



NEW SURVEY OF PAINTED PANELS OF NORTHWEST PAPUA: A PRECISE IDENTIFICATION OF THEIR LOCATION PARAMETERS AND SOME INSIGHT INTO THEIR FUNCTION

*Jean-Michel Chazine**

Abstract - New survey of painted panels of Northwest Papua: a precise identification of their location parameters and some insight into their function

A recent second survey of a new cluster of paintings upon cliffs sinking into the ocean, in the Misool islands archipelago, of Northwest Papua, has provided new insights into this strange rock art. Seven new sites, which have increased the total of sites to 13, have been discovered in the vicinity of the previously located sites. These new sites present also a large number of hand stencils which appear, apart from two cases, in all painted places.

The other confirmation in content and expression concerns the subject of the paintings, which are mostly related to the sea fauna. Tuna, sharks, dolphins and generally large fishes' features compose the main core of representations. Being represented mostly up or down in a vertical position, they obviously correspond to a basic symbolic figure. Many signs, dots, patches and thin or bold lines circling cupules are also scattered in the paintings.

The extension of the number of ornate cliffs was important enough to study the different paintings, but also permitted the formation of a preliminary inductive procedure in the discovery of ornamented sites. In all the surveyed cases we observed that 11 had three or four common features sufficient for determining the probability of the presence of paintings: 1) a large and rather high cliff; 2) a cavity, cave, overhang or hole around the foot of the cliff; 3) a main coloured (red-yellow to red-brown) wide strip reaching down to the cavity; 4) a step-bank (coral or karst platform) at the foot.

It has been verified that in every case, when four (or three) of these parameters are present, paintings are also present, whatever the state of the rocks' surfaces. If the parameters are missing, so are the paintings.

The interpretation the selection of parameters is still open, but the combination of a large coloured strip automatically associated with a cavity permitting, inducing or provoking the action of painting, may be interpreted minimally as a strong chthonian, fertility or maternity symbolism. Decipherment of sexual gender using the ©kalimain program has already shown that there were also female hand stencils scattered around these places.

Riassunto - Nuovi studi sui pannelli dipinti nelle isole del nord ovest della Papuaia: identificazione precisa dei parametri di localizzazione e panoramica della loro funzione

Una recente seconda indagine di un nuovo gruppo di pitture sopra una falesia a picco sul mare, nell'arcipelago di Misool a nel nord ovest della Papuaia, ha fornito nuovi elementi per la lettura di queste strane forme di arte rupestre. Sono stati scoperti sette nuovi siti nei pressi di altri precedentemente localizzati, portando totale a 13. Anche in questo caso sono state documentate numerose "mani in negativo" raffigurate in quasi tutti i siti, fatta eccezione per due.

Si riconferma che il soggetto principale delle pitture è la fauna marina: tonni, squali, delfini e altri pesci più o meno grandi sono nucleo principale delle rappresentazioni. I soggetti sono generalmente rappresentati verticalmente, con la testa verso l'alto o verso il basso, e rimandano ad una costruzione simbolica delle composizioni. Numerosi segni, punti, tacche, linee spesse e sottili circondano i nuclei figurativi principali.

L'aggiunta di nuovi siti permette da un lato di approfondire lo studio delle composizioni pitturiche e dall'altro di comprendere le caratteristiche morfologiche dei luoghi "adatti" ad ospitare incisioni, quindi a formulare una procedura induttiva che permetta la scoperta di siti simili. Infatti abbiamo osservato che 11 dei casi osservati condividono caratteristiche comuni sufficiente a determinare la probabilità della presenza di pitture: 1) una grande e alta falesia; 2) una cavità, una grotta, una sporgenza o un buco nella parete bassa del dirupo; 3) un'ampia fascia di colore (dal giallo-rosso al bruno-rossastro) che fluisce dalla cavità o che discende verso di essa; 4) la presenza di uno sporto in calcare o coralli ai piedi della falesia (facoltativo).

In tutti i casi esaminati, abbiamo potuto constatare che la presenza di almeno tre delle quattro caratteristiche enunciate corrisponde ad una manifestazione di arte rupestre.

La discussione sulle ragioni che abbiano portato l'uomo a compiere tale accurata selezione dei luoghi da dipingere resta aperta. Tuttavia, se l'ampia fascia di colore è automaticamente associata ad una cavità che permette, porta o provoca l'azione di dipingere, questa può essere interpretata come un simbolo ctonio, di fertilità o di maternità. Il software Kalimain, che permette di determinare il sesso di un individuo dall'impronta della sua mano, ha già dimostrato che le impronte in negativo delle mani femminili sono sparse anche in questi settori.

* Jean-Michel Chazine
CNRS/CREDO-Marseille
jmchazine@mailcity.com / jmchazine@gmail.com

Résumé - Nouvelle étude des panneaux peints dans une île du nord ouest de la Papouasie : identification précise de leurs paramètres de position et aperçu de leur fonction

Récemment, la deuxième étude d'un nouvel ensemble de peintures réalisées sur des falaises plongeant dans la mer, dans l'archipel de Misool, dans le Nord-Ouest de la Papouasie, a proposé un nouveau regard sur cette étrange forme d'art rupestre. Sept nouveaux sites ont été découverts à proximité de ceux précédemment localisés, ce qui porte leur nombre total à 13. Ces nouveaux sites présentent eux-aussi un nombre important de mains en négatif, qui apparaissent dans tous les cas sauf deux.

L'autre confirmation au niveau du contenu et de l'expression concerne le sujet des peintures, qui sont en majorité liés à la faune marine. Thons, requins, dauphins et autres poissons plus ou moins grands sont le centre des représentations. Étant généralement représentés verticalement, tête vers le haut ou vers le bas, ils doivent manifestement correspondre à une figure symbolique de base. De nombreux signes, points, taches, lignes fines ou épaisses entourant des cupules parsèment aussi les peintures.

Cette extension du nombre de falaises ornées était assez importante pour que l'on étudie la répartition des différentes peintures, mais elle permit surtout l'élaboration d'une procédure inductive précédant la découverte de sites ornés.

En fait, nous avons observé que 11 des cas étudiés partageaient des caractéristiques communes qui suffisent à déterminer la probabilité de la présence de peintures. Ces caractéristiques communes, au nombre de 3 ou 4, sont les suivantes : 1) Une grande falaise assez haute; 2) Une cavité, une grotte, un surplomb ou un trou vers le bas de la falaise; 3) Une large bande de couleur (rouge-jaune à rouge-brun) qui jaillit de la cavité ou qui descend vers elle; 4) Au pied de la falaise, un petit bord (plateforme de corail ou de karst) (facultatif).

Nous avons pu constater que dans tous les cas, lorsque 4 (ou même 3) paramètres sont présents, il y a aussi des peintures, quel que soit l'état de la surface rocheuse. S'il manque un des paramètres, il n'y a pas de peinture.

L'interprétation d'une telle sélection de paramètres reste ouverte. Toutefois, si une large bande de couleur est automatiquement associée à une « cavité » qui permet, entraîne ou provoque l'action de peindre, cela peut être interprété comme un symbolisme chthonien, un symbolisme de fertilité ou de maternité. Le logiciel Kalimain, qui permet de connaître le sexe d'un individu avec l'empreinte de sa main, a déjà montré que des empreintes en négatif de mains de femmes étaient aussi éparpillées dans ces endroits.

The most eastern part of Indonesia has been known for a long time to be rich in rock art traces (see the work of Heekeren, Röder), which had nevertheless been very little studied. Located on the eastern side of the Wallace Line, almost all the northern archipelagos contain different expressions of rock art (see map 1). At the extreme northwest tip of Papua New Guinea (recently changed in name from Irian Jaya to West Papua), a huge strip of seashore including a large bay (once called MacLuer Bay and changed to Berau Bay) was surveyed by the pioneering German Josef Röder, a member of the Frobenius expedition in the 1930s. The survey had collected numerous data, but, although already very large, had not been able to visit all the places cited by local peoples. The most recent survey organised under UNESCO's sponsorship in the 1990s (Arifin and Delanghe, 2004) revisited almost all the sites checked by Röder and updated the decayed state of conservation of many of the paintings.

But the extension of the sites on the seashore as much as inland is so wide that they could only quote some of the data cited in the literature, mostly from Netherlands visitors from the end of the 17th to the 19th century. Therefore, the opportunity of visiting some sites in the vicinity of the Misool island (see map 2), which had not been described by Röder nor Arifin and Delanghe, which was offered to me by the Misool Ecoresort management was an exceptional opportunity.¹

Located off the south of Misool island, the area where painted cliffs may be seen covers a few square kilometres. The aspect of the landscape looks like a group of sunken karstic outcrops, producing an anarchic distribution of large to tiny fjords or calanques. Many cliffs or overhangs are scattered all along these labyrinthine channels, and some of them present a very large concentration of paintings.

Although being aware of the existence of some of these paintings, which they had observed during their fishing trips, the local community did not claim any link with either their ancestors or with any earlier visitors. On the contrary, it is the resort management which has provoked some interest within the local community after discovering them. For the local people, these paintings being rather high (up to 8 metres) were supposed to have been executed by flying spirits. These belong to a previous human settlement, which according to them would have 'lived' there in 'archaic' or even pre- or proto-human times. They themselves say they originated in the northern tip of Australia and arrived only less than a millennium before present times.

¹ I have to express my best thanks to Precious Planet organisers, who first invited me to visit the Misool EcoResort on Batbitim island, also my warmest acknowledgements to the originators and managers Marit and Andy Miners, as well as Cherry and the whole team of the resort, who took such an enthusiastic interest, and spent a lot of their time introducing me to the first painted cliffs of the area.



The local fishermen, stimulated by the resort's management team, had already checked seven places by the end of 2007. After comparison with the data of Arifin and Delanghe' (2004) and Röder (1995), these became the very first to be surveyed. They have also provided a large and surprising set of paintings. Located from the lowest part of rock walls up to more than 8 metres high, their colours, when they are not decayed or covered with calcite, are mostly plain red.

The images mainly consist of marine fauna, that is, tuna, sharks, dolphins, barracuda, large cod, gilthead and squid. The sizes vary from small silhouettes to large profiles, without any mean average of proportional reproduction, and what is notable is the fact that the majority of representations are vertical. They are mostly 'diving' into the sea or emerging from it. Moreover, they frequently are represented in pairs, and are often unequal in size (Figure 1).

Besides the typical marine fauna, there are many hand stencils. They appear on almost all the painted panels, sometimes apparently associated with specific figures, sometimes isolated. On a few panels there are also lines of dots, regular and broken lines and patches of colour (Figure 2). Within all these representations, there are almost no anthropomorphic features. These when they appear are in black colour and seem to have been made much more recently.

But what is even more noticeable and which will be considered as a specific clue later (see below), is the fact that in many places, the edges of small natural erosion hollows or seemingly cupules (8–15/20 cm in diameter) have frequently been overlined, whether they are isolated or included in a general motif (Figure 3).

The representations of the large fishes, sharks, dolphins and tuna, although very schematic in shape, show an acute capacity for detailed figuration. For instance, the general movement of dolphins or sharks, seen from under water when they suddenly change direction and bend their silhouette, is very precise and fully artistic.

Although the general display of the marine fauna was new, given Röder's sorting of paintings in the Macluer/Berau Bay, the nearest place, 200 km towards the east with paintings, does not provide such a conspicuous bestiary. There is also at least one motif appearing to be quite unique² and surprising. It consists of an exceptional stencilled representation of the 'Yoni' (Figure 4).³ Possibly correlated with this, the handprint located just above it has been deciphered as female, using our ©kalimain program.⁴ These combined motifs may provide some interesting clues, as expressed below, for the interpretation of the sites' function.

Not far above are also unusual representations of stencilled circles, which possibly could correspond to some circular thin basketry. A closer view using a picture treatment computer program has revealed that in fact five different motifs had been painted, some of them being painted in super-impression (Figure 5).

Two other very rare motifs are two stencilled large flat fishes in one large hollow. Also stencilled are two adzes, which have been blown into the frame of a large dolphin's or shark's body (Figure 6). Very few artefacts have been stencilled and flat fish are the scarcest, and also very few adzes are to be found in the aboriginal rock art of Australia. As far as we know, it is the first time that such motifs have been observed in the whole Indonesian Insulinde.

During the very first survey of that area, no tangible trend could be determined from what appeared to be a random distribution of painted walls, lost in a labyrinth of erratic channels. Only one thing could be isolated: each large site was not visible from the neighbouring one.

Therefore the second survey⁵ was primarily intended to enlarge the number of locations and sort the painted motifs of the areas.

Given that the main original aim was to visit two new sites with rock paintings, which had been recently surveyed by the EcoResort's team, and to try to select samples of calcite covering some of the paintings, hoping we would be able to date them.

During that visit, we discovered four new sites, which increased the total of sites to 13. The next day, in the vicinity of the previous located sites, we counted four new locations, more or less associated or far from previous main places. In fact, the second survey of painted panels led unexpectedly to the identification of location parameters.

2 Since these first observations, that 'Yoni' motif has already been discussed, although without natural photography, by Graham Walsh in Carnarvon Gorge and Beyond, 1998.

3 As far as I could find out from different colleagues, none of them had ever seen such a motif in any rock art sites.

4 See Chazine and Noury, 2006.

5 One more time, thanks to the support of Precious Planet, and the charming welcome of Andy and Marit Miners in Batbitim, I was able to stay from the 5th till the 10th of April 2009 on the Misool EcoResort and survey as many places as possible.

In these new sites a large number of hand stencils have been observed. They appear, apart from two cases, in all painted places. While awaiting the exact account and description, it may be observed that hands were mainly normal in size, although sometimes surfaces were badly decayed or calcified by water pouring.

The other confirmation in content and expression is the subjects of the paintings, which are mostly connected to sea fauna. Tuna, sharks, dolphins and general more or less fish features compose the main core of representations. In these, as already mentioned, the animals are represented mostly in a vertical position. That peculiar orientation may possibly happen, but is nevertheless not natural. It is a strong indication that they are not a direct realistic representation, but isolated, or at least out of their common natural environment. It would thus probably correspond somehow to a basic symbolic attitude or figuration. Many signs, dots, patches, and thin and bold lines are also scattered in the new set of paintings. Negative imprints show that sometimes the colour has been strongly splashed, not only spat, on the stencilled artefact.

Some of the new cases found are rather badly decayed, which would explain why they had not been so rapidly checked as others. The decay process, if it has ceased by now, has led in some cases to the almost complete disappearance of the paintings. But precise observation with good lighting conditions let the previous paintings become discernible.

The extension of the number of ornate cliffs is particularly important and helpful, not only to study the content and begin the sorting of the different paintings, but also to possibly start on a preliminary inductive procedure of discovery of ornate sites. In fact these discoveries result from a previous observation on the use of ochre in correlation with the ethnographic data for its cultural or ritual use and the natural environment where paintings are to be found.

The intuition that there were some common parameters which were always present in each painted cliff emerged once the two or three new sites were shown to us. Then we checked the validity of our observations by locating all the sites, old and new, by ourselves, without using our guide's knowledge.

In the 13 surveyed cases, we observed that 11 had some common features which would determine with a sufficient probability the presence of paintings. There are four of these common features:

- a large and rather high cliff (10 x 15 metres minimum);
- a cavity, cave, mouth or even hole at or above the foot of the cliff;
- a large coloured (yellow to red-brown) wide track or strip, still or not pouring, arriving at or going down from the cavity;
- and (less systematic) a step-bank (coral or karstic platform) at the foot.

These four parameters have been isolated and defined⁶ from a simple direct survey, before more precise and complete observations can be made which would possibly facilitate modifications. They perfectly fit with the presence of the paintings. On the contrary, the absence of painting fits also with the absence of a single parameter.

These four parameters mix different aspects of meanings: practical and logical necessities (large cliff and step-bank supposedly for placing poles); and probable symbolic criteria of high cliff, red-coloured track 'leading' to a (black) 'hole' (Figure 7). The fact is that in some cases, the paintings appear on a rough or eroded surface, but only when the four given parameters are present. If the coloured strip and the cave or hollow are present but not linked, there are no paintings. This shows that the mere presence of the hollow or cavity is not sufficient, nor that the sole quality of the surface of the cliff is predominant.

There are plenty of high, large and smooth-surfaced cliffs without any paintings. That would mean that once the four parameters had been assembled, the process of painting could be achieved, indicating probably that the action of painting would have its best chances of result or efficiency.

Even before the validity of these parameters are confirmed and tested later with more accuracy, they already provide some interpretation clues. It sounds obvious that the choice of selecting places for paintings – or of course rituals involving the painting practice – depends on geomorphological factors. It is a clear indication of a symbolic interpretation of these natural features. The simple aspect of these natural details like a cave, cavity or hollow whose entrance looks black or at least obscure, correlated with an ochre-coloured strip, is evidence of a symbolic choice of combination. It thus may be suggested that it would probably be related with some fecundity, fertility or reproduction process.

⁶ The survey was conducted with the helpful assistance of Sangut, a local member of the Misool EcoResort, which helped our work. Discussions with the different hosts of the EcoResort and with Naneng Setiawan, a coral protection biologist also present at that time (and sister of our colleague rock art specialist Pindi), have also stimulated the reflections concerning this puzzling and unusual rock art.



The possible - or even visible - analogy with the female matrix associated with the red ochre, symbolising either menstruation or bleeding during childbirth, can be also related to the representations of big sea fauna. These are not painted realistically in their natural environment, but emerge out of or dive directly into the marine world.

One must also note that only big game - sharks, tunas, dolphins, dugongs and the like - are represented. Therefore some totemic interpretative analogy may be advanced to explain that it is only these obviously emotional charged animals which have been painted there. They probably correspond to invocations oriented towards strong and basic elements of the cosmogony involved in specific rituals or ceremonies. Let us remember that these paintings are rather far from the nearest dwelling places (some 20 minutes by motor boat, meaning a couple of hours with paddle canoes) and thus are very remote and isolated. The karst environment is particularly inhospitable and no archaeological occupation remain nor fresh water well have been detected yet. It is thus strongly improbable that people decided to settle for long in this area. Therefore the places chosen for the paintings, the specific cliffs where they have been applied on precise locations express a determined intention. It is a complete mix of selected configurations (a red-coloured pouring, seemingly bleeding, from a dark cavity) in close association with something evoking an allegoric concentrate of local mother nature (i.e. the biggest known marine animals).

The obvious precise choice of the location for any ritual practice(s) - paintings being the only surviving remains, which have lasted over decades until now - is a clear indication of a symbolic correlation between a not unusual natural feature reinforced by paintings of important animals themselves extracted from their own natural environment.

It may be supposed that that combination of nature and culture (i.e. a transformed nature) may be related to a kind of representation, if not of the origins of humankind itself, at least of the regular, repetitive and inescapable process of reproduction. One may think that we are thus looking at places symbolically linked to humankind's origins, dedicated to fertility, reproduction and longings for fecundity. The possible crude interpretation of the physical aspect of such a dark cavity from which there is bleeding, leads one to associate it with a female womb and thus to some allegorical fertility representative place. The frequent association of negative hand stencils in the display of paintings, some of which have been deciphered as feminine, added to the 'yoni' figuration, would enhance that hypothesis.

I have previously supposed from Borneo's numerous checked hand stencils (Chazine, 2008) that they were possibly correlated symbolically to healing or even to so-called shamanic practices. Some samples from Australia and especially Carnarvon Gorge recently observed show places where masses of hand stencils are positioned near an incredible number of vulva engravings (nearly 700). If in Misool's area the fertility rituals signs are not so obvious, what is obvious is the very explicit and precise choice of place. The dark cavity and its coloured track would be just a single huge generic vulva, which becomes common to all the rituals and ceremonies carried out there. As there are neither caves nor rock shelters in the area, the intentional choice for locating specific rituals, including paintings, has been adapted to the natural geomorphological reality. Natural rocks, that is, their associated cliff shapes, have been selected and transformed into highly allegorical and significant ritual places, following the cultural fantasies of the occupants. It is interesting, although surprising, that the actual local community does not claim any link with these spots, which for them would belong to the flying spirits of previous dwellers, in no case their own ancestors. Anticipating some anthropological investigations, one may already deduce that they originate from a place where fertility rituals were either absent or totally different.

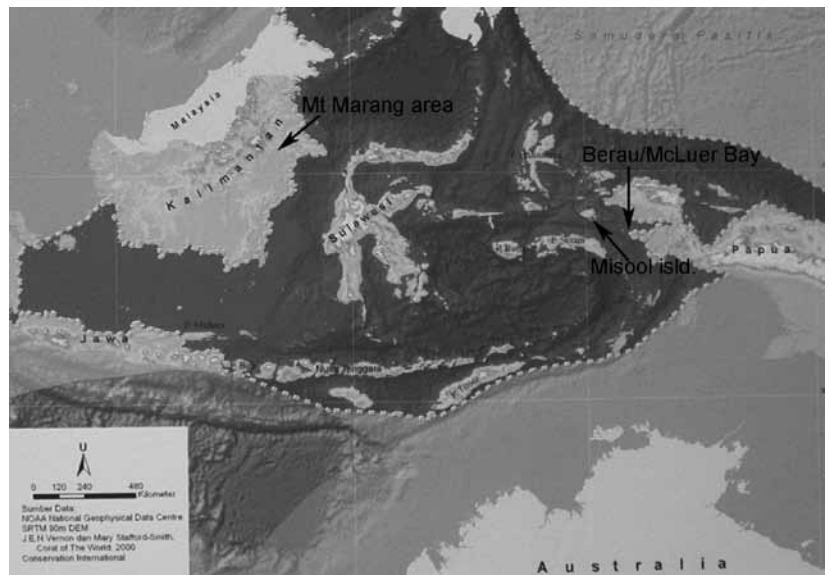
At this stage of observation and deduction, and anticipating possible forthcoming dating and new site checking, one is confronted with a kind of strictly codified concept of some selected places. The participants in the rituals or ceremonies, which have been performed there and including selected paintings, had in common a shared cosmogonic frame. The fact that there are at least 14 different spots sharing the same process would possibly correspond to different groups, families or lineages, each of them being especially attached for historical reasons to specific places.

If we cannot yet define any complete classical language *stricto sensu*, using a common intelligible communication system which would be used in direct association with these places and practices, we nevertheless still have at least in common a coding system, which must have been known by every participant or actor, probably a secret mute and unexpressed real language, which linked communities having common needs, concerns and hopes.

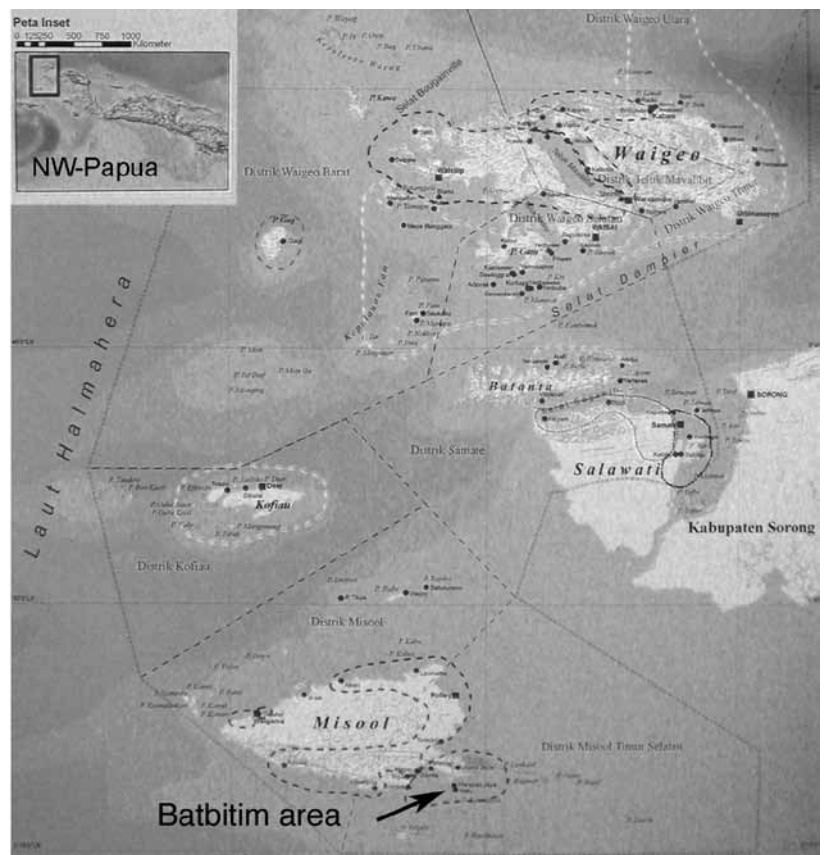
BIBLIOGRAPHY

Arifin, K. and Delanghe, P. (2004) *Rock Art in West Papua*, Paris: UNESCO.
 Chazine, J.M. (2007) 'Rock art from Borneo: an original insight into socio-cultural prehistoric pattern?', in *The intellectual and spiritual expressions of non-literate peoples*, UISPP-CISENP Conference proceedings, E. Anati and J.-P. Mohen (eds) (September), Paris, pp. 33-47.
 Chazine, J.M. (2008) 'De nouvelles peintures en Nouvelle Guinée occidentale', *Archéologia* 451, p. 10.
 Chazine, J.M. (2009a) 'De nouvelles grottes ornées dans la jungle', *Archéologia* 69 (September), pp. 8-9.
 Chazine, J.M. (2009b) 'Nouvelles peintures rupestres découvertes dans les Rajah Empat d'Indonésie orientale et identification des paramètres de localisation', *INORA (September)*, pp. 3-8.
 Chazine, J.M. (2009c) 'Decipherment of negative hand stencils in caves with computer', comm. to the 14th Cul-

tural Heritage and new Archaeology and Computer Technologies Workshop, 16-18 November, Vienna.
 Chazine, J.M. and Noury A. (2006) '©Kalimain a program intended to deciphering negative hand stencils', poster presented to the 2006 AAA Conference, Fargo, United States.
 Chazine, J.M., with Fage, L.H. (2009) *Bornéo: La mémoire des grottes*, G. Fage (ed.), Paris.
 Röder, J. (1956) *Felsbilder und Vorgeschichte des MacLuer Golfes (West Neuguinea)*, Vol. 4, Darmstadt: L.C. Wittich.
 Morwood, M. (2002) *Visions from the Past*, Crows Nest: Allen & Unwin.
 O'Connor, S. (2003) 'Nine new painted Rock art sites from East Timor in the context of the Western Pacific Region', *AP* 34(1).
 Walsh, G. (1998) *Carnarvon and Beyond*, Carnarvon Park Association (ed.).



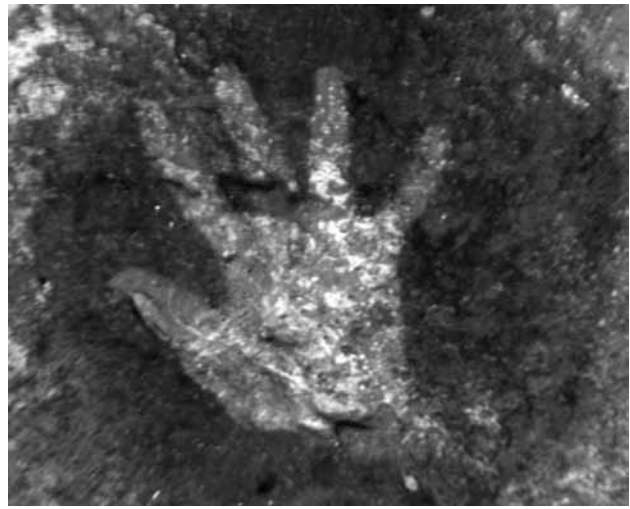
Map 1: General location map



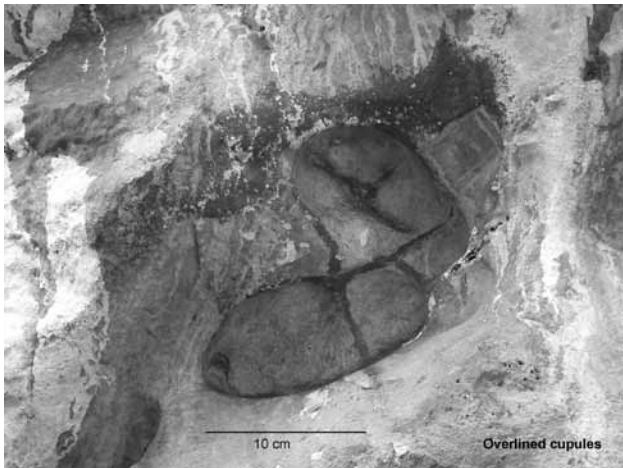
Map 2: Misool area location



Pict 1: Vertical sharks besides a large coloured pouring strip



Pict 2: Hands stencils;



Pict 3: Overlining of cupules;



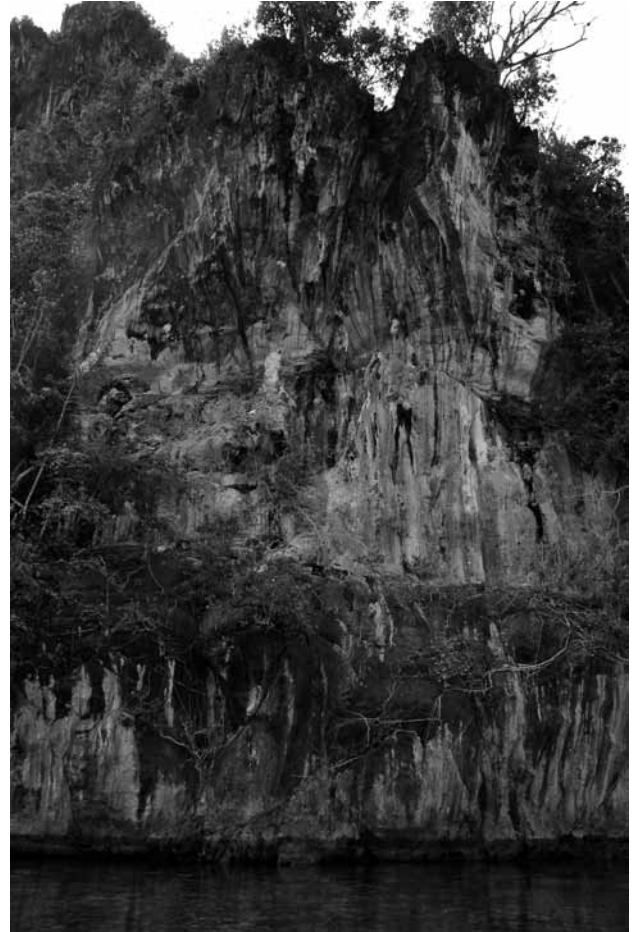
Pict 5: Basketry stencil



Pict4: "Yoni" and hands stencils;



Pict 6: Adze stencil inside a large blanked fish representation and edges overlining of dissolution holes



Pict 7a



Pict 7b

Pict 7 a-b: Sample of painted panel linking the identified parameters : large cliff-cavity/hole-coloured strip-reef shelf.