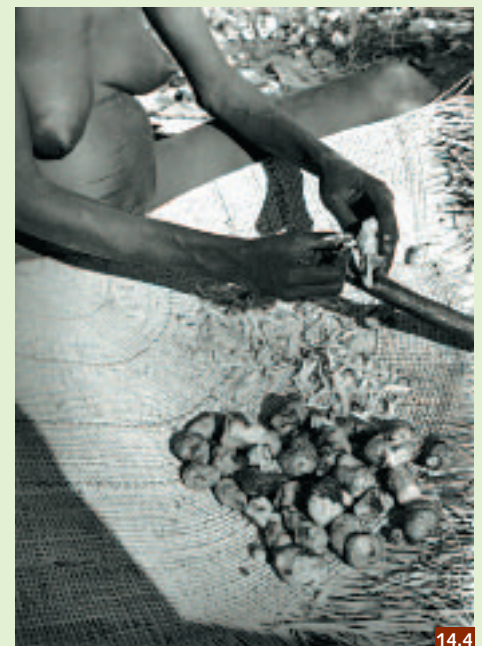
Chaloupka, however, also mentions that these figures in their earlier form in Arnhem Land are simple images of yams, which seems to be the case at the site of Sasero Oyomo.



14.3



14.2



14.4



# Conclusion

Berau Gulf rock art was recorded as early as the second half of the nineteenth century. However, it was Röder who popularized it for the world more than sixty years ago. His monumental book (*Felsbilder und Vorgeschichte des MacCluer-Golfes, West Neuguinea: Ergebnisse der Frobenius-expedition 1937–8 in die Molukken und nach Hollandisch Neuguinea*) on the rock art of Berau Gulf, which was published twenty-two years after his fieldwork, became the bible for those who wanted to study the rock art of the region. The Berau Gulf became known as a distinct concentration of coastal painted rock art sites in the region. Röder's book was quoted by almost all of the experts who reviewed rock art in Indonesia or Western Melanesia.

No other extensive studies had been done in West Papua. Therefore, it was not surprising to find even more extensive and richer sites about 175 km south-east of the Berau Gulf, namely in the Kaimana region. Although Souza and Solheim (1976) summarize its captivating extent, its richness was never exposed:

After passing so many hundreds of metres of painted surfaces I decided we had to record a small sample. We therefore, select a somewhat isolated section of ledge, about 100 metres long. . . .

(Souza and Solheim, 1976, p. 191)

The sites were almost neglected and writers who reviewed the rock art in West Papua excluded them altogether, or mentioned them only briefly. The Berau Gulf and Kaimana areas may represent different rock art styles. However they also show similarities, indicating the existence of contact between the two areas, as illustrated during the course of





**Map 8. The South-East Asia region and Australia during the last Ice Age.**

this book. It cannot be denied that these coastal painted rock art complexes are exceptional and outstanding. They are certainly much more complex than any other sites found in other coastal and inland areas in West Papua. Their complexity can also be recognized in their regional context. So, who made them, when, and why?

The human occupation of New Guinea dates back to the Upper Pleistocene. . . . The Papuans, although most closely related to Australian Aborigines, are a distinct group of people. This distinctiveness is considered to be the consequence of a long period of separation, not only since the two populations were last separated by the rising sea level at the end of the last glacial maxima, but one that also existed before their ancestors migrated to Sahul.

Prior to the last glaciation, and since the rising seas separated the island from the rest of the Sahul continent, local Papuan groups, like their Australian counterparts, lived in almost total isolation. Some 3,000 years ago seafaring Austronesians reached

New Guinea where they settled and intermixed with the Papuan populations along its northern coast and on the nearby islands.

(Chaloupka, 1993b, p. 2)

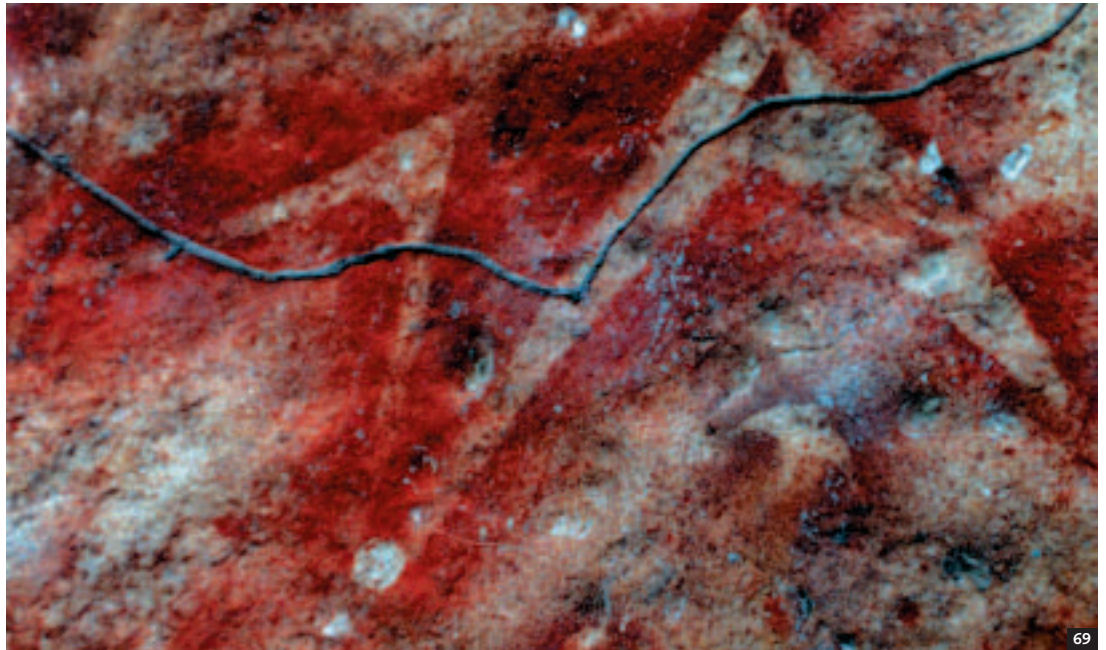
There was the early occupation of New Guinea and Australia by groups of people migrating from the west around 60,000 BP, crossing the Timor Gap, the last water barrier at least 70 km wide, and establishing themselves on the coast (Vandermeersch, 2001, p. 445). A group would have moved north to become the forefathers of the Papuans; another moved south leaving the Aborigines as their descendants. In fact, as evidence shows to date, the first Australians were the first humans ever to launch themselves on the sea and cross a strait (*ibid.*). The regions we are interested in are the southern coast of West Papua (Berau and Kaimana) and Northern Australia (Arnhem Land).

A lively discussion on the earliest possible dates of rock art in Australia is still being held. It is nevertheless evident that the production of this art started very early on the Australian continent. Rock art developed in Arnhem Land – where we find the earliest presence of human occupation – as early as 40,000 BP (Vandermeersch, *op. cit.*, p. 447). Chaloupka even points out that it is believed that the oldest rock art in Arnhem Land at Malakunanya II shelter in Kakadu National Park goes as far back as 50,000 BP. Dating was done on a large block of hematite and several ground pieces of this material that had been used in preparing pigment, as well as several types of red and yellow ochre (Chaloupka, 1993a, p. 91). This early period of visual expressions is called the Pre-Estuarine period by Chaloupka and covers roughly 50,000 BP to 8000 BP (*ibid.*). During this period there were some dramatic climatological changes deeply influencing human living conditions.

At the beginning of that period the environment must have been a lot dryer than we know today and rainfall could have been less than half. Arnhem Land and the Arafura Plain, which was the land bridge north to New Guinea, had open savannah vegetation with forested river margins.



**Plate 69. Boomerang stencils at Tapuraramu Berau Gulf, West Papua.**



During this period, groups of Papuans would have had the opportunity to move south into the Arafura Plain and groups of Aborigines would have had the opportunity to move north. Then the rainfall substantially increased and the sea level rose, obliging both groups to retreat. The sea reached its maximum level at about 30,000 BP, also the time when a new glacial era started, to reach the Last Glacial Maximum at around 18,000 BP when the sea level dropped to about 120 m.

The same migration pattern as described earlier would have happened, and possibly even on a much larger scale. It was a period during which Papua and Aboriginal populations could have lived together for several thousand years (Map 8). But after 18,000 BP the sea rose again, and quickly, submerging the Arafura Plain, and forcing both groups to retreat north and south. Around 10,000 BP the sea kept rising but at a much slower pace, nevertheless separating both populations for good. The sea finally reached its actual level, with a peak period between 6000 BP to 4000 BP when it reached 2 m higher than its present level (Allen et al., 1977, p. 281). What we are trying to illustrate is that there was a very significant period of time in which Papuans and Aborigines could have lived together.

Aboriginal groups by then had lived for many thousands of years alongside the 'Papuans' – indeed, for a far longer period of time than has passed since the sea parted them again. During this period of contact, the Aborigines would have developed close

social and culture ties with their northern neighbours, and it is more than likely that they adopted and brought back with them some of the northerners' cultural traits.

(Chaloupka, 1993a, p. 91)

The same however could equally be argued for the Papuans. They might have adopted and brought back some of the cultural traits of the Aborigines. Such cultural traits would serve as a logical explanation for the presence of boomerang stencils and images in the Berau Gulf and Kaimana regions (Plate 69), since the boomerang is not used anymore and seems to have lost its meaning and value completely in the West Papua region.

In Arnhem Land the use of the boomerang also disappeared although it is depicted in a lot of its rock art sites (Plate 70). It was, however, still used in the hinterland.

Astonishingly all the weapons found in historical times to be unique to different parts of the continent were present during the pre-estuarine period in Arnhem Land. That they also occurred over the now submerged land bridge to New Guinea is documented in the rock art of the tiny Chasm Island in the Gulf of Carpentaria, where there are perhaps more boomerang stencils than in the plateau region. Stencils recorded in Teluk Berau (MacCluer Gulf) in Irian Jaya suggest a common origin for this weapon.

(Chaloupka, 1993a, p. 123)



**Plate 70. Boomerang at Djawumbu-Madjawarrnja, Arnhem Land, Australia. Photo by George Chaloupka.**

Chaloupka even suggests dating of rock art through its images (Chaloupka, 1984). This is an inspiring technique, recognized as a useful tool for archaeology (Renfrew and Bahn, 1996, pp. 216–17). The technique is not so much for accurate shoreline data as for clear indications of change in coastal environments. As the sea rose after the Last Glacial Maximum, it caused changes in the local fauna and flora, which provoked modifications in technology. These changes seem to be reflected in the region's art. The deduced variations in sea level are themselves important in providing a date for the art.

The Pre-Estuarine period coincides with the Last Glacial Maximum and depicts different non-marine species that have been interpreted as now extinct (Chaloupka, 1993a). In the Estuarine period (starting 6,000 or 7,000 years ago), however, one finds images of new species such as the barramundi (giant perch) and the saltwater

crocodile. The presence of these water creatures can be explained by rising seawater that partially filled the shallow valleys and creeks, creating a salt-marsh environment. At the same time, other species, such as small marsupials, that had once occupied the pre-estuarine plains then moved further inland and disappeared from the coastal region, as did the boomerang, the human weapon that used to hunt them (Chaloupka, 1984; Renfrew and Bahn, 1996, pp. 216–17). Further research is needed to see whether this logic is also applicable to West Papua.

Through archaeological excavation it is proven that the boomerang was certainly in use by 10,000 BP in Australia (Chaloupka, 1993a, p. 122). However, since the object is associated with early styles such as dynamic and simple figures (with boomerang) of the Pre-Estuarine period, it could suggest a date older by 6,000 years. Other findings of Chaloupka might inspire further research.

Several of the sites<sup>1</sup> have paintings that visually and stylistically suggest an earlier commencement of this tradition here than in the MacCluer Gulf region. Certainly most paintings in the largest of the sites, located in the immediate vicinity of the Maimai village and accessible by land, seem to be of considerable antiquity. There, a sizeable painting of what seems to be a representation of a yam tuber that had an Arnhem Land feel about it.

(Chaloupka, 1993b, p. 11)

We are very far from concluding anything at all. There are resemblances but serious caution should be applied. Only extensive archaeological research and correct dating could provide us with some clues. It is, however, an acceptable idea that when Aborigines and Papuans became separated by the rising sea level and the disappearing of the Arafura plain – during the end of the Last Glacial Maximum – a common cultural heritage could have been brought back to West Papua and North Australia. It is also to be expected that a hunting tool like the boomerang completely lost its usefulness in northern Arnhem Land and along the south coast of West Papua. With the Arafura plain and animals gone, hunting methods had to change. The terrain along the south coast of West Papua simply did not, and does not, lend itself to the use of the boomerang.

Another issue that may be addressed here is the shape of the boomerang in Berau and Kaimana. This shape could lead to the idea that some samples are boomerangs for fishing, very similar to the fish boomerang unique to the north-western region of Australia and more particularly Broome (Jones, 1996). This finding is not really surprising, since we know that even during the Last Glacial Maximum Berau and Kaimana were much closer to the sea than Arnhem Land. After the Last Glacial Maximum this situation becomes even more apparent. With the sea level dropping 50 m below the present level, Berau and Kaimana became coastal areas (Voris, 2000).

The sharp-angled boomerang in its turn, also frequently encountered at Berau and Kaimana, may be associated with the hunting boomerang of the north-

western coast of Australia (Jones, 1996). These similarities in shape – we cannot possibly guess its physical appearance since the boomerang is not in use anymore in West Papua – may illustrate in another way the possible cultural connections between the two landmasses.

In this context, it is hard to believe the classification system and dating put forward by Röder. Rosenfeld agrees with this opinion, but nevertheless puts the arts antiquity at 3000 BP (Rosenfeld, 1988, p. 123). Ballard states ‘we might expect some divergence of motifs and locational characteristic, particularly over the time laps between 4000 BP and the date of about 2000 BP for initial settlement of the south Papuan coast’ (Ballard, 1992, p. 98). Still, Rosenfeld’s and Ballard’s conclusion leaves us far from the early prehistoric contacts suggested by Chaloupka during the Last Glacial Maximum.

This brings us to the Austronesian migration, which started in Taiwan 5000 BP and reached West Papua about 3000 BP. By 3000 BP, these groups reached even as far as Fiji and the Polynesian islands (Bellwood, 1997). The evidence for this is almost entirely linguistic, although there is also some archaeological evidence as an additional indication. For Timor Leste, Glover stipulated that:

About 5,000 years ago, there is evidence for major cultural and economic changes in the island of Timor Leste with an increased rate of occupation of the caves and the first appearance of pottery and the bones of exotic animals in the cave deposits.

(Glover, 2000, p. 47)

In contrast to the first migration, which might have been an accidental drift 50,000 to 60,000 years ago crossing the Timor Gap with simple rafts (Plate 71) – maybe similar to rafts that can still be found in Australia – the Austronesians came with sophisticated vessels containing rudder, oars, sails and mast (Bellwood, 1979, p. 246; Plate 72). Such vessels are to be found in the rock art of the Berau and Kaimana regions in West Papua as well as in Timor Leste.

Excellent examples are the figures recorded by Röder at the site of Sosorraweru (Figure 8 in Chapter 2). Also in Timor Leste, as illustrated before, paintings of these vessels were discovered at the sites of Sunu Taraleu, Ili Kere

1. In the Kaimana region.



Plate 71. Representation of a simple boat depicted at Ili Kere Kere



Plate 72. A dugout canoe (*lippa lippa*) used in Arnhem Land in August 1935. This boat could be based on Austronesian tradition since the Aborigines copied it from the Macassars, South Sulawesi, Indonesia. Source: photo by Donald Thomson, reproduced in Wiseman (1996, pp. 60–1).

Kere, Tutuala and Lene Kichi. The question remains as to whether they are part of the evidence of the Austronesian migration.

It seems that from different sources, one might suggest that a far longer tradition of rock art exists in West Papua. The newer styles overlap the older ones, sometimes with such a density that it is difficult to separate them. In Timor Leste the density is non-existent, and the paintings are clearly separate entities. This may suggest that rock art was introduced only later in Timor Leste, maybe by the Austronesians. It could also indicate that similar paintings discovered in both Timor Leste and West Papua coincide with the Austronesian migration. Oral tradition and history in Timor Leste add to this hypothesis.

Strangely enough though, the rock art is found only in Fataluku land, the NAN-speaking part of Timor Leste, a contradiction in itself.

On the other hand these languages,<sup>2</sup> that are found mainly in the interior and eastern part of Timor, may be relics of languages

2. The non-Australian languages.

more widely spoken in the island before the arrival of the Austronesians in the third millennium B.C.

(Glover, 2000, p. 49)

In Chapter 5 it was argued that a strange and awkward Austronesian language-speaking population might have dwelt in Timor Leste, today represented only by the Makua people at the village of Mehara. As we stated earlier, we find this evidence too weak to be convincing.

We also know from recent excavations that the Lene Hara Cave (which shows most, and even quite unique, resemblance to the West Papua rock art) had human occupation since 35,000 BP (O'Connor, 2003, p. 2). This dating brings us closer to the first migration in this region and some of the earliest rock art in Australia. That period in time, however, has no relation to the sophisticated vessels we recognize in the supposedly Austronesian paintings. It must be said, though, that Lene Hara does not contain representations of boats. But it is hard to believe that at such an early stage regular exchange was established between Timor Leste and West Papua, especially in view of the technological incapacity to build sophisticated boats. Painting styles that we could eventually relate to an older period, such as the negative stencils in West Papua, are not present either in Timor Leste, while the styles which could possibly relate to the Austronesian period, such as the fish representation from Memnemnambe (Plate 55), Lene Hara (Plate 56) and Sorraa (Plate 57), are very similar.

Cator (1939) and Röder (1938) suggest that with the coming of the Austronesians, the original Papuan population in West Papua fled further inland. This could then in its turn explain the differences between the rock art on the coast and in the Baliem Highlands. Following this hypothesis, the tradition, still performed in the Baliem Highlands – with some minor exceptions in similarity that could date from the initial contact with the Austronesians and the Papuans' subsequent migration to the hinterland – could be pre-Austronesian. A logical deduction is that the art found in the highlands could have its origins in the Pre-Estuarine period or shortly afterwards, in view of its pure Papua character. However, it cannot explain

the enormous differences between the Pre-Estuarine paintings in Arnhem Land and the paintings in the Baliem Highlands, unless isolation and time left the tradition alive in a more rudimentary form in West Papua.

A last question that we may take on board is why these paintings were made. In the boxes in particular we have referred to certain patterns (dots, lines, grids, abstract motives, the therianthrop *matutuo*) and associations (hand stencils and other stencils) to be found throughout the survey. As we also mentioned in the Introduction, the debate on the *raison d'être* of rock art is a topic of much discussion currently among specialists mainly in Europe, the United States, South Africa and Australia. One of the latest and more detailed studies, *The Mind in The Cave* (2002) by David-Lewis Williams, attracted our interest. His hypothesis is that shamanism is the basic explanation for the existence of the rock art in upper Paleolithic Europe. This hypothesis is based on two case studies of recent shamanism in South Africa and North America, and the most recent discoveries in neurology and neuropsychology – trying to understand the functioning of the human brain in different stages of the consciousness and ethnographic, anthropological and archaeological data from all around the world.

Simplified, it demonstrates that the rock on which the paintings occur is a membrane for communication with another world, the spirit world behind the rock. This spirit world is shaped by shamans (more commonly known as holy men or medicine men), introduced and accepted by society, and results in early forms of religion, religious beliefs and contact with the spirit world. Such a religion can be considered as a cornerstone of *Homo sapiens'* society.

Deep down in caves, upper Paleolithic Europeans created a mystical world that formed somehow one of the basic structures for early *Homo sapiens'* society. The model is very attractive, and can of course, as illustrated by the recent study cases of South Africa and North America, have its local varieties in space and time. It is very tempting to relate some of these findings to the sites we encountered during the survey. The sacredness of the sites, and the mystical behaviour of the elders and sacred keepers in



the Baliem Valley in West Papua and Timor Leste, are in themselves indications of spirituality and religiosity. As we discovered, in the Baliem Valley the art is *wusa* (sacred), and as Heider was informed, executed during initiation rites and rituals, a characteristic to which Lewis-Williams also refers. The sites are also revisited many times and paintings overlap each other, sometimes with such density that they become unrecognizable. Excessive use of sites noted by Lewis-Williams is also observed for both the Baliem and coastal sites in West Papua. In Timor Leste we heard that, if not properly entered, the sites could inflict disease and eventually cause death.

Most rock art in the sites, apart from the Baliem Highlands in West Papua, face the sea, even when executed in inland caves, as if a message comes from the rock to the surrounding environment, the real world.

However, the explanation why is not the main purpose of this book, and should be considered as a subject for further extensive study. It is our strong belief that especially in the region of the Baliem Valley in West Papua, where rock art is still executed, a similar study would be worthwhile.

All these hypotheses may illustrate the lack of data, research, and understanding, and consequently the difficulty for interpretation. It is our hope that the opportunity offered by the possible cultural exchanges indicated above will have an effect on the scientific community. It is therefore strongly suggested that governments take their responsibility in the preservation and conservation of these sites before they disappear.

Already the Berau Gulf is an area of 'considerable tourism' and has a far larger potential, for which the region's infrastructure is being prepared. No counter-activities are undertaken to protect the sites. This means a larger influx of people, with more likelihood of graffiti and other destructive action. The lack of education in the region, and in particular with relation to the sites, only aggravates the situation. The local population will keep on destroying sites as long as their value is not properly explained. This value can bring community development to the neighbouring villages if correctly understood by policy and decision makers.

Inadequate surveys and archaeological study worsen the situation. We are convinced there could be other sites, since we were not in a position to visit areas such as Arguni Bay. Protection somehow also means selection, and it becomes difficult to select if one does not even know the extent of the art. This reasoning should however not be taken as an excuse to wait for preserving and conserving what we have to date. On the contrary, it only illustrates the massive amount of work to be done if the situation is taken seriously.

It is necessary for the Indonesian Government and leading institutions such as universities and archaeological services, national and local, to start a process for protecting these sites. It is a huge task that can hardly be performed alone. International help through bi- and multi-lateral assistance should therefore be offered within the region and even be extended to a larger scale. Suggestions include:

- A total survey of the region, so that the extent of the art is known.
- Archaeological and interdisciplinary research at pilot sites, and anthropological research related to the traditional arts, belief systems and history of the region.
- Liaise over the sites on a regional scale and build a firm chronological table based on styles and absolute dating wherever possible.
- Carefully analyse the environmental and climatic impact on the sites so that correct scientific methods can be applied for their conservation.
- Make a selection of important sites for permanent preservation and conservation, giving rise to a way of protection that could eventually lead to World Heritage listing, thereby guaranteeing their safety and illustrating their intrinsic value.

However, all of these suggestions cannot be successfully implemented if local communities are not involved and do not benefit in ways that add to the development of their livelihood, communities and region. Village women and men should be involved in the surveys, and considerations should be explained to them with

regard to destructive actions (such as graffiti) against the sites. Courses and training sessions should be organized in the villages for both young and old, bringing awareness to the communities. Last but not least, the communities should be involved in the protection of the sites as conservators, guards and guides for tourism, by setting up local government programmes in close collaboration with the tourism sector. This way the local communities could benefit from the sites, learning to enjoy and tolerate their presence.

These are only a few very demanding, but necessary, actions to be taken before a world of information disappears. The rock art sites truly represent a common heritage in the South-East Asia-Pacific region and are of major importance for the understanding of human history in this part of the world.





# Berau Gulf Region

## 1. Safar 1 (Röder 1)

This site is located on a small bay in the north-west part of Ogar Island. Red paintings are found on an overhanging cliff, facing west. The remains are scattered along the cliff for approximately 25 m, 2 to 8 m above sea level (asl).

They mostly decorate the lower part of the cliff; however, some more faded paintings can also be found further up. One faded Matutuo is still visible (Plate 73). Here are also remains of a yellow painting, possibly also representing a matutuo and a boomerang (Plate 74); several red motifs are already washed away or badly faded. Some hand stencils can also be seen.

This site was the first listed in Röder's catalogue. He also indicated that not far from this cliff, further west, another cliff showed remains of faded red paintings.

## 2. Safar 2

This open cliff is situated north-east of Safar 1. It might be the cliff mentioned by Röder when he described Safar 1. Faded paintings are located at approximately 10 m asl, and are distributed over an area 3 m wide. Remains of three hand stencils can be seen as well as other unidentifiable red marks (Plate 75).

## 3. Fuum (Röder 2)

Site number 2 of Röder's catalogue is a small island, situated between the Ogar and the Arguni Islands. On the southern part of the island, on an overhanging cliff approximately 4–5 m asl, some red marks as well as



**Plate 73.** Most of the Safar 1 paintings are already faded and unrecognizable. Only a faded dark red matutuo painting still can be seen quite clearly.

**Plate 74.** A faded matutuo is drawn below a yellow 'boomerang' figure at Safar 1



yellow pigments are visible. Some hand stencils and other figures are already faded. They are scattered along the wall for about 9 m. In a small niche are remains of a red anthropomorphic figure with both hands raised and legs spread apart. Unfortunately, someone has thickened the outline of this figure with a pencil to reveal it more clearly (Plate 40). This painting is in Röder's book (Figure 2). His informant told Röder that this figure is a female matutuo, characterized by the absence of the pointed hat.

#### 4. Dudumunir (Röder 6)

This cave is located in a protected bay, north-east of the present village of Arguni. This bay is situated in the south of Arguni Island, and the cave itself on the western side of the bay. According to Röder, the old village of Arguni was situated on this bay about 100 years ago. During his visit, the wooden poles of the old village were still seen protruding from the sea.

The cave is about ten minutes easy walk from the village. A boat can get into the entrance of the cave during high tide, while during low tide people can visit it by crossing a hill and then walking from Arguni along the

beach. Röder did an excavation in this cave, but most of the material found was destroyed by fire during the Second World War. Some was saved and illustrated in his book (potsherds, stone tools, and bones).

Röder suspected that this cave was once full of paintings, but when he visited it only several paintings and some tracing of red and black pigments were left. He pointed out that the humid condition inside the cave could have deteriorated the paintings (Plate 32).

The entrance chamber is large, with a ceiling more than 10 m high. In many parts, the ceiling is covered by black soot from (historically) recent fires lit by the local people; therefore it was difficult to locate the paintings. Behind this chamber there are two passages. The left one descends and becomes a dead end after a few metres; wooden poles from the old Arguni mosque are now kept in this passage. In the right passage, which also terminates after a few metres, shell midden and animal bones cover the floor. In the left part of the chamber (rather high up, before entering the left passage) the remains of a dark red painting, looking like a branch of a tree or a coral reef, can be seen. This painting is illustrated in Röder's book (Dudumunir, Figure 6; Plate 76). Before entering the passage, on the wall behind a stalactite, an incomplete figure is visible, a kind of spiral. An obscure painting on the right wall of the right passage is heavily damaged. Part of it has been washed away; it may have represented an anthropomorphic figure. None of the black paintings recorded by Röder was found.

## 5. Matutuo (Röder 7)

This cliff is situated in the same bay as Dudumunir, but located further south, on the cape at the other side of Arguni village. Paintings can be seen about 1.5 m asl, scattered over about 4 m (Plate 77). The paintings are red and yellowish brown and represent an abstract painting and a matutuo. Other figures are faded.

## 6. Oya (Röder 8)

This site is located on the southern coast of Arguni Island, further east of Matutuo, in another bay. The pictures here



Plate 75. Hand stencils at Safar 2



Plate 76. 'A branch of a tree or a coral reef figure', as Röder named it, at Dudumunir. The chipping of the surface and salt intrusion has caused fundamental damage to the painting.



Plate 77. Röder (1959, p. 103) identified this unknown dark red figure at Matutuo (Arguni Island) as a ship. However, Röder's illustration was not very accurate. On the lower right side of this figure is a faded matutuo.

Plate 78. An unknown object at Oya (Arguni Island)

Plate 79. A turtle and a fish at Mampoga

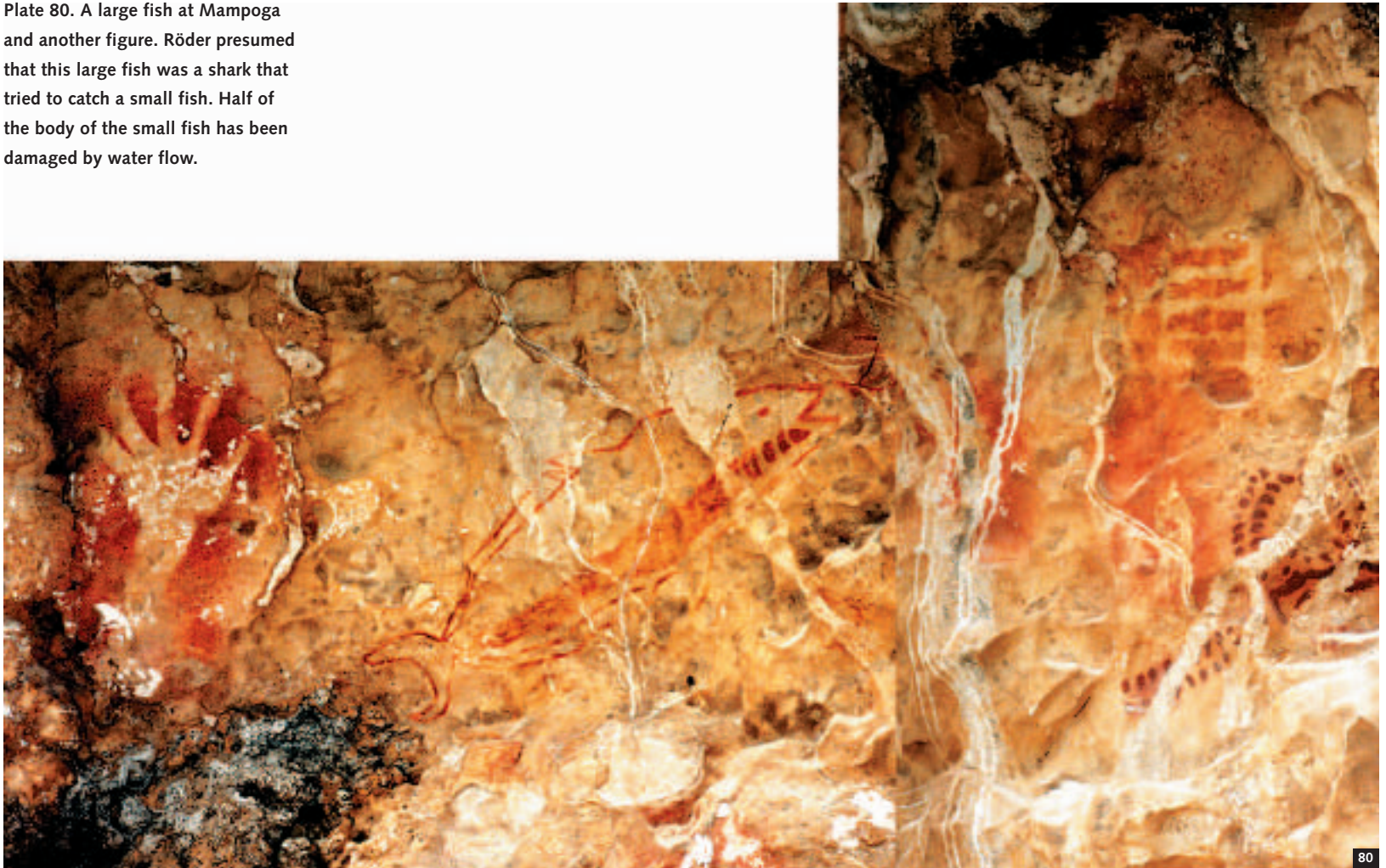


are still very clear, as in Röder's illustration. There are two red objects: the lower one looks like a bullet with a triangular shape, while the other is a long tubular form with two maize corn-shaped objects hanging underneath. The length of the pictures does not exceed 50 cm (Plate 78).

## 7. Mampoga (Röder 9)

This site is located south-east from Oya at the southcoast of Arguni Island. It consists of a long gallery, a few hundred metres long, and about 4–5 m asl. Some stalactites form pillars. Many paintings can still be seen clearly in this gallery, as well as masses of human bones scattered along the platform, and a whalebone.

Plate 80. A large fish at Mampoga and another figure. Röder presumed that this large fish was a shark that tried to catch a small fish. Half of the body of the small fish has been damaged by water flow.



According to the Raja of Arguni, at the beginning of the twentieth century the Arguni people were twice hit by a calamity. The first was an attack by the neighbouring tribe on the Arguni village. It happened while all of the Arguni men were out fishing. Only one woman and a child could escape the massacre. Most of the dead bodies were disposed of at Mampoga. The site also contained the victims of the second calamity, the 1918 epidemic that wiped out a large part of the Arguni population. The dead bodies were wrapped in cloth and put in the gallery or on the beach.

Mampoga is a large site which has various kinds of motifs, such as hand stencils, fish, turtles, lizards, anthropomorphic figures, masks, lines, hooks, dots, geometric figures (circles, concentric circles with rays,



Plate 81. Lizards, a crocodile and other unknown figures at Mampoga



Plate 82. Various unidentified figures at Mampoga

Plate 83. A masked figure at Mampoga

Plate 84. Unknown objects at Mampoga



spirals, rectangles), patterns of rows of vertical short lines, and other non-figurative motifs (Plates 79–91). Hand stencils and other figures found at this site are not densely overlain and have not made the wall completely red like they have at Tapuraramu or Afofo. However, some paintings seem to be arranged in a group to form a composition. This is the case with some of the fish (Plate 5.1). The paintings are in different hues of red pigment, and yellow is also present.

Fish are dominant in this site, and drawn in various ways. The style is mostly naturalistic, and often the local inhabitants can identify the species. Almost all of the fish have been done with solid infill, mostly placed



Plate 85. Geometric and matutuo figures at Mampoga



Plate 86. Unidentified figures at Mampoga

vertically, but also horizontally or obliquely. There is one exceptionally large fish in fine outline, in an oblique position (Plate 80). Its style is very different from the other paintings, which makes it an outstanding motif on the wall.

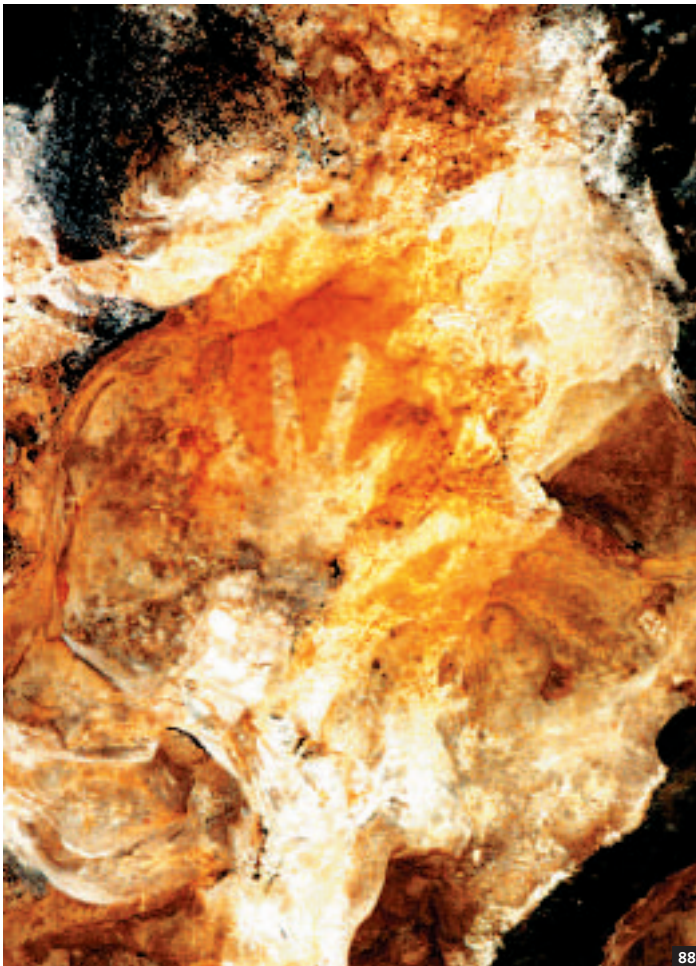
Turtles are painted with solid infill or outlined with decorations inside, for example by a line along the backbone (Plate 79) or by dots (Plate 30). There are several naturalistic lizards. The most impressive one has been drawn horizontally in orange-red with both eyes and a protruding mouth (Plate 81). All the limbs are drawn with fingers and toes, five to each one, except for the right leg, which has only four. Röder noted that the local inhabitants





Plate 87. Geometric design  
at Mampoga

Plate 88. A yellow hand stencil  
at Mampoga



considered this lizard a crocodile. Across its mouth is painted the very long tail of another lizard-like figure, drawn horizontally. This tail is more than twice the length of its body, from which rays are protruding. This lizard is drawn in dark red pigment. Further to the right another lizard figure is already faded. In Röder's illustration, the 'X-rayed' body was shown clearly. However, today the pigment has fused together and the lines are blurred.

## 8. Pintunis (Röder 10: Betunis)

Pintunis is an islet south of Mampoga. Röder recorded it as Betunis. A single painting is found in a gallery, about 5 m asl. It represents a faded yellow figure, which now looks more like a geometric composition. In Röder's illustration, the figure is clearer and looks like a matutuo with all parts of its body drawn in lines of the same thickness, except the head, which is rounded and drawn in thicker lines. The arms with three fingers are raised; the legs, less clear, have toes; but the right leg has a line connected to the end of the tail and to the right arm. Approximately 5 to 6 m to the right, there is a trace of unidentifiable red marks.

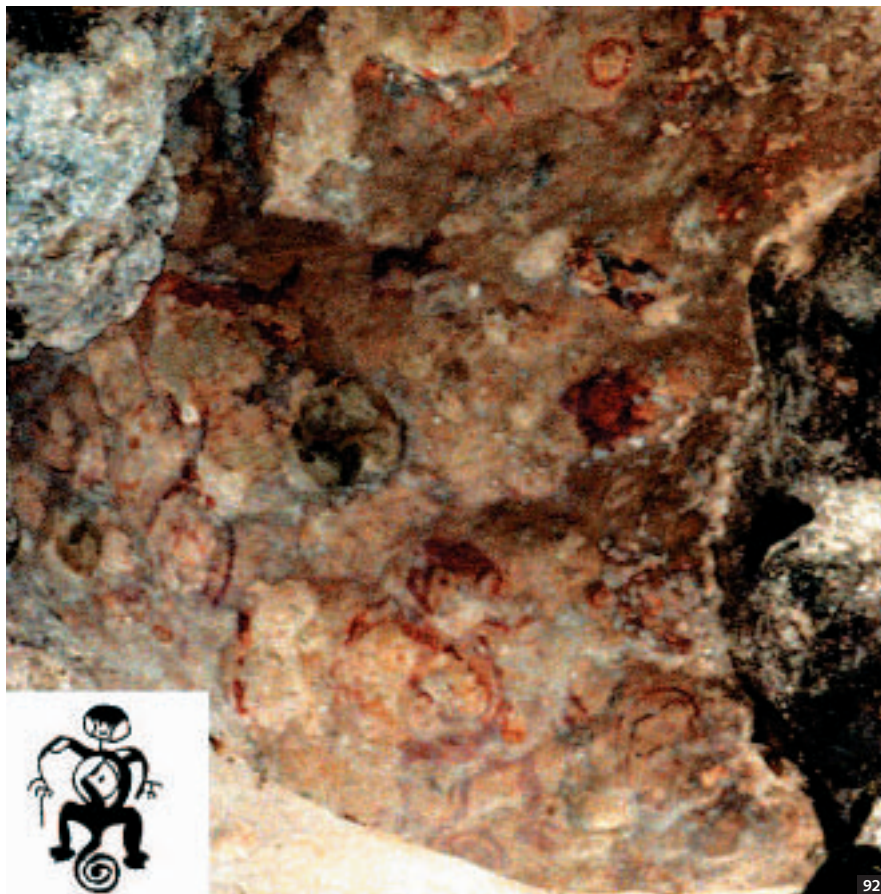


Plate 89. Unknown objects at Mampoga

Plate 90. Geometric figures at Mampoga

Plate 91. Unidentified figures at Mampoga



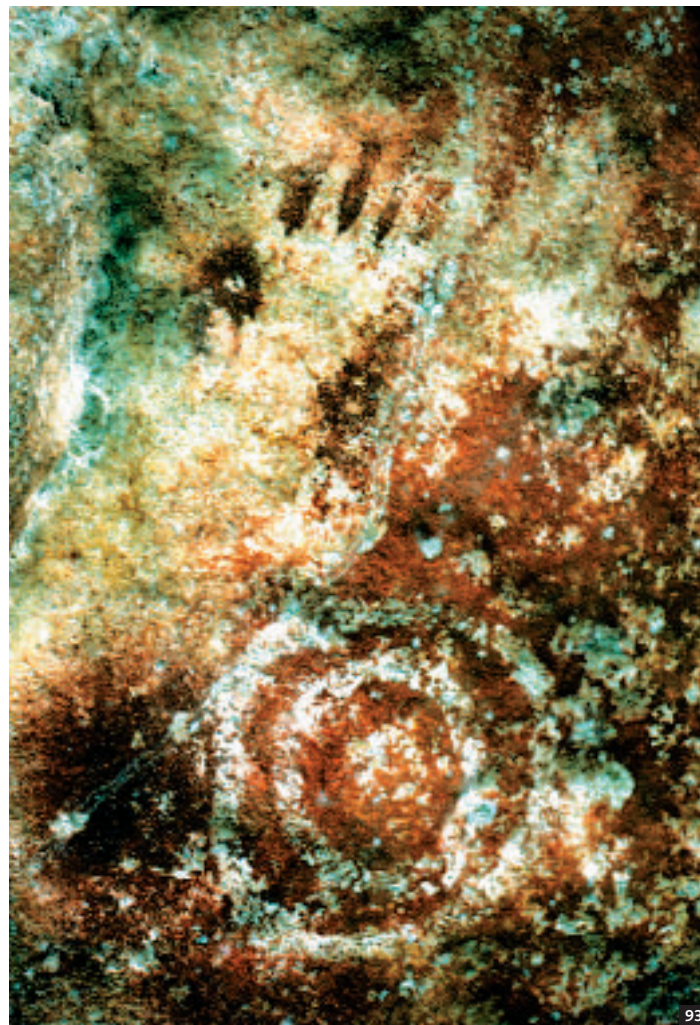


**Plate 92.** This faded anthropomorphic figure at Risatot was much clearer in Röder's illustration (inset). From the five groups of paintings described by Röder at Risatot, this is the only one that was found during the survey.

**Plate 93.** A white concentric circle on top of red pigment at Tapuraramu

## 9. Risatot (Röder 11)

This site is located in a bay and consists of a long gallery facing eastward. The bay has a couple of islets and is well protected from the open sea. Paintings have been drawn about 5 m asl, most of them already faded. Of the five groups of paintings illustrated by Röder in his book, only one can be found and it is less clear than in Röder's illustration (Risatot, Figure 1), (Plate 92). The beautiful anthropomorphic figure which has a headdress like a helmet and a spiral penis or tail in Röder's book is now already faded, and part of the face has peeled off. A turtle painted on the left of the anthropomorphic figure



mentioned earlier is faded, as are other figures and lines. A solid sun with rays can still be seen clearly. Remains of other yellowish-red pigments are scattered on this panel, but cannot be differentiated into figures.

Röder described Risatot as a complex of paintings located in different places in this bay. Some were located in a cave. However, he did not mention the exact locality, except that this cave was situated approximately 100 m from the painted gallery and part of it was already ruined. At the entrance, Röder recorded remains of human and animal bones, ceramics, a model of a small boat, and a shell trumpet scattered on the ground. Röder got the impression that this place was used to keep not only the dead, but also important objects. He also recorded a wooden sculpture of an ancestor (matutua) in this cave complete with a charm of dugong teeth. Such a sculpture was also found on one of the islets in this bay. Röder mentioned that there were four small matutuo figures in a corner, but they were very fragile, and when he touched

the wall the surface fell down. He added that most of the paintings were already damaged.

During our visit we could not find the cave with paintings, although people from Arguni acted as our guides, one of whom was one of Röder's informants. They did not seem to know much about the paintings. We were shown a cave, about 50 m up the hill, with much shell midden but no paintings. According to the informants, it was used as a refuge during the Japanese occupation in the 1940s. Another cave, further away, also contained shell midden, but no paintings. Between these two caves there was a third, with the entrance flooded by water. This cave had a platform on its right, where remains of scaffolding used by the people who once occupied it could still be seen. Again, paintings were not found. We did not go inside, since the water was too deep and the entrance too small for our boat to go through.

## 10. Tapuraramu (Röder 3: Tabulinetin)

This site is known by Röder as Tabulinetin and was wrongly placed by him. He indicated it was on an overhanging cliff of Kayier Island. We located the paintings on another island, Sapar, east of Kayier. The Andamata people call this site Tapuraramu, while the Arguni islanders call it Tapure.

It is one of the richest sites of this region, with impressive paintings. As at Afofo, the cliff is almost completely covered by red paintings, and many figures overlap. Stencilled figures are dominant, and the technique used to make them has caused the pigment to spread all over the wall, creating big red areas. Stencilled objects are hands complete with arms, round objects, boomerangs, 'bird-like' objects, fish, and crescents (see Box 1, 'Stencilled Objects'). Anthropomorphic figures or matutuos are painted in different styles. The most outstanding is one with both hands raised, the left hand holding a boomerang and the right a diamond-shaped object (Plate 4.6). The tail or the penis is long and curly. Other figures found are circles (sometimes concentric circles or circles with ray, Plate 58), and triangles. White paintings are present but very rare and have always been painted on top of the



Plate 94. A hand stencil and other unidentified figures at Tapuraramu. In some places the surface has peeled off, damaging the paintings.



Plate 95. A geometric figure, some dots and other faded red figures at Tapuraramu

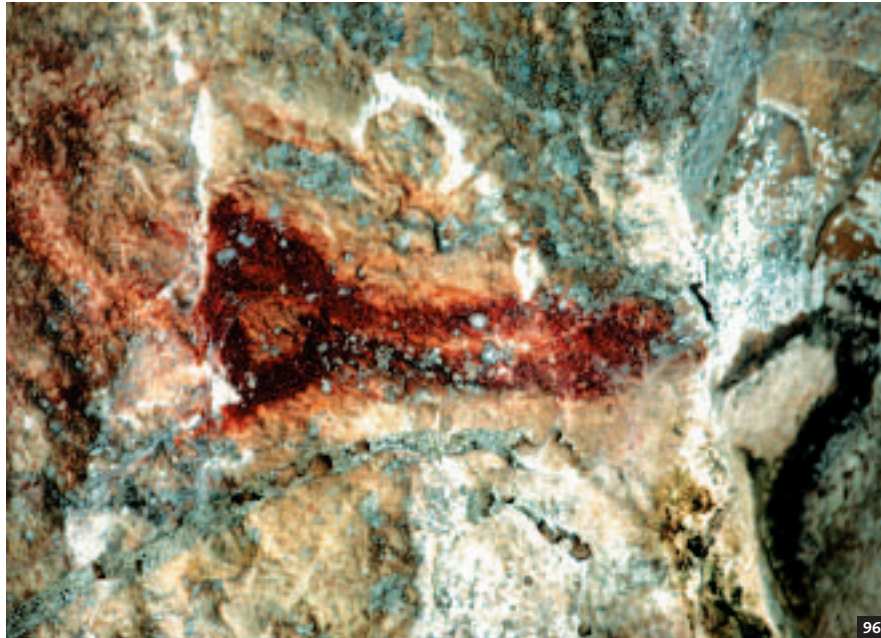


Plate 96. An unidentified figure at Tapuraramu

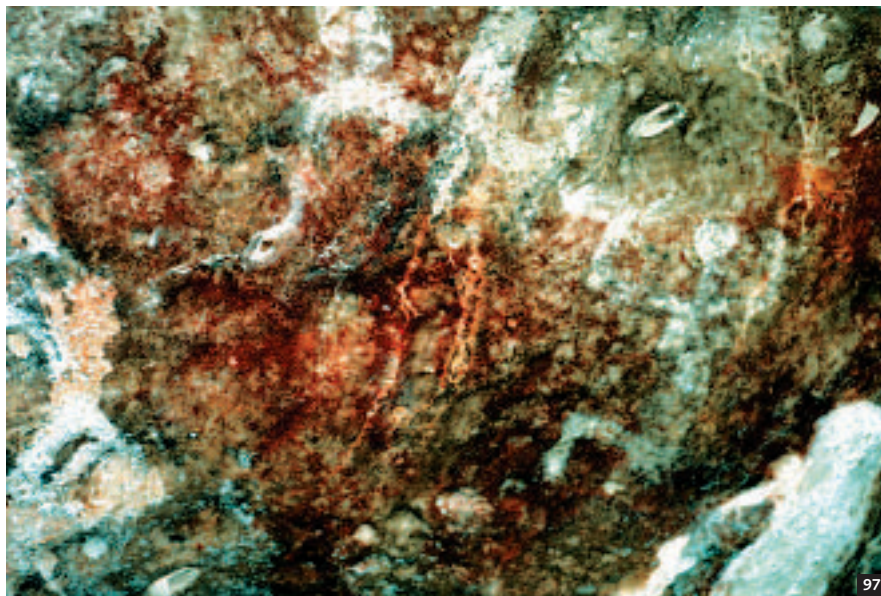


Plate 97. Two white matutuo figures were drawn on the red painting at Tapuraramu. In this photo, only the lower part of the body of the right matutuo figure can be seen.

red ones (Plates 93, 97, 98). Many of the paintings are unidentifiable (Plates 94, 95, 96).

### 11. Taminunusa (Röder 5: Batewa)

Taminunusa is an islet west of Andamata village. In Röder's book this island was named Batewa. The paintings are found on the north-eastern side of the islet on an overhung cliff. Remains of red marks are visible along this cliff for approximately 10 m. The paintings are already faded and nothing can be recognized. In Röder's time the paintings were already very faded. However, he still recognized two fishes and several hand stencils.

### 12. Farek

This islet is north-east of Andamata village and the paintings can be seen on the northern side at about 10 m asl. What is left now is a concentration of unidentifiable red marks, one of which is probably a fish stencil.

### 13. Mernusa

This small island is west of Wamarain, and south-east of Farek Island. Remains of unidentifiable red marks can be sighted at approximately 2.5 m asl.

### 14. Ambibiaom (Röder 14: Ambinimabe)

This small island is located to the north of Wamarain. On his map, Röder named this site Ambinimabe, while he placed another site, Ambibiao (site number 4), to the west of Andamata. However, the description he gave for Ambinimabe is actually that of Ambibiao. At the place where Röder plotted Ambibiao, we found nothing.

Paintings are found about 2.5 m asl on an overhanging cliff, spread over about 4 m. Most of them are difficult to distinguish, but there are some lines that can still be seen clearly and probably form parts of a complicated design. Two of the three pictures of this site illustrated in Röder's book were identified. They are non-figurative, consisting of lines, spirals and circles. One has been made with white

pigment on a red base (Plate 99). The other painting illustrated by Röder is not identifiable anymore, but may be one of the red marks on this cliff. Röder illustrated an intricate maze. We suggest that the pigment has fused in the rock, blurring the lines and creating a big red blotch, making the original design unrecognizable. It seems that quite a number of the pictures in Röder's book have deteriorated in this way.

## 15. Goor

Goor is an open white cliff on the mainland facing Wamarain Island. A big black stalactite protrudes from the middle of this cliff and is regarded as a snake by the local inhabitants. Goor means 'snake'.

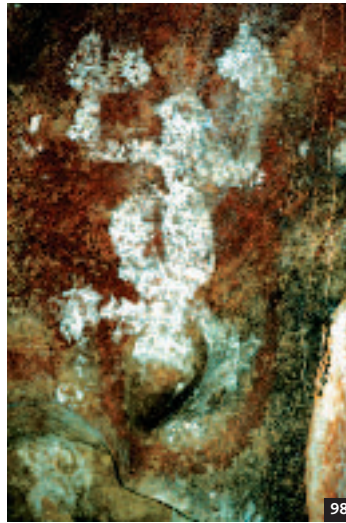


Plate 98. White non-figurative figures at Ambibiaom

Plate 99. A white matutuo figure at Tapuraramu

Plate 100. Among patches of red paintings at Goor, hand stencils, a human or matutuo (in the middle) and white non-figurative figure (to the left) can still be recognized.





Plate 101. These fish and dot figures were painted in an isolated and protected niche in Wamarain. Other paintings located on an exposed wall were already faded. The unidentified long stencilled objects may be boomerangs

Plate 102. This beautiful dark red lizard at Wamarain was painted between stencilled objects, mainly hands

Plate 103. A smiling face at Wamarain

Plate 104. An isolated dark red human figure in a niche at Wamarain is outstanding in its white surrounding



On this 30 m-long cliff, paintings are scattered from about 1–1.5 m to 8–10 m asl. Almost all of the paintings are faded and now red patches as well as some unidentified lines can be seen in many places. There are hand stencils and probably an anthropomorphic figure (Plate 100). The upper part of the body with both hands raised beside its head can still be identified. There is also a white non-figurative painting, and a faded boomerang stencil can also still be seen. The dominant figures found here consist of red dots, about 10 cm in diameter scattered randomly on the upper part of the cliff. Some are arranged in a horizontal line.

Approximately 10 m westward there is another cliff that also shows traces of red paintings. However, all that can be observed now are lines of dots.

Röder did not describe Goor but he described a site named Barom situated a few hundred metres to the east of Goor with similar characteristics. Röder noted that in front

of the Barom cliff there was a big stalactite and that the local inhabitants regarded it as a rock snake. None of the paintings illustrated in Röder's book is now found on Goor or Barom, and Röder described none of the paintings that can be seen today.

## 16. Barom (Röder 12: Barom/Kuasi)

Barom is east of Goor, facing Wamarain Island. It is an open cliff where paintings are scattered 1–8 m asl for about 15 m. The cliff is dominated by red dots about 10 cm in diameter. Most of the paintings are faded and difficult to distinguish. A red hand stencil is located on the highest point of the cliff. The remaining paintings are faded red and yellow pigments.

## 17. Wamarain (Röder 13: Wamerei/Jarak)

Wamarain is an island located to the north of Goor and Barom, and the painted cliff is situated in the southern part of the island. The site consists of an open cliff that has a protruding rock on which people can stand. At high tide this platform is easily reached from a boat. In some areas the cliff forms small niches where paintings have been well preserved. However the open cliff has also various motifs, half of which are still clearly visible.

Röder named this site Wamerei (Jarak), site number 13, and he mentioned paintings in two different places, separated by a small valley. One is the open cliff mentioned earlier and the other is a big wave-cut gallery similar to Tabulinetin. The Andamata people call the second place Potmbasi.

This cliff is dominated by naturalistic paintings of fish, mostly done in solid infill and in a vertical or oblique position (Plate 101; Plates 5.2 and 5.6). They are similar to those found in Mampoga, but sometimes finer. The local inhabitants identify whales and dolphins among them. Another animal drawn is the lizard; a red one is beautifully drawn near a group of hand stencils (Plate 102). However, compared with Röder's illustrations, not many anthropomorphic or matutuo figures are left today (Plates 103, 104). Most have faded or are washed away.



103



104





**Plate 105.** This beautiful white bird on red pigment is the central attraction at Wamarain. White painting is not common in this area, especially such figurative motifs which have been done carefully, using X-ray infill, in the case of this bird.



**Plate 106.** The long stencilled object on the left is probably a boomerang. Other figures depicted on this panel at Wamarain include fish (on the upper right side of the long stencilled object), a hand stencil and other unidentified figures.

The central attraction of this site is a large painting of a white bird painted in the attempt to show internal organs ('X-ray'), drawn on a red background. This is known as a Wamarain bird, the name given to the cliff (Plates 29 and 105).

Stencilled figures are dominated by completely drawn hands and with the arms often drawn in a dark red pigment, making them clearly visible (Plate 102). Other stencils cannot be identified. There are a couple of long thin objects with a pointed tip (Plates 101 and 106) and another with one tip pointed and the other oval (Plate 105; Plate 1.10) which according to Röder's informant was a knife, but reminded Röder of a lice-scratcher (Röder, 1959, p. 114). A stencil of an unknown object (an elongated object with rounded points) is shown close to a hand stencil (Plate 105; Plate 1.4).

There are geometric figures: lines, circles, ovals, triangles, and spirals, sometimes with linear infill. Some of them are drawn individually, but others form a composition or part of a larger drawing.

The white figures are usually lines, mazes, or other motifs, mostly unidentifiable (Plate 107), except the big bird mentioned earlier (Plate 105).

## 18. Potmbasi (Röder 13: Wamerei)

This site is a gallery, located east of Wamarain, on the southern side of Wamarain Island. It was mentioned by Röder as the second cliff of Wamerei. Remains of red marks can be seen scattered on the wall.

## 19. Fo'ora (Röder 15: Ora)

This island is situated east of Wamarain and paintings are found in a 20 m long gallery, on the south side. Röder recorded it under the name of Ora.

The left corner of this cliff forms a deep shelter, much like a cave, and on the ceiling some figures are still clearly visible, together with many faded red marks and hand stencils, as well as yellow marks. This site is dominated by fish figures, shown in a vertical position, but most of them are already faded (Plate 5.5). Geometric figures include circles, triangles, and inverted U- and V-shaped figures drawn in a group (Plates 108 and 109). Some unidentifiable figures are also present (Plate 110).

## 20. Menin

Paintings are found on the north-west side of this islet. Only some faded and flaked red and yellow pigments can be seen on the cliff, 2–4 m asl, and only a hand can be recognized.

## 21. Mariein

The island is located west of Sunduma, and paintings are distributed over three cliffs. The first one is an open cliff in the south-west of the island. At 8–10 m asl, a red hand stencil and a red mark, obliterated in the middle, can be seen clearly from a distance. At about 2 m asl there are also some very faded red marks.

The second cliff is located about 30 m to the east of the first one. A stencil of a vertical dark red figure, about 80 cm long, forms the main attraction of this site. It has the shape of a fish, with its rounded head downward, but its identity is unclear (Plate 111). Two wavy lines in light



107



108

Plate 107. The white drawings at Wamarain are mostly unidentifiable, including these lines, mazes and other motifs. The white drawings in the middle were illustrated upside down in Röder's book. Röder thought the white figures on the right might be tattoos.

Plate 108. Some of the geometric figures at Fo'ora seem to be composite and most of them are unidentifiable



**Plate 109.** The geometric figures at Fo'ora include circles and inverted U- and V-shaped figures

**Plate 110.** Some of the paintings at Fo'ora are unidentifiable. They include a 'dragonfly' (top left) and 'beehive' figure (bottom left).



red and at least seven hand stencils are clearly pictured. Above these hand stencils, two vertical fish stencils and a horizontal fish are to be seen. The paintings are distributed over approximately 10 m and the highest of them is about 7 m asl.

Approximately 10 m further east, beyond a small cape, lies the third cliff facing north, towards an islet. There are several red hand stencils, some of them already badly flaked. At least four hand stencils can be identified clearly. Some flaked yellow marks are also to be seen. All of these paintings are found approximately 2.5 m asl and occupy a 3 m gallery.

## 22. Sunduma

This site is located on the mainland, on the west side, facing Mariein. Paintings are found in three different places. The first group is on the overhanging cliff 3–5 m asl and scattered over about 7 m. Most of the figures are faded groups of dots, mostly red, but also yellow (Plate 112). The second group is found in a small white niche cut into a black cliff about 10 m asl. The paintings are very obvious, consisting of five dark red hand stencils, two oval stencils and some other unrecognized figures (Plate 1.1). The paintings are densely concentrated in this niche, occupying an area 3 m wide and 2 m high. There are also yellow dots. In another niche at the same cliff a concentration of red and yellow dots, each one approximately 10 cm in diameter, can be observed.

The last group of paintings consists of unidentifiable red and yellow marks on a cliff 5–10 m asl.

## 23. Cape Ufit

This site is located on the mainland, on the west side of the cape, facing Ufit Island. Therefore, we named this site as such. Paintings are in two separate places, one in a gallery and the other in an open cliff. In the gallery they are approximately 3.5 m asl and higher, painted on the wall just above the platform as well as on the ceiling. Most of the paintings are now only faded red and yellow marks, sometimes already flaked and unidentifiable. Some of them form parallel lines, brackets and hooks. There is a red curved smear about 80 cm long and 20 cm thick, already flaked; other red and yellow marks fill in a small niche, approximately 70 cm long and 25 cm wide, severely flaked and therefore unidentifiable. There are also faded hand stencils.

The second place, the open cliff, is about 30 m to the east, where the coast turns north. Eroded and unidentifiable red marks indicate that once there were also paintings on this cliff. They can be seen at 3 m asl and further up.



Plate 111. The second cliff at Mariein is marked by the outstanding large stencil of an unknown object

Plate 112. Sunduma has three groups of paintings. The first consists mainly of faded groups of red and yellow dots. The second group consists mainly of hands and oval stencils (see Box 1, 'Stencilled Objects').

## 24. Babamba

This small island is located between Cape Ufit and Mbosu'umata and has a painted cliff on the north side. In Röder's map this island is called Fior Lama. There are remains of red marks and a hand stencil approximately 5 m asl, over an area of 2 m width.

## 25. Mbosu'umata (Röder 16: Tapore/Bosugo)

This mainland cape is very conspicuous, since it has a pointed tip with a big stalactite hanging from the overhanging cliff. The inhabitants interpret its shape as a pig's snout and that is the origin of the name (*mbosu'u*: pig's snout; *mata*: rock). It is a big site with paintings all around the cape, in a long gallery or high up on the cliff. Röder listed this site as Tapore (Bosugo). The western part of this cliff consists of a gallery with pillars of stalactites, which sometimes form small niches. Remains of human bones, and broken and rotten wooden objects, are also visible in one of the western galleries where the cliff makes a turn and forms a corner.

When Röder visited the site, he saw in one corner broken Chinese ceramic plates, coconut husks, and a small doll made of *Gabagaba* (sago palm stem). On the cliff itself hung a *kasuari* (Cassowary bird) breastbone and a bit of human hair. Such offerings were also found in the corners where remains of red paintings were present. He also saw in the biggest corner a net full of fish, a shred of cloth, and dried plants hanging on a wooden club, stuck in a hole on the wall. When we visited the site, we saw near the tip of the cape a shred of a shirt, a thong (a rubber sandal) and other objects hanging from a wooden pole on the wall.

Most of the paintings scattered on the wall are already faded and have become large red marks. However, many lines can still be seen, although most of them are no longer identifiable. Plenty of dots are found along this gallery, either in rows, forming two parallel or wavy lines, scattered randomly, or concentrated in groups. The dots are mostly red, ranging from dark to light red, approximately 10 cm in diameter, or smaller; other dots are yellow. Hand stencils

are also present, some of them faded, but many are clear. Some show only the palm of the hand, but others the whole arm. They belong to adults and children. Most of the very high pictures found on the cliff are hand stencils. Therianthrop figures (*matutuo*) are found in several places but some are already very faded. A couple of faded geometric figures probably also represent *matutuos*. An anthropomorphic figure seems to be the biggest motif at this site (Plate 28). It is not clear whether it represents a human or a lizard, since the tail is rounded and looks more like a penis. This figure is more than 1 m long, surrounded by red and yellow dots. One line of these dots extends along the gallery for more than 20 m. On the right of this anthropomorphic figure there is a big cross, and further to the right three vertical fine lines. Under the cross a blotch of big red pigment is a boomerang stencil. There are also other geometric figures, such as semicircles and triangles, and unidentifiable paintings.

Röder recorded a number of black paintings at this site, but all have disappeared. He also illustrated various kinds of anthropomorphic figures, including *matutuos* with pointed hats, which we failed to find. We were also unable to find the stencilled fish mentioned by Röder.

In the western part of the cape, near the tip, remains of red paintings are covered by graffiti, written recently by the local people.

## 26. Unnamed site

This site is located on the mainland, on a large cape, between Mbosu'umata and Boam. We discovered this site on the way back to Arguni, on the last day of our visit, and we did not have time to obtain its name from the local inhabitants (Fior people). Röder did not list it.

On the east side of the cape faded hand stencils can be seen as well as a picture of a fish, and a stencilled figure of a long pole topped with a four-pointed star, and a triangle. Other unidentifiable red marks are scattered on this cliff. Towards the tip of the cape, at about 8 m asl, are a number of dots and an anthropomorphic figure.

## 27. Boam 1 (Röder 17)

The site is located on the mainland, south-east of the unnamed site. Paintings can be seen clearly in dark red colour on a cliff about 10 m asl. A matutuo wearing a pointed hat, face complete with eyes and mouth, is the central attraction of this site. In Röder's illustration the body was pictured in 'X-ray' style, showing the backbone and horizontal lines coming out of it on the left and right. Today these infill lines are not visible, but seem to have fused together, so the inner part of the body shows a solid infill, of a lighter colour than the body's outline (Plate 34). There are other motifs depicted on this cliff: on the right, a round solid object with rays, which, according to Röder's informants, was a representation of the sun, and a geometric figure on the left, identified by the local inhabitants as a crocodile. Close to the matutuo is a long object that looks like a walking stick. Under the 'crocodile' are two eroded figures painted in bright red; in Röder's book, they seem to be in a better condition. They represent two fish, one with its face upward, the other downward.

Further to the east, three other painted cliffs are situated close to each other, but were not mentioned by Röder. Therefore we list them as Boam 2, 3 and 4.

## 28. Boam 2

Situated east of Boam 1, this cliff has a protruding roof perpendicular to the wall (Plate 17). Paintings are close to the roof as well as on it. Those close to the roof are mostly hand stencils, which are found also on the wall. On the platform there are two red dots approximately 5 cm in diameter.

## 29. Boam 3

This gallery is located east of Boam 2. In one of the niches, just under the roof, is a big red mark, approximately 50 x 50 cm. It is not clear whether it represents a figurative or geometric motif but it consists of blurred red blotches. There are also very faded unidentifiable black marks.



113



114

Plate 113. Hand stencils, geometric and other unidentified figures at Manggo

Plate 114. This intricate maze at Dijora is similar to the one at Manggo



Plate 115. Like most of the other paintings in Dijora, this dark red figure has suffered from chipping of the rock surface



Plate 116. A faded intricate maze at Dijora

### 30. Boam 4

One red hand stencil is clearly seen on this cliff, which is located east of Boam 3. Other red marks under this stencil are unidentifiable.

### 31. Manggo (Röder 18: Manga)

The site is registered as Manga in Röder's book. This open cliff is located east of Boam 4. Red and yellow hand stencils can be seen clearly on the yellowish brown cliff. They mostly include the arm. Several geometric motifs are done in different hues of red. A number of intricate geometric figures on this cliff were considered by Röder to be typical of the Manga style (Figure 7).

However, some of them have started to deteriorate, the lines are fusing together, and some paintings have peeled off and washed away. One painting depicted by Röder was a beautiful matutuo figure with an elaborate headdress, an 'X-ray' body, and a spiral tail or penis. Today only the top part of the headdress and the tip of the spiral tail can be seen; the rest has already faded. Röder used this sophisticated figure for his book cover (Plate 3.9). Close to this painting are some geometric figures: a maze and several unidentifiable objects. Further to the right, other geometric figures form a vertical column (Plate 113).

### 32. Dijora (Röder 20: Tidora)

According to Röder, this site is an islet situated in front of Cape Eri. We found that Dijora is a small cape connected to the mainland by a narrow sandy passage, west of Fior village. Röder might have confused Dijora and Eri, since the paintings described as from Eri in Röder's book can be found in Dijora, including the black painting. This black anthropomorphic figure illustrated in Röder's book has deteriorated, and only half of it can be seen today (Plate 31). The red marks surrounding it are also severely flaked. The red paintings include intricate mazes (Plates 114, 115 and 116) and a lizard-like figure (117).

### 33. Fior

This open cliff is located next to Fior village, on its western side. Remains of red hand stencils can be seen. Röder did not mention this site. Probably this site is one of the sites mentioned by Röder under no. 22 (Cape Omata, Odi Island, Cape Awu, or Sinanruma).

### 34. Urumbua Uwat Mata

This site is located east of Fior village. Before entering the village there are two open cliffs with paintings. The eastern cliff has paintings, approximately 25 m asl. What can be seen are only red marks, some of them very eroded. The second cliff located closer to Fior has paintings 3–8 m asl. Only red marks, a row of dots and a stencil of a round object are present.

### 35. Sumbunane

Röder did not mention this small island site in front of Fior. Amongst some vague red marks at least two red hand stencils can be identified. A geometric figure of crossed lines in bright red is clearly identifiable (Plate 118). Probably this site is also one of the sites mentioned by Röder under no. 22 (Cape Omata, Odi Island, Cape Awu, or Sinanruma).

### 36. Anduir (Röder 23)

This is a big cave with magnificent stalactites and stalagmites. The cave is located approximately 500 m from Fior, further inland on the slope of a hill. Röder wrote that this cave was not regarded as a sacred place.

Today most of the villagers seem to be ignorant of the presence of black paintings in the cave. But they, especially the children, helped us find at least thirty-one black figures representing anthropomorphic motifs, often stylized. The four figures illustrated by Röder are on the right wall at the front of the cave, approximately 2 m above the ground (Figure 12). They are already very faded and would have been difficult to identify without the help of

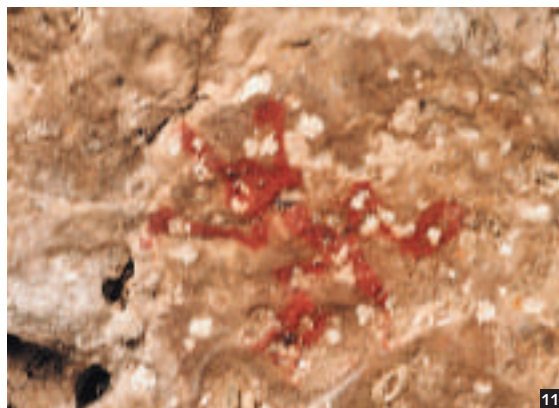


Plate 117. A lizard-like figure at Dijora

Plate 118. This bright red geometric design is the only figure that is still clearly visible from Sumbunane



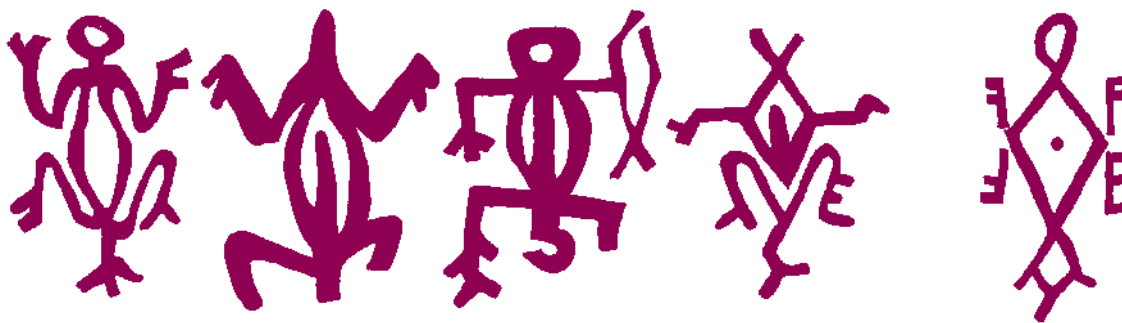


Figure 12. Anthropomorphic figures from Anduir. The first four figures are taken from Röder (1959, p. 128) and could not be found any more or were already very faded. The last figure was identified during the survey.



Plate 119. One of the rich galleries at Damir, decorated with hues of red pigment. This panel is dominated by stencilled objects; however, the centre of attraction is the geometric figure on the left of the stalactite.

Röder's pictures. The size of the anthropomorphic figures is 8.5 × 2 cm, and other figures in this cave are about the same size. They are all very faded and many are badly eroded. The presence of paintings on the ceiling of the cave is remarkable, 3–7 m above the ground. Presumably the artists used a kind of scaffolding to be able to draw them. The figures are drawn in horizontal rows, in groups or individually. Some of them resemble the black figures at Afofo and the common motif tattooed on the backs of Humboldt Bay men (Kooiman and Hoogerbrugge, 1992, pp. 75-6), but they are simpler (see Box 2, 'Tattoos'). Red marks, also found very high up, approximately 7 m above the ground, may have been anthropomorphic figures.

### 37. Damir (Röder 24)

In Röder's map, Damir was located on the cape close to Beoraramu. However, we found it located further west, on another large protruding cape. The galleries of paintings actually extend along the whole cape, from west to east.

Damir is a large site with paintings in the galleries as well as on the open cliff. Most of them are already faded or flaked, but it seems that once many paintings decorated this big site (Plate 119). Now, it is dominated by remains of red paintings, small individual blotches or big areas of red smear. Hand stencils, including the arms, can be seen scattered in different places. There are also stencils of round objects, fish, long thin objects and boomerangs (Plate 4.3), groups or lines of dots about 20 m long, and other unidentifiable objects. According to the local people the lines of dots represent a fish net.

### 38. Buraramu (Röder 25: Beoraramu)

Buraramu is a large site on the mainland, located west of Tuturu Island. Most of the paintings are already faded. Red and yellow pigments are to be seen, and many of them are unidentifiable. Among those clearly visible are stencils of hands and unknown objects (Plate 1.17), and various kinds of geometric figures: triangles (Plate 120), circles, lines, dots, stars, and mazes. Engravings of lines are also present (Plate 121). This is the only site that we visited in this region that contained engraving.

### 39. Duri (Röder 26: Taba)

This site was listed under Taba by Röder, but the paintings were illustrated under Duri (site 27). It was difficult to find because mangroves cover the low cliff and the local people did not recognize the names Duri or Taba. The place listed by Röder as Duri is a mangrove coast without cliffs. During our second visit to Taba we found the paintings described by Röder for Duri, but not those described for Taba.

Stencils of a group of round objects in bright red are to be seen today (see Box 1, 'Stencilled Objects'). An anthropomorphic or matutuo figure has both hands raised. Above the left hand, there are seven dots. Both the face and the body are drawn with one vertical line, and horizontal lines come out from it; not only from the body, but also from the face. This 'X-ray' picture clearly seen in Röder's illustration has its lines blurred today, leaving an uneven red infill. The lower part of the body, especially the legs, is no longer visible (Plate 35). Another panel illustrated by Röder has also deteriorated: almost all of the geometric figures are incomplete, showing only remains of lines and spirals (Plate 122).

### 40. Tuturu (Röder 28a: Duduru)

This gallery is located on the northern side of Tuturu Island. Röder recorded it as Duduru. Paintings are scattered 2–7 m asl over a width of approximately 10 m. There are many red marks and also remains of yellow pigment. Still visible are some hand stencils, lines,



120



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Plate 120. A 'triangle' painting from Buraramu

Plate 121. Buraramu is the only site in the Berau Gulf area with engravings



Plate 122. Most of the geometric figures from Duri have deteriorated and show only remains of lines and spirals



Plate 123. An intricate maze from Tuturu has suffered from surface damage

anthropomorphic figures (one of them with a face and the upper part of the body), and remains of geometric figures similar to those found at Manggo, but in a cruder format.

#### 41. Matutuo on Tuturu Island (Röder 28)

This site has the same name as the island located north-west of Furir. The cliff is situated on the east side of Tuturu Island. This open cliff has paintings 8–10 m asl, scattered over an area 8–10 m wide. One brown hand stencil and other red paintings can still be seen. A big lizard or matutuo drawn in bright red outlines stands out high up so it is visible just behind the top of the trees (Plate 63).

#### 42. Sosoraweru (Röder 29: Sosorra)

This cave is located east of the Furir village. Röder listed it as Sosorra or Sosoraweru. It has a big room with passages descending at the back. Röder mentioned a rectangular stone, about 50 cm high, which, according to local belief, was brought here by the ancestors of Furir village. It

was called *batu pemali* and was believed to have extreme powers. Villagers were forbidden to touch it and if they did so a huge wave would drown their village and forest as has happened before. Today this *batu pemali* still exists, but the taboo is forgotten.

There are also two other important pillars in this cave, actually of two stalactites, further inward, in the back of one of the chambers. According to Röder, one of the pillars belonged to the chief of war and the village, while the other belonged to the head of the village and his family. Both pillars were called *batu kapiten*. He also added that there were important meetings in this cave in the olden days.

When Röder visited this cave in 1937, a lot of the black paintings had been destroyed by water and could only be identified by lighting them up from a certain angle. This cave showed the biggest range of boat figures in black, and Röder considered them to be of a different style from other sites (Figure 8). One of the boats carried what Röder identified as a Dongson drum. They were drawn in sometimes very fine lines, and were very stylized; some motifs, anthropomorphs or matutuos, were drawn in a simpler way. It nevertheless seems that there were also some schematization of figures.

Unfortunately, after Röder's visit, the paintings suffered severely from human habitation of the cave. During the period of the Japanese occupation, the locals used it as a refuge. Remains of wooden poles forming platforms can still be seen. Most of the walls are covered by soot and the humidity has made the condition even worse. No paintings can be seen, except in the part that has been cleaned by recent visitors. It seems that during the last decade or so, some visitors, knowing about the presence of paintings via Röder's book, have tried to relocate them. With the help of the local inhabitants, they scrubbed and washed the wall with a coconut husk or a brush, to reveal the paintings. During our visit, we found such clean white walls in several places. Some black lines are visible. However, they are hardly identifiable. Remains of such paintings can be found in the left part of the entrance, on the ceiling in front of the *batu pemali*, and in front of and behind the *batu kapiten*.



Plate 124. Anthropomorphic figures, matutuos, hand stencils and other unidentified figures at Sorraa

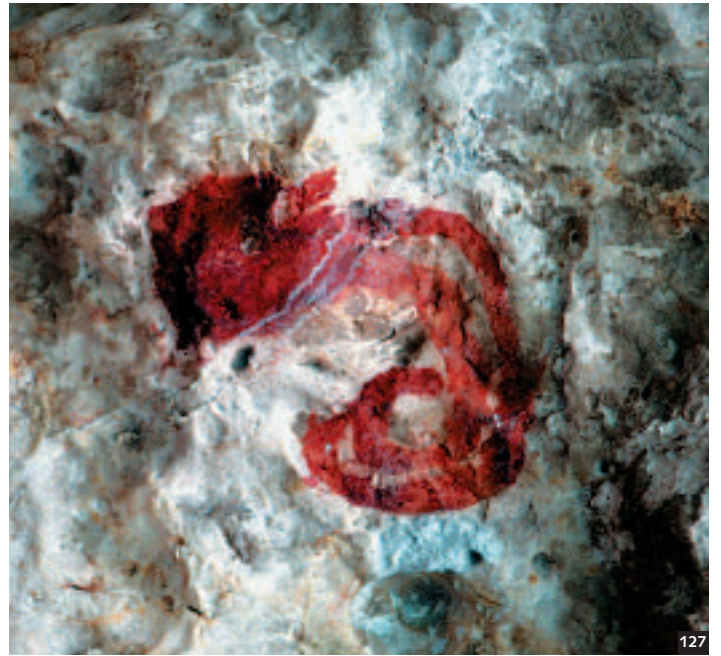
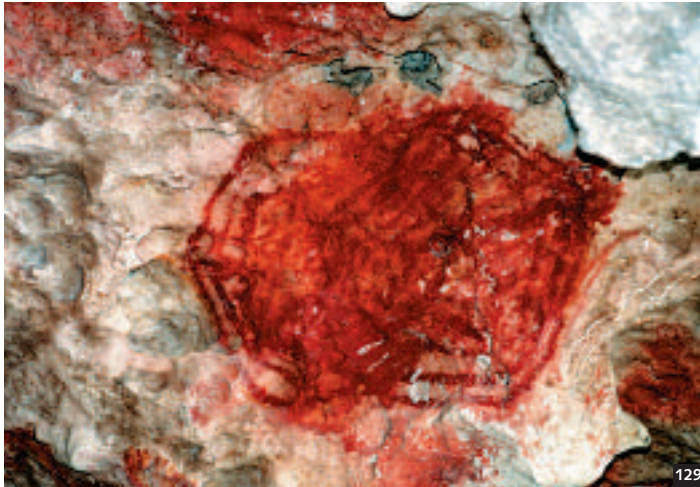


Plate 125. A geometric figure  
at Sorraa

Plate 126. A geometric figure  
at Sorraa

Plate 127. An unidentified figure  
at Sorraa

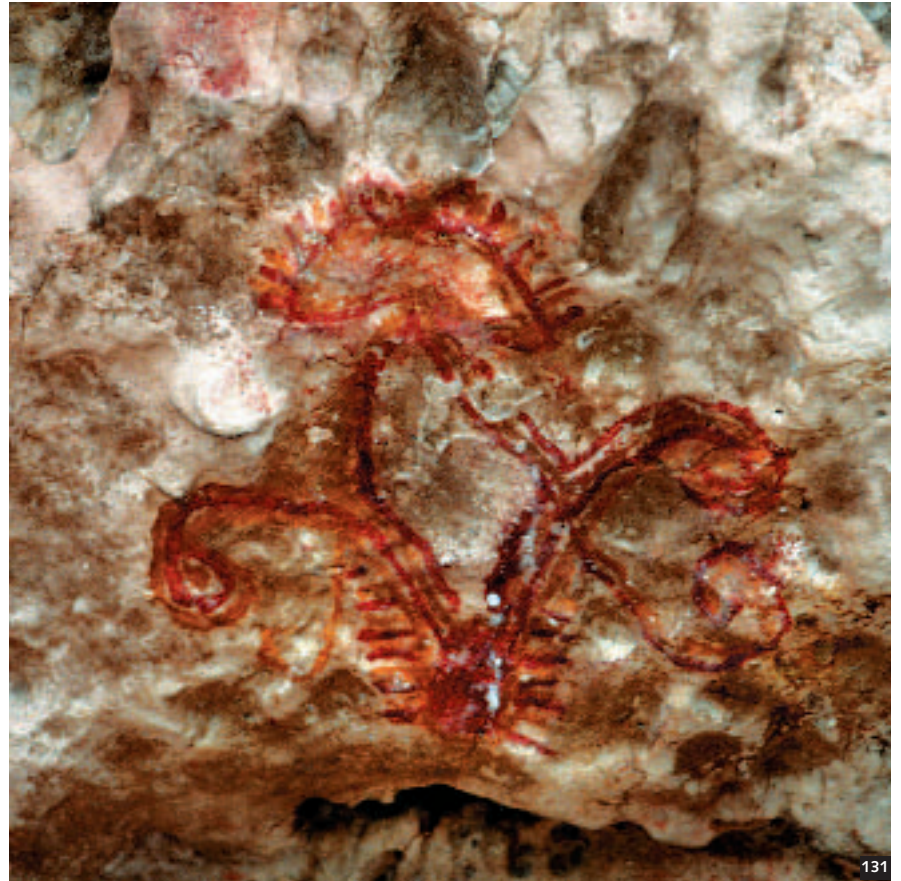
Plate 128. A geometric figure  
at Sorraa



129



130



131

### 43. Sorraa (Röder 30)

This big gallery, approximately 35 m long, is located on a round cape, east of Furir. Stalactites have divided it into small niches.

Most of the paintings have been done in a dark red colour, but various hues of red are visible, while yellow is rare. Although the paintings sometimes have fused together, making the wall completely red, the colouring of the cliff is not as impressive as at Afofo or Tapuraramu.

This gallery is also used as a burial place. Remains of human bones and wooden planks are scattered on the platform. Röder found a breastbone of *Kasuari* (Cassowary bird) and fish bones hanging on the wall or put on the ground as offerings (Röder, 1959, p. 141). Almost all of

Plate 129. An intricate maze at Sorraa

Plate 130. Röder (1959, p. 141) regarded the red concentric circle figure in the middle of this painting at Sorraa as a tattoo

Plate 131. An unidentified figure at Sorraa



Plate 132. An unidentified figure at Sorraa



Plate 133. An unidentified figure at Sorraa



Plate 134. Hand stencils, geometric and maze figures at Sorraa



the paintings depicted in Röder's book can still be found, although some have flaked. Stencilled objects are most common at this site, such as hands and feet stencils, fish, combs, leaves, and unidentifiable figures (Plates 1.9, 1.12, 1.19; 135 and 136). Various kinds of geometric figures, mazes, rectangles, triangles, cross lines, spirals and concentric circles, as well as anthropomorphic figures were also seen (Plates 124–36). Some of the figures' lines have fused together, making them difficult to recognize.

#### 44. Ota (Röder 31)

This island is located east of Furir and north of Sausosso. According to Röder, Ota was a centre for red and black paintings. They could be found in the west, south and east galleries. He added that the Darembang people occupied this island, and that their graves could still be seen. Remains of human bones were also found in the galleries. Röder saw shells and turtle bones, which seemed to come from offerings a long time ago; bits of human hair hung in several places in the galleries (1959, p. 145).

From a distance, continuous red marks can be seen clearly decorating the galleries. Among the stencilled figures are hands and round objects (Plates 138 and 139). Groups of dots and geometric figures are also visible. Many of the paintings depicted in Röder's book are no longer discernible, especially the black ones.



Plate 135. Various stencils and other unidentified drawings at Sorraa

Plate 136. This spectacular panel at Sorraa is decorated with stencilled objects (a comb, a rounded object, hands and unknown objects), red geometric figures, and red and white matutuo. The white matutuo is located on the right side of the yellow stencil.





Plate 137. The old wave-cut gallery of Ota

Plate 138. Red dots dominate this panel at Ota. Some are arranged in a circle. Stencils of a rounded object and a 'cross', a typical Ota motif, are also present.

Plate 139. Stencilled objects at Ota



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139

The platform of the galleries is about 4 m asl and is difficult to reach, so we only examined the paintings from our constantly moving boat (Plate 137). More time could presumably have enabled us to identify more figures.

#### 45. Sausosso (Röder 32: Sausose)

This site is located on an islet south-east of Ota. Röder mapped this site in the wrong place. This site contains one painting of an orange-red stylized anthropomorphic figure, 3 m asl (Plate 140). It is located on the east side of the islet.

#### 46. Afofo (Röder 34: Abba)

This is the easternmost rock painting site of the region, situated on the mainland, west of Goras. The platform of the gallery is approximately 3 m asl and can be reached from a boat. The site is one of the richest and most outstanding in the region. The gallery is almost entirely covered by dark red pigment, clearly visible from a

**Plate 140.** An anthropomorphic figure at Sausosso

**Plate 141.** One of the rich panels with red paintings at Afofo. Stencilled objects dominate this panel.

**Plate 142.** Another rich panel at Afofo



distance. These massive red marks are the result of the overlapping of various paintings, especially those that were done by splattering red pigment on the wall. Besides the galleries, there are also paintings on the unreachable open cliff and niches.

The site has also been used as a burial place. In one corner, remains of human skulls and bones can be seen, together with wooden planks used as a platform, presumably for placing offerings.

Röder recorded this site as Abba, but today the local inhabitants call it Afofo. Almost all of the paintings are red. The stencilled objects are of various kinds: hands (complete with the arms, some with missing fingers, belonging to children and adults, Plates 20 and 141–43), feet (Plate 143; Plate 1.7), fish (Plates 1.2 and 1.5), lizards (Plate 20; Plate 1.11), combs (Plate 20; Plate 1.8 and 1.9), boomerangs (Plate 141; Plate 4.5), round objects, crescent-shaped objects (Plates 1.13 and 1.14), ‘bird-like’ objects, and long objects (Plate 1.19). From the range of these stencilled figures, Afofo can be considered the centre of the stencilled style in this region. Other objects drawn are fish, various kind of anthropomorphic figures or matutuo (Plates 33, 39, 144 and 4.7), masks, concentric





143

Plate 143. The rich gallery at Afofo represents the classic Tabulinetin style of Röder

Plate 144. A faded matutuo at Afofo



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circles, spirals, mazes (Plates 145 and 146), triangles and rectangles. A few yellow figures were found. Several black figures that have a different style from the red paintings overlaid the red ones. They are stylized figures, which resemble the tattoo marks of the Berau (Röder, 1959, p. 25; Plates 2.1–2.3) and Humboldt Bay people (Kooiman and Hoogerbrugge, 1992, p. 76; Figures 2.6–2.10). Röder recorded white figures, but our team did not find them.



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Plate 145. A maze figure at Afofo



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Plate 146. A maze figure at Afofo

Plate 147. Hand stencils on the unreachable cliff at Afofo

Plate 148. Hand stencils on an unreachable niche at Afofo



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# Bitsyari Bay

Catalogue II



## 1. Cape Bitsyari

Into Bitsyari Bay, about 1 km north-north-west from Cape Bitsyari, the team encountered a niche at about 25 m asl, containing three anthropomorphic red figures and one red fish-like design crossed by lines of red dots.

The paintings had already been discovered in 1953 by a Dutch military patrol in the area. Records of this discovery first appeared in 1957 (Galis, 1957*a*). The drawings in this article however do not reflect the reality very well. What is described as a rhomb structure is clearly a fish-like design on the photograph (Plate 9.1).

The human-like beings are depicted without arms and legs and wear a specific kind of headdress, also described by Galis. Whether it is a headdress, a ceremonial type of head or a symbol is very difficult to judge. Their bodies are rather long and small, and filled with red lines. Galis suggests that the paintings may be representations of ancestors.

## 2. Ginana I

Ginana I is the first site of the Ginana complex. The complex is characterized by its galleries divided into niches and separated from each other by stalactites. The paintings depicted in the different niches are of great variety.

The first clearly visible paintings represent at least two matutuo-like figures and fish, among which one could easily detect a dolphin. The matutuo-like figures are respectively in red and yellow ochre (Plate 149). Other representations are yellow and red crosses among different superimposed abstract figures. These are followed by



Plate 149. Detail from Ginana I

Plate 150. Fragment from Ginana III with hand stencils, matutuo-like figures, lizards and abstract figures



orange ochre snake patterns and abstract designs varying from linear to maze structures. The dominating colours in the site are yellow, orange and red ochre.

### 3. Ginana II

The paintings in Ginana II are unclear. Studying the paintings in detail, it is possible to detect two matutuo-like figures in red ochre. One has very distinct features with something (lightning?) protruding from both its elbows. Red ochre dominates the site, and paintings can be found in galleries divided into several niches formed by protruding limestone formations.

### 4. Ginana III

Ginana III is situated a bit further on from Ginana II in a northern direction. The site is covered by graffiti at the entrance to the gallery. The paintings are very interesting, such as one representation of the sun and two figures which may represent human faces, as well as two matutuo-

like figures, hand stencils, several lines, fish and red dots (Plate 150).

The human faces and sun representations are common in the Kaimana area; other examples are to be found at Ereretari, Netnarai, Memnemnambe, Tumberawasi, Munfuritnus, Werfora II, and in a different bichrome way at Memnemba.

## 5. Ginana IV

Paintings in Ginana IV are very faded. A view of the site gives the impression that the whole gallery is painted with an orange-red colour.

Climbing into the gallery was unfortunately impossible. A closer and more detailed study in the future could reveal the composition of the paintings.

## 6. Ginana V

Most of the paintings in Ginana V are in red ochre. They are very clear and in good condition. One discovers linear, circular and oval patterns, sometimes very complicated in structure. A faded matutuo-like figure could also be detected. Unfortunately, the photographs taken are not sharp enough for publication because of the difficult survey conditions.

## 7. Onomanussu

On the little Island Onomanussu, from which the site borrowed its name, situated south-west from the village of Morano, the team could discover only one faded red painting. It is very hard to see some structure in the overall pattern, although one might suggest that the strange triangular shape on the top is similar to the headdress of the anthropomorphic figures found in Cape Bitsyari.

## 8. Weretwarom

The team discovered three clear paintings at Weretwarom, a site near the village of Arkasi. The lower painting consists of a complicated dark brownish maze pattern. This pattern

is observed on many paintings in the Kaimana area. The meaning of these kinds of structures is unknown. However, the multitude of them in the region could suggest a symbolic magico-religious meaning.

Other sites where this or similar symbols have been found are Ereretari, Netnarai, Sasere Oyomo, Memnemba and Tumberawasi. The painting just above the maze structure clearly represents a human face. Both of the paintings situated higher up are in an orange-red colour. The upper painting is less clear but suggests another linear composition.

## 9. Munfuriti

Munfuriti is located about 1 km south-east from Weretwarom. Paintings are situated in a gallery approximately 10 m in length. Several linear and circular structures can be detected in colours varying from yellow to red and brownish ochre. Two concentrations of dark brownish ochre dots and a hand stencil were also observed. Remarkable are two dark red matutuo-like figures and a complicated structure of lines.

Very difficult survey conditions have resulted in many of the pictures taken being blurred. The meaning of the different lines and complex structures is again a mystery.

## 10. Munfuritnus

The gallery of Munfuritnus is situated about 50 m south-south-east from Munfuriti, and is partially covered by graffiti. Many of the red paintings are faded apart from a matutuo-like figure, a sun, several linear and circular structures and hand stencils. All of these paintings could not be well recorded by the team. This was due to the height of the site and difficult working conditions.

## 11. Esaromi

Esaromi is the first site of the Maimai complex, situated near Maimai village. The Maimai complex consists of five sites, namely Esaromi, Ereretari, Netnarai, Sasere Inabo and Sasere Oyomo.





Plate 151. Detail from Esaromi showing some abstract figures



Plate 152. Series of dots at Ereretari

Esaromi consists of different galleries, situated at approximately 7 m asl. In the first gallery red dots and some unclear figures can be spotted. The next gallery about 20 m south-south-east is approximately 20 m long.

A horizontally placed matutuo-like figure or lizard was discovered near an abstract design. Further south some red paintings can be observed. Apart from the diamond structure, they are unique in concept and composition (Plate 151) since the team could not discover other examples in the Kaimana area.

## 12. Ereretari

The second site of the Maimai complex, Ereretari, is situated about 40 m south-south-east from Esaromi. The gallery is approximately 10 m long and 3.5 m high. In the first niche two superb faces (suns?) are discovered in red painting, surrounded by dots (Plate 152). Just above them, a strange structure can be observed, consisting of a central circular part, enlarged by what seems to be a fish tail. Both are filled with an ochre yellow colour.

In the bottom left corner, several vertical yellow ochre lines are depicted. Above this niche another series of red dots can be seen surrounding several figures like a cross, a matutuo-like figure and some linear structures curling at the end, all depicted in red pigment. Further south a horizontal matutuo-like figure is observed. On the lower part a circular and linear structure and red dots are visible.

Approximately 10 m further south a marvellous face can be seen surrounded by some stylistic ochre and yellow figures (Plate 153). Underneath one finds an anthropomorphic design in red ochre. Other faces were also observed further down (Plate 154).

Many of these pictures, with similar characteristics, appear throughout the Kaimana and Berau Gulf regions. In the Kaimana region they appear at Netnarai and Tumberawasi. To the right of the pictures just described, some complex abstract paintings can be found.



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### 13. Netnarai

Approximately 50 m south-south-east from Ereretari we found Netnarai. The gallery is about 25 m long and 3–4 m high. At the beginning of the site from left to right, one detects yellow and red ochre dots, red linear and circular structures (Plate 155), sometimes filled with yellow ochre, negative hand stencils and an anthropomorphic figure.

Immediately to the right of the red linear structure filled with yellow ochre, we find the representation of a red tool (Plate 155). Further to the right, there is a continuity of yellow ochre dots, linear and circular red structures, a red matutuo-like figure and the representation of fish which could be dolphins. Continuing to the right there is a painting of a decorated red human face, a red sun, several red linear and circular structures and an unusual dark red abstract figure. Below, a light red matutuo-like figure can be observed. To the right a red matutuo-like structure, unique in its characteristics and appearance, is depicted, surrounded to the right by linear and circular red and yellow ochre abstract paintings.

An anthropomorphic or lizard structure, similar to the one depicted at Esaromi, is clearly visible. A similar anthropomorphic figure was later found in Tumberawasi. These representations are, however, unique since they are the only ones of their kind the team discovered during the survey.



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Plate 153. Dots and faces from Ereretari

Plate 154. Faces, dots, abstract figures and a matutuo-like figure at Ereretari





Plate 155. An overview of the rock art gallery at Netnarai



Plate 156. An overview of the rock art gallery at Sasere Inabo

## 14. Sasere Inabo

Sasere Inabo is the next gallery to be observed, approximately 35 m south-south-east from Netnarai. The gallery varies in height from 2.5 to 3.5 m, and is about 8–10 m long and situated 7–8 m asl.

From left to right we find some extraordinary pictures (Plate 156). At the top among some abstract figures in yellow and red ochre there is a representation of a crayfish. Underneath at the bottom an eroded red figure is visible. Further to the right we detect a red turtle, a circular structure, a small matutuo-like figure and several representations of fish.



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Plate 157. Left part of the main gallery at Sasere Oyomo

Plate 158. Central part of the main gallery at Sasere Oyomo

## 15. Sasere Oyomo

Sasere Oyomo is an overwhelming site (Plate 160) but may also serve as an example of the destructive impact graffiti can have on rock art. Many of the paintings have been destroyed. Reading through the graffiti it seems that local people, as well as tourists, have painted on the site. It also demonstrates that if no conservation is undertaken these wonderful places will soon disappear forever.

It is almost impossible to give a detailed description of Sasere Oyomo, as the site is literally covered by paintings. The impact of the colours is so enormous that from a



Plate 159. Right part of the main gallery from Sasere Oyomo

distance, the place is observed as a huge red spot. At the beginning of the site three matutuo-like figures, a dark red lizard, linear and circular red structures, red dots and a unique, dark red, brownish painting can be distinguished (Plate 157)

Further to the right, linear structures seem to be weaving a large web on the ceiling of the gallery (Plate 158). A few circular structures can also be seen. Further south dark red circular paintings are observed.

Above one of the circular structures, filled with a linear pattern and flanked to the right by what might be sun rays, a large number of dense little red spots and lines is clearly visible (Plate 159). Such a formation is unique in its pattern and was observed at only one other location, namely at Tumberawasi, but in a different context.

Along the whole gallery a large number of matutuo-like figures, faces and paintings in X-ray style are seen (Plates 161 and 162). Yet further south the web of linear and circular red structures continues. Here we also note a positive black hand stencil, the only example found in the region.

## 16. Bombromenambi

In a gallery approximately 500 m south-south-east from Sasere Oyomo, one red hand stencil was observed. The photograph however was taken from a very long distance, and found to be of insufficient quality for publication.

## 17. Lerfis

A few faded red paintings could be observed at Lerfis. The condition however was so bad and the distance from the site so great that it was impossible for the team to give any useful description.

## 18. Omborcene

A rough map of Omborecene Bay with Omborcene Island and Cape Omborecene (Map 9) may illustrate the situation of the different groups of paintings. On Omborcene Island, situated in Omborcene Bay approximately 1 km south-south-east from Sasere Oyomo, facing Cape Omborcene,



Plate 160. From top left to bottom right, overview of the rock art at Sasere Oyomo with detail of the bottom-right section



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Plate 161. Detail  
at Sasere Oyomo



Plate 162. Another detail  
at Sasere Oyomo

a few interesting paintings were discovered such as a human face, depicted in orange-red pigment, and the representation of a sun-like structure, with long rays, a lot of red dots and abstract figures.

The first painting the team encountered at Cape Omborcene was an orange-red figure, again not clearly visible on the photographs and thus not suitable for reproduction. A little further north-north-west a niche was discovered with three red dots. The continuation of this niche was very unclear. In the next gallery some spots in brownish pigment were visible together with a little dark red sun-like structure.

The first paintings on the rounding of the cape were easier to describe. The team discovered a red matutuo-like figure and a dark red circular structure with a tail at the bottom. Continuing along the cape, dark red linear and circular structures were observed.

Further along the cape and heading towards Omborcene Bay, seven matutuo-like figures were discovered, two of them depicted with tools in their hands, flanked by arrow-like, linear and circular patterns and dots

(Plate 163). Next, some orange-red spots were clearly visible accompanied by abstract motifs. The circular structures filled with matutuo-like figures are very interesting. Similar paintings were observed at Ginana II, Tumberawasi and Memnemnambe. The meaning is unclear, but because of their similarity in appearance we felt it appropriate to relate their interpretation to the Aboriginal myth/legend of the lightning man in north-east Australia (see Box 12, 'Lightning Man').

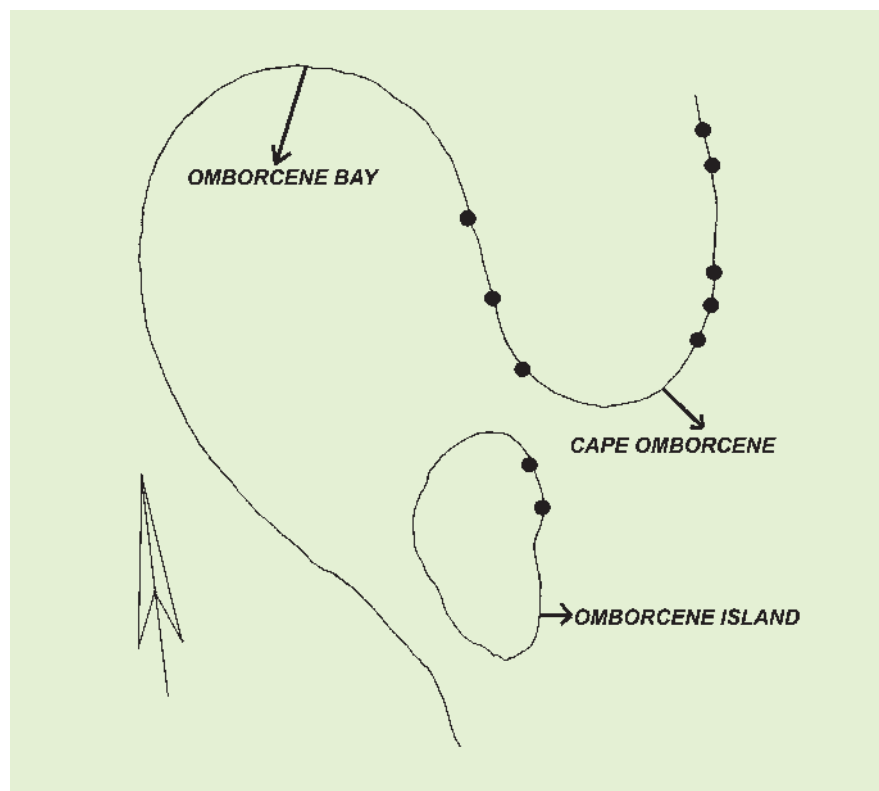
In a southern direction along the cape a fish-like structure and several linear patterns were clearly observed, followed by a series of red spots and a faded orange-red painting. Next, dots could be observed, almost forming a square. Further south the gallery is covered by red dots and some linear red structures flanked on both ends by red dots, a red matutuo-like figure and red linear structures. Continuing on, there are red dots and an unclear oval structure (Plate 164).

Further along the site there are red dots, shell-like structures filled with lines, along with drawings of lines in different patterns. In the following part of the gallery an interesting representation of a horizontal anthropomorphic figure was found. Apart from a red lizard, the rest of the gallery is characterized by faded paintings and undefined structures.

## 19. Memnemba

The first paintings to be observed at Memnemba are three red negative hand stencils followed by a long orange-red lizard situated above a red circular structure filled with dots. This painting is situated next to a red linear structure under an overhang of limestone. Further to the right there is an oval red painting filled with a linear pattern and red dots.

The next bichrome painting, situated above two linear structures, is unique of its kind. It could represent a human face or mask, with a red negative stencil as surrounding, filled with two yellow dots that could represent the eyes. Since the team has no other reference material it is virtually impossible to search for a meaning or symbolic value. It could also be a negative stencil filled



Map 9. Sketch (not to scale) of the location of the groups of paintings at Cape Omborcene and Omborcene Island



Plate 163. Group of dots at Omborcene

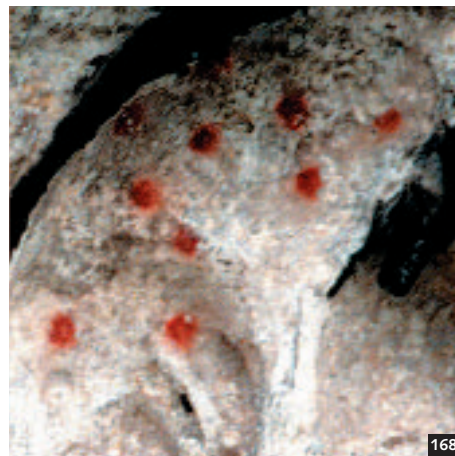


Plate 164. Detail at Omborcene

Plate 165. Detail at Memnemnambe

Plate 166. Matutuo-like figures at Memnemnambe

Plate 167. Memnemnambe: extraordinary emplacement of some figures

Plate 168. A group of red ochre spots at Memnemnambe

with two yellow ochre dots. This face is followed by some circular and oval patterns and an abstract motive.

## 20. Memnemnambe

The large gallery of Memnemnambe is most interesting for its different sets of very well preserved paintings such as red matutuo-like figures (Plate 166), anthropomorphic figures (Plate 165), holding possibly weapons or tools, and representations of linear patterns and arrow-like symbols.

In very small niches several fish representations are observed, and also a negative red stencil. Many of these stencils were found in the Berau Gulf region. Some suggest these are small representations of stingrays or *manta*, abundant in the surrounding Arafura Sea. Tichelman (1953/4a), however, suggests they could be representations of a little bronze axe, used for certain rituals. Discussion with Ballard revealed that he also accepts this theory. Next to this axe-like structure a dark unique brownish pattern is evident. On the ceiling, at the tip of Cape Memnemnabe, a rectangular brownish painting is discovered (Plate 167).

Continuing along the gallery, one observes red dots (Plate 168), red fish, red linear and oval patterns, some filled with red lines (Plate 169), and dark red patterns flanked by lines not clearly visible in niches behind stalactites (Plate 170). These complicated patterns are repeated in similar ways in other sites, even in Timor Leste, leading to the obvious conclusion that a symbolic value may be attached to them.

The last painting observed at the site is quite unique and could be comparable in its form to the one found at the site of Wamarain in the Berau Gulf region. But although the form is similar, there are clear differences. The bird figure at Wamarain is depicted in white and is executed in the X-ray style. The painting at Memnemnambe is in red ochre and does not have the same stylistic refinement.

## 21. Tumberawasi

The next site, Tumberawasi, contains a large number of paintings and can be regarded as one of the most



Plate 169. Some abstract and X-ray figures at Memnemnambe

Plate 170. Refined abstract figures (fish?) at Memnemnambe



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Plate 171. Partial site overview  
of Tumberawasi

Plate 172. Matutuo-like and lizard  
figures at Tumberawasi

Plate 173. Detail of abstract figures  
at Tumberawasi

extraordinary sites in the Kaimana region together with Sasere Oyomo.

The gallery starts off at a little cape (Plate 171). Here it is already densely covered with red dots, faded figures, linear and circular structures, along with anthropomorphic figures. Further south a lot of paintings in dark brownish pigment are visible, representing lines and circular motifs, a brown half-moon, a brown lizard/matutuo-like figure (Plate 172) and several red dots (Plate 173).

Continuing south, the team discovered a very interesting niche with a red matutuo-like figure (Plate 174). The painting is surrounded with a lot of pictures of, for example, fish, red dots, square patterns and matutuo-like figures.

The human figure depicted in dark brown might suggest a human at labour in his/her field (Plate 174). The figure is clearly holding with lifted arms a tool to come down on a pattern of spots and lines that could represent a field. The next niches in the gallery are covered with matutuo-like figures and anthropomorphic figures surrounded by faces, lizards, lines, linear and circular structures (Plate 175).



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Plate 174. Anthropomorphic, matutuo-like and fish figures at Tumberawasi

Plate 175. Site detail at Tumberawasi: with very expressive paintings of lizards and human faces



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Plate 176. Site detail at Tumberawasi: a beautiful combination of anthropomorphic figures, boomerang, fish, lizards and a negative hand stencil

Plate 177. Other detail at Tumberawasi



Plate 178. An overview of the rock art gallery at Tumberawasi

Specific attention may be paid to the representation of two anthropomorphic figures. The first has two boomerangs above its head, and the second is beautifully refined with a clearly visible headdress, ears with ornaments, eyes, nose, mouth, body, coloured arms and legs and penis (Plate 176). Underneath one may observe lizard, matutuo-like and abstract motifs and a beautiful negative hand stencil.

Next, the gallery becomes so dense with paintings that it becomes really difficult to give a clear description. Details reveal beautiful lizards in red and dark paint crawling over the limestone through a canvas of dots, matutuo-like figures, linear patterns and several human faces.

Other abstract motifs in combination with a human face and snake pattern below give a further idea of the beauty of the site (Plate 177). Its complexity and extraordinary character as a whole, also described by Souza and Solheim, is illustrated in an overview of the gallery (Plate 178).

Further south, the team observed red matutuo-like figures again, red lines, a faded red surface in which a red matutuo-like figure holds what appears to be a spear, a positive red hand stencil, a red rhomb filled with red lines and two little circles, red negative hand stencils, and linear and circular patterns and dots.

At the far right of all the paintings, an abundance of pictures almost creates a square modern art canvas. One can detect red lines, circular patterns and matutuo-like figures. Above the square an anthropomorphic figure is clearly visible, depicted in red pigment. In the last niche a red face, curled lines, a matutuo-like figure, a snake and several undefined symbols were detected.

## 22. Werfora I

Werfora I consists of a small gallery containing a few faded paintings and dots. Graffiti also covers part of the gallery.







Plate 179. Detail with turtle at Werfora III

Plate 180. Other detail with possible turtle at Werfora III

### 23. Werfora II

A few paintings at the beginning of Werfora II are very faded, although a brownish oval structure filled with a linear pattern and some red dots, and red arrow-like motifs could be observed.

Further south a red oval structure with rays attached and a red human face are depicted. The face considerably resembles the other faces found at Cape Bitsyari. In both cases they wear a typical pointed headdress or hat. The last two niches of the site contain a red sun filled with linear patterns, a red cross and a few unidentified paintings.

### 24. Werfora III

Werfora III is a very interesting site offering a lot of clearly visible paintings. At the beginning, several red linear and circular motifs can be seen along with matutuo-like figures, a red sun, a lizard and a big dark oval structure with tail and head, likely to be a turtle (Plate 179).



Plate 181. Another detail from Werfora III

Some yellow connecting rings form a diamond-like structure (Plate 180). The next part of the gallery was formerly used as a burial site. As already stated, a lot of these sites were found during the survey, especially in the Berau Gulf region. In Berau Gulf there is no relationship between the paintings and the burial sites. We did not discover any evidence of a relationship in the Kaimana region either. Most of the burial sites at Berau Gulf date from the late nineteenth and beginning of the twentieth century, and are the result of epidemic diseases or war.

The paintings in this part of the site, however, are very eroded and unrecognizable. The gallery continues south with niches containing red faded circular structures, a red oval motif that could be a turtle, three red matutuo-like figures and an anthropomorphic figure painted in profile. This figure is clearly carrying a tool. Underneath, several linear patterns can be observed along with diamond-like figures, sometimes flanked by circles, sun rays, other anthropomorphic figures and symbols in triangle shape.

Towards the bottom of the gallery there are more linear patterns. A cross seems to have been put on an older underlying structure, which might represent a sun. It is the colour of the sun, albeit of a lighter red. Another sun is clearly visible to the right along with red dots and four little red circles. The last paintings to be observed in the gallery are red oval motifs surrounded by linear patterns and a dark red faded sun-like structure (Plate 181).

## 25. Werfora IV

The site Werfora IV is the most impressive site in its environmental setting, mainly because of its magnitude (Plates 182 and 184). The gallery begins with a spectacularly situated fish stencil at a height of at least 35 m asl. It serves as a further illustration of the difficulties posed to the painters by these locations. In several cases it is simply impossible to imagine how people reached these heights, especially here, since there is no logical way



Plate 182. Site view of Werfora IV



Plate 183. Front view of Werfora IV



Plate 184. Front view of Werfora IV

of mounting a scaffolding or hanging ropes. Werfora IV consists of a lower and upper gallery both containing rock art (Plate 183). At the lower part, in a southerly direction, we detect three anthropomorphic figures.

Apart from a clearly visible circular motif in a little niche to the right, the site contains only very faded red and brownish paintings. Another niche further south contains a dark brown matutuo-like figure followed by a dark brown rectangular motif, divided in the middle by a line. Both parts of the structure are filled with dark brown dots.

Continuing south, the gallery contains a very faded red painting, an uncompleted oval structure filled with a linear pattern, and an elongated red structure also filled with a red linear pattern (Plate 185).

Next to these paintings is a structure similar to one encountered previously in Esaromi, followed by some



Plate 185. Detail of Werfora IV

faded red motifs. At this point the site divides into two galleries. The first one is situated approximately 2 m asl, with the second at about 16 m asl. The lower gallery contains very faded paintings, probably because of the tide and their unprotected position.

The top gallery, however, embraces very good and clearly visible paintings. Although the team had to take photographs from a great distance, the paintings could be observed easily. Starting from the north, the upper gallery contains a large number of red spots with linear motifs situated in between.

Moving southwards, red negative hand stencils were clearly observed surrounded by red fish, a trapezium-shaped motif, and a red oval figure containing a red line and trapezium covered by rays. Next there is a rectangular pattern containing an undefined painting followed by a large matutuo-like figure, half depicted in yellow and red pigment. This painting is at least 80 cm in height, and is the biggest matutuo-like figure the team encountered during the survey. The site continues with red spots and several undefined paintings. These are not faded but difficult to describe because of the distance.



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# Triton Bay

## 1. Irisjawe

The very specific character of the rock art at Irisjawe is unusual. It is a site beautifully situated in a little bay approximately 4.5 km east from the village Lobo (Plate 186) in Triton Bay. According to the villagers who accompanied us and brought us to the different sites in Triton Bay, we were the first ones to see them. Whether this is the truth or not is not very important; the fact is that there are no records of these sites.

The cliff on which the paintings are situated is steep and very eroded in a specific pattern. It could be the perfect site for a fairy-tale. Pictures can be found scattered all over the site. A lot of matutuo-like figures or anthropomorphic figures are depicted in an orange-red pigment, most of them with exaggerated male/female genitals.

Although this is a characteristic of these figures throughout the survey, the ones found at Irisjawe have distinct features (Plate 187). Other new discoveries are the strange round structures with an opening on one side, and the curled figures in red paint (Plate 188). The first have a remarkable resemblance to the female genitals represented in some of the Aboriginal rock art. If they really represent the vulva of a woman, and taking into account the outspoken representations of male genitals, this particular site as a whole could be seen as a fertility symbol.





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Plate 186. Front view of Irisjawe

Plate 187. Matutuo-like figures at Irisjawe

Plate 188. Matutuo-like and other figures at Irisjawe

## 2. Ganggasa

The Island Ganggasa is situated approximately 300 m south of Irisjawe. The cliff on which the rock art is situated faces east (Plate 189). Unfortunately, part of the site is covered by graffiti, and the local population were not ashamed to admit that they often performed this destructive activity (Plate 190). This again brings us to the necessity of a conservation plan involving the local communities.

The site is unusual in that the natural cracks in the limestone cliff have been used for cremation burials, the only ones we found in the Kaimana region (Plates 191 and 192). The rock art is situated up to a height of approximately 30 m at very steep parts of the cliff. Besides the abundance of red dots (Plates 193, 194 and 195) the vulva motif referred to in the description of Irisjawe appears also in Ganggasa (Plate 196).



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Plate 189. Front view of  
Ganggasa

Plate 190. Graffiti at Ganggasa

Plate 191. Cremation burial  
at Ganggasa



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Plate 192. The second cremation burial at Ganggasa

Plate 193. Three parallel lines of red ochre dots at Ganggasa

Plate 194. Group of red ochre spots at Ganggasa

Plate 195. Other spots at Ganggasa

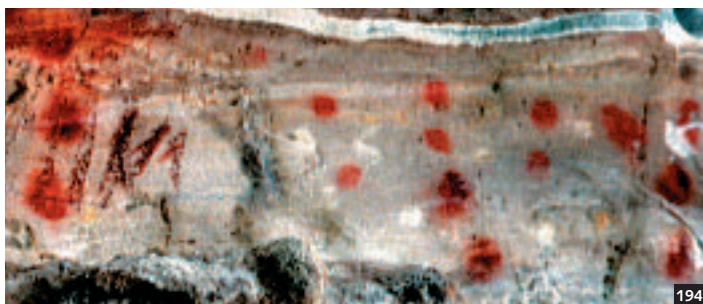
Plate 196. Abstract figures and vulva motif at Ganggasa



Some of the paintings are very faded, but they could be observed because the team were able to approach the lowest parts of the site very easily. Some of the figures discovered are red cross-like patterns, red curling lines and red half-oval structures. Higher up, linear patterns are clearly visible, depicted in red pigment along with red spots.

At a height of approximately 20 m an S-pattern was discovered, flanked by linear red and yellow ochre figures. A niche higher up contains a lot of red and yellow ochre spots, red negative stencils, and linear and circular red and yellowish patterns, along with abundant graffiti. The other painted parts of the wall, mainly in red pigment, are completely faded.

Underneath the graffiti, at the steepest part of the cliff, are a lot of red and yellow dots, negative stencils, as well as linear and circular patterns. Erosion made it impossible to discover any clear paintings on the rest of the steep cliff. The lack of anthropomorphic figures was, however, quite unusual.





# Baliem Valley

## 1. Suroba/Subulah

Suroba/Subulah is the only site we could indirectly visit in the highland region. Observed earlier by Heider in the 1960s as a member of the Harvard-Peabody expedition and by members of the NGO Sejati, the site is sacred to the Kurulu Dani people. It is extensive with three different sections named Wukugi, Itsugu Baga and Yagar oak, and contains a large range of paintings in red ochre.

Since we did not visit the site ourselves, only developing the photographs upon return to Jakarta, and could not obtain more information from the local population during later visits, it was impossible to distinguish which paintings belong to these three different sites. The first picture (Plate 197) reveals a mass of red paint, and it is difficult to distinguish recognizable patterns, probably because of the extensive use of the site.

Details include a snake pattern (Plate 198), similarly observed along the coastal areas; abstract motifs in rather dark red paint (Plate 199); a lizard, again common in the southern regions (Plate 200); and a snake pattern surrounded by faded red marks.

A closer look at the next picture (Plate 201) is very interesting. Not only do we discover anthropomorphic and matutuo-like figures, but there are also crosses and rectangular patterns. In particular, the matutuo-like figure with three fingers and toes bears an almost uncanny resemblance to the paintings in the coastal region. A bird-like figure can also be observed (Plate 202), the only painting of its kind we discovered during the survey.

It is interesting to look back here at the theory developed by Cator and Röder. They state that the



197

Plate 197. Heavily used limestone surface at Suroba/Subulah



**Plate 198. Detail of snake-like figure at Suroba/Subulah**

ancestors of the local coastal people could not have made paintings along the coast since there is no trace of myth/legend or remembrance. In their view only the Papuans, the original inhabitants of the island, could have made the paintings. One of the theories is that they fled inland with the arrival of the Austronesians 3,000 years ago. Could it be that the Papuans continued a more rudimentary, simpler art form in the highlands after fleeing the coastal areas? It is obvious that the art executed along the coast is much superior in quality and refinement. Or is any connection seen in this context and from this distance just an illusion, the resemblance being only the result of reinterpretation of symbols exchanged during centuries of encounters between highlanders and coastal inhabitants?

Another particularity in the highland art, with a lot of resemblance to the coastal areas, is the rectangular pattern. This could be directly connected to the highlanders' agricultural practices of cultivating the sweet potato in square irrigated garden plots. Whether this is a too obvious link made by the observers or just a pure coincidence is left to future research. It is clear that the highland region needs a lot more prospecting and research. The Harvard-Peabody expedition revealed parts of numerous rock art sites in the highlands. Our team never got to visit the site we described, the survey being surrounded by mist and myths. At Suroba people still carry out rituals and



**Plate 199. Abstract figures at Suroba/Subulah**



**Plate 200. Lizard and other figures at Suroba/Subulah**



201

Plate 201. Symmetrical figure,  
a long cross and matutuo-like figure,  
at Suroba/Subulah



202

Plate 202. Bird-like figure at Suroba/  
Subulah

paint their *wusa* art. It is maybe one of the only regions in the world where rock art still has a living tradition in community life. Therefore it is all the more important to respect local customs and rules. Maybe one day the sites will be revealed, adding important insights into ongoing speculations in anthropology and archaeology, but only when these communities are willing to share their testimony.





# Timor Leste

## Catalogue V

### 1. Lene Hara

The first site we visited in the Tutuala region was Lene Hara, a cave site also visited by Cinatti and Almeida. The team, accompanied by Mattheus and Everisto Martines, Alberto and Makario de Zeus – inhabitants of Tutuala – reached the site by taking the road to Walu beach, stopping approximately halfway and then turning in a north-western direction. A walk of about half an hour brought us to the entrance of the cave. The big entrance hall contains some very interesting paintings (Figure 13).

From the extreme left to right we could recognize a human figure close to the bottom of the cave, an anthropomorphic figure (matutuo?) holding a tool in both hands and wearing a specific headdress immediately to the right of an abstract figure in black and red (Plate 203), a brown, yellowish human figure holding up its arms above a celestial (sun) figure (Plate 203), a brown matutuo-like figure (Plate 204), an anthropomorphic figure with heavy headdress (Plate 205), a fish-like structure, a red abstract (Plate 206) and two negative hand stencils reaching towards each other (Plate 207) above a dark rock outcrop. A sun-like figure (Plate 204) and human face, overlooked at first sight, can be added to the panel, as well as a black abstract figure resembling the red and black abstract figure mentioned earlier (Plate 208). Another abstract figure similar to paintings found in the Berau Gulf can also be observed (Plate 208). The other two parts of the cave, including the inner cave mentioned by Cinatti (1963, p. 51), were studied quickly and did not seem to contain any more paintings. The villagers accompanying us confirmed this.

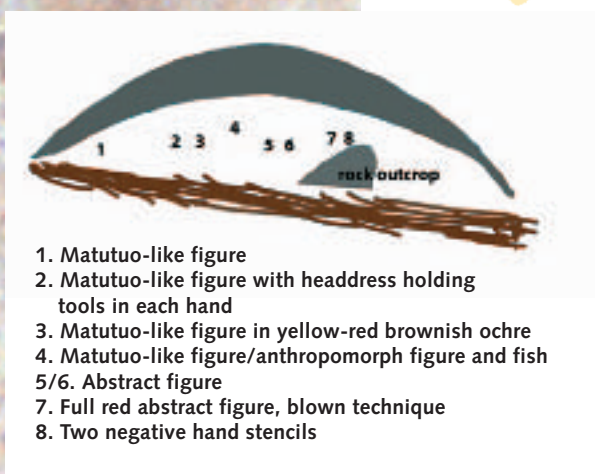


Figure 13. Location of the paintings at Lene Hara cave



Plate 203. Anthropomorphic figure with tools and bichrome figure (turtle?) at Lene Hara. Photo by Max Stahl, 2002.

Plate 204. Matutuo-like and sun-like figures at Lene Hara. Photo by Max Stahl, 2002.



Plate 205. Matutuo-like figure with, on the right, an anthropomorphic figure with large headdress at Lene Hara. Photo by Max Stahl, 2002.



Plate 206. Abstract figure at Lene Hara

Plate 207. Two negative hand stencils in red pigment at Lene Hara. Photo by Max Stahl, 2002.

The similarities to the Berau Gulf and Kaimana areas in West Papua make this site particularly interesting. In fact it is the only site where almost all figures have a matching counterpart in the Berau Gulf and Kaimana areas in West Papua.

The sacred keeper of Lene Hara is Mateus Rodrigues but neither he, nor any of the villagers, would or could reveal the meaning of the paintings to us, except in the case of one figure which they indicated probably represented a fish.

## 2. Ili Kere Kere

This high wave-cut gallery is located beneath Tutuala village in the district of Los Palos, and is a sacred site to the Fataluku people. Its full length stretches over at least 100 m and it reaches 15–20 m at its highest point (Plate 209).

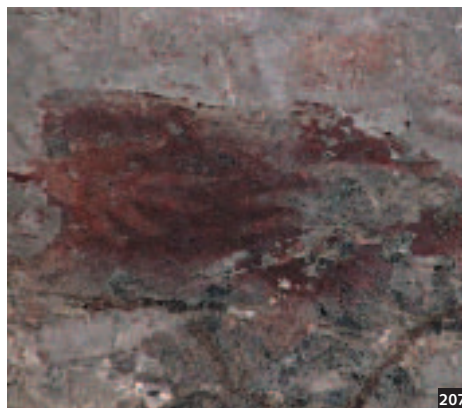
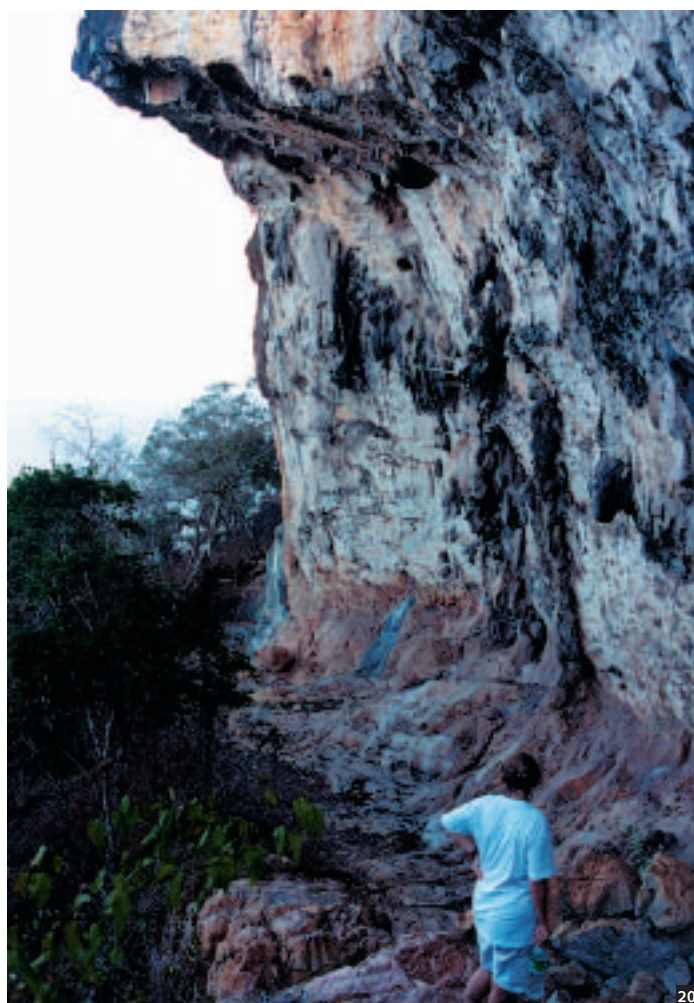


Plate 208. Black abstract figure similar to Plate 55. Photo by Max Stahl, 2002.

Plate 209. Ili Kere Kere's wave-cut gallery





**Plate 210.** S-shaped figure in red hematite at Tutuala, similar to the black ones outside the site.  
Photo by Max Stahl, 2002.

**Plate 211.** The first paintings encountered when entering the site of Ili Kere Kere



During the Indonesian occupation the site was being made accessible for a larger public. However the clearing of the path, the making of concrete stairs, benches and parasols at breathtaking viewpoints suddenly stopped in 1998. This is the reason why today the stairs stop before actually reaching the site. The rest of the distance to the entrance is covered with rubble and stones. Approximately 6 m from the entrance of the site at the right side at a height of  $\pm 2.5$  m four small black figures are clearly visible (Figure 14). They are carried out in a very refined style and are the only black ones of this genre that we discovered in the Tutuala region. Similar representations exist but



Figure 14. Four black S-shaped figures just before entering Ili Kere Kere

only in red hematite at Ili Kere Kere site itself and Tutuala (Plate 210).

Once entered, the site consists of three very large and different galleries, all facing Jaco Island and the line in the sea formed by the coming together of the Indian and Pacific Oceans. The most north-eastern part could not be visited because of the dangerous terrain. According to the local people there are a few paintings located in that spot. The steep gap of 35–40 m down tempered any temptation to make the required jump.

The first two parts of the gallery, however, already offer a wonderful spectacle of different drawings. Facing the first part of the gallery from right to left, there are immediately some beautiful paintings to be observed in a rather large niche (Plate 211).

There are several coloured turtle-like figures or abstract symbols (Plate 212), hand stencils (Plate 213) and multicoloured figures (Plate 214). When we asked Paolo da Costa, sacred keeper of the site, what the symbols meant, he said only that they were signs from God for humanity and that the large multicoloured symbol comprised the world of humans. The true meaning, however, had to be kept sacred and could not be revealed.

During the Indonesian occupation it was a man from Tutuala village named Geronimo who helped the Indonesians to discover the site. Not long afterwards he contracted an eye disease and died three or four years later. For Paolo it is a sign that whoever comes and reveals secrets of the site will be punished.

The niche we discovered, immediately after entering the site, is not only beautiful and meaningful, but according to Paolo the paintings here were the first ones



Plate 212. Turtle-like figure at Ili Kere Kere. Photo by Max Stahl, 2002.



Plate 213. Hand stencil and sun-like figures at Ili Kere Kere. Photo by Max Stahl, 2002.



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Plate 214. Multicoloured abstract figure interpreted by the sacred keeper as comprising the world of humans

to be painted at the site by the first people who came to the island. The discussion got a little confused when we were informed that the first people actually landed at the far north-eastern end of the gallery, the part that we mentioned earlier was inaccessible because of the difficult terrain.



**Plate 215. Two anthropomorphic figures at Ili Kere Kere. Photo by Max Stahl, 2002.**



**Plate 216. S-shaped figure at the site Sunu Taraleu**

Logically the paintings in that spot – which we never saw – should have been the first to be painted. But Paolo insisted that the first paintings were the ones in the niche just described. All the other paintings on the site would have been painted according to Paolo after that, about 2,000 to 3,000 years ago. This is an interesting dating since it coincides more or less with the Austronesian migration.

In the same niche, immediately to the left, we also found some extraordinary anthropomorphic figures (Plate 215). Their S-shape, also to be found at the site of Tutuala, and to a somewhat different extent in Sunu Taraleu (smaller and less gracious), led us to name them ‘S-shaped figures’ (Plates 216 and 217). The black ones we referred to outside the site of Ili Kere Kere are part of this group although – as already indicated – they are the only black ones we found in the region. Usually, as we have seen in the course of our research in West Papua, the black charcoal drawings are more recent and less refined than



**Plate 217. S-shaped figure at the site Tutuala. Photo by Max Stahl, 2002.**



**Plate 218. S-shaped figure in motion**

**Plate 219. S-shaped figure throwing a spear**

**Plate 220. Three bird figures with sun-like figure. Photo by Max Stahl, 2002.**

the red hematite ones. In the case of Ili Kere Kere the black gracious paintings might be younger, but are certainly as refined as the red ones, which makes us wonder if they really date from a different period.

Another characteristic of the S-figures (Plates 218 and 219) is that all of them seem to be in action carrying a strange triangle-shaped object above the head. Other tools could be interpreted as spear, bow, arrow and so on (Plate 219). Further to the left of the S-figures at Ili Kere Kere we found a whole range of different figures of which the meaning is not known.

Paintings we encountered include two panels next to each other, containing three bird figures (Cassowary bird?) in association with sun-like figures (Plate 220). From here, 2–2.5 m to the left, are several anthropomorphic representations, very different in style from the S-shaped figures, and some celestial symbols (Plate 221).

After an interruption of approximately 5 m we again find representations of human and celestial symbols. Some anthropomorphic representations seem to be of dancing, hunting and horse riding (Plate 222), and two representations of boats (Plate 223) were found 10 m to the left. The second part of the gallery contains less figurative and abstract paintings.





Plate 221. Anthropomorphic figure at Ili Kere Kere

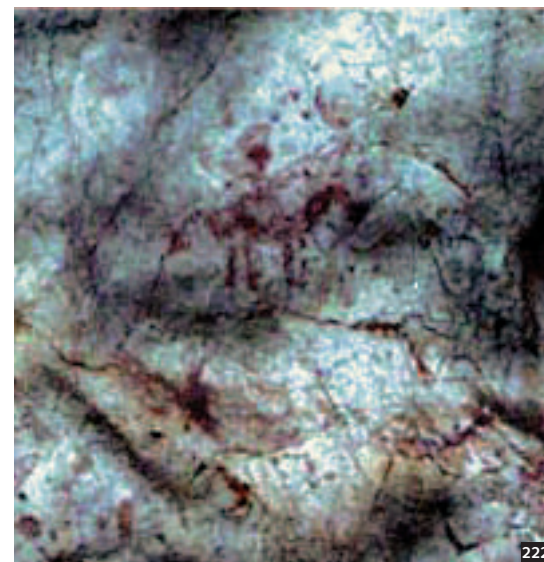


Plate 222. Horse riding at Ili Kere Kere

Plate 223. Two boats at Ili Kere Kere





224



226

Plate 226. The first panel encountered at the site of Tutuala.  
Photo by Max Stahl, 2002.



225

Plate 224. Two human figures carrying an animal at Tutuala

Plate 225. Detail, showing dancing (?) human at Tutuala.  
Photo by Max Stahl, 2002.

### 3. Tutuala

The site of Tutuala in many ways resembles Ili Kere Kere. It is also a huge wave-cut gallery, which is reached from Tutuala village by a small path. It takes only half an hour to walk to the site and the path is fairly accessible. The site of Tutuala was visited with Paolo da Costa, sacred keeper of Ili Kere Kere and Tutuala.

The first group of paintings we encountered are a range of anthropomorphic figures (Plate 224) very much executed in the same simple linear style, used at a certain part of Ili Kere Kere. These paintings could represent a ceremony or festive gathering (Plate 224). Although carried out in linear style, they suggest movement. The figures entangled at the lower part of the panel (Plates 225 and 226) could be dancing while the ones in the upper part are carrying something hanging upside down from a stick. One could easily imagine this to be an animal.

Further to the left there is an obvious mixture of styles in paintings. The more linear unrefined style we



Plate 227. Abstract figure in thick red paint at Tutuala. Photo by Max Stahl, 2002.

Plate 228. Abstract (human?) figure in thick red paint at Tutuala. Photo by Max Stahl, 2002.

Plate 229. Roster in fine red lines at Tutuala. Photo by Max Stahl, 2002.





**Plate 230.** S-shaped figure at Tutuala. Photo by Max Stahl, 2002.

**Plate 231.** Recent/faked S-shaped figure at Tutuala. Photo by Max Stahl, 2002.



**Plate 232.** Sun-like figure at Tutuala

encountered at the beginning of the site continues, but now with representations of abstract and celestial figures (Plates 227 and 228). The more refined style, with representation of S-shaped figures (Plate 230) and an abstract roster of symmetric lines (Plate 229), are sharing the composition. An S-shaped figure, carried out with much less care, could suggest a very recent copy or fake (Plate 231).

Other symbols, such as a sun-like figure (Plate 232) resemble similar paintings at Ili Kere Kere.

#### 4. Sunu Taraleu

The rock art site of Sunu Taraleu was visited by boat from Walu beach, Tutuala. It took us about one hour to get to a beach named Juta Kuda, where we left the boat and started trekking to the site. After a walk of approximately another hour we reached Sunu Taraleu, a rock shelter, containing two niches with paintings (Figures 15, 16 and 17 and Plates 233 and 234). In both niches there are clear representations of boats and small anthropomorphic figures carrying tools. Most of them are painted in the S-shaped figure style. Although the figures are smaller than the ones in Ili Kere Kere and Tutuala, the pictures are very clear and one might think they were repainted recently.

One of our guides, Makario de Zeus, confirmed this, and stated that the local people regularly visited the site.



Plate 233. The first panel  
at Sunu Taraleu

Plate 234. The second  
panel at Sunu Taraleu



The lack of a path to the site and wild forest growing around it, which had to be cleared before we could enter, did not exactly suggest this to be the case.

The detailed way the first boat in the first niche (Figure 15, Plate 233) is painted, with mast, oars and rudder is remarkable. Another extraordinary figure is a woman with heavy hips, who appears to be dancing with a tool in her right hand. In fact all the figures seem to be in action.

The description of the tools and headdresses by Almeida is far too detailed (Almeida, 1967, pp. 71–72). In many cases it is difficult to see whether the figures carry a spear, a stick, a harpoon, or club, and wear flowers or other typical headdresses on the head. Almeida also refers to four panels combined in the two niches. Our team is rather tempted to describe each niche as a separate unit without subdividing into panels (Plates 233 and 234 and Figures 15–17).



Figure 15. The first panel at Sunu Taraleu. Source; after Almeida (1967)



Figure 17. The second panel at Sunu Taraleu. Source: after Almeida (1967)

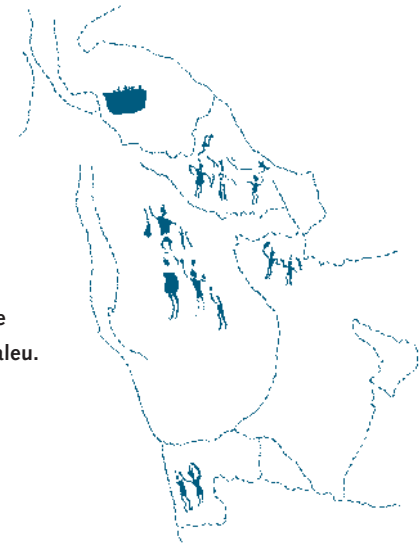


Figure 16. Detail of the first panel at Sunu Taraleu. Source; after Almeida (1967)

Although most of the figures can be related to the S-shaped figures in Ili Kere Kere and Tutuala there is a distinct difference in execution. The Ili Kere Kere and Tutuala S-figures are not only taller, but also much more refined. Almeida's conclusion that the paintings could represent 'celebration of magico-religious ceremonies' (op. cit., p. 73) is a possibility that could not be verified by other literature or the local people. We would rather interpret them as war scenes, fishing and hunting themes, a mere reflection of daily life.

## 5. Hi O

Hi O is a cave site at the beach right in front of Jaco Island, facing the meeting of the Indian and Pacific Oceans (Plate 235). We reached the site through the forest – there was no path available – half an hour after departing from Walu beach. To reach the cave we descended from an outcrop of rock at the coast, on which was situated a sacred place. It was marked by a circular arrangement of stones with two wooden sticks in the centre (Plate 236). According to our guide this was the place where the first two people landed in Timor Leste. They came to land at this sacred place, descended into the cave and made the sacred paintings. After that they went out of the cave into the forest, and procreated.

Inside the cave there are two black charcoal paintings at the right end of the right-hand wall. One could represent an anthropomorphic figure (Plate 237), the other has the same shape as paintings encountered in Ili Kere Kere (Plate 238). As indicated already on several occasions, charcoal drawings in general are of a later date than

Plate 235. Entrance of Hi O



Plate 236. Sacred site above the cave site Hi O

Plate 237. Anthropomorphic figure at Hi O

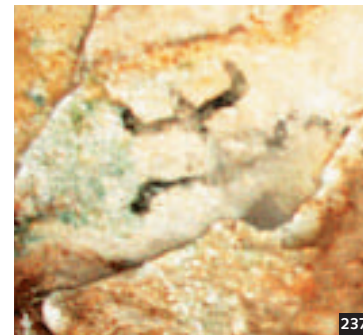


Plate 238. Figure similar to the ones found at Ili Kere Kere

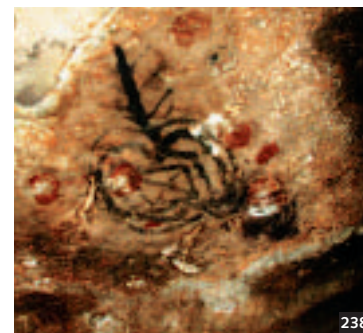




Plate 239. Bird (?) figure at Ili Kere Kere Chaialoro

the ones in red hematite. They are usually rougher and simpler in design, a characteristic we certainly find back here in Hi O, and again, it is difficult to put an age on the paintings. Also here neither the sacred keeper Don Mateus Rodrigues nor the local people could, or would, give us any information about their meaning.

## 6. Ili Kere Kere Chaialoro

Ili Kere Kere Chaialoro is the most difficult site to reach in terms of distance and terrain. The authors were not able to visit the cave, but the other members of the UNESCO team brought sufficient digital photo material back from the expedition to elaborate on the contents of the site.

Ili Kere Kere Chaialoro is reached through dense forest downhill from Tutuala village after more than three hours' walking. The rock shelter is certainly not as rich in paintings as Ili Kere Kere and Tutuala but nevertheless contains some interesting drawings, more specifically the negative stencil of an object identical to negative stencils found in the Berau Gulf region in West Papua. This object made out of wood or bone is a comb to style women's hair. Today it is still made and used in West Papua, and one of the authors was even given one as a token by a woman in the town of Wamena, the capital of highland West Papua.

Other figures include an abstract drawing (bird?), (Plate 239), two stylized anthropomorphic figures (Plates 240, 241), a painting which could represent another anthropomorphic figure – very much in the style we found at Tutuala and Ili Kere Kere (Plate 242) – and two magnificent negative hand stencils (Plate 243). This is the first time this site has been recorded. When the team asked for its meaning and value to the local population, the guides stayed silent.

## 7. Lene Kichi I and II

As with Ili Kere Kere Chaialoro, the authors were not able to visit Lene Kichi. Again, the other members of the UNESCO team made it possible to make a detailed description of the site through digital photography and film footage. Lene Kichi was visited in the company of





Plate 240. Anthropomorphic figure at Chaialoro



Plate 241. Anthropomorphic figure at Chaialoro



Plate 242. Anthropomorphic figure at Chaialoro



Plate 243. Two negative hand stencils at Chaialoro



244



245

Plate 244. Trekking to Lene Kichi I

Plate 245. Traditional house at the entrance of Tutuala

Tutuala villagers Don Mateus Rodrigues – sacred keeper of the site – and Gonzalo Pinto. The site is best reached from the main road to Walu beach and is within walking distance from the rock art site of Lene Hara. It is situated at the south-easternmost end of a mountain range that begins near the village of Moro on the northern coast, rises at Tutuala, turns south to rise again at Lene Kichi and then turns westward. The site is reached quite easily through a path in the forest (Plate 244). The mountain on which Lene Kichi is situated does not have a distinct name. In some villages it is called Noro; in others Nara or Noir.

It is interesting to remark here that all the mountains on Fataluku land are sacred. Their function and meaning in local tradition is vital; one could even state that they occupy a central place in the traditional belief system. On a lot of occasions during the survey, villagers attributed special powers to them. Some are related to rituals, such as the building of the sacred houses (Plate 245).

They nourish the sacred springs from which water is taken to perform special rituals. They harbour the places where the first people came to Timor Leste, the stone boat the first people left behind, the trees and stones for carvings and the plants used for dyeing textiles. The mountains also offer the exit from terrestrial life, the place where the stream of life changes. They are considered the stairs to heaven.

Lene Kichi is also situated in the region where the last sacred language, Lovaia, is spoken. Only the men in the upper class of the society speak Lovaia and women are not even allowed to listen to the language.

Lene Kichi is actually a complex of shallow caves, perfect shelters for human occupation. In contrast to Lene Hara, no archaeological excavations have been carried out, but given its proximity to that site one cannot exclude human occupation at some period of time. Close to where the cave complex starts, there is a cave containing one painting of a boat (Plate 246) on the edge of the cave's ceiling (Plate 247). The painting is executed in great detail. Mast, sail, oars, rudder and four passengers can easily be recognized. Similar examples have already been described for the rock shelters Sunu Taraleu (Plate 248) and Ili Kere Kere (Plate 223). A second cave, a little further on,



**Plate 246. The boat at Lene Kichi I**

**Plate 247. The ceiling of the cave at Lene Kichi I**

contains two paintings, one black abstract figure which is very faded (Plate 249) and a red ochre celestial figure (Plate 250). We named both caves respectively Lene Kichi I and Lene Kichi II, without knowing about the discoveries of ETAP.

The complex of Lene Kichi is considered a special place to build boats. Several recent fireplaces encountered by the team during the survey had been left by local fishermen building new boats. Don Mateus explained to the team that for the building of each new boat a special ceremony needs to be performed. First, they have to celebrate the forest and choose a tree. Then a ceremony is held to transfer

**Plate 248. Boats at Sunu Taraleu**

**Plate 249. Faded abstract figure at Lene Kichi II**



250



251

**Plate 250. Sun-like figure at Lene Kichi II**

**Plate 251. Sacred stone boat at Peti Lete Lete**

the spirit of the tree to the boat. Once the boat is carved, usually after six to ten weeks depending on the size of the boat, the vessel and surroundings are blessed on the site of construction. The last and most important ceremony is held on the beach, before the boat is taken to sea. A rooster is hypnotized and made to perform six circles. Then its spirit is offered to the boat and its liver is read by a holy man. If the liver suggests bad luck, the ceremony has to be begun all over again until another liver predicts good luck. Once the holy man is sure, the vessel is blessed with water and taken to the ocean.

Strangely enough, at least according to Don Mateus, the making of the boats at the site has nothing to do with the presence of the painting of the boat in Lene Kichi I. According to him, locals do not even know about the existence of the paintings. He himself discovered them by accident. Don Mateus recalls that one of his ancestors – as did all of the ancestors of the clans in the region – came from Macao. Don Mateus' ancestors possessed this sacred land surrounding Lene Kichi, and he inherited it from his father. While he was helping his grandfather collect honey from the bees nesting in the caves, they discovered the paintings. There are no stories or traditions related to the drawings and nobody ever comes to visit them.

This story is striking in view of the importance and sacredness of the boat in the region. The sacred site of the first people, Piti Lete Lete – close to the village of Moro – where a stone boat harbours the grave of the first people (Plate 251), is yet another example.

A possible explanation could be that in the late nineteenth century the Portuguese colonial administration started relocating people in order to control the area better. That could also explain why there is no house within 1 km distance of the rock art site. Being relocated could, after a few generations, have cut the strings of the local population with the sites. Examples of ghost villages, created by this administrative policy, are still to be found today as witnesses of this period.

In fact, one of the authors visited such a village, named Lete Mampere. Mario, the guide at the time of the visit, explained to us that his grandfather or great-grandfather, together with other villagers, was forced to move to

another place. Lete Mampere however kept a sacred value, due to a kind of totem still standing in what must have been the centre of the village (Plate 252).

Therefore it is the authors' conviction that relocation can be only a partial explanation, if it is an explanation at all. In many other parts the links of the local people to the sites obviously still exist, and why is it that boat-making is so important at Lene Kichi where the most beautiful drawing of a boat in the region – at least for our survey – is situated?



Plate 252. Sacred totem at Lete Mampere

# Bibliography

## Abbreviations

AP	Asian Perspectives
BA	Berkala Arkeologi
BCCSP	Bollettino del Centro Camuno di Studi Preistorici
BIPPA	Bulletin of the Indo-Pacific Prehistory Association
BTLV	Bijdragen tot de Taal-, Land- en Volkenkunde
CI	Cultureel Indie
DIA	Diskusi Ilmiah Arkeologi
JB	Journal of Biogeography
JBAB	Jurnal Balai Arkeologi Bandung
NW	Naditira Widya
OV	Oudheidkundig Verslag
PIA	Pertemuan Ilmiah Arkeologi
REHPA	Rapat Evaluasi Hasil Penelitian Arkeologi
TNG	Tijdschrift Nieuw-Guinea

- ALMEIDA, A. DE. 1967. A Contribution to the Study of Rock Art in Portuguese Timor. In: *Archaeology at the 11th Pacific Science Congress*, pp. 69–72.
- ALLEN, J.; GOLSON, S.; JONES, R. 1977. *Sunda and Sahul, Prehistoric Studies in Southeast Asia: Melanesia and Australia*. New York, Academic Press.
- ARIFIN, K. 1992. Lukisan Batu Karang di Indonesia: Suatu Evaluasi Hasil Penelitian. Jakarta, LPUI (unpublished).
- BAHN, P. G.; VERTUT, T. 1988. *Images of the Ice Age*. Leicester, Winward.
- BALLARD, C. 1988. Dudumahan. A Rock Art Site on Kay Kecil, Southeast Molluccas. *BIPPA*, No. 8, pp. 139–61.
- . 1992. Painted Rock Art Sites in Western Melanesia: Locational Evidence for an ‘Austronesian’ Tradition. In: J. Macdonald and I. P. Haskovec (eds.), *State of the*

- Art: Regional Rock Art Studies in Australia and Melanesia*, pp. 94–106. Melbourne (Occasional AURA Publication no. 6).
- BELLS, F. L. S. 1941. Rock-Pictures in New Guinea. *Man*, No. 104, pp. 79–80.
- BELLWOOD, P. 1979. *Man’s Conquest of the Pacific: The Prehistory of South East Asia and Oceania*. New York, Oxford University Press.
- . 1997. *Prehistory of the Indo-Malaysian Archipelago* (revised edition). Hawaii, University of Hawaii Press.
- BERGER-KIRCHNER, L. 1970. The Rock Art of West New Guinea. In: H. G. Bandi (ed.), *The Art of the Stone Age*, pp. 231–9. London, Methuen.
- BINTARTI, D. D. 1982. Mungkinkah Doyo Lama merupakan sebuah situs prasejarah. *PIA*, 1980, pp. 709–14. Jakarta, Pusat Penelitian Arkeologi.
- CATOR, J. 1939. Rotstekeningen in West Nieuw Guinea. *CI*, No. 1, pp. 246–51.
- CERVICEK, P. 1976. *Catalogue of the Rock Art Collection of the Frobenius Institute. Part II, Australia and Oceania: East Indonesia*. Wiesbaden, Franz Steiner Verlag GMBH, pp. 192–4.
- CHALOUKKA, G. 1984. *From Palaeoart to Casual Paintings*. Monograph Series 1. Darwin, Northern Territory Museum of Arts and Sciences.
- . 1993a. *Journey in Time: The World’s Longest Continuing Art Tradition*. Chastwood, Reed.
- . 1993b. Rock Art of the Bomberai Peninsula: Irian Jaya. (unpublished).
- . 1996. Bomberai: Rock Art and Crystal Clear Bays. In: Kal Muller, *Irian Jaya: Indonesian New Guinea*. 4th ed., pp. 95–7. Singapore, Periplus Editions (HK).

- CHAUVET, L. 1995. *La Grotte Chauvet: Une Analyse*. Paris, Éditions Gallimard.
- CHAZINE, J. M. 1993a. *Ethno-Archaeological Observations in Borneo (East-Kalimantan): Preliminary Report*. Université de Paris 1 Pantheon-Sorbonne, Laboratoire d'Ethnologie Préhistorique.
- . 1993b. Trekking archéologique à Bornéo. Mission 1992 – Kalimantan Ouest – Indonésie. (unpublished).
- . 1994. New Archaeological Perspectives for Borneo and Especially Kalimantan Provinces. Paper presented to the 15th IPPA Congress, Chiang Mai.
- CHAZINE, J. M., et al. 2001. *The 2001 Kalimantanrope's Mission*, www.kalimanthrope.com/2001/jmc.
- CINATTI, R. 1963. *As Pinturas Rupestres de Timor, Separata de*. Abstract from Colloquium, Lisbon, pp. 49–59.
- CLOTTE, J. 1995. *La Grotte Cosquer: Une Découverte*. Paris, Éditions CNRS.
- FLOOD, J. 1983. *Archaeology of the Dreamtime*. Sydney, Collins.
- GALIS, K. W. 1948. Nieuwe rotstekeningen-vondst op Nederlands Nieuw-Guinea. *OV*, Vol. 14, No. 8.
- . 1952. *Papua's van de Humboldt-Baai: Bijdrage tot een ethnografie*. Den Haag, J. N. Voorhoeve.
- . 1957a. Nieuwe rotstekeningen ontdekt. *BTLV*, Vol. 117, pp. 464–74.
- . 1957b. De grotten van Jaand. *Nieuw-Guinea Studiën*, Vol. I, pp. 14–23.
- . 1957c. De Pinfeloe-grot nabij Tainda. *Nieuw Guinea Studiën*, Vol. I, pp. 118–29.
- . 1964. Recent oudheidkundig nieuw uit westelijk Nieuw-Guinea. *BTLV*, No. 120, pp. 245–74.
- GARDNER, R.; HEIDER, K. G. 1968. *Gardens of War: Life and Death in New Guinea Stone Age*. New York, Random House.
- GLOVER, I. C. 1972. Excavation in Timor. Ph.D. thesis. Canberra, Department of Prehistoric Research, School of Pacific Studies, Australian National University.
- . 1986. *Archaeology in Eastern Timor, 1966–67*. Terra Australia 11. Canberra, Department of Prehistoric Research, School of Pacific Studies, Australian National University.
- . 2000. The Prehistoric Background to Timorese Culture: Evidence from Excavations in Eastern Timor, 1966–67. In: *Cerâmicas De Timor Loro Sa'e. Exposição*, pp. 47–9. Lisbon, Museu Centro Científico e Cultural de Macao.
- HEEKEREN, H. R. VAN. 1957. *The Stone Age of Indonesia*. 'S-Gravenhage, Martinus Nijhoff.
- . 1958. Rock-Paintings and Other Prehistoric Discoveries near Maros (South West Celebes). In: *Laporan Tahunan 1950*, Jakarta, Dinas Purbakala Republik Indonesia, pp. 22–35.
- HEIDER, K. G. 1970. *The Dugum Dani: A Papuan Culture in the Highlands of West New Guinea*. Chicago, Adline Publishing Company.
- HICKS, D. 2000. Traditional Society in East Timor. In: *Cerâmicas De Timor Loro Sa'e. Exposição*, pp. 37–46. Lisbon, Museu Centro Científico e Cultural de Macao.
- HOLT, C. 1967. *Art in Indonesia: Continuities and Change*. New York, Cornell University Press.
- JONES, P. 1996. *Boomerang; Behind an Australian Icon*. Kent Town, Wakefield Press.
- KADIR, H. 1985. Tinjauan tentang lukisan dinding gua di daerah Sulawesi Selatan. *PIA*, Vol. 3, pp. 176–81.
- KOOIMAN, S.; HOOGERBRUGGE, 1992. J. Art of Wakde-Yamna Area, Humboldt Bay, and Lake Sentani. In: Suzanne Greub (ed.), *Art of North West New Guinea*, New York, Rizzoli, pp. 7–126.
- KOSASIH, E. A. 1978. Lukisan-Lukisan Gua di Pulau Muna (Sulawesi Tenggara): Suatu Penelitian Pendahuluan. Archaeological Sarjana thesis (S1), Jakarta, Fakultas Sastra Universitas Indonesia.
- . 1982. Tradisi berburu pada lukisan gua di Pulau Muna (Sulawesi Tenggara). *REHPA I*, pp. 1–29.
- . 1984. Hasil penelitian lukisan-lukisan pada beberapa gua dan ceruk di Pulau Muna (Sulawesi Tenggara). *REHPA II*, pp. 55–66.
- . 1985. Lukisan gua di Indonesia sebagai sumber data penelitian arkeologi. *PIA*, Vol. 3, pp. 158–75.
- . 1986. Studi komparatif tentang lukisan gua prasejarah di kawasan Asia Tenggara (Indonesia, Thailand, dan Filipina). *PIA*, Vol. IV, pp. 379–96.
- . 1987. Lukisan gua prasejarah bentangan tema dan wilayahnya. *DIA*, Vol. 2, pp. 16–37.

- . 1989. Sumbangan data seni lukis bagi perkembangan arkeologi di kawasan Asia Tenggara (suatu studi analisis persebaran). *PIA*, Vol. 5, (IV. *Studi General*), pp. 29–55.
- . 1991. Rock Art in Indonesia. In: P. Bahn and A. Rosenfeld (eds.), *Rock Art and Prehistory: Papers Presented to Symposium G of the AURA Congress*, Darwin 1988, Oxbow Books, Monograph 10.
- . 1995. Lukisan Gua di Sulawesi Bagian Selatan: Refleksi Kehidupan Masyarakat Pendukungnya. Archaeological Master thesis (S2). Depok, Post-Graduate Programme in Archaeology, Universitas Indonesia.
- KOSASIH, E. A.; PRASETYO, B. 1995/6. *Survey Gua-Gua di Pegunungan Muller Kabupaten Kutai, Provinsi Kalimantan Timur. Laporan Penelitian Arkeologi*. Banjarmasin, Balai Arkeologi Banjarmasin.
- KUSCH, H. 1986. Rock Art Discoveries in Southeast Asia: A Historical Summary. *BCCSP*, Vol. 23, pp. 99–108.
- LEWIS-WILLIAMS, J. D. 1993. *The Rock Art of Southern Africa*. Cambridge, Cambridge University Press.
- . 2002. *The Mind in the Cave: Consciousness and the Origins of Art*. London, Thames and Hudson.
- MATTHIESSEN, P. 1962. *Under the Mountain Wall: A Chronicle of Two Seasons in the Stone Age*. New York, Viking.
- MEYER, A. J. P. 1995. *Oceanic Art*, Volume I. Köln, Könemann.
- MITTON, R. D. 1972. Stone as a Cultural Factor in the Central and Eastern Highlands. *Irian*, Vol. 1, No. 3, pp. 4–11.
- MULVANEY, J.; KAMMINGA, J. 1999. *Prehistory of Australia*. Sydney, Allen & Unwin.
- MULLER, K. 1996. *Irian Jaya, Indonesian New Guinea* (4th edn). Singapore, Periplus Editions.
- NASRUDDIN. 1986. Leang Bulu Sumi dan Leang Sumpang Bitu sebagai Situs Arkeologi. Archaeological Sarjana thesis (S1), Ujung Pandang, Fakultas Sastra Universitas Hassanuddin.
- . 1988. Data Lukisan Gua-Gua Maros Sulawesi Selatan. (unpublished).
- NITIHAMINOTO, G. 1980. Sebuah catatan tambahan tentang prehistori Irian Jaya. *Penerbitan Balai Arkeologi*, Vol. 1, No. 1, pp. 3–23.
- O'CONNOR, S. 2003. Nine New Painted Rock-Art Sites from East Timor in the Context of the Western Pacific Region. *AP* vol. 34, No.1, 2003 (unpublished version).
- PÉTRÉQUIN, P. 1994. *Écologie d'un outil: La Hache de Pierre en Irian Jaya*. Paris, Éditions CNRS.
- PFEIFFER, J. E. 1982. *The Creative Explosion: An Inquiry into the Origins of Art and Religion*. New York, Harper & Row.
- PIGEAUD, T. G. T. 1960. *Java in the Fourteenth Century: A Study in Cultural History III*. The Hague, Martinus Nijhoff.
- PRASETYO, B. 1997. Gambar cadas di Kalimantan Barat dan Kalimantan Timur: indikasi sebaran di kawasan Indonesia Barat. *NW*, No. 2, pp. 44–51.
- RAGLAN, LORD. 1940. Rock paintings in Dutch New Guinea. *Man*, No. 40, p. 32.
- RENFREW, C.; BAHN, P. 1996. *Archaeology: Theories, Methods and Practice* (2nd edn). London, Thames and Hudson.
- ROBERT, M. 1996. *L'art Rupestre: Conservation*. Paris, Éditions CNRS.
- RÖDER, J. 1938a. Die Felsbilder im Flussgebiet des Tala (Süd West Ceram). *Paideuma*, Vol. 1, pp. 19–28.
- . 1938b. Felsbildforschung auf West Neuguinea. *Paideuma*, Vol. 1, pp. 75–88.
- . 1939. Rock-Pictures and Prehistoric Times in Dutch New Guinea. *Man*, No. 39, pp. 175–8.
- . 1956. The Rock Paintings of the MacCluer Bay (Western New Guinea). *Antiquity and Survival*, Vol. 1, No. 5, pp. 387–400.
- . 1959. *Felsbilder und Vorgeschichte des MacCluer-Golfes, West Neuguinea. Ergebnisse der Frobenius Expedition 1937–38 in die Molukken und nach Holländisch Neu-Guinea*. Bd. IV. Darmstadt, L.C. Wittich.
- ROSENFELD, A. 1988. Rock Art in Western Oceania. *BIPPA*, Vol. 8, pp. 119–38.
- ROWE, W. P. 1940. Rock-paintings in Dutch New Guinea. *Man*, No. 40, p. 16.
- SCHNEEBAUM, T. 1994. MacCluer Gulf. *Pacific Arts*, Vols. 9 and 10, pp. 42–3.





- SOEJONO, R. P. (ed.). 1990. *Sejarah Nasional Indonesia I*. (4th edn) Jakarta, Balai Pustaka, 1990.
- SOUZA, C. R.; SOLHEIM II, W. G. 1976. A New Area of Rock Paintings in Irian Jaya, Indonesian New Guinea. In: K. K. Chakravarty (ed.), *Rock Art of India*, pp. 182–95. New Delhi, Arnold-Heinemann.
- SPECHT, J. 1979. Rock Art in the Western Pacific. In: S. M. Mead (ed.), *Exploring the Visual Art of Oceania*, pp. 58–82. Honolulu, University of Hawaii Press.
- STILWELL, P. 1995. *A Condição Humana em Ruy Cinatti*. Lisbon, Editorial Presença.
- SUMANTRI, I. 1996. Pola Pemukiman Gua-Gua Prasejarah di Biraeng Pangkep, Sulawesi Selatan. Archaeological Master thesis (S2). Depok, Post-Graduate Programme in Archaeology, Universitas Indonesia.
- SUMIATI, A. S. 1984. Lukisan Manusia di Pulau Lomblen, Flores Timur (Tambahan data hasil seni bercorak prasejarah). *BA*, Vol. 5, No. 1, pp. 1–8.
- SUPRAPTA, B. 1996. Lukisan Dinding Gua di Daerah Pangkep: Suatu Kajian Tentang Makna Lukisan dalam Kehidupan Mesolitik. Archaeological Master thesis (S2). Depok, Post-Graduate Programme in Archaeology, Universitas Indonesia.
- TICHELMAN, G. L. 1939a. Mededeelingen: 15 Dr. Carl Schuster on Bird-Design in the Western Pacific: Indonesia – Melanesia – Polynesia. *CI*, Vol 1, pp. 232–5.
- . 1939b. Mededeelingen: 7 Dr. J. Röder over rotsteekningen aan de MacCluer Golf (Nederlandsch West Nieuw-Guinea). *CI*, Vol. 1, pp. 84–8.
- . 1940. Mededeelingen: De handsilhouetten der Nieuw Guineesche Rotsschilderingen. *CI*, Vol. 2, pp. 154–6.
- . 1953–4. Nieuw-Guineese Rotsschilderingen om de nek van de vogelkop. *TNG*, No. 4, pp. 161–7.
- . 1954–5a. Rotstekeningen van een bronzen bijltje. *TNG*, No. 15, pp. 75–79.
- . 1954–5b. Nieuw-Guineese Rotsschilderingen om de nek van de vogelkop (II). *TNG*, pp. 1–6.
- TICHELMAN, G. L.; de GRUYTER, W. J. 1944. *Nieuw-Guineesche Oerkunst, No. 1*. Serie: Vormen en Verbeldingen in Indonesië. Deventer, W. van Hoeve.
- VANDERMEERSCH, B. 2001. *L'Origine des Hommes Modernes. In: Aux Origines de l'humanité, Sous la direction de Yves Coppens et Pascal Picq, de l'apparition de la vie à l'homme moderne*, pp. 416–63. Paris, Fayard.
- VERHOEVEN, H. Th. 1956. The Watu Wetu (Picture-Rock) of Flores. *Anthropos*, No. 51.
- . 1963. Felszeichnungen auf Flores. *Anthropos*, Vol. 58, pp. 908–9.
- VORIS, H. K. 2000. Maps of Pleistocene Sea Levels in Southeast Asia: Shorelines, River Systems and Time Durations. *JB*, Vol. 27, pp. 1153–67.
- VOS, B. 1992. *Naar het Sneuwgwberte*. Amsterdam, Nijgh en Van Ditmar.
- WALSH, G. L. 1994. *Bradshaw: Ancient Rock Art of North-West Australia*. Geneva, Carouge.
- WISEMAN, J. P. 1996. *Thompson Time: Arnhem Land in the 1930s: A Photographic Essay*. Melbourne, Museum of Victoria.
- YONDRI, L. 1996. Batucap: temuan awal tinggalan seni lukis gua/ceruk di wilayah Indonesia Barat. *JBAB*, Vol. 3, pp. 57–66.

Appendix I

# Rock Art Sites in Indonesia and Timor Leste

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
1	Liang Kaung	Kalimantan	Upper Kapuas River, Central Kalimantan	Cave		painting	black	anthropomorphic figures, lizards, deer, 'fish', geometric figures	Chazine, 1993a, 1993b, 1994
2	Batu Cap	Kalimantan	Ketapang, West Kalimantan	Cave	500	stencil, painting	red, white	hand, human, centipede, snake, fish bones, boat, geometric figures.	Yondri, 1996; Prasetyo, 1997
3	Gua Tengkeyu	Kalimantan	Sungai Sungkung Village (Sambas), West Kalimantan	Cave		painting	black	human, sword, arrowhead, spear, shield	Prasetyo, 1997
4	Batu Bakil	Kalimantan	Sungai Sungkung Village (Sambas), West Kalimantan	Cave		painting	not mentioned	human, four-legged animal, bird, sword, arrowhead, spear, shield	Prasetyo, 1997
5	Batu Kadok	Kalimantan	Sungai Sungkung Village (Sambas), West Kalimantan	Cave		painting	not mentioned	human, four-legged animal, bird, sword, arrowhead, spear, shield	Prasetyo, 1997
6	Gua Mardua	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
7	Gua Payau	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
8	Gua Kambing	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
9	Liang Sara	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
10	Liang Pelahniran	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
11	Liang Ara Raya	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
12	Liang Alan Bilao	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
13	Gua Masri I	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
14	Gua Masri II	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
15	Ilas Kenceng	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave		stencil	red	hand	Chazine et al., 2001
16	Gua Tewet	Kalimantan	Gunung Marang, Mangkalihat Peninsula, East Kalimantan	Cave		painting	red	hand stencil with geometric design, deer	Chazine et al., 2001
17	Gua Pindi	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
18	Gua Te'et	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
19	Gua Unjan	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
20	Gua Tamrin	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
21	Gua Mentis	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
22	Gua Kayu Sapung	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
23	Gua Ilas Kecil	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
24	Gua Tangkorak	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
25	Gua Kurang Tahu	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave			not mentioned		Chazine et al., 2001
26	Gua Ham	Kalimantan	Mangkalihat Peninsula, East Kalimantan	Cave		stencil, painting	not mentioned	hand stencil with geometric design, bovid	Chazine et al., 2001
27	Mardua III	Kalimantan	Kecamatan Sangkulirang, Mangkalihat Peninsula, East Kalimantan	Cave	130	stencil, painting	red	hand, spider, possibly tree	Kosasih & Prasetyo, 1995/6
28	Tomini Bay	Sulawesi	Central Sulawesi	Cliff	5	stencil	red	hand	Norman Edwin (1982, pers. comm.)

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
29	Leang PattaE	South Sulawesi	Maros	Cave		stencil, painting	red, red brown	hand, pig	van Heekeren, 1957, 1985
30	Leang Burung 2	South Sulawesi	Maros	Cave		stencil	red	hand	van Heekeren, 1957; Kosasih 1995
31	Leang JariE	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
32	Gua Batu Ejaya	South Sulawesi	Maros	Cave	275	stencil	red	hand	Mulvaney and Soejono, 1970
33	Leang Lambatorang	South Sulawesi	Maros	Cave		stencil, painting	red	hand, babi rusa	Kadir, 1983; Kosasih, 1995
34	Leang Bembe	South Sulawesi	Maros	Cave		stencil	red	hand	Nasrudin, 1988
35	Leang Patagere	South Sulawesi	Maros	Cave		stencil	red	hand	Mulvaney and Soejono, 1970
36	Leang Ra Hakere	South Sulawesi	Maros	Cave		stencil, painting	red	hand, babi rusa	Soejono, 1997
37	Leang Pattakere 1	South Sulawesi	Maros	Cave		stencil, painting	red	hand, pig	Kosasih, 1995
38	Leang Pattakere 2	South Sulawesi	Maros	Cave		stencil, painting	red	hand, pig	Kosasih, 1995
39	Leang Karope	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
40	Leang Sampeang	South Sulawesi	Maros	Cave		stencil, painting	red/black	hand, human	Nasruddin, 1988; Kosasih, 1995
41	Leang Uluwae	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
42	Leang Tapuang Lompoa	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
43	Leang Bata-bataE	South Sulawesi	Maros	Cave		painting	red	animal, human	Nasruddin, 1988
44	Leang Lambarugae	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
45	Leang Bulu Batu	South Sulawesi	Maros	Cave		stencil	red	hand	Nasruddin, 1988
46	Leang Lompoa/Tapuang Lompoa	South Sulawesi	Pangkep	Cave	15	stencil, painting	red/black	hand, pig, human, fish, jellyfish, reptile, unidentified figure	Kadir, 1985; Kosasih, 1986; Nasruddin, 1988; Sumantri, 1996; Suprpta, 1996
47	Leang Kassi	South Sulawesi	Pangkep	Rock shelter	12	stencil, painting	red/black	hand, human, boat-like figure, bronze axe ?, snake, geometric unidentified figure	Kadir, 1985; Kosasih, 1986, 1995; Sumantri, 1996; Suprpta, 1996
48	Leang Sapiria	South Sulawesi	Pangkep	Rock shelter	16	stencil, painting	red/black	hand, human-like figure, 'ladder', boat-like figure, sun, abstract figure	Kadir, 1985; Kosasih, 1986, 1995; Sumantri, 1996; Suprpta, 1996
49	Leang Bulurbiba	South Sulawesi	Pangkep	Rock shelter	20	painting	red	fish	Kadir, 1985; Sumantri, 1996; Kosasih, 1995; Suprpta, 1996
50	Leang Sakapao (I)	South Sulawesi	Pangkep	Cave	51	stencil, painting	red/black	hand, pig, anoa	Kadir, 1985; Sumantri, 1996; Kosasih, 1995; Suprpta, 1996
51	Leang Pattenungan	South Sulawesi	Pangkep	Cave	10.5	stencil, painting	red	hand, foot, human, three-pronged 'fish spear'	Kadir, 1985; Sumantri, 1996; Kosasih, 1995; Suprpta, 1996
52	Camming Kana(ng)	South Sulawesi	Pangkep	Cave	20	stencil, painting	red	hand, three-pronged fish spear, turtle	Kadir, 1985; Sumantri, 1996; Kosasih, 1995; Suprpta, 1996
53	Leang Elle Masigi	South Sulawesi	Pangkep	Cave		painting	red	anoa, babi rusa, fish, turtle	Kadir, 1985
54	Leang Sumpang Bitu	South Sulawesi	Kecamatan Balocci, Pangkep	Cave	280	stencil, painting	red	hand, foot, anoa, pig, deer, boat?, three-pronged fish spear	Kadir, 1985; Kosasih, 1986, 1995; Nasruddin, 1986; Suprpta, 1996

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
55	Bulusumi	South Sulawesi	Pangkep	Cave	160	stencil	red	hand	Kosasih, 1986, 1989, 1995; Nasruddin, 1986; Suprpta, 1996
56	Gua Garungung	South Sulawesi	Pangkep	Cave	46	stencil, painting	red	hand, three-pronged fish spear, pig's head, pig	Kosasih, 1986, 1989; Suprpta, 1996
57	Leang Lasitae	South Sulawesi	Pangkep	Cave	3	painting	red	hand, fish, fish trap, turtle	Kosasih, 1986, 1989, 1995; Suprpta, 1996
58	Gua Saluka	South Sulawesi	Pangkep	Rock shelter	70	stencil, painting	red/black	hand, parallel lines, pig, three-pronged fish spear	Kosasih, 1989, 1995; Suprpta, 1996
59	Gua Cumi Lantang	South Sulawesi	Pangkep	Rock shelter	60	stencil	red	hand, single-head fish spear, three-pronged fish spear	Kosasih, 1989, 1995, Suprpta, 1996
60	Leang Caddia	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Rock shelter	35	stencil, painting	red/black	hand, fish ?, human, phallus, non-figurative, unidentified figure	Sumantri, 1996; Suprpta, 1996
61	Leang Buto	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Cave	10	stencil	not mentioned	hand	Sumantri, 1996
62	Leang Tinggia	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Rock shelter	120	stencil	not mentioned	hand	Sumantri, 1996
63	Leang Kajuara	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Cave	15	stencil	red/black	hand, human, fish-like figure, half of a boat, unidentified figure	Sumantri, 1996; Suprpta, 1996
64	Leang Carawali	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Cave	110	stencil	red	hand	Sumantri, 1996
65	Leang Ujung	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Rock shelter	40	painting	not mentioned	fish-like figure	Sumantri, 1996
66	Leang Sassang	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Cave	30	stencil	red	hand	Sumantri, 1996
67	Leang Batanglamara	South Sulawesi	Pangkep, Kelurahan Persiapan Biraeng	Cave	30	stencil, painting	red	hand, boat-like figure	Sumantri, 1996
68	Gua Akarassaka	South Sulawesi	Pangkep	Cave		stencil, painting	red/black	hand, human, fish, squid, crab, fish net	Kosasih, 1995
69	Gua Bulu Sipong	South Sulawesi	Pangkep	Cave	180	stencil, painting	red	hand, fish, boat, human,	Kosasih, 1995
70	Leang Bireng'ere I	South Sulawesi	Pangkep, Kelurahan Mangilu	Cave	140	stencil	red	hand	Suprpta, 1996
71	Leang Bireng'ere II	South Sulawesi	Pangkep, Kelurahan Mangilu	Cave	85	stencil	red	hand	Suprpta, 1996
72	Leang Pamellakang Tedong	South Sulawesi	Pangkep, Kelurahan Mangilu	Rock shelter	4	stencil, painting	red	hand, fish, fish trap, boat, centipede, human, sun, geometric figure	Suprpta, 1996

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
73	Leang Bulu Ballang	South Sulawesi	Pangkep	Cave	3	stencil, painting	red	hand, turtle, boat	Suprapta, 1996
74	Leang Bulu Sipong I	South Sulawesi	At the border of North Maros and Pangkep	Cave	100	stencil, painting	red	hand, boat, human with oar, human with spear	Suprapta, 1996
75	Leang Bulu Sipong II	South Sulawesi	At the border of North Maros and Pangkep	Rock shelter	70	stencil, painting	red	hand, three-pronged fish spear, fish, boat, fish trap	Suprapta, 1996
76	Leang Monro'e	South Sulawesi	At the border of North Maros and Pangkep	Cave	28.5	stencil, painting	red/black	hand, human, monkey?	Suprapta, 1996
77	Gua Kobori	Muna Island	Kecamatan Katobu	Cave	216	painting	brown	human, horse, human riding a horse, 'birdman', cow, deer, pig, dog	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
78	Gua Metandono	Muna Island	Kecamatan Katobu	Cave	202	painting	brown	human, human riding a horse, human fighting, 'birdman', horse, deer, dog, chicken, snake, centipede, boat, sun	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
79	Gua Toko	Muna Island	Kecamatan Katobu	Cave	216	painting	brown	human, hunter/warrior riding a horse, dancer, corn and coconut trees	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
80	Gua Wa Bose	Muna Island	Kecamatan Katobu	Cave	147	painting	brown	human, warrior/hunter riding a horse, deer, dog, cat?, boat	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
81	Gua La Kolumbu	Muna Island	Kecamatan Katobu	Cave	226	painting	brown	human, warrior, warrior riding a horse, dancer, horse, deer, boat, sun, abstract figures	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
82	Ceruk Lasabo A	Muna Island	Kecamatan Katobu	Rock shelter	141	painting	brown	human, deer, dog, horse	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
83	Ceruk Lasabo B	Muna Island	Kecamatan Katobu	Rock shelter	141	painting	brown	human, deer, dog, horse	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
84	Tangga Ara	Muna Island	Kecamatan Katobu	Cave	168	painting	brown	human, human holding a spear and a shield and riding a horse.	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991
85	La Nsarofa	Muna Island	Kecamatan Katobu	Rock shelter	236	painting	brown	human riding a horse	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
86	Ida Malangi	Muna Island	Kecamatan Katobu	Rock shelter	216	painting	brown	human, human riding a horse	Kosasih, 1978, 1982, 1984, 1985, 1986, 1987, 1989, 1991, 1995
87	Ceruk Goma	Muna Island	Kecamatan Katobu	Rock shelter	100	painting	brown	human, sun	Kosasih, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
88	Watu Weti	Flores Island	Nua Mbako Village, Lio District			engraving		boat, fish, bronze axe, dagger, human	Verhoeven, 1956
89	Liang Mbikong	Flores Island	Near Wangka	Rock shelter		painting	black	not mentioned	Verhoeven, 1963
90	Liang Melima	Flores Island				painting		not mentioned	Verhoeven, 1963
91	Liang Ting	Flores Island				painting		not mentioned	Verhoeven, 1963
92	Liang Toge	Flores Island				painting		not mentioned	Verhoeven, 1963
93	Lemagute	Lomblen Island	Kecamatan Ile Ape, Kabupaten Flores Timur	Boulder		painting	red/white	human, boat	Sumiati, 1984
94	Tutuala	Timor Leste	Tutuala Region	Rock shelter		painting	red	anthropomorphic figure, sun figure, geometric figures	Almeida, 1967; Glover, 1972; Arifin and Delanghe, 2001
95	Ili Kere Kere	Timor Leste	Tutuala Region	Rock shelter		painting	red/yellow/ brown/ black	anthropomorphic figures, turtle-like abstract motif, cassowary bird, boat	Cinatti, 1963; Almeida, 1967; Arifin and Delanghe, 2001
96	Ili Kere Kere Chaialoro	Timor Leste	Tutuala Region	Rock shelter		stencil, painting	red	hand, comb, stylized anthropomorphic figure,	Arifin and Delanghe, 2002
97	Lene Hara	Timor Leste	Tutuala Region	Rock shelter		stencil, painting	red/yellow/ black/brown	hand, anthropomorphic figure, face, abstract figures	Cinatti, 1963; Almeida, 1967; Arifin and Delanghe, 2001
98	Sunu Taraleu	Timor Leste	Tutuala Region	Rock shelter	60	painting	red	boat, anthropomorphic figures carrying tools	Almeida, 1967; Arifin and Delanghe, 2002
99	Lie Siri	Timor Leste	Baucau Highland	Cave		painting	red	hand	Glover, 1986
100	Hi O	Timor Leste	In front of Jaco Island	Cave		painting	black	anthropomorphic figure	Arifin and Delanghe, 2002
101	Lie Baai	Timor Leste	Baucau Plateau	Rock shelter	360	painting	red/black	figurative motifs	O'Connor, 2003
102	Lie Kere	Timor Leste	Baucau Plateau	Rock shelter		painting	red		Glover, 1986
103	Lie Kere 2	Timor Leste	Baucau Plateau	Overhanging cliff	130	painting	red/black	geometric figures	O'Connor, 2003
104	Verulu	Timor Leste	North Coast, north-west of Mehara Village	Overhanging cliff	500	painting	red/yellow/ black	anthropomorphic figure, boat, geometric figure	O'Connor, 2003
105	Lene Cece	Timor Leste	2.5 km from Tutuala Village	Rock shelter	250	painting		anthropomorphic figures, boats, sun motifs, bird	O'Connor, 2003
106	Lene Kici 1	Timor Leste	2 km north-east of Tutuala Village	Cave	100	stencil, painting	red	hand, boat, human figures, fish, faded geometric figures	Arifin and Delanghe, 2002; O'Connor, 2003
107	Lene Kici 2	Timor Leste	50 m north-east of Lene Kici 1	Cave		painting	red/black	sun motif, boat	Arifin and Delanghe, 2002; O'Connor, 2003
108	Lene Kici 4	Timor Leste	20 m west of Lene Kici 1	Cave		painting	red	anthropomorphic figures, faded marks	O'Connor, 2003
109	Lene Kici 5	Timor Leste	25 m west of Lene Kici 4	Cave		stencil, painting	red	hand, faded marks	O'Connor, 2003
110	Lene Kici 6	Timor Leste	In the right side of Lene Kici 5	Cave		stencil, painting	red	hand, faded marks	O'Connor, 2003
111	Matgugul Kakun	Buru							Ballard, 1988
112	Tala River	Ceram Island	Upper river (at 2 places)	Boulder		engraving		geometric figure	Röder, 1938



No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
113	Olitora Botui	Ceram Island	Lower Tala River	Cliff		engraving		geometric figure	Röder, 1938
114	Wai Lau Kecil	Ceram Island	Branch of Tala River	Boulder		engraving		geometric figure, boat, human	Röder, 1938
115	Tanjung Hatulua	Ceram Island	Near Rumasokat Village, Seleman Bay	Cliff		stencil, painting	red	hand, sea cucumber, human-headed fish,	Röder, 1938; Tichelman and Gruyter, 1944
116	Haturipa	Ceram Island	Near Rumasokat Village, Seleman Bay	Cliff		painting	red	lizard	Röder, 1938
117	Tanjung Sepului	Ceram Island	Near Rumasokat Village, Seleman Bay	Cliff		painting	red	anthropomorphic figure	Röder, 1938
118	Tanjung Hatusupun	Ceram Island	Near Rumasokat Village, Seleman Bay	Cliff		painting	red/white	human	Röder, 1938
119	Hatu Roninantai	Ceram Island	Near Rumasokat Village, Seleman Bay	Cliff		painting	red	sun, human, bird, geometric figure	Röder, 1938
120	Waraloine	Ceram Island	North-west of the island	not clear		engraving		not mentioned	Tichelman and Gruyter, 1944
121	Gua Hatu Patola	Ceram Island	West of the island	Cave		painting	red	not mentioned	Tichelman and Gruyter, 1944
122	Dudumahan	Nuhu Rowa Island	North coast of the island, Kai Kecil Islands.	Rock shelter	16	stencil, painting	red/orange/ yellow/black	rayed concentric circle, circled cross, concentric circle, lines, and other non-figurative motifs, anthropomorphic figure, net, spear, bow, dagger, hafted adze, shield	Ballard, 1988
123	Speelman Gulf	West Papua	South of Fakfak	Seashore cliff		painting	red		Galis, 1964
124	Mumamuran Island	West Papua	West of Geelvink Bay/Cendrawasih Bay	Seashore cliff	5	painting	red	lizard, cross, fish, human, star, square, faded figure	Galis, 1948, 1957a, 1964
125	Rumberpon Island	West Papua	West of Geelvink Bay/Cendrawasih Bay	Seashore cliff	3	painting	black/white/ blue	turtle, crocodile	Galis, 1957a, 1964
126	Ron Island	West Papua	Near Kayob Village, Geelvink Bay/ Cendrawasih Bay			painting	red/black	lizard, turtle, snake?, human	Galis, 1964
127	Jari-ari	Rumberpon Island, West Papua	North of Jari-ari	Seashore cliff	3	painting	black/white/ blue	crocodile, turtle	Galis, 1964
128	Cape Suaja	West Papua	Humboldt Bay, near Jayapura	not clear		painting		lizard	Galis, 1952, 1964

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
129	Lake Kamaka	West Papua	West shore of the lake, Kaimana	Cliff		painting	red	'primitive human'	Galis, 1957a, 1964
130	Kajob Village	Roon Island, West Papua	North of Wandamen Cape	not clear		painting	red, black		Galis, 1957a
131	Senggi	West Papua	South of Jayapura	not clear		painting	not mentioned	foot	Galis, 1964
132	Doyo Lama	West Papua	On the west part of Sentani Lake, 50 km from Jayapura	Boulder		engraving		fish, lizard, turtle, crocodile, snake, dog or pig, human	Galis, 1964; Bintarti, 1982
133	Arso	West Papua	By the side of Uyapi River, between Girwage and Sawia Villages	Cliff		engraving		vulva, penis or snake	Galis, 1964
134	Nabunage	West Papua	Near Karubaga	Boulder		engraving		face, row of dots	Mitton, 1972
135	Sosena Island	West Papua	An island on the east of Sentani Lake	Boulder		engraving		not mentioned	Galis, 1964
136	Asoker	Waigeo Island	On the north-east part of Waigeo Island	Seashore cliff		painting		faded marks	Galis, 1964
137	Waf Island	Waf Island	South of Misool Island	Cliff		painting	red	fish	Galis, 1964
138	Fafanlap	Misool Island	East of the island, near Pana-Pana Strait	Sea cave		stencil, painting	red/orange/yellow	hand, fish, concentric circle, human, line of dots, boat, abstract figure	Galis, 1964
139	Alyosi	West Papua	At the beginning of Alyosi Bay	Sea cliff	8	stencil	red	hand	Galis, 1964
140	Samberi	Biak Island	South of the island	Cliff		painting	red	not mentioned	Galis, 1964
141	Padwa Village	Biak Island	Not far from Samberi	Cliff		painting	red	cross	Galis, 1964
142	Urfu Village	Biak Island	East of Padwa	not clear		painting		turtle, fish, octopus	Galis, 1964
143	Guwaimit	West Papua	90 km south of Jayapura	Cave		painting	red/black	sun disk, 'plus sign', abstract, lizard, human or mask	Galis, 1957b; 1964
144	Pinfelu	West Papua	90 km south of Jayapura	Cave		painting	red/black	'plus sign', lizard, mask, fish, snake	Galis, 1957c; 1964
145	Kumbiam	West Papua	Indangan Village, 110 km from Jayapura	Cliff		painting	black/white/red	human	Galis, 1964
146	Amuambia Cave	West Papua	Menggau Village, 110 km from Jayapura	Cave		painting	white/red/black	not mentioned	Galis, 1964
147	Wonggosten Village	West Papua	South-east Fakfak	Cliff		painting		not mentioned	Galis, 1964
148	Warpati Bay	West Papua	South-east Fakfak	Cliff		stencil		hand	Galis, 1964

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
149	Jense Village	West Papua	East of Bentuni Bay;	Cliff		painting		not mentioned	Galis, 1964
150	Trading pass, south of Wamena	West Papua	Central Highland	Cliff	3,850	painting	red	animal	Galis, 1964
151	Van Rees Mountains	West Papua	East of Memberamo River	not clear		painting	red/possibly black	not mentioned	Galis 1964
152	Abulopak Village	West Papua	Baliem Valley	Cave		painting	black	human, lizards, crayfish	Matthiessen, 1962
153	Lokoparek Village	West Papua	Baliem Valley	Overhanging cliff		painting	black	human, lizard, pig	Matthiessen, 1962
154	Dutabut Hill	West Papua	Baliem Valley (6 places)	Rock shelter		positive & negative stencil, painting	red	hand, animal, cassowary bird, crescent, cross	Heider, 1970
155	Subulah/Suroba	West Papua	Baliem Valley	Rock shelter consisting of 3 different panels. See Nos. 156, 157, 158		painting	red	matutuo-like figure, snake, bird, abstract figures, garden plot pattern, faded marks	Arifin and Delanghe, 1995
156	Wukugi	West Papua	Baliem Valley	Rock shelter		painting	red	See No. 155	Arifin and Delanghe, 1995
157	Itsugu Baga	West Papua	Baliem Valley	Rock shelter		painting	red	See No. 155	Arifin and Delanghe, 1995
158	Yagar oak	West Papua	Baliem Valley	Rock shelter		painting	red	See No. 155	Arifin and Delanghe, 1995
159	Limestone hills, Dugum Dani	West Papua	Baliem Valley (25 places)	Rock shelter		painting	black	human, pig, lizard, garden plot pattern, araucaria tree, geometric figures, vulva	Heider, 1970
160	Mandala Mountain	West Papua		Cliff	3,500	painting	red	not clear	Mitton, 1972
161	Safar 1	West Papua	Berau Gulf	Overhanging cliff	2	stencil, painting	red/yellow	hand, matutuo, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
162	Safar 2	West Papua	Berau Gulf	Open cliff	10	stencil	red	hand, unidentifiable figures	Arifin and Delanghe, 1995
163	Fuum	West Papua	Berau Gulf	Overhanging cliff	5	stencil, painting	red/yellow	hand, anthropomorphic figure, unidentifiable figure	Röder, 1959; Arifin and Delanghe, 1995
164	Dudumunir	West Papua	Berau Gulf	Cave		painting	red/black	a branch of a tree or a coral reef, spiral, unidentifiable figure	Röder, 1959; Arifin and Delanghe, 1995
165	Matutuo	Arguni	South of the island. Berau Gulf	Cliff	1.5	painting	red/yellowish brown	abstract, matutuo	Röder, 1959; Arifin and Delanghe, 1995
166	Oya	Arguni	South of the island. Berau Gulf	Wave-cut gallery	4	painting	red	bullet', maize corn-shaped object.	Röder, 1959; Arifin and Delanghe, 1995
167	Mampoga	Arguni	South-east side of the island. Berau Gulf.	Wave-cut gallery	5	stencil, painting	red/yellow	hand, fish, turtle, lizard, anthropomorphic figure, mask, lines, hook, dots, geometric figure	Röder, 1959; Arifin and Delanghe, 1995
168	Pintunis (Röder: Betunis)	Pintunis	Berau Gulf	Wave-cut gallery	5	painting	red/yellow	matutuo, geometric figure, unidentifiable figure	Röder, 1959; Arifin and Delanghe, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
169	Risatot	Arguni	South-east of Arguni Village. Berau Gulf	Wave-cut gallery	5	painting	red/yellow	anthropomorphic figure, turtle, solid circle with rays	Röder, 1959; Arifin and Delanghe, 1995
170	Tapuraramu (Röder: Tabulinetin)	Sapar	Berau Gulf	Sea cliff	2	stencil, painting	red/yellow	hand, rounded object, boomerang, crescent, bird-like object, fish, anthropomorphic figure, matutuo.	Röder 1959; Arifin and Delanghe 1995
171	Taminunusa (Röder: Batewa)	Taminunusa	West of Andamata Village, Berau Gulf	Overhanging Cliff		stencil, painting	red	hand, fish, faded marks	Röder, 1959; Arifin and Delanghe, 1995
172	Farek	Farek	North-east of Andamata Village Berau Gulf	Cliff		stencil, painting	red	fish?, unidentifiable figure	Arifin and Delanghe, 1995
173	Mernusa	Mernusa	West of Wamarain Berau Gulf	Cliff	2.5	painting	red	unidentifiable marks	Arifin and Delanghe, 1995
174	Ambibiaom (Röder: Ambiminabe)	Ambibiaom	North of Wamarain, Berau Gulf	Overhanging cliff	2.5	painting	red	lines, spiral, circle	Röder, 1959; Arifin and Delanghe, 1995
175	Goor	West Papua	Facing Wamarain Island, Berau Gulf	Open cliff	1	stencil, painting	red/white	hand, boomerang, anthropomorphic figure, dots, non-figurative figure	Arifin and Delanghe, 1995
176	Barom (Röder: Barom/Kuasi)	West Papua	East of Goor, Berau Gulf	Open cliff	1	stencil, painting	red/yellow	hand, dots, faded marks	Röder, 1959; Arifin and Delanghe, 1995
177	Wamarain (Röder: Wamerei/Jarak)	Wamarain	North of Goor and Barom, Berau Gulf	Open cliff, wave-cut gallery	2	stencil, painting	red/yellow/white	hand, lizard, bird, fish, matutuo, geometric figure	Röder, 1959; Arifin and Delanghe, 1995
178	Potmbasi (Röder: Wamerei/Jarak)	Wamarain	East of Wamarain, Berau Gulf	Wave-cut gallery		painting	red	unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
179	Fo'ora (Röder: Ora)	Fo'ora	East of Wamarain Island, Berau Gulf	Wave-cut gallery	4	stencil, painting	red/yellow	hand, fish, circle, non-figurative figure, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
180	Menin	Menin	At the north-west side of the islet, Berau Gulf	Cliff	2	stencil, painting	red/yellow	hand, unidentifiable figures	Arifin and Delanghe, 1995
181	Mariein	Mariein	West of Sunduma Berau Gulf	Three open cliffs	8, 7 & 2.5	stencil, painting	red/yellow	hand, fish, unknown object	Arifin and Delanghe, 1995
182	Sunduma	West Papua	East of Mariein, Berau Gulf	Overhanging cliff, wave-cut gallery	2	stencil, painting	red/yellow	dots, unidentifiable figures	Arifin and Delanghe, 1995
183	Cape Ufit	West Papua	East of Sunduma, Berau Gulf	Wave-cut gallery	3.5	stencil, painting	red/yellow	hand, parallel lines, bracket, hook, unidentifiable figures	Arifin and Delanghe, 1995
184	Babamba	Babamba	Between Cape Ufit and Mbosu'umata, Berau Gulf	Cliff	5	stencil, painting	red	hand, unidentifiable figures	Arifin and Delanghe, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
185	Mbosu'umata (Röder: Tapore/Bosugo)	West Papua	East of Babamba, Berau Gulf	Overhanging cliff and galleries	3	stencil, painting	red/yellow/black	hand, dots, matutuo, fish, cross, boomerang, geometric figures, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
186	Unnamed site	West Papua	Between Mbosu'umata and Boam, Berau Gulf	Cliff	8	stencil, painting	red	hand, fish, geometric figures, unidentifiable figures	Arifin and Delanghe, 1995
187	Boam 1 (Röder: Boam)	West Papua	Southeast of nn-named site, Berau Gulf	Open cliff	10	painting	red	matutuo, crocodile, stick, sun, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
188	Boam 2	West Papua	East of Boam 1, Berau Gulf	Overhanging cliff	10	stencil, painting	red	hand, dots, unidentifiable marks	Arifin and Delanghe, 1995
189	Boam 3	West Papua	East of Boam 2, Berau Gulf	Wave-cut gallery	5	painting	red/black	unidentifiable figures	Arifin and Delanghe, 1995
190	Boam 4	West Papua	East of Boam 3, Berau Gulf	Cliff	5	stencil, painting	red	hand, unidentifiable figures	Arifin and Delanghe, 1995
191	Manggo (Röder: Manga)	West Papua	East of Boam 4, Berau Gulf	Open cliff	10	stencil, painting	red/yellow	hand, intricate geometric figure, matutuo, maze, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
192	Dijora (Röder: Tidora)	West Papua	West of Fior Village, Berau Gulf	Wave-cut gallery	3	stencil, painting	red/yellow/black	comb, circle, lines, anthropomorphic figure/matutuo, intricate maze, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
193	Fior	West Papua	West of Fior Village, Berau Gulf	Open cliff	5	stencil, painting	red	hand, dots, unidentifiable figures	Arifin and Delanghe, 1995
194	Urumbua Uwat Mata	West Papua	East of Fior Village, Berau Gulf	Two open cliff	3 & 25	stencil, painting	red	hand, unidentifiable figures	Arifin and Delanghe, 1995
195	Sumbunane	Sumbunane	In front of Fior Village, Berau Gulf	Wave-cut gallery	4	stencil	red	hand, unidentifiable figures	Arifin and Delanghe, 1995
196	Anduir	West Papua	Inland from Fior Village, Berau Gulf	Cave	10	painting	black	anthropomorphic figures	Röder 1959; Arifin and Delanghe, 1995
197	Damir	West Papua	East of Fior Village, Berau Gulf	Wave-cut gallery, open cliff	3	stencil, painting	red/yellow	hand, boomerang, round object, fish, lines of spots, circle, non-figurative figures, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
198	Buraramu (Röder: Beoraramu)	West Papua	West of Tuturu Island, Berau Gulf	Wave-cut gallery	3	stencil, painting	red/yellow	hand, anthropomorphic figure/matutuo, human face, spiral, maze, triangle, circle, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
199	Duri (Röder: Taba)	West Papua	West of Furir Village, Berau Gulf	Open cliff		stencil, painting	red	hand, anthropomorphic figure/matutuo, round figures, lines, spirals, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
200	Tuturu (Röder: Duduru)	West Papua	Northwest of Furir, Berau Gulf	Wave-cut gallery	2	stencil, painting	red/yellow	hand, lines, anthropomorphic figures, geometric figures,	Röder, 1959; Arifin and Delanghe, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
201	Matutuo at Tuturu Island (Röder: Duduru)	Tuturu	North-west of Furir, Berau Gulf	Open cliff	8	stencil, painting	red/brown	hand, matutuo	Röder, 1959; Arifin and Delanghe, 1995
202	Sosorraweru (Röder: Sosorra)	West Papua	East of Furrir Village, Berau Gulf	Cave		painting	black	boat, anthropomorphic figures	Röder, 1959; Arifin and Delanghe, 1995
203	Sorraa	West Papua	East of Furir Village, Berau Gulf	Wave-cut gallery	3	stencil, painting	red/yellow/black	hand, foot, fish, comb, leaves, mazes, rectangles, triangles, concentric circle, anthropomorphic figure, abstract figure, unidentifiable figures	Röder, 1959; Arifin and Delanghe, 1995
204	Ota	Ota	East of Furir, north-west of Sausosso, Berau Gulf	Wave-cut gallery	3	stencil, painting	red/black	hand, round object, dots, geometric figures, unidentifiable figures.	Röder, 1959; Arifin and Delanghe, 1995
205	Sausosso (Röder: Sausose)	Sausosso	South-east of Ota, Berau Gulf	Cliff	3	painting	orange/red	anthropomorphic figure/matutuo	Röder, 1959; Arifin and Delanghe, 1995
206	Afofo (Röder: Abba)	West Papua	East of Goras, Berau Gulf	Wave-cut gallery	3	stencil, painting	red/yellow/black	hand, foot, fish, lizard, comb, boomerang, round object, crescent-shaped object, anthropomorphic figure, maze, circle, spiral, rectangle	Röder, 1959; Arifin and Delanghe, 1995
207	Fior Lama	Fior Lama	West of Fior Village, Berau Gulf	Cliff		painting	white/red	anthropomorphic figure, unidentifiable figures	Röder 1959; Arifin and Delanghe, 1995
208	Uruan	West Papua	Berau Gulf	Cliff		stencil, painting	red/yellow/white	hand, anthropomorphic figure, dots, mask ?	Röder, 1959
209	Cape Omata	West Papua	Berau Gulf			painting	red	oval object, abstract motifs	Röder, 1959
210	Odi Island	West Papua	Berau Gulf			painting	red	fish	Röder, 1959
211	Cape Awu	West Papua	Berau Gulf			painting	red/dark/yellow	matutuo, letter-like figures	Röder, 1959
212	Sinanruma	West Papua	Berau Gulf			painting	red	unidentifiable figures	Röder, 1959
213	Auramo		Bedidi and Wos Rivers, Berau Gulf	Cliff		painting	black	boat, matutuo, house, abstract figures	Röder, 1959
214	Siawachwa	West Papua	Berau Gulf	Cave		painting	black	anthropomorphic figure, boat, geometric figure	Röder, 1959
215	Cape Bowier	West Papua	Berau Gulf	Cliff		painting	red	not mentioned	Dea Sudarman (pers. comm)
216	Cape Bitsyari	West Papua	Kaimana	Rock shelter	25	painting	red	anthropomorphic figures, fish	Galis 1957a, 1964, Nitihaminoto, 1980
217	Ginana I	West Papua	Kaimana	Wave-cut gallery	2–2.5	painting	red/yellow	matutuo-like figures, dolphin, fish, abstract figures	Arifin and Delanghe, 1995
218	Ginana II	West Papua	Kaimana	Wave-cut gallery	2–3.5	painting	red	matutuo-like figures	Arifin and Delanghe, 1995
219	Ginana III	West Papua	Kaimana	Wave-cut gallery	2–3.5	stencil, painting	red	hand, sun, human faces, matutuo-like figures, fish, lines, dots.	Arifin and Delanghe, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
220	Ginana IV	West Papua	Kaimana	Wave-cut gallery	2–3.5	painting	orange/red	faded marks	Arifin and Delanghe, 1995
221	Ginana V	West Papua	Kaimana	Wave-cut gallery	2–3.5	painting	red	matutuo-like figure, linear, circular and oval pattern	Arifin and Delanghe, 1995
222	Onomanusu	Onomanusu	East side of the island, Kaimana	Wave-cut gallery	1.5	painting	red	faded marks	Arifin and Delanghe, 1995
223	Weretwarom	West Papua	Near Arkasi Village, Kaimana	Wave-cut gallery	2	painting	red	maze figure	Arifin and Delanghe, 1995
224	Munfuriti	West Papua	1 km south-east from Weretwarom, Kaimana	Wave-cut gallery	2	stencil, painting	red	hand, matutuo-like figures, linear and circular figures, dots	Arifin and Delanghe, 1995
225	Munfuritnus	West Papua	50 m south-south-east from Munfuriti, Kaimana	Wave-cut gallery	2	stencil, painting	red	hand, matutuo-like figure, linear and circular figure, faded marks	Arifin and Delanghe, 1995
226	Esaromi	West Papua	Kaimana	Wave-cut gallery	7	painting	red	matutuo-like figure, abstract figures	Arifin and Delanghe, 1995
227	Ereretari	West Papua	40 m south-south-east from Esaromi, Kaimana	Wave-cut gallery	6	painting	red	matutuo-like figure, human faces, abstract figures.	Arifin and Delanghe, 1995
228	Netnarai	West Papua	5 m south-south-east from Ereretari, Kaimana	Wave-cut gallery	6	stencil, painting	red	hand, anthropomorphic and matutuo-like figures, linear and circular figures	Arifin and Delanghe, 1995
229	Sasere Inabo	West Papua	35 m south-south-east from Netnarai, Kaimana	Wave-cut gallery	6	painting	red	matutuo-like and abstract figures, crayfish, turtle	Arifin and Delanghe, 1995
230	Sasere Oyomo	West Papua	Kaimana	Wave-cut gallery	6	painting	red/yellow	A large variety of paintings characteristic for the region can be observed; graffiti	Arifin and Delanghe, 1995
231	Bombromenambi	West Papua	500 m south-south-east from Sasere Oyomo, Kaimana	Wave-cut gallery		stencil	red	hand	Arifin and Delanghe, 1995
232	Lerfis	West Papua		Wave-cut gallery		painting	red	faded marks	Arifin and Delanghe, 1995
233	Omborcene	Omborcene	1 km south-south-east from Sasere Oyomo, Kaimana	Wave-cut gallery	2	painting	red	human face, sun-like figures, dots, abstract figures, 'lightning man'	Arifin and Delanghe, 1995
234	Cape Omborcene	West Papua	Kaimana	Wave-cut gallery	2	stencil, painting	red	fish, 'lightning man', matutuo-like, anthropomorphic figures, lizard, dots, unidentifiable figures	Arifin and Delanghe, 1995
235	Memnemba	West Papua	Kaimana	Wave-cut gallery	3	stencil, painting	red/yellow	hand, lizard, circular and abstract figures, mask?	Arifin and Delanghe, 1995

No.	Site	Island	Area	Nature of sites	Height (m asl)	Technique	Colour	Motif	Reference
236	Memnemnambe	West Papua	Kaimana	Wave-cut gallery	2	painting	red	matutuo-like and anthropomorphic, abstract figures	Arifin and Delanghe, 1995
237	Tumberawasi	West Papua	Kaimana	Wave-cut gallery	3	painting	red	A large variety of paintings can be observed characteristic for the region	Arifin and Delanghe, 1995
238	Werfora I	West Papua	Kaimana	Wave-cut gallery	2	painting	red	dots, faded marks, graffiti	Arifin and Delanghe, 1995
239	Werfora II	West Papua	Kaimana	Wave-cut gallery	2	painting	red	oval structure filled with linear motif, dots, arrow-like motifs, human face, sun, linear and cross motifs	Arifin and Delanghe, 1995
240	Werfora III	West Papua	Kaimana	Wave-cut gallery	2	painting	red	matutuo-like figures, sun, lizard, turtle, anthropomorphic figures, linear and cross motifs	Arifin and Delanghe, 1995
241	Werfora IV	West Papua	2 galleries on top of one another, Kaimana	Wave-cut gallery	2 & 16	stencil, painting	red	hand, matutuo-like and abstract figures	Arifin and Delanghe, 1995
242	Irisjawe	West Papua	4 km east of Lobo Village, Triton Bay	Open cliff	1	painting	red	matutuo-like and anthropomorphic figures, vulva?	Arifin and Delanghe, 1995
243	Ganggasa	Ganggasa	Triton Bay	Open cliff	1	painting	red	dots, vulva?, abstract figures, graffiti	Arifin and Delanghe, 1995



# The Journey in the Baliem Valley

Immediately after landing in Wamena (Plate 253) we took our luggage and went to the Hotel Nayak. Some Papuan men from just across the street then joined us in the hotel lobby. After making the necessary arrangements for the rooms, the Papuan men came up to us and asked where we were heading.

They wanted to guide us, thinking that we were tourists visiting the area for pleasure and a walk through pretty scenery. We sat down with them, explained the purpose of our visit and showed them some of the copied photographic materials and maps we had brought along. This abrupt introduction led to some commotion. It became clear by then that we had a difficult task ahead. After a couple of minutes they decided (if we agreed) that we would first visit a nearby village, called Jiwika, to ask for the permission of the elders to visit the sites. It was, however, indicated by one of the guides that our timing was bad because of the very recent death of a tribal chief named Subulah.

This was a strange coincidence as this was precisely the name of one of the sites we wanted to visit. We decided to go to the village, first stopping at a local *toko* (general store) in front of the market place to buy cigarettes.

The guides had informed us that as a matter of courtesy it would be good to distribute some cigarettes during the ongoing mourning ceremony. After half an hour's walk with our guides Mes and Wak along the main road, we arrived at a small path. We took the path and continued the walk. Mes was a member of the Lani tribe, and so was not from the area we wanted to visit. On the contrary, Wak was a Kurulu Dani and was from the region we wanted to explore.



**Plate 253. Inside the cargo flight  
of Airfast from Jayapura to Wamena**

During the hike Wak told us that whenever a man encountered a woman, he was to say '*lauk*' (good day); if it was a male he was to say *narak*. When a woman addressed another woman or man it was just *lauk*. These were greetings that were successful all the way to Jiwika. What struck us was the soft-spokenness and gentleness of these people. Hands were shaken for a long time and greetings were almost whispered. Wak was warmly greeted and often embraced.

The first fence of the village Jiwika was about 1.5 m high and consisted of vertical wooden planks covered with dried grass and tied up with rattan. The second fence, containing the main entrance to the village, was constructed in the same manner, with the sole difference that there were separate entrances for people and pigs. Behind the fence was a courtyard surrounded by large huts for the men in the back and smaller huts for the women, male and female kitchens and pig stables. We estimated the village itself contained approximately thirty inhabitants. The men were sitting in the back, some in modern clothing, others wearing the traditional penis gourd. Many *naraks* were soft-spoken. One Papuan man

understood and spoke English. His name was Yunus. As a child he had studied at the Catholic Mission of Wamena, as an adolescent he had received schooling in Bali, and now he went on regular business trips to Jakarta. He welcomed us warmly and we were invited to sit down in a small circle, which seemed to contain the village elders and other prominent figures. We were just seated when the mourning song commenced. Some sentences were sung by the lead singer, always ending with a stretched 'weeh...'. The audience then responded with the same 'weeh...' after which the lead singer took over again.

After a short break, Yunus took us to one side and wanted to know precisely what we had in mind. Having listened, he answered that we should visit some very nice caves in the neighbourhood, and that our guide Wak could easily lead us there. Visiting caves was not the reason for our trip. The discussion was finally concluded from his side by saying, 'I cannot promise you anything, but maybe you would like to take some pictures of our people'. We were a little surprised at first, but soon everything became obvious. Once we were out of earshot a vivid discussion started between Yunus and Wak. Terms and conditions were being discussed. After approximately ten minutes, during which we took some picturesque photographs, Mes came and told us that we were asked to contribute Rp.15,000 towards the mourning ceremony and that we could leave shortly afterwards. Was that it? We could simply not believe it.

But all too soon it became clear that negotiations were yet to start. Yunus was going to accompany us to Wamena to discuss the problem in further detail. Back at the Nayak Hotel the articles and maps of Karl Heider and Pieter Matthiessen which we had brought with us appeared on the table again. Our guides Wak and Yunus had known these people as young boys. They also knew Michael Rockefeller who was part of the same expedition and had disappeared in 1961 in the Asmat region further south. Yunus would show us Karl Heider's camping grounds near Dugum later during our stay.

As the discussion continued it became obvious that we would not be able to visit the sites indicated in the articles: they were too sacred. Nevertheless we tried to revitalize

Plate 254. Wak's father  
(in the centre)



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the discussion, concentrating on tourism and the need for preservation. This resulted in our guides telling us a quite disturbing and shocking story. Previous expeditions had also not been allowed into the sites. Some families in the Kurulu area, however, had fallen into temptation. In return for a pig or pigs they had guided the different teams around. This was a story we had heard before. The last man to have done this, however, was sentenced by tribal council, after the researchers left, to the payment of five pigs to all families in the community: a huge sum, for which his family are still in debt today. It was extraordinary that the research teams had left the sites and the people in ignorance. The rule was clear: the one who revealed the sacred sites to an outsider was to be punished.

Endless talking followed as we searched for the slightest possibility. Finally, Yunus proffered a solution. Wak, as a member of the Kurulu Dani tribe living close to one of the sites, could take my camera, go to the site and take photographs. This was a compromise by which we outsiders would not go into the site but nevertheless would have some material to go home with. We decided to give it a try.

While Wak was going to visit the site we were supposed to take a hike in the neighbourhood with our second guide, Mes. We would spend the night in villages surrounding the sites, one of which was Wak's own village of Wam. On several occasions we asked if the plan was according to Wak's wishes. He always assured us that this way of handling it would not cause any problems, and he told us he would take pictures of three sites. This was beyond our imagination, since we had only heard about two, Subullah and Dutabud. Going into more detail it seemed to be one rock shelter containing different sites. As he explained, the general name of the place was Suroba; the names of the sites were Wukugi, Itsugu Baga and Yagarook.

Yunus put the itinerary of the hiking trek for the coming days together:

- 3 May: Wamena – Pugima – Wam
- 4 May: Wam – Hikima – Jiwika
- 5 May: Jiwika – Kontilola – Jiwika
- 6 May: Jiwika – Dugum – Suroba
- 7 May: Suroba – Wamena
- 8 May: Wamena – Kurelu – Wamena
- 9 May: Wamena – Jayapura



Plate 255 The village of Wam, early morning, with smoke coming out of the men's kitchen

All parties seemed to be happy. On 5 May, however, we had to be in Jiwika to witness the final mourning ceremony for Chief Subulah. During the hike we would also pass by Suroba. In the neighbouring villages we could then try to ask for permission to visit the sites. If not, we would still have Wak's photographs. It was a well balanced plan.

But at the time it was obvious the local community had decided we could not see the sites, at least not for the moment. They would keep us busy, walking around in circles, letting us enjoy the scenery at a safe distance from their inner sanctum. We would meet each other the next day at 8 a.m. A busy day was ahead of us and we still had to report to the police and buy food for the trip. Reporting to the police had to be done at each checkpoint with our special travel pass (*surat jalan*).

Police and government business in West Papua were quite out of the ordinary. The day started above any expectation. The guides took us to the police station at Wamena airport. A quick look at the special travel passes, the necessary stamps, and we were off.

It was very different to the start of our survey on the south coast where each little specification needed to be typed on the permit. We were nevertheless informed that

a visit was still needed to police headquarters in Wamena and then we would be cleared. This, however, turned into a half-day trial. The police wanted to accompany us, Karina was questioned and had to keep an eye on Philippe, we had to visit the local branch of the Ministry of Culture, they also wanted to accompany us, and so on. By wheeling and dealing we got around the problem and did not have to hire a bus to fit all the members of the expedition.

At lunchtime we were finally ready. An *angkutan kota* (minibus) awaited us at Hotel Nayak, we took the main road and headed for the path we had taken the day before with Wak and Mes. Once we arrived there, the guides took the backpacks and the hike went through Pugima via Jiwika, to end the day at Wam where we would spend the coming two nights.

After a remarkable evening of hospitality, cosiness and storytelling in the company of Wak's father (Plate 254), we spent the night in the men's kitchen. The morning announced itself with a lot of noise in the kitchen (Plate 255). After preparation for breakfast (Plate 256), a good meal and adventure could start again.

Soon after leaving the village of Wam, Wak went his own way. We followed Mes with the children of the



village in our trail. Very soon, in his turn, Mes was being guided by the children who were giggling and playing along the jungle paths, steep slopes and vegetable gardens. Sometimes magnificent views of the Baliem Valley could be seen beneath us.

Along the way two people who had followed us from Wam indicated an interesting place. It was an outcrop of rock with strange marks. They were the marks left from polishing stone axes (Plate 257) that were used while labouring in the field. The marks were so deep that the rock must have been used over a very long time.

We continued in a relaxed atmosphere and the walk brought us back to Wam in the late afternoon. Early in the evening Wak returned from his trip as well, and with success. He returned the camera and confirmed he had taken twenty-six photographs of the different sites. Curiosity prevailed, but we could do nothing but wait for our return to Jayapura for the development of the film. The evening was spent in the men's kitchen again. This time we observed more daily activities, such as the repair of *noken* (traditional bags, Plate 258) and the making of new penis gourds in which our guide Wak assisted (Plate 259).

We were also informed that we had a new place to sleep, the hut of Wak's mother. This was a new development that we considered a great honour. Later in the evening, in our new premises we were accompanied by Wak for another long chat, a highland chat. It had already occurred to us how much value these people attach to talking and storytelling, especially in the world of 'men'.

The next day we were off to Jiwika again. This proved to be another day of socializing. We were to catch up with Yunus for the final mourning ceremony of Chief Subula.



**Plate 256. Preparation of food  
in a traditional oven**

**Plate 257. A boulder with grinding  
marks from polishing stone axes**

Via some forest paths we arrived back at the main road, where we took a small bus to Jiwika. This was a colourful drive seated opposite some Papuan men with penis gourds. We stopped at the *Koperasi Jiwika*, a government-owned supermarket and the only store in the neighbourhood where one could buy some serious provisions. As promised to Yunus, we bought rice, noodles, cigarettes and candies to be distributed during the mourning ceremony. This was a usual custom for foreigners assisting at a ritual. It was a huge gathering with several hundred people present, even some tourists. The day went by slowly, with our



Plate 258. Repairing a *noken*  
(a traditional bag)

Plate 259. New penis gourds  
drying above the fire in the  
men's kitchen



being introduced here and there by Yunus, and explaining to people what the purpose of our trip was. We did not, however, seem to get any nearer to our goal. We left in the late afternoon with some good pictures of rituals and ceremonial life (Plates 260 and 261).

Our stay for the night was to be in a *losmen* – cheap hotel – owned by one of the friends of Wak, also a Kurulu Dani. When Wak explained to him the purpose of our mission, we immediately captured his interest. More details were requested and the discussion finally headed in the direction of conservation and preservation. Both the owner and Wak seemed to agree that more elders needed to be involved, informed and stimulated. The elders living in the village of Dugum seemed in particular to be of great importance for our purpose. While drawing up our schedule and timetable with Yunus two days earlier, Dugum was included just as a casual visit, part of our scenic hike. Now it seemed so important we had to spend at least a day there.

Dugum was the place where Heider, a member of the Harvard-Peabody expedition, had spent more than two years. Heider had also discovered the Dutabud site. Ever since the beginning of our trip, and even before, when consulting literature, it was obvious that Dugum had to be an important place. Our arrival at Wamena, and the immediate course of events, had led us to follow a different route with equally interesting prospects, that of Suroba, a site never mentioned to us before or encountered in any of the literature. We were pressed for time, since we had only a couple of days before returning to the coastal sites near Fakfak and Kaimana. Thus the whole plan involving Dugum seemed very sensible, and a quite unexpected turn

of events. Wak promised to leave very early in the morning so he could meet some of the elders and explain to them the reason for our visit before we arrived in Dugum.

The next morning we were informed by Mes that Wak had left at 5 a.m. It seemed that Wak was getting increasingly serious about the project. We started the trip to Dugum.

Upon arrival at Dugum there was some confusion over where we should meet, in the village or back in the *losmen*. We were forced into another walk, to encounter Wak still trying to get more people for our meeting. Some shouts echoing in the mountains were the sign for the people walking with us that Wak was coming. It is amazing how these shouts, formed deep in the throat while moving with the tongue, are such an effective form of communication, and way of identification, since every tribe has its own tunes and signs.

All of this was to confirm that the meeting was indeed in the village of Dugum. When we arrived back there, five elders were waiting for us, all of them village chiefs from the area. We talked for more than five hours. Karina introduced the project through Wak. The elders, with dark glittering eyes, listened with interest and curiosity. We also showed them our articles, photocopied photographs and maps by Karl Heider and Pieter Matthiessen. The first reaction was shock and dismay. They could simply not believe that such detailed information about their living environment and most sacred places was available for the general public. For approximately one hour the discussion was very confusing, and often we were talking over each other, our side stressing the importance of our project, theirs constantly coming back to the question, 'Who was the one in 1962 who introduced Heider to these sites?'

This issue, however, also brought us closer to the possibility of conservation and preservation. It was also obvious to the elders that more of these maps and information could quickly lead to the opening up of their sacred sites for a larger public. Something had to be done. A much bigger meeting with all the leaders from the region – at least twenty-five more – and much more time would be needed to discuss this important issue. We decided to leave it there. The message was conveyed and we could



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**Plate 260. Kurulu Dani woman in mourning outfit at the village of Jiwika**

**Plate 261. Incineration grave of Chief Subulah**



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not do much more than wait. If they were interested in a project they could always reach us.

On the way to Wamena, Wak suddenly grabbed Philippe's arm and pointed to a mountain ridge. Looking carefully, at a distance of approximately 1.5–2 km, we could distinguish red spots on a flat rock surface. It was Suroba, a splendid view.

Back in Wamena, Wak told us it would be good to gather some of the children of the elders and chiefs working in Wamena. They would maybe have a more modern and moderate view and could help in pushing our case. The meeting was organized for the next day. Again there was a lot of interest, but even the young generation told us that a decision for collaboration on the project could take a long time, it being handled by the elders, or more accurately, it being handled the highland way.

On the last day of our stay in the Baliem Valley we had an appointment with Father Frans Lieshout, head of the Catholic Mission post in Wamena. He had arrived in the Baliem Valley in 1964, and we were convinced he would be a good source of information, having such a close relationship to the local people. Surprisingly he did not know about the existence of any paintings. It was all the more obvious how important these sites were for the community, if they did not even talk about them over a period of thirty years with their parish priests.

The photographs of Wak were developed in Jakarta; since we were concerned about the quality we had decided not to develop them in Jayapura. They revealed the site of Subulah, mentioned by Heider and filmed by Sejati. Our research strategy had worked, but we had not discovered a new site.

It was not until October 1996 that we heard back from our Baliem friends, and Philippe was to visit them in the Baliem Valley several times: in April 1997, August 1997, and from December 1997 to January 1998. In the Baliem Valley, Philippe made it a ritual to stop where Wak had grabbed his arm in 1995 on the way back from Dugum. Philippe never got any more information on Suroba – that was still the name they called the site, and not Subulah – or other existing sites, and by January 1998 he had stopped asking. We believe the elders had seen enough in

the articles and maps we showed them to take draconian measures against intruders.

Soon enough, these measures would no longer be necessary. The political situation in the highlands had already been deteriorating since the hostage crisis in 1996 when one of our colleagues in the UNESCO office in Jakarta had been abducted. The year 1997 brought great forest fires, and in 1998 the Asian crisis brought political and economic problems to the country as a whole. The destabilization of the central regime in Jakarta brought more crises for the independence of West Papua, a struggle that still continues although it became an autonomous region in 2000. Our visits to the Baliem Valley stopped, since West Papua was becoming a dangerous place to be.

Occasionally, people from the Kurulu area still visit Jakarta, mostly in search of support, and stop by the office. Mutual understanding prevails and friendship lives on.



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