

# **A REFLECTION OF PAINTING TRADITION AND CULTURE OF THE AUSTRONESIAN BASED ON THE ROCK ART IN MISOOL, RAJA AMPAT, WEST PAPUA**

Irsyad Leihitu\* & R. Cecep Eka Permana\*\*

\*First author, \*\*Corresponding author

Department of Archaeology, Faculty of Humanities,  
Universitas Indonesia

(Irsyad.leihitu@gmail.com; rcecep.ekapermana@gmail.com)

DOI: <https://doi.org/10.22452/jati.vol24no1.9>

## **Abstract**

This article discusses rock art in Misool, Raja Ampat Region, West Papua, and their relationship to the Austronesian speakers' painting tradition and its cultures. This paper aims to relate the motifs in 10 rock art sites in Misool: Len Makana 1, Len Makana 2, Len Makana 3, Nu Tonton, Sun Bayo 1, Sun Bayo 2, Sun Malele 1, Sun Malele 2, Sun Malele 3, and Sun Malele 4. It examines the paintings in terms of Ballard and O'Connor's concept of the Austronesian Painting Tradition (APT). This study shows that there are some indications of Austronesian cultures depicted in rock art motifs in Misool, which can be categorised as APT. These indications consist of: the sites located in the distribution area of Austronesian language, the motifs locations, and the depiction of motifs such as hand-stencils, anthropomorphic, face or mask images, sun motifs, stone artifacts, and boats.

*Keywords: rock art, Austronesian, Austronesian Painting Tradition (APT), Misool, Raja Ampat*

## **Introduction**

The development of human culture during the prehistoric era grew slowly over time. However, after the transition from the Middle Palaeolithic period towards the Upper Palaeolithic, there was a creative explosion that was proven by the birth of the first art in the world (Lewis-William, 2002). One such example of the first art in the world is a rock image sometimes termed rock art. Rock art is defined as an art landscape consisting of images, motifs, and designs in the form

of paintings or sculptures placed on natural and hard surfaces, such as large boulders, walls and ceilings of caves, cliff walls, and ground surfaces (Setiawan, 2015; Whitley, 2011).

These cultural products, which are identical to the advanced hunter-gatherer society (Pasaribu, 2016; Poesponegoro & Notosusanto, 2008; Howell, 1980), have become one of the archaeological phenomena that are gaining great attention in Indonesia. However, there are a number of experts who argue that rock art in Indonesia was a continuous tradition until the Neolithic period, specifically the rock art tradition made by early Austronesian speaking communities in the past. According to Ballard (1992), Austronesian speakers have created rock art since 4000 years ago in Indonesia. The experts then tend to designate the rock art made by Austronesian speakers as the Austronesian Painting Tradition (APT) (O'Connor, Louys, Shimona, & Shimona, 2015; Ballard, 1992; Wilson, 2004).

In addition, the hypothesis above is indirectly justified by a number of chronological studies that have been recently conducted. The results of the dating analysis provide fairly accurate chronological data concerning the age of rock art at various sites, ranging from the maximum age in Jeriji Saleh Cave, East Kalimantan at 51,800 years ago (Aubert et al., 2018), 40,700 years ago in Leang Timpuseng (Aubert et al., 2014), and 17,800 years in Leang Lompoa, in Maros (Oktaviana, 2016), with the youngest being Gua Harimau, Padang Bindu around 3,500 years ago (Oktaviana, 2015), and rock art in Maluku and Papua of around 2000-1000 years ago (Widianto, 2015).

From the summary of the chronology presented by the experts above, it can be seen that the tradition of drawing on the media of rock in Indonesia continued from 51,800 to 2000 years ago. During that time, there was also a cultural shift from hunting and gathering carried out by the Australomelanesoid Race from 13,000 onwards to 5000 years ago to a horticultural era or Neolithic era carried out by the Mongoloid, especially speakers of Austronesian languages 4000 years ago (Widianto, 2015). Related to the description above, this study seeks to apply Austronesian Painting Tradition theory (hereinafter referred to APT) to analyse one of the rock art sites in Indonesia, namely, Misool Islands, Raja Ampat Regency, West Papua. The area was chosen because the authors assumed that the shape and characteristics of the images in the region had indications that led to APT.

### **Problem Statement, Research Question, and Objectives**

The research question is to prove whether the rock art images in Misool Islands, Raja Ampat, West Papua, have indications that lead to APT in terms of form and

characteristics. Also, as to whether there is evidence to suggest that rock art in the region was made by Austronesian speakers. The purposes of this study are: (1) to prove that the Austronesian people participated in creating rock art in Indonesia; and (2) to prove that the APT theory can be applied and used as a reference in examining rock art in Indonesia. Another objective is to provide additional thoughts concerning research on rock art in Indonesia, especially in the Misool region, Raja Ampat, West Papua.

### Literature Review and Theoretical Framework

It would be better if the emergence and the beginning of the Neolithic period along with its culture are first discussed. The culture was first brought by Austronesian speakers to the Islands of Southeast Asia (ISEA), especially Indonesia, from 4000-2000 years ago. It was an event, which, according to Simanjuntak (2011, 2015), became a stepping stone that brought enormous changes in the development of prehistoric societies in Indonesia. Experts agree that, during the prehistoric period, before the arrival of Europeans and Western colonialism, Austronesian languages were the most widespread language family in the world. It has been proven that around 1,200 languages are now spoken by approximately 300 million people who are members of this language family. In addition, the distribution area of this language includes Madagascar in the west, Easter Island in the east, Taiwan and Micronesia in the north, and New Zealand in the south, or, in sum, almost half the world (Bellwood, 1985; Tanudirjo & Simanjuntak, 2004; Bellwood, 2002). The term *Austronesian* was originally popularised in 1988 by an expert named W. Schmidt, which is an amalgamation of *australis* = south and *nesos* = island, or islands in the south. Schmidt used the term to name a family of languages used by people in the archipelago and the Pacific (Simanjuntak, 2011; Tanudirjo & Simanjuntak, 2004).

During recent decades, experts have generally provided hypotheses that explain the origin of Austronesian-speaking communities and their distribution. The most famous hypothesis is the "Out of Taiwan" model. In the 1960s, this model was first developed by K.C. Chang, who states that Formosa (Taiwan) was the origin of Austronesian speakers. He believes that there are similarities in artefactual findings, both in southern China, Formosa, and also islands in the archipelago or ISEA (Tanudirjo & Simanjuntak, 2004). This theory was later supported by Robert Blust, a linguist, and Peter Bellwood an archaeologist. Robert Blust (1985) supported Chang's work by conducting a study that reconstructs proto-language by comparing the vocabulary of various types of plants, animals, and natural phenomena around it. Blust concludes that the place

of origin for the ancestors of Austronesian speakers should be in the areas that have unstable tectonic conditions, are part of sub-tropical regions, have winters, experience storms and hurricanes regularly, and are located at the west of the Wallacea line; a place that fits most of these criteria is Taiwan (Tanudirjo & Simanjuntak, 2004). One of the most important hypotheses in the results of the study conducted by Blust is kinship trees that show the chronology of branching languages. He believes that the ancestors of the Austronesian language had begun to form in Taiwan around 4500 years BC, then split into two language groups, namely, Formosa and Proto-Malayo Polynesia as a result of the migration of Austronesian speakers to the south of Taiwan towards the Philippines. Language branching occurred again around 3,500 BC when Austronesian speakers migrated from the Philippines to the west Indonesian islands (Kalimantan-Sulawesi) and the southeast Indonesian islands (Maluku), which gave birth to two new languages, namely, Malayo-Western Polynesian and Middle-Eastern Malayo-Polynesian. The Middle-Eastern Malayo Polynesian sub-group branched back around 3000 BC and became Middle Malayo-Polynesian and Eastern Polynesian Malayo, which marked the migration from Maluku to the south towards Nusa Tenggara and east towards the West Papuan bird head. Finally, language branching occurred again in the eastern region, which became a subgroup of southern Halmahera until the West Papua and Oceanic languages in Melanesia and Polynesia around 2,000 BC (Tanudirjo & Simanjuntak, 2004; Blust, 1985).

The linguistic model above received support from Peter Bellwood. He completed the hypothesis above using the distribution of archaeological findings in several regions in southern China and Taiwan, specifically ISEA and MSEA (Mainland Southeast Asia). However, there are differences in the chronological number of the hypotheses expressed by Bellwood, which is slightly younger than the chronology explained by Blust. Based on archaeological and language approaches, Bellwood believes that the migration of farmers from southern China to Taiwan was carried out around 5000 years BC, which was driven by rapid population growth due to agriculture. The migration brought along the Neolithic culture they possessed, namely, the domestication of animals, such as dogs, pigs, and chickens; as well as rice cultivation, sugar cane, and sweet potatoes; pottery and bark cloth creation; various tools from stone and bone; and the ability to sail with a canoe (Tanudirjo & Simanjuntak, 2004; Bellwood, 1985; Bellwood, 2002)

Besides the hypothesis of the "Out of Taiwan" model, there are several opposite models that are a counter response to the previous model. They generally criticise Bellwood and Blust's thinking, which considers that southern

China or Taiwan is the birthplace or origin of Austronesian speakers. Solheim II (1985), in his paper, argues that, in general, it is not logical for there to have been a migration from Taiwan to Melanesia and Polynesia. He argues that the direction pattern of the Monsoon wind does not support that kind of migration (which certainly depends on wind direction). Solheim II considers that the migration orientation should come from the south to the north, or better known as the Nusantao hypothesis. In general, Nusantao is a marine culture developed by the maritime community (regardless of the type of race, whether Mongoloid or Australomelanesoid). He believes that this community has locations in the eastern and southern Indonesian regions of the Philippines given the very close relationship concerning the culture and language between the two regions (Solheim II, 1985; Tanudirjo & Simanjuntak, 2004).

Agreeing with the Solheim II hypothesis, Maecham (1985), in his paper, expresses his objection to the theory of "Out of Taiwan". He considers that, in general, the regions of southern China have a backward culture so that it is unlikely to have had a huge impact on Neolithic culture for the surrounding area, especially in the islands of Southeast Asia. In addition, he emphasises that the Neolithic community in the Southeast Asian archipelago was generally obtained from a process he called "local evolution", not from southern China or Taiwan (Maecham, 1985). Maecham offers a new hypothesis, which states that the birthplace of Austronesian speakers is generally between imaginary triangle lines that connect the region between Taiwan, Sumatra and Java, and Timur-Rote which later spread since 6000 years ago.

Oppenheimer (2004) and Oppenheimer and Richards (2001) also criticises the thought of migration from Taiwan to Indonesia, Melanesia, and Polynesia, which is like a fast train or express train. He argues that the Melanesian region, in particular, and Papua New Guinea, in general, was not an easy-to-pass area. Based on the genetic and morphological data of the skeletons of human skulls in these regions, Oppenheimer considers that the migration described as the train was delayed in Melanesia. This can be seen from the results of DNA studies that show the closeness between humans in Polynesia and humans in eastern Indonesia, compared to humans in Taiwan or in southern China.

Regardless of the above differences of origin, experts generally agree and share the same idea concerning the material objects left by Austronesian people, especially in Indonesia, which consist of red slip Lapita pottery and ornamental rope, stone adzes (both square and oval), stone bracelets, bark cloth, and a canoe. These objects are generally very related to the early Neolithic culture in Indonesia (Simanjuntak, 2011, 2015; Bellwood, 2005). In addition, some experts also argue that rock art are products of past culture followed by Austronesian

speakers in the Indonesian region (O'Connor et al., 2015; Mahmud, 2011; Tanudirjo, 2011; Ballard, 1992). The typical rock art of Austronesian speakers is generally known to have two types, namely the Austronesian Engraving Style and Austronesian Painting Tradition (APT), which was introduced by Ballard (1992) who continued the research from Jim Specht (1979) on rock art in the Pacific region (O'Connor et al., 2015; Tanudirjo, 2011; Wilson, 2004).

Ballard (1992) formulated several conditions in categorising rock art as AES or APT, including the followings:

- Rock art of Austronesian speakers must be in the area of distribution of Austronesian languages, where local people also spoke the language (before Western colonialism came).
- APT rock art are generally placed in isolated or remote areas, sometimes also depicted on high cliffs that beyond reach.
- The last is the typical motifs, including geometric curves and circles (spiral), mask or face motifs, human motifs, hand motifs, disc or sun motifs, and boat motifs (O'Connor et al., 2015; Tanudirjo, 2011).

Ballard also concludes that the appearance of APT probably began after the initial spread of Austronesian speakers, which was around 2000 BC ago (O'Connor, Aplin, St Pierre, & Feng, 2010). This is also supported by the similarity between the APT images with Dong Son's metal artefact motifs (O'Connor, 2003; Wilson, 2002).

Until now, the hypothesis made by Specht (1979) and Ballard (1992) is still supported by experts today, such as Meredith Wilson (2002, 2004) in her research on regional analysis of rock art in the Pacific region and Sue O'Connor (2003, 2015) as well as O'Connor et al. (2010) in their studies on rock art sites in the Timor-Leste region. Wilson's (2002) research was entitled *Picturing Pacific prehistory: The rock-art of Vanuatu in a western Pacific context*. In her research, she combined AES and APT with geographical, topographic, motif, and language variables. Based on his research on the AES and APT rock art sites in the western Pacific region, Wilson confirms what Ballard (1992) previously stated that there is a correlation between the distribution of AES and APT rock art sites with the distribution of language and migration of Austronesian speakers in the past.

Meanwhile, the studies conducted by O'Connor in Timor-Leste show significant results, namely, the discovery of nine recent rock sites (thus, there are 20 rock art sites in Timor-Leste). Of the 20 sites, O'Connor realises that there are similarities in the motifs and characteristics with rock art in the Pacific region. O'Connor (2003), in her paper, states that there is a contextual relationship between the rock art in Timor-Lester with those in the western Pacific, namely,

(1) geographically and topographically rock art in Timor-Leste are generally placed in isolated and difficult-to-reach areas; (2) as well as the distribution of languages, the territory of Timor-Leste falls into the area or region of distribution of Austronesian languages; (3) similarity in design, motifs, and composition; (4) sequence and colour chronology; and (5) influence of the Dong Son culture. The five variables mentioned above certainly support the previous studies conducted by Ballard (1992) and Wilson (2002).

In addition, O'Connor (2015) also develops a new perspective to conduct research using APT. In her article entitled "Rethinking the Neolithic in Island Southeast Asia, with particular reference to the archaeology of Timor-Leste and Sulawesi", she states that the motifs depicted in the APT are generally very typical and are only found in the Melanesian and western Pacific regions (in this case eastern Indonesia). Meanwhile, she also realises that the APT motifs are not found in the Taiwan region or in the Philippines, which were believed to be the origin of Austronesian speakers and languages. O'Connor (2015) concludes that this APT or Austronesian type of rock drawing tradition was born and developed in Eastern Indonesia. Thus, she indirectly agrees to the opposing opinion of the hypothesis of the "Out of Taiwan" model that Austronesian speakers came from Melanesia or Eastern Indonesia. In addition, in terms of chronology, rock art that are categorised as APT have not been analysed using a date analysis as was done in Maros with the results of 40,000 years ago and in Sangulirang, which is around 50,000 years old. However, based on the motifs described and the similarities with the motifs of the Dong Son tradition, O'Connor estimates that the APT rock art are from around 2000-100 BC.

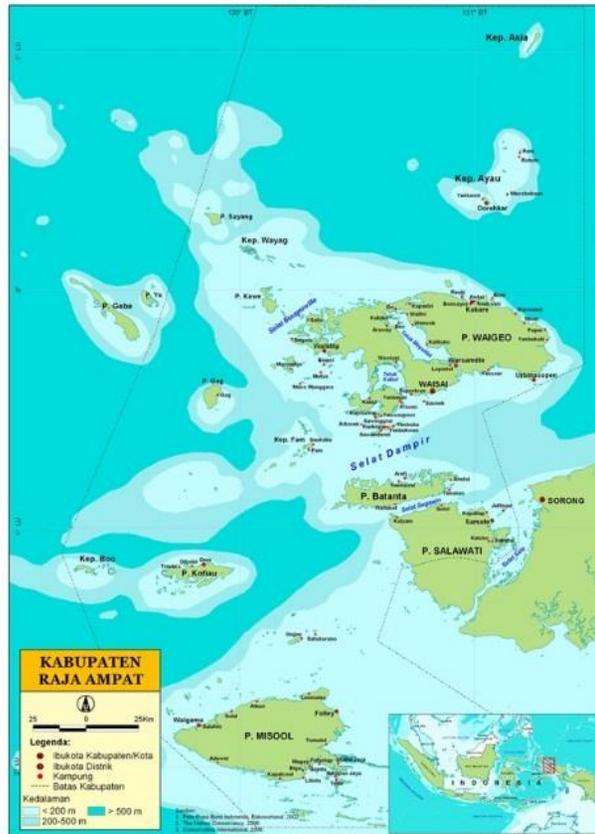
## **Method**

This study will try to see the connection between the shape and characteristics of the motifs found in the rock art in Misool using APT theory and Austronesian culture described within the theory. The methods used in this study are gathering and processing data. This stage is divided into two, namely, collection of library data, and field data obtained based on the results of location surveys. The data that have been collected are then analysed using a qualitative-descriptive approach. Finally, this research will provide an explanatory conclusion about the rock art of the APT found in Misool Islands, Raja Ampat, West Papua.

## **Scope of Study**

Raja Ampat Regency, West Papua, in East Indonesia is generally an area of around four million hectares (Nasruddin, 2015; Mcleod, 2007). This area consists

of land and water. There are around 1,800 large and small islands with a coastline length of 753 km. As an archipelago, the ratio between the land area and the water or ocean is 1:6, where the territorial waters are more dominant (Raja Ampat District Government, 2019). Among the 1,800 islands, there are generally four main islands, namely, Waigeo, Batanta, Salawati, and Misool (Nasruddin, 2015; Mcleod, 2007).



**Map 1: Area of Raja Ampat Regency**  
(Source: "Peta administratif Kabupaten Raja Ampat", n.d.)

As an object of study in this paper, Misool Island, which is one of the large islands, is generally located on the southernmost side of Raja Ampat Regency. Based on the results of a survey conducted on pictorial cliffs in Misool, on 6-13 May 2018, it can be seen that there are about 10 sites that have been identified, namely, Len Makana 1, Len Makana 2, Len Makana 3, Nu Tonton Site Sun Bayo 1 site, Sun Bayo 2 site, Sun Malele 1 site, Sun Malele 2 site, Sun Malele 3 site, and Sun Malele 4 site. In general, the motifs of the rock art found in the ten sites consist of palm, geometric, face/mask motifs, marine fauna (such as sharks,

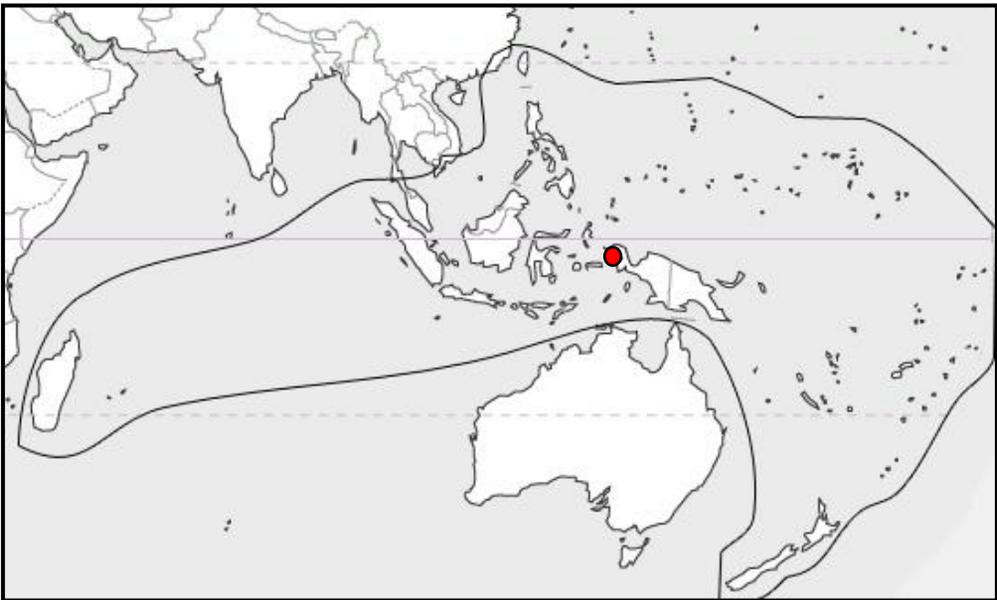
whales, dolphins, turtles, and various other marine animals that have not been identified), artefacts, humans, therianthrope, and boats. In this sub-chapter, we will discuss the indications that show the link between the rock art found in Misool and APT.

## **Analysis and Findings**

### **Rock Art at Misool as APT**

In this section, five indications show that the rock art at Misool can be categorised as APT, namely: (a) site location and the placement where it was depicted; (b) the depiction of anthropomorphic motifs and masks/faces; (c) geometric motifs: discs or the sun; (d) stone artefact motifs: stone adze; and (e) boat motifs.

### ***Site Location and Location of Rock art***



**Map 2: Area of Misool in the Territory of Austronesian Speakers Distribution**  
(Source: Adapted from JohoMaps [n.d.] by the authors.)

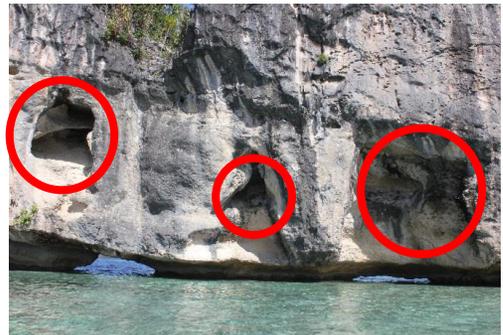
Misool, which is in the eastern part of Indonesia, is included in the distribution area of Austronesian speakers. This is also supported by a statement from Moeliono (cited in Suroto, 2011), which states that the Melanesian region whose language is included in Austronesian speakers includes Yapen, Biak, Waropen, Raja Ampat, Wandamen Bay, along the coast of Cendrawasih Bay, the

west end of the island of Papua from Sorong to the south, along the coast of the Sele Strait, and the surrounding areas of Bintuni Bay, Arguni Bay, and the coast of the Gulf of Etna.

In addition to its location, the placement of the images on the sites also shows distinctive features. All the sites mentioned above are generally located in isolated places far from the villages, some of the images are depicted on very high and difficult-to-reach cliff walls. For example, in Len Makana 1 and Sun Malelen 4, the average height between sea level and the images at both sites is around 5-15 m.



**Figure 1: Picture of Rock Art in Len Makana Cliff I**  
(Source: Irsyad Leihitu, 2018)



**Figure 2: Position of Panil in the Cliff of Len Makana II**  
(Source: Irsyad Leihitu, 2018)



**Figure 3: Picture of Rock Art on the Sun Malele Cliff II**  
(Source: Irsyad Leihitu, 2018)



**Figure 4: Picture of Rock Art on the Sun Malele Cliff IV**  
(Source: Irsyad Leihitu, 2018)

This is certainly in line with the typical APT, which are generally depicted in isolated locations or high cliffs that are steep and difficult to reach. Because of the distance visibility, a telephoto type lens was used to take photos of the rock art on both sites. Chazine (2011), in his paper, explains that, overall,

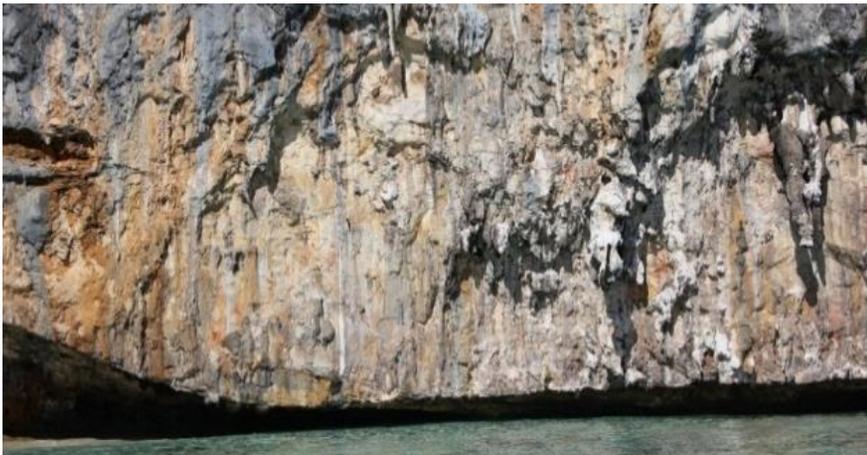
the rock art depicted in the Misool Islands are generally shown in areas or regions that are isolated and very far from the area where the Misool people currently reside (Moreover, Sun Bayo as one of the regions described above, is a local language which means Forbidden Place).

### ***Anthropomorphic and Mask/Face Motifs***

Ballard (1992) and O'Connor (2015), in general, both agree that human or anthropomorphic figures as well as mask or face motifs are the types of motif that are typical of APT and AES. Typical depictions of the APT anthropomorphic figures are generally depicted as small, red, and appear to be active, such as dancing, holding objects, etc. (O'Connor et al., 2015, pp. 194-198). The depiction of anthropomorphic figures and mask or face motifs in Misool is generally found on two sites, which is Len Makana 2 Site and Sun Bayo 1.

### **Len Makana 2**

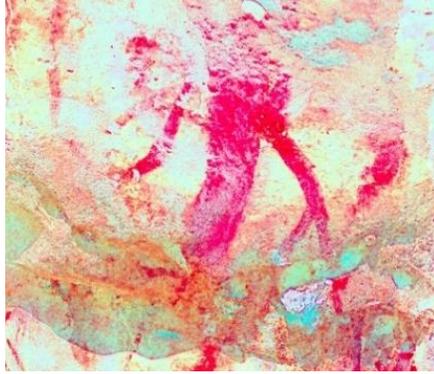
This site is located in the Len Makana Region. In this area, there are three sites/sectors, namely, Len Makana 1 site, Len Makana 2, and Len Makana 3, but all three are in different cliffs and islands. The rock art in these sites are generally depicted on wide, elongated cliffs. There are four panels and the motifs depicted on this site include the motifs of the hand-stencils, fish motifs, geometric motifs, and anthropomorphic figure.



**Figure 5: Cliff of Len Makana 2**  
(Source: Irsyad Leihitu, 2018)

An anthropomorphic figure on this site is depicted in the centre of the cliff, this figure is drawn on the convex surface exposed by the weather and the sun's rays.

The depiction of this anthropomorphic figure has begun to fade on the legs, so the only visible parts are his head, body, and hands.



**Figure 6: Human Motifs on the Len Makana 2 Site**  
(Source: Irsyad Leihitu, 2018)

### **Sun Bayo 1**

Sun Bayo Regional Site has two sites depicted on the same island. As stated earlier, Sun Bayo in Misool's native language means the Forbidden Region. The images found on Sun Bayo 1 site are much better (in terms of quantity and quality) than the other sites in Misool. On this site, there are about seven panels that extend along the cliff. The motifs depicted on this cliff include marine fauna (such as several types of sea fish, dolphins, and turtles), certain symbols and geometric, anthropomorphic figures, face or mask, stone adze, hand-stencils, and therianthrope (the combination of bird form and human).



**Figure 7: Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)

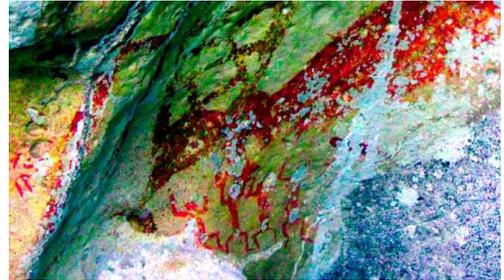


**Figure 8: Picture of Cadas on the Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)

There are two panels that have a depiction of anthropomorphic figures on this site. The first figure (Figure 9) is depicted in red with complete body parts but has begun to fade. This motif clearly illustrates the shape of the face that is drawn (like laughing). It is also illustrated with five fingers on each hand. At the bottom right of this motif, there is a depiction of human motifs of the same shape, but depicted in white pigment. Meanwhile, the second one (Figure 10) is generally described in groups and in tandem. The group's human motifs are generally smaller in red. There are four motifs that are depicted as if they are dancing.



**Figure 9: Human Motifs 1 on Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)



**Figure 10: Group of Human Motifs 2 on the Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)



**Figure 11: Face Motif 1 on Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)



**Figure 12: Mask 1 Motif on Sun Bayo 1 Site**  
(Source: Irsyad Leihitu, 2018)

In addition to depicting human or anthropomorphic figures, on this site, two mask or face motifs are also depicted. The first one is more like a face than a mask, this motif (Figure 11) is depicted in a tiny size, red in colour, and with conditions that have begun to fade. The depiction of the face on this motif is

quite detailed yet terrifying; it is depicted with two eyes, a mouth, and hairs on the head. The last two motifs (Figure 12) have a shape that is more like a mask than a face. The basic shape of this motif is diamond with two curved lines on both sides that look like ears, and two circles in the middle that look like eyes. While the other one is depicted in several stripe lines and curves.

### ***Geometric Motifs: Discs or the Sun***

Spriggs (2011) and Blench, R. (2012, 2014) in O'Connor (2015) and O'Connor et al. (2015) state that in addition to the spread and migration of Neolithic culture or farming, language, as well as objects that are typical of Austronesian speakers, there is also evidence that shows the spread of ideology with new materials, such as symbols and certain practices and traditions. In this case, the symbols referred to by O'Connor are geometric motifs that are shaped like a geometric circle or sun. The description of the motif has generally been described by Ballard (1988) in his research on the Dudumahan, Kai Kecil, Maluku Tenggara site. The depictions of geometric circle symbols are also found on two sites in Misool, which is the Sun Malele 1 Site and Sun Malele 2 Site. In the Sun Malele 1 Site, there is a geometric circle, which is made with painting techniques using a red pigment. Unfortunately, this motif was overlapped by vandalism. Unlike the previous motifs, the depictions of geometric circles on the Sun Malele 2 Site are depicted by stencil techniques and in a unique pattern. This motif is made with an orange pigment.



**Figure 13: Sun motif on Sun Malele 1 Site  
(Source: Irsyad Leihitu, 2018)**



**Figure 14: Sun motifs 2 and 3 at Sun Malele 2 Site  
(Source: Irsyad Leihitu, 2018)**

### ***Stone Artefact Motif: Square and Oval Adzes***

As explained earlier, the cultural product that is very typical of Austronesian speakers is a square adze and oval adze. The tool signifies cultural progress from previously hunting and concocting to farming and agriculture (Simanjuntak,

2011, 2015; Bellwood, 2005). In general, both types of stone tool have different distributions; square adzes are generally spread in western Indonesia and oval adzes are typical of eastern Indonesia. This pattern of distribution is considered by Heine-Geldern (1932, 1948), cited in Tanudirjo and Simanjuntak (2004), as two distinct waves of Austronesian migration.

The rock art at Misool illustrate these motifs, especially at the Sun Bayo 1 Site. On this site, the artefacts described are a square adze and oval adze (Fig. 15) made with stencil techniques with red pigment. Uniquely, the depictions of these two different types of stone tool are drawn with different fish motifs.



**Figure 15: Two different kinds of stone adze, each were depicted on a Dolphin Motif on Sun Bayo 1 Site**



**Figure 16: Oval Stone Adze**  
(Source: Simanjuntak [2015].)



**Figure 17: Square Stone Adze**  
(Source: Ministry of Education and Culture, Indonesia [n.d.].)

### ***Boat Motif***

Some hypotheses concerning the migration of Austronesian speakers state that these communities have a maritime culture and proficiency in the field of water transportation technology, the ability to organise trips for near-far shipping,

astronomical knowledge, climate, and wind direction (Simanjuntak, 2015; Simanjuntak, 2017, p. 202; Hartono, 2006; Bellwood, 2000; Solheim II, 1985). Experts agree that Austronesian-speaking communities have the ability to make and sail an outrigger canoe and also possibly a double boat (Simanjuntak, 2015; Bellwood, 1985; Meacham, 1985). O'Connor (2015), O'Connor et al. (2015), and Ballard (1992) in general have categorised boat motifs in the Melanesian and western Pacific regions as also the characteristics of APT.

The depiction of boat motifs in Misool is only found on the Sun Malele 3 Site. This site is generally the only site whose rock art images are depicted inside a cave (in contrast to other sites generally depicted on cliffs). On this site, there is one motif that clearly illustrates the shape of a boat with drawing (dry) techniques and has black pigment. On this motif, there is also a depiction picturing a man riding a boat.



**Figure 18: Boat Motifs on Sun Malele 3 Site**  
(Source: Irsyad Leihitu, 2018)

The depiction of the boat's motif is very important, because, based on the ethno-archaeological studies carried out, it can be seen that the shape of the boat's motif has similarities to the traditional boat of the typical Misool community. A boat or *waang* in Misool is generally a type of boat that is made from an onion tree (it is said that the wood emits an odour like an onion). In the middle or top, there is a square wooden construction that functions as a base.

The base can at any time be covered with a roof made of knitted pandan leaves to take shelter from the sun and rain. Based on the results of interviews in three traditional villages, it can be seen that, in general, this boat is equipped with a simple sail with a rectangular shape and made of pandan leaves (but to

minimise costs, now the fishermen replace the sail using sack material). In general, this type of boat is used as a means of transportation between islands, both far and near.



**Figure 19: Misool Traditional Boat**



**Figure 20: Traditional Misool Boat with Roof**



**Figure 21: Reconstructing a Boat Motif using Original Circumstances  
(Source: Irsyad Leihitu, 2018 (Figure 19, 20, 21))**

According to Mahdi (1999), this type of boat is one type of Austronesian boat development, or what is also called a double-outrigger boat. This type of boat (with two outriggers), is generally used as a means of transportation between islands and is not a boat used in river routes. A boat or a canoe equipped with a sail is generally used to increase boat speed by utilising sea breezes. Based on the description and illustration of the boat sail described by the Misool community, a rectangular boat screen is commonly known as old Malayan (Mahdi, 1999).

## **Discussion**

Based on the explanation above, it can be seen that the above research consists of several stages that comprised: (1) identifying the location of Misool Regency; and (2) analysing the shape and characteristics of the images/motifs of rock art found

in the area. We have argued that the Misool District is included in the area of distribution of Austronesian languages.

At this stage of the discussion, we tried to demonstrate some genetic analogy between the rock art of Misool with other rock art in the territory of Timor-Leste and Kupang, which, according to Sue O'Connor, is APT. Genetic analogy is generally based on historical relations and culture. For example, the community on site A has a cultural and "language" relationship with the community on site C. Thus, the same artefacts/motifs have the same function, meaning or "origin" (Whitley, 2011, p. 133). This certainly makes sense, given the proximity of the locations of the above sites that are still in the territory of Indonesia and have languages that both branched from Austronesian languages.



**Figure 22: Mask Motif 1  
in Sun Bayo 1 Site**

(Source: Irsyad Leihitu, 2018)



**Figure 23: Mask/Face Motif in Lene Hara Site  
(Left) and Kurus (Right) in Timor-Leste.**

(Source: O'Connor et al. [2010].)



**Figure 24: Disc Motif in  
Sun Malele 1 Site**

(Source: Irsyad Leihitu, 2018)



**Figure 25: Disc Motif of APT in Inuntun Site  
4, Kisar.**

(Source: Ririmasse Photo in O'Connor, 2017)

The genetic analogy is done by comparing the two types of sample found on both sites, which are: (1) face/mask motifs; and (2) geometric circle/sun motifs. Mask motifs at Misool generally have the same characteristics as the mask motifs on the Lene Hara and Kurus Sites in Timor-Leste, which O'Connor et al. (2010) considered as being the face of the ancestors of the Timor-Leste's people, which are the early Austronesian speakers themselves. These motifs, in both sites, are generally depicted in red pigment (O'Connor et al., 2010).

In addition to face motifs, comparisons are also made of the geometric circle/sun motifs found on Sun Malele Site 1 with the geometric circle Motifs found on Inuntun Site 4, Kisar. In the two photos above (Figures 24-25), it appears that both have the same shape, attributes, and characteristics. O'Connor, Mahirta, Tanudirjo, and Ririmasse (2018) in their article entitled "Ideology, performance and its ritual manifestations in the rock art of Timor-Leste and Kisar Island, Island Southeast Asia", tended to categorise the geometric circle motifs above (Figure 25) as APT.

It should be noted that the series of analogies based on the two samples above shows that there are similarities in the depictions and ideas (ideology) in the making of rock art at both sites, within the context of the Indonesian region, which is the largest distribution area of Austronesian language and culture. This also confirms that the Austronesian Painting Tradition (APT) is a tradition that spread across the territory of Indonesia, especially East Indonesia.

## **Conclusion**

Based on the discussion above, it can be concluded that the rock art found in Misool, Raja Ampat Regency, West Papua, can be categorised as a part of the Austronesian Painting Tradition or APT. This can be seen from many indications, such as: (1) the location, which is located in the area of distribution of Austronesian speakers; (2) the motifs, depicted in areas that are isolated and difficult to reach, but can still be seen from a distance; and (3) generally show the specific characteristics of APT and Austronesian Neolithic culture, namely, the hand-stencils, geometric motifs (specifically the symbol of the circle/sun), active anthropomorphic figures, artefact motifs, such as two different types of stone adzes, and the last is the boat motif.

Since this is a preliminary study, it is certainly necessary to do a more intensive research and study, especially with an absolute dating analysis to strengthen this assumption and prove the truth of Ballard's (1992) statement that the Austronesian speakers rock art tradition were made around 4000 years ago.

## **Acknowledgments**

The authors are grateful to Dr. Karina Arifin who has directed us in discussing the APT theory, and Ms. Inggrit H.E. Pojoh, Mr. Zubair Masud from Balar Jayapura, and Mr. Ujon Sujana from the Balai Pelestarian Cagar Budaya (BPCB) Ternate who helped and assisted us while we were at Misool in 2018.

## **References**

- Aubert, M., Setiawan, P., Oktaviana, A. A., Brumm, A., Sulistyarto, P. H., Saptomo, E. W., Istiawan, B., Ma'rifat, T. A., Wahyuono, V. N., Atmoko, F. T., Zhao, J.-X., Huntley, J., Taçon, P. S. C., Howard, D. L., & Brand, H. E. A. (2018). Palaeolithic cave art in Borneo. *Nature*, 564, 254–257.
- Aubert, M., Brumm, A., Ramli, M., Sutikna, T., Saptomo, E. W., Hakim, B., Morwood, M. J., van den Bergh, G. D., Kinsley, L., & Dosseto, A. (2014). Pleistocene cave art from Sulawesi, Indonesia. *Nature*, 514, 170–223.
- Ballard, C. (1992). Painted rock art sites in western Melanesia: Location evidence for an 'Austronesian' tradition, in J. McDonald & I. Haskovec (Eds.), *State of the art: Regional rock art studies in Australia and Melanesia* (Occasional AURA Publication 6) (pp. 94-106). Melbourne: Australian Rock Art Research Association.
- Ballard, C. (1988). Dudumahan: A rock art site on Kay Kecil, Southeast *Molluccas*. *Bulletin of the Indo-Pacific Prehistory Association* (BIPPA), 8, 139-161.
- Bellwood, P. (1985). A hypothesis for Austronesian origins. *Asian Perspectives*, 26(1), 107-117.
- Bellwood, P. (2002). *Prasejarah Kepulauan Indo-Malaysia*. Jakarta: PT. Gramedia.
- Blench, R. (2014). The Austronesians: an Agricultural Revolution that Failed. Unpublished Pre-Circulated Paper for the 2014 *International Conference on Formosan Indigenous Peoples: Contemporary Perspectives*. Taipei, Taiwan: Academia Sinica. 15-17
- Blench, R. (2012). Almost Everything You Believed about the Austronesians Isn't True. In M.L. Tjoa-Bonatz, A. Reinecke and D. Bonatz (Eds.), *Crossing Borders. Selected Papers from the 13th International Conference of the European Association of Southeast Asian Archaeologists*, Vol. 1. Singapore: NUS Press. 128-148.
- Blust, R. (1985). The Austronesian homeland: A linguistic perspective. *Asian Perspective*, 26(1), 45-67.

- Chazine, J.-M. (2011). New survey of painted panels of Northwest Papua: A precise identification of their location parameters and some insight into their function. In *Proceedings of the XXIV Valcamonica Symposium, Art and Communication in Pre-Literate Societies/Arte e Comunicazione nelle Società pre Letterate, Capo di Ponte, 2011* (pp. 106-113). Capo di Ponte: Centro Camuno di Studi Preistorici.
- Howell, C. F. (1980). *Early man*. Jakarta: P.T Dainippon Gitakarya Printing.
- Hartono, W. S. (2006). Austronesian prehistory from a Paleoclimatological and Paleogeographical perspective: Settlement and migration through time in Indonesian maritime islands. In T. Simanjuntak, I. H. E. Pojoh, & M. Hisyam (Eds.), *Austronesian diaspora and the ethnogeneses of people in Indonesian archipelago: Proceedings of the international symposium* (pp. 30-59). Jakarta: Indonesian Institute of Science.
- Heine-Geldern, R. (1932). Urheimat und früheste Wanderungen der Austronesier. *Anthropos*, (H.3./4), 543-619.
- Heine-Geldern, R. (1948). *Indonesian Art: A Loan Exhibition from the Royal Indies Institute, Amsterdam, the Netherlands*. Asia Institute.
- JohoMaps. (n.d.). Retrieved from <http://www.johomaps.com/>
- Lewis-William, D. (2002). *The mind in the cave: Consciousness and the origins of art*. London: Thames & Hudson.
- Maecham, W. (1985). On the improbability of Austronesian origins in South China. *Asian Perspectives*, 26(1), 89-106.
- Mahmud, M. I. (2011). Jejak budaya Austronesia, Melanesia, dan tradisi prasejarah berlanjut di Papua. In M. I. Mahmud & E. N. I. Djami (Eds.), *Austronesia dan Melanesia di Nusantara* (pp. 43-74). Jakarta: Penerbit Ombak.
- Mahdi, W. (1999). The dispersal of Austronesian boat forms in the Indian Ocean. In R. Blench & M. Sprigg (Eds.), *Archaeology & language III, Artefacts, languages and texts* (pp. 144-208). London: Routledge.
- Mcleod, E. (2007). *Traditional marine resource management in Raja Ampat, Indonesia*. Hawai'i : University of Hawai'i.
- Ministry of Education and Culture, Indonesia. (n.d.). Retrieved from <https://kebudayaan.kemdikbud.go.id/>
- Nasruddin. (2015). Membaca dan menafsirkan temuan gambar prasejarah di Pulau Misool Raja Ampat, Papua Barat. *Berkala Arkeologi Sangkhakala*, 18(2), 150-168.
- Oppenheimer, S. (2004). The 'Express Train from Taiwan to Polynesia': On the congruence of proxy lines of evidence. *World Archaeology*, 36(4), 591-600.
- Oppenheimer, S., & Richards, M. (2001). Fast trains, slow boats, and the ancestry of the Polynesian Islanders. *Science Progress*, 84(3), 157-181.

- O'Connor, S. (2003). Nine new painted rock art sites from East Timor in the context of the Western Pacific Region. *Asian Perspective*, 42(1), 96-128.
- O'Connor, S. (2015). Rethinking the Neolithic in Island Southeast Asia, with particular reference to the archaeology of Timor-Leste and Sulawesi. *Archipel*, 90, 15-47.
- O'Connor, S., Aplin, K., St Pierre, E., & Feng, Y.-x. (2010). Faces of the ancestors revealed: Discovery and dating of a Pleistocene-age Petroglyph in Lene Hara Cave, East Timor. *Antiquity*, 84(325), 649-665.
- O'Connor, S., Louys, J., Shimona, K., & Shimona, M. (2015). First record of painted rock art near Kupang, West Timor, Indonesia, and the origins and distribution of the Austronesian painting tradition. *Rock Art Research*, 23(2), 193-201.
- O'Connor, S., Mahirta, Tanudirjo, D., & Ririmasse, M. (2018). Ideology, performance and its ritual manifestations in the rock art of Timor-Leste and Kisar Island, Island Southeast Asia. *Cambridge Archaeological Journal*, 28(2), 225-241.
- Oktaviana, A. A. (2015). Temuan mutakhir situs gambar cadas. In R. C. E. Permana (Ed.), *Gambar cadas prasejarah di Indonesia* (pp. 334-337). Jakarta: Direktorat Pelestarian Cagar Budaya dan Permuseuman.
- Oktaviana, A. A. (2016). Hand stencil with and without narrowed fingers at two new rock art sites in Sulawesi, Indonesia. *Rock Art Research*, 33(1), 32-48.
- Peta administratif Kabupaten Raja Ampat. (n.d.). Website of the Raja Ampat Regency Government. Retrieved from <http://www.rajaampatkab.go.id/administrasi>
- Poesponegoro, M. D., & Notosusanto, N. (2008). *Sejarah nasional Indonesia I*. Jakarta: Balai Pustaka.
- Raja Ampat District Government. (2019). Sejarah Kabupaten Rajja Apmat [sic]. Retrived from <http://www.rajaampatkab.go.id/sejarah#>
- Simanjuntak, T. (2011). Austronesia prasejarah di Indonesia. In M. I. Mahmud & E. N. I. Djami (Eds.), *Austronesia dan Melanesia di Nusantara* (pp. 1-22). Jakarta: Penerbit Ombak.
- Simanjuntak, T. (2015). Progres penelitian austronesia Di Indonesia. *Amerta*, 33(1), 25-44.
- Simanjuntak, T. (2017). The western route migration: A second probable Neolithic diffusion to Indonesia. In P. J. Piper, Philip, H. Matsumura, & D. Bulbeck (Eds.), *Neu persepectives in Southeast Asian and Pacific Prehistory* (pp. 201-212). Canberra: ANU Press.

- Setiawan, P. (2015). Introduction. In R. C. E. Permana (Ed.), *Gambar cadas prasejarah di Indonesia* (pp. 1-71). Jakarta: Direktorat Pelestarian Cagar Budaya dan Permuseuman.
- Solheim II, W. G. (1985). The Nusantao hypothesis: The origin and spread of Austronesian speakers. *Asian Perspective*, 26(1), 77-88.
- Specht, J. (1979). Rock Art in the Western Pacific. In S. M. Mead (Ed.), *Exploring the Visual Art of Oceania: Australia, Melanesia, Micronesia and Polynesia*. Honolulu: The University Press of Hawaii. 59-82
- Spriggs, M. (2011). Archaeology and the Austronesian Expansion: Where are we now ?. In *Antiquity* 85: 510-528
- Suroto, H. (2011). Budaya Austronesia di Papua. In M. I. Mahmud & E. N. I. Djami (Eds.), *Austronesia dan Melanesia di Nusantara* (pp. 95-106). Jakarta: Penerbit Ombak.
- Tanudirjo, D. A. (2011). Interaksi Austronesia – Melanesia Kajian Interpretasi Teoritis. In M. I. Mahmud & E. N. I. Djami (Eds.), *Austronesia dan Melanesia di Nusantara* (pp. 23-42). Jakarta: Penerbit Ombak
- Tanudirjo, D. A., & Simanjuntak, T. (2004). Indonesia di tengah debat asal usul masyarakat Austronesia. In E. K. M. Masinambouw, D. A. Tanudirjo, H. T. Simanjuntak, T. Jacob, I. Y. Fernandez, H. Widiyanto, & B. Prasetyo (Eds.), *Polemik tentang masyarakat Austronesia: Fakta atau Fiksi?* (pp. 11-32). Jakarta: Lembaga Ilmu Pengetahuan Indonesia.
- Wilson, M. (2002). Picturing Pacific prehistory: The rock-art of Vanuatu in a western Pacific context. Doctoral thesis, Department of Archaeology and Natural History, Australian National University, Canberra, Australia.
- Wilson, M. (2004). *Rethinking regional analyses of western Pacific rock-art*. In V. Attenbrow & A. Fullagar (Eds.), *A Pacific odyssey: Archaeology and anthropology in the western Pacific. Papers in honour of Jim Specht* (pp. 173-186). Canberra: Records of the Australian Museum.
- Widiyanto, H. (2015). Manusia pendukung budaya gambar cadas. In R. C. E. Permana (Ed.), *Gambar cadas prasejarah di Indonesia* (pp. 72-83). Jakarta: Direktorat Pelestarian Cagar Budaya dan Permuseuman.
- Whitley, D. S. (2011). *Introduction to rock art research*. New York: Routledge.