Easter Island's birdman stones in the collection of the Peabody Museum of Archaeology and Ethnology, Cambridge, Massachusetts

Paul Horley and Georgia Lee

*This article focuses on two carved stones collected from Easter Island by the expedition of Alexander Agassiz. We report the presence of pigment traces on the larger stone adorned with two facing birdmen (*manupiri*) that allows a tentative reconstruction of the way the carving was painted. The second stone features a bas-relief birdman (*tangata manu*) surrounded by several* komari *motifs and also the image of a* patuki *fish, which, to the best of our knowledge, was neither described nor identified before. Basing our interpretations on Easter Island lore that ascribe* patuki *with fertilizing powers, the discovery of this fish in close association with* tangata manu *offers considerable support to a fertility-based impetus of the late phase of the birdman cult.*

*Este artículo se enfoca en el estudio de dos piedras talladas que fueron recogidas en la Isla de Pascua por la expedición de Alexander Agassiz. En este articulo, se reporta la presencia de restos de pigmentos en la piedra más grande, la cual es adornada con dos hombres pájaros ubicados uno frente al otro (*manupiri*) y que permite una reconstrucción tentativa de la manera en que fue pintada esta escultura. La segunda piedra tiene un hombre pájaro (*tangata manu*) en bajo relieve, rodeado por varios diseños de* komari *y también la imagen de un pez* patuki*, que, según nuestro conocimiento, no ha sido identificada o descrita antes. Basando nuestras interpretaciones en la tradición local de la Isla de Pascua, la cual asigna al* patuki *los poderes de fertilidad, el descubrimiento de este pez en asociación con un* tangata manu *permite apoyar la teoría de un impulso basado en el tema de la fertilidad que fue característica para la última fase del culto del hombre pájaro.*

Introduction

Rapa Nui (Easter Island) is renowned for its vast and varied cultural heritage, and one of the particular developments in the late prehistory of the island was the famous cult of the birdman, *tangata manu*. This cult consisted of an annual event involving the selection of a sacred birdman, determined by a competition to obtain the first egg of a sooty tern from the offshore islet of Motu Nui. Participants in the event gathered at the ceremonial village of 'Orongo, perched on the picturesque rim of the extinct volcano, Rano Kau.

The site itself is in a breath-taking location, on the top of a narrow ledge some 300m above the ocean and in direct view of the islets of Motu Kao Kao, Motu Iti and Motu Nui, some 2km from the shore. In the Austral spring, when the nesting season of the migratory sea birds began, the participants of the competition – important men in Rapanui society – assigned their proxies, called *hopu,* to swim to Motu Nui and wait there for the moment when the birds began to lay eggs. The quest for the first egg was a great test of agility and strength – and political power. It is said that the identity of the would-be birdman was revealed in a vision to the priest, or *ivi atua*; the dominating clans reserved the right to admit or deny participation of the others.

Once the first egg was found, the *hopu* who had it would swim back to the island and climb the cliffs of Rano Kau and present the egg to his patron, who then became *tangata manu* – the incarnation of the great god Makemake – a position held for a year. The birdman would live in seclusion for a year at Orohie in the Hotu Iti territory, or close to the royal residence at 'Anakena, depending on the tribe to which the winner belonged. The clan of the *tangata manu* gained the right to pillage other tribes, demanding their share of food. In the next year, the birdman retired to his normal life, and the competition was repeated to determine

Paul Horley | Chernivtsi National University, 2 Kotsyubynsky Str., 58012 Chernivtsi, Ukraine; CIMAV Campus Monterrey, Nuevo Léon, Mexico. paul_horley@yahoo.com

Georgia Lee | The Easter Island Foundation, P.O. Box 6774, Los Osos, CA 93412, USA.

another winner. This "rotating" leadership replaced the original hereditary monarchy and while it gave access to valuable food resources to different tribes each year, it also caused waves of inter-tribal warfare that ravaged the island. During this time, the island society lost the consolidation that was vital to create the megalithic wonders of Rapa Nui, such as the legendary *moai* and ceremonial platforms (see, e.g., Van Tilburg 1994).

The birdman cult was associated with the development of a particular artistic style, focused on a stylized depiction of the *tangata manu* (a human figure shown in profile with a bird head), eye-masks and faces of Makemake, as well as stylized drawings of *manutara* birds. These motifs can be found in great numbers at the ceremonial village of 'Orongo, either in carved or painted form. At the southern extremity of 'Orongo there is a natural basalt outcrop; here each boulder is richly decorated with birdman designs, predominantly carved in bas-relief. This sacred precinct, called Mata Ngarau, was reserved for priests and *rongorongo* men.

'Orongo was first mentioned by J. Linton Palmer (Palmer 1870a, 1870b); the important early surveys of the site were made by Geiseler in the 1880s (Ayres & Ayres 1995), Thomson (1891) and Routledge (1920).

This paper describes and discusses two carved boulders in the collection of the Peabody Museum of Archaeology and Ethnology (Harvard University, Cambridge, Massachusetts). These boulders were collected from the ceremonial village of 'Orongo by Alexander Agassiz (1906), who visited Rapa Nui in the framework of an expedition to the eastern and tropical Pacific on the steamer *Albatross*. The accounts of the expedition were published in 1906 and feature an impressive photographic documentation of key sites of Rapa Nui; a more detailed discussion of which will be presented elsewhere (Lee & Horley *in prep.*).

The *Manupiri* Carving

The larger of the two boulders (Figure 1) in the collections of the Peabody Museum, catalogue number 05-2-70/64852, measures 88 x 60 x 30cm (Peabody 2009a). It features bas-relief carvings of two birdman figures facing each other in a configuration known as *manupiri*, which is possibly related to a connection between human and spiritual aspects or *tumu* groups (Lee 1992:70). The hands of the birdman figures are shown together, forming a "conjoined hand" with six fingers, none of which are thumbs. The feet are also joined together but show no toes – only the heels are delineated, although they are considerably eroded. The birdman on the left is carved in a classical conventionalized style and has a hooked beak that is characteristic of a frigate bird; the right birdman has a beak with rounded ends, which is discussed in detail below. At the lower body of the birdman on the right, one can see an incised groove that defines the underside of the knee, buttocks and lower back. It is difficult to say whether this outline pre-dates or post-dates the main bas-relief image. It is tempting to suggest that the carver incised the contour and then decided that the resulting body was too small, so he made the sculpture with larger proportions, thus implying that the incision was made before the carving. On the other hand, comparing the sizes of the birdmen, the outline makes the composition more symmetrical, and the incision may have been made over the final sculpture with the aim of reducing the lower body of the birdman on the right. There is supporting evidence for the latter; in comparing the contours that mark the underside of the knee, the outline carved on the right birdman better mirrors the design of the left figure.

The birdmen are executed in deep relief and set between two *komari* – stylized motifs depicting female genitalia (Figure 1). The left *komari* is carved in realistic relief (Figure 2a) and has a vertical orientation that is common for this motif in Rapa Nui art. The *komari* on the right side is horizontal and concave (Figure 1). Because the top level of this design corresponds to the background of the main carving, it may have been added to the composition later (Figure 2b; also see Figure 5b); the carver had to remove a considerable amount of rock around it to achieve the desired bas-relief image. A simple *komari* is incised on the body of the left birdman and is associated with a cupule. In rock art, cupules were made for "acquisition of power from the stone, or nullification of power inherent in the stone" (Lee 1992:46). Similarly, "female sexual parts possessed a powerful magic of a negative kind in that they contained *tapu*-destroying power" (Lee 1992:193). Under these circumstances, *komari*-with-a-cupule could have been an even more efficient "*mana*-draining device". This design is common at Mata Ngarau – for example, Locus #35 has a *komari* with a cupule in its upper part carved to the left of the elbow of the birdman (Figure 2e). This same *tangata manu* features two *komari* on its body, touching a large cupule with their labia. Other examples show cupules set in the top vertex of a *komari* (Figure 2f).

The possible relationship between birdman and *komari* motifs in Rapa Nui rock art has been discussed in the literature (see, for example, Lee 1992:193-196). Here we would like to reiterate that not every *tangata manu* at Mata Ngarau is superimposed by *komari* – out of 334 vulva forms registered at 'Orongo (Lee 1992:64) only 48 are superimposed over bas-relief birdmen (Lee 1992:193). The same selectivity can be noted for the cupules carved on the great *moai* (Figure 2g):

> "In some instances at Rano Raraku, cupules literally cover the *moai* figures… There seems to have been some kind of selection process because only certain

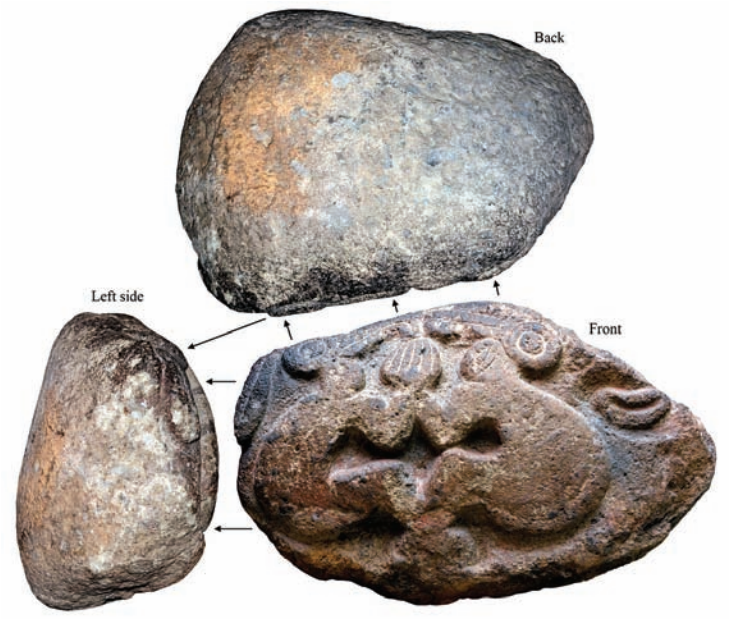

Figure 1. Stone with a *manupiri* carving, Peabody Museum number 05-2-70/64852 (Copyright 2011 President and Fellows of Harvard College).

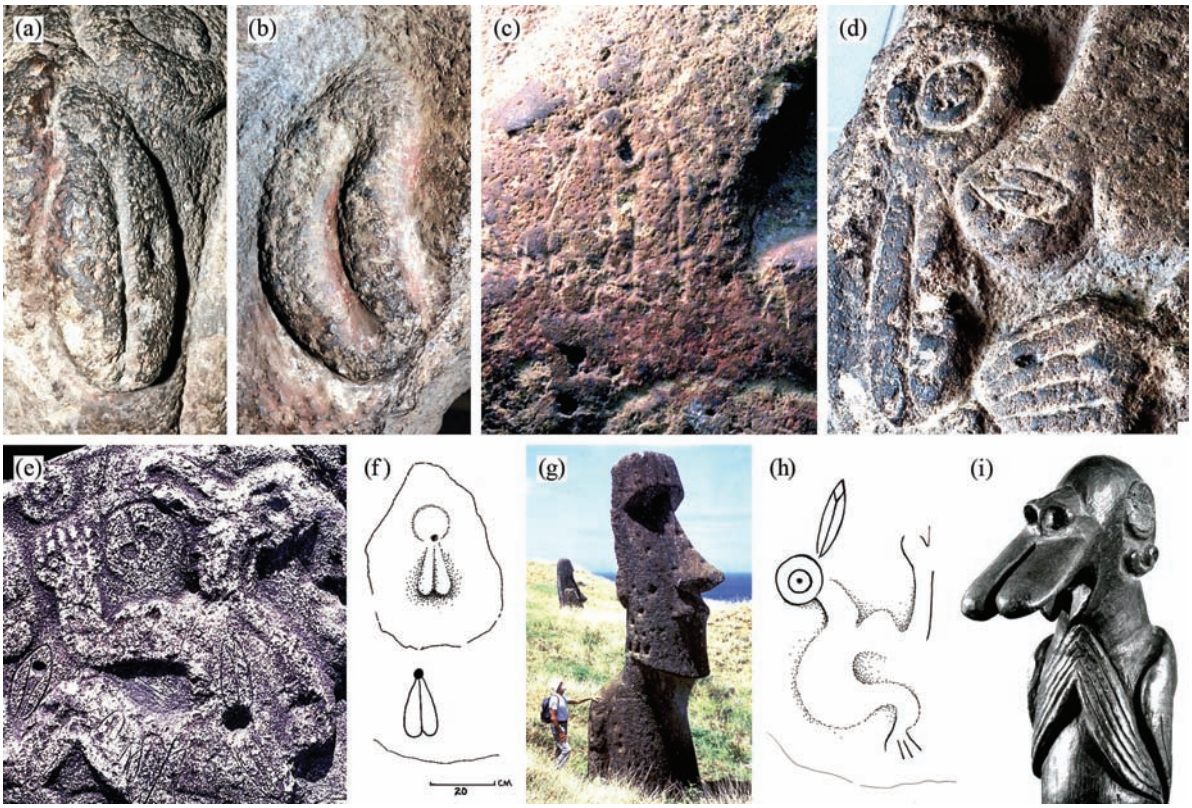

Figure 2. *Komari* figures carved on the *manupiri* stone, Peabody Museum number 05-2-70/64852 (Copyright 2011 President and Fellows of Harvard College): bas-relief forms carved a) to the left and b) to the right of the *manupiri* figure, c) *Komari* and a cupule incised on the lower body of the left birdman, d) incised *komari* on the neck of the right birdman, the beak of which may be another vulva form. The similar carvings in Rapa Nui art: e) superimposed *komari* and cupules at Mata Ngarau, locus #35 (photo by W. Hyder); f) *komari* associated with a cupule, 'Orongo locus #75b (top) and Vai a Tare site 2-128b (bottom; drawings by G. Lee); g) cupules on *moai* Piropiro, exterior quarries of Rano Raraku (photo by G. Lee); h) birdman with a *komari* carved in place of its beak, 'Orongo locus #61 (drawing by G. Lee); i) birdman figurine with *komari* in place of its beak, Brunswick Museum (photo courtesy of the Kon-Tiki Museum).

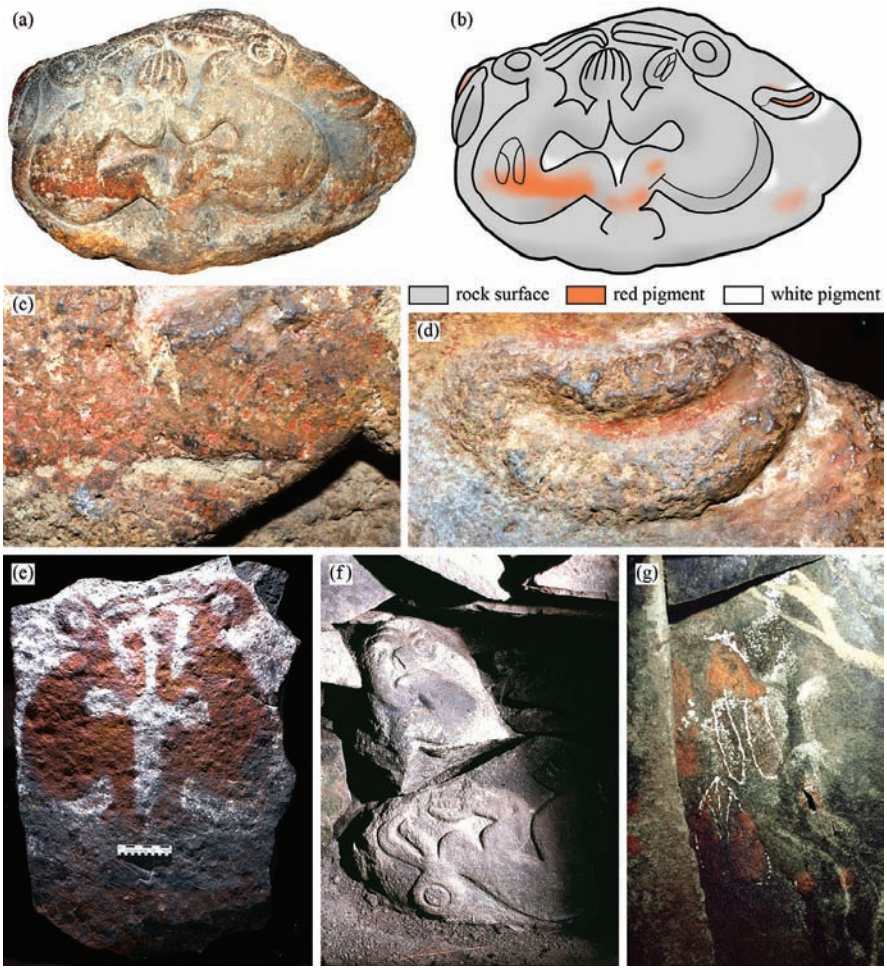

Figure 3. Traces of paint on the *manupiri* stone, Peabody Museum number 05-2-70/64852 (Copyright 2011 President and Fellows of Harvard College); the photographs are over-saturated in red to emphasize the paint: a) general image and b) sketch showing the locations of paint traces, c) lower body of the left birdman showing red clay pigment in pores of the stone, d) upper right *komari* with remains of red pigment in the central groove and on its top edge; white pigment can be seen around the right side of the *komari*. Use of pigments at 'Orongo: e) *manupiri* painting on a rock plate that once adorned a house interior (photo by M. Oliver and W. Hyder, 1982), f) bas-relief birdmen (*in situ* in a house of Mata Ngarau) featuring white background painting (photo by W. Hyder, 1982), and g) incised *komari* on the ceiling plates of 'Orongo house with remains of red pigment (photo by C. Cristino).

Figure 4. Tentative photographic reconstruction by Horley of the *manupiri* stone, Peabody Museum number 05-2-70/64852 (Copyright 2011 President and Fellows of Harvard College), walled-in and painted. The background image of the 'Orongo house's interior was taken during the Petroglyph Documentation Project (photo by G. Lee).

> statues have these additions. It may be a case of trying to extract the *mana* from them, or to release, and thus destroy, the *mana* inherent to them" (Lee 1992:124).

In the face of such selectivity – and if vulva motifs were seen as a way to "nullify" the magical powers of the carving – it is tempting to interpret the birdman designs superimposed with a *komari* as acts of "history correction". However, this phenomenon may have a different explanation, which will be presented in the last section of this paper.

As for the *manupiri* stone in the Peabody Museum, it seems reasonable to assume that the *komari* incised on both bas-relief birdmen (Figure 1) postdate them, even though we have no information about the exact time of their incision – were they made when the rock was still in its place, or just before extracting it (for example, as an effort to drain away the *mana* and therefore to "pacify" the spirits embedded in the carving)? Also, as the rock was selected for shipping off the island, might some Rapanui have made quick incisions of *komari* to ensure that the "outsiders" would not carry away an object embedded with *mana*? This hypothesis may explain the abundance of *komari* incisions on other stones collected from Rapa Nui (see Esen-Baur & Forment 1990:283, 284, 293). In the case of wooden figures, a similar effect might have been achieved by extracting one of their eye inlays (Haskell pers. comm. 2011).

The birdman carved on the right of the *manupiri* stone has another curious detail. Esen-Baur and Forment (1990:281) note that there could be another vulva form carved above the *komari* incised over its neck. While no detailed explanation is supplied, one may wonder if the carvers had the shape created by the base of the curved neck and beak, or the beak itself in mind? Indeed, compared to the classical hooked beak of the left birdman, the beak of the right *tangata manu* has oval-shaped tips (Figure 1), which are reminiscent of the labia of a *komari* motif (Figure 2d). It is difficult to expand on a logical explanation of such a strange-looking combination, but birdmen with vulva-shaped beaks are known from rock art (Figure 2h) and woodcarvings (Figure 2i) from Rapa Nui. Both bas-relief *komari* carvings on the *manupiri* stone have traces of red pigment around (Figure 2a) or inside (Figure 2b) them.

A detailed analysis of the entire rock confirms that it was originally painted. To emphasize the presence of the red-earth pigment, the saturation of red was increased in the photographs in Figure 3. As one can see, there are several areas with considerable traces of pigment (Figure 3a), as sketched in Figure 3b. Red pigment can be seen in the pores of the rock at the lower body of the left birdman (Figure 3c). The spaces between the figures of *tangata manu* and the exterior of the right bas-relief *komari* show traces of white pigment (Figure 3d). This painting scheme is consistent with that observed on other artifacts from ʻOrongo (see, e.g., Horley & Lee 2008:114-115, 2009:106), that usually favor red figures on a white background for the improvement of image contrast/visual appeal. Red pigment (*kiea*) was usually made from weathered tuff; white pigment was produced from *marikuru* tuff (Lee 1992:186). The color red has a special meaning throughout Polynesia, being associated with chiefly power, *mana* and life. Red-white contrast is also prominent: "The imagery of colour … contrasts red as the signal of *tapu* and power – rank, sacred lore, gods and blood – with white, the colour of cleanliness, powerlessness, freedom from *tapu*, and shame" (Salmond 1978:12). Therefore, the white background, in addition to providing purely aesthetical considerations, might have emphasized the sacredness of the red-colored designs.

The red-on-white painting scheme can be clearly illustrated with artifacts from ʻOrongo – these are the colors of the *manupiri* motif painted on a stone slab that once adorned the interior of a stone house (Figure 3e). In the case of bas-relief carving, the protected background areas may retain traces of white pigment (Figure 3f). Some *komari* motifs were also known to be painted red (Figure 3g). Therefore, the study of the original artifact and the results of previous research on Rapa Nui paintings allow us to suggest that the *manupiri* boulder in the Peabody Museum collection was probably painted during its ceremonial life; the bas-relief birdmen and *komari* figures were covered with red pigment, and the background of the carving was chalk-white. Our tentative reconstruction showing the painted *manupiri* stone is presented in Figure 4.

One of the great examples of painted rock art of Rapa Nui is the famous *moai* Hoa Hakananai'a, which was also collected from the ceremonial village of the birdmen:

> "the carvings [on the back of the statue] … were painted red and white. Red and white paint was reported in several Orongo buildings and in Taura renga, which housed Hoa Hakananai'a … It was not applied, so far as is known, to Orongo petroglyphs, but is found on rock art in Rano Raraku and elsewhere" (Van Tilburg 2004:50).

With the evidence coming from pigment traces on Mata Ngarau rocks (Figure 3f) and the *manupiri* stone (Figure 3a), we can state with considerable certainty that ʻOrongo petroglyphs were also painted. One may hypothesize that deposition of the pigment – perhaps, effected during the annual birdman competition – might have had enormous cultural and ritual significance (Horley & Lee 2008:115-116).

To determine the way in which the stone #05-2-70/64852 was mounted in its location, it was

studied from different sides (Figure 1). The side view shows that the front side of the stone has a patina from frequent handling. In contrast, the back surface of the rock is relatively smooth, lacks carved designs and, despite a slight color variation, does not reveal any pronounced traces of handling. The study of the upper surface of the rock, looking from the left and right sides (Figure 5), revealed that the left side (with the vertical *komari*) has a considerable patina that extends in non-uniform blots all over the heads of both birdmen (Figure 5a). Such traces of frequent handling, touching or rubbing of the stone when being *in situ* suggest a considerable cultural significance of the carving. On the right side, the upper surface is flat and clean; the significant traces of handling are noticeable mainly at the vertical surfaces around the bas-relief *komari* (Figure 5b). This distinct pattern of patination, the absence of lichens, and presence of paint traces, suggests that the *manupiri* stone was partially exposed in a place protected from the elements and, indeed, we know that the rock was situated inside a house at 'Orongo, because it was documented *in situ* by Geiseler's expedition in 1882 (Horley & Lee 2009:115).

Geiseler arrived on Rapa Nui without any photographic equipment, so that all graphical documentation was made by sketching. Paymaster Weisser produced drawings (and etchings based on them) for the expedition report. Geiseler's Plate 18 (reproduced here in Figure 6) shows a recognizable depiction of the *manupiri* stone with two *komari* – a vertical one at the left and horizontal one at the right side of the carving. The dimensions of the carving supplied by Geiseler (64 x 45cm) are smaller than modern measurements (88 x 60cm). This considerable difference suggests that the Germans measured the dimensions of the *manupiri* motif but not the size of the rock itself.

The Peabody Museum database says that Stone 05-2-70/64852 comes from "Orongo, lower part" (Peabody 2009a). The scan of the original registry journal (accessible from the Peabody Museum website) gives the provenance "from shore base of Mountain at extreme south-west of Island", which is likely a reference to the volcano at Rano Kau. No further details are given, so it is unclear if Agassiz's expedition excavated the stone from the house – or if the rock was extracted/fell from the wall before and was just collected by the *Albatross* team. The good state of preservation seemingly points to the first scenario, but is insufficient to prove it conclusively. Be that as it may, one can rather focus on inferring about the location of the house sheltering the stone from Geiseler's descriptions (English translation by Ayres & Ayres):

> "Very close to the first cliff wall [the rocks of Mata Ngarau] there was still another underground stone house which was accessible from the top because some of its covering plates were broken. This stone house also had a side cavity and on the inside it had two larger stones incorporated into the wall; one of these stones displayed figures from the cliffs [i.e., birdmen; this was the *manupiri* stone] and the other the head of a god [Makemake]. It seemed to be of value to dig out one of these figures and to sketch the sculptures on the cliffs" (Ayres & Ayres 1995:37).

And further:

> "Afterwards we visited several more stone houses … the cliffs decorated with sculptures and the last stone house with the walled-in figures still remained to be investigated. … The entrance to the last stone house which we were to visit was so entirely obstructed by rubble that we had to climb down into it from the top. This dwelling consisted of two parts, a 4.75m long and 2m wide main section and 1.30m deep and 1.40m wide side chamber. We attempted to excavate and remove the two walled-in stone figures which we had discovered the day before. However, it soon became obvious that the carvings, which protruded approximately 2cm, were so affected by the continual wetness that they crumbled at the touch. … Under these circumstances the notion of removing them had to be abandoned; instead pictures were drawn of them which can be found in Plates 18 [the *manupiri* stone] and 19 [a stone with a Makemake face]" (Ayres & Ayres 1995:41-45).

Looking at the side view of the *manupiri* stone (Figure 1), it is clear why the expedition failed to extract it – the exposed part of the rock was so small that it was impossible either to pull or to pry it out (such actions would only damage the carving, which probably explains Geiseler's comment about the fragility of the stone); the only way to extract the stone was to dismantle the entire wall above it, which was a precarious and time-consuming enterprise.

The description of the house with walled-in rocks matches House #47 (in the numbering system by Horley & Lee 2009:118-119) located on the south side of Mata Ngarau (i.e., beyond it for a spectator standing inside the 'Orongo village). Routledge gives the following description of this house (1920:447, House #45 in her nomenclature):

> "[House] No. 45. Condition: fair. Passage can be traced. Chamber: oval, 15'6" x 7'0" [4.72m x 2.13m; Geiseler: 4.75m x 2m]. At west end on south side recess with oval termination, 4'7" x 4'4" [1.40m x 1.32m; Geiseler: 1.40m x 1.30m]."

As the dimensions of the chambers correspond with Geiseler's data, we considered that the *manupiri* stone came from House #47 (Horley & Lee 2009:115).

Figure 5. The *manupiri* stone (left), Peabody Museum number 05-2-70/64852 (Copyright 2011 President and Fellows of Harvard College) seen from the top with light-colored upper surface contrasted with patinated front areas (marked with arrows).

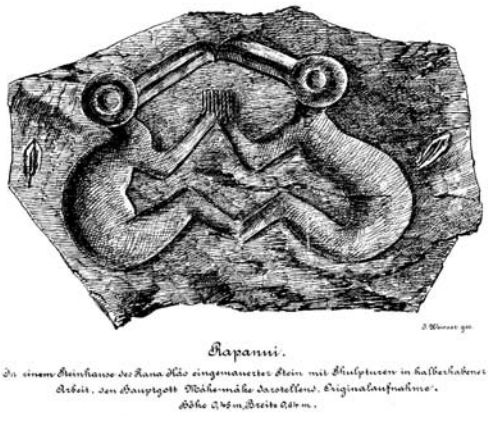

Figure 6. The *manupiri* stone (above) as drawn by Paymaster Weisser (Geiseler 1883:Plate 18). The original figure caption says: "Walled-in stone relief representing the chief divinity, Make-make, in relief sculpture, inside a stone house on Rano Kau. Height of 0.45m and width of 0.64m" (Ayres & Ayres 1995:46).

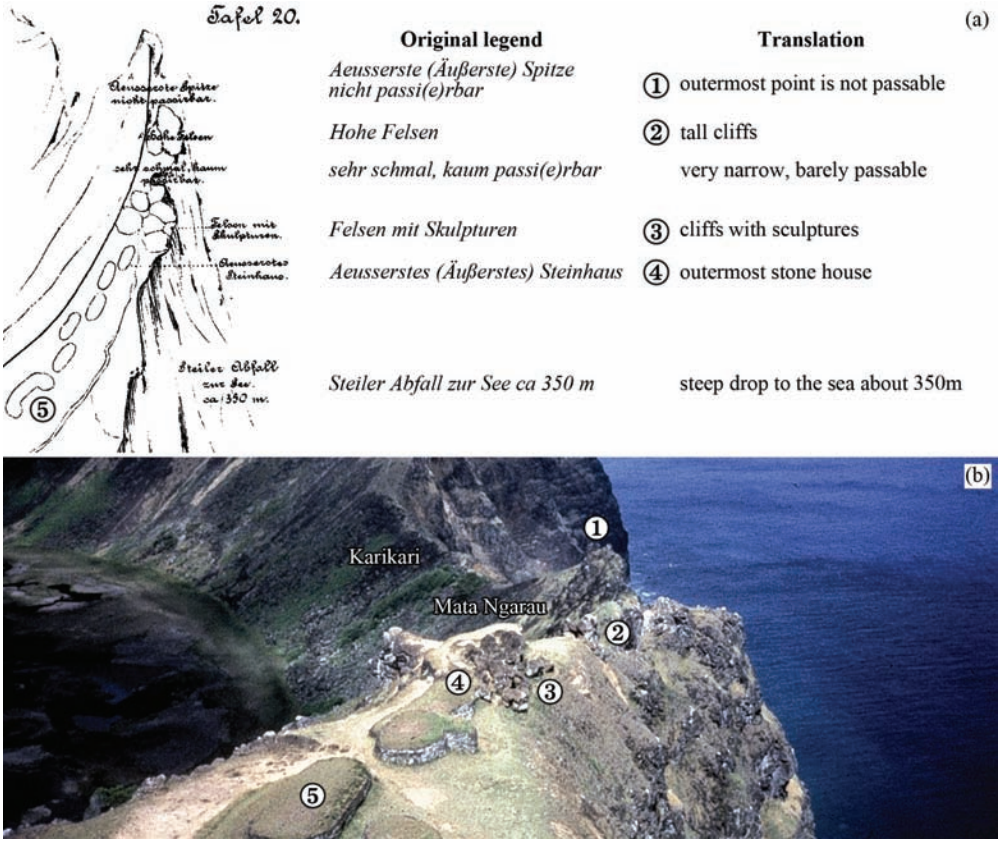

Figure 7. Identification of the house in which the carving was seen by Geiseler: a) Weisser's map published as Plate 20 in Geiseler's report; b) kite aerial photograph of south extremity of 'Orongo village with the corresponding places marked (photo courtesy of Don and Elaine Dvorak). The numbers denote: 1) a peak at the entrance to Karikari; 2) a rock cluster corresponding to locus #1; 3) carved stones of Mata Ngarau; 4) House #39 and 5) barrow pit houses #33 and #34.

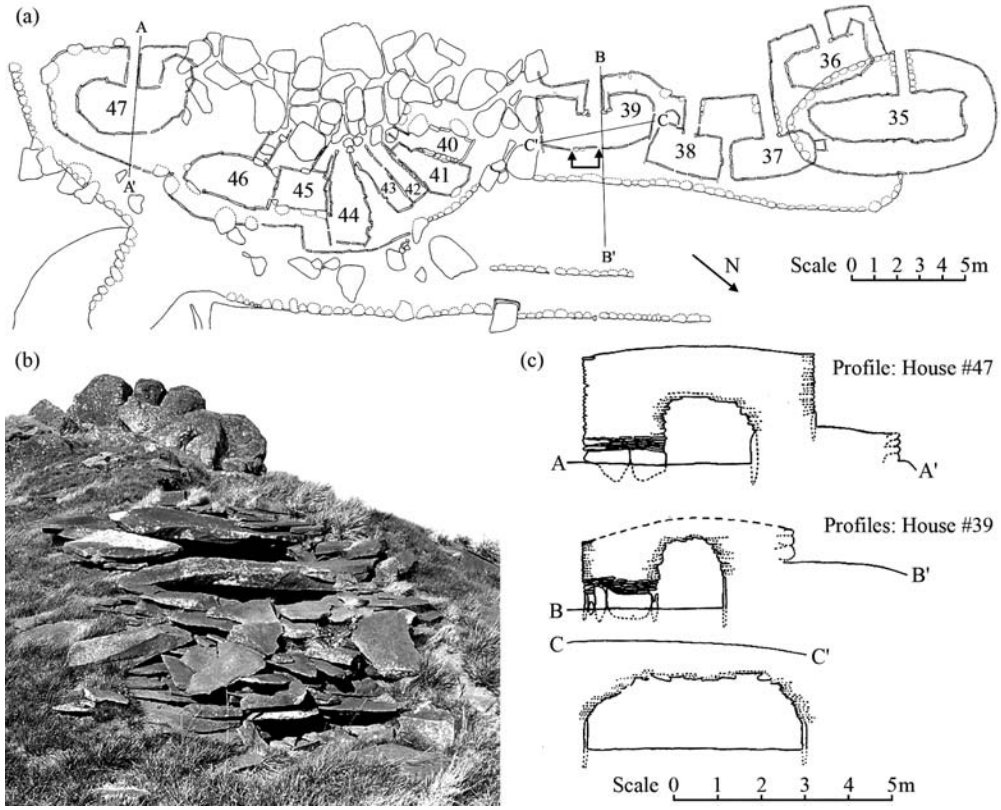

Figure 8. Identification of the house where Geiseler's expedition saw the embedded carvings: a) map of Mata Ngarau (adapted from Mulloy 1997:Bulletin 4, Figure 2). The arrows mark the damaged section of the inner wall of House #39; b) photograph of Mata Ngarau showing the destroyed ceiling of House #39 in the foreground (Routledge 1920:Plate 5.2; Copyright Trustees of the British Museum); c) the transversal profiles of houses #47 and #39 (adapted from Mulloy 1997:Bulletin 4, Figure 2).

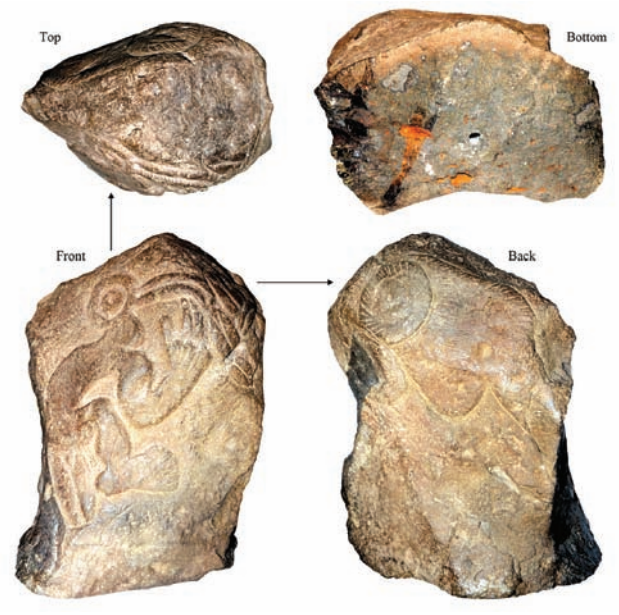

Figure 9. Stone with the *tangata manu – patuki* carvings, Peabody Museum number 05-2-70/64851 (Copyright 2011 President and Fellows of Harvard College).

However, additional studies performed since then reveal that Geiseler's report gives a contradicting description of the house in question. The "stumbling block" is Mulloy's documentation (1997:78, House #1 in his nomenclature):

> "[Mata Ngarau] area had been extensively restored by Englert in 1947… Englert apparently replaced at least some roofs, rebuilt the wall facing the court and perhaps some or all of the entrance passages in it, and the rear exterior wall of Houses 2-8, though not that around House 1 … No evidence remained that Englert had attempted to restore House 1. Only the vertical slabs interspersed with a few irregular foundation stones and a course or two of horizontal masonry remained of its exterior wall … Only the interior end of the entrance passage remained ceiled. *Interior walls remained intact* [our emphasis] up to part of the second cantilevered course and the west end of one central roof slab remained."

Therefore, despite the fact that the ceiling of House #47 collapsed since Routledge's documentation, its interior walls were in place at the time of the restorations

in 1974 (Mulloy 1997:70). This observation does not agree with removing a heavy 88cm-wide embedded boulder, which should cause significant damage to the inner house masonry.

To explain this inconsistency, we turned to Geiseler's original 1883 report and compared the text to a sketch of 'Orongo made by Weisser (Figure 7a). In the text, the house with walled-in blocks is called "*das letzte Steinhaus*" (Geiseler 1883:16) – "the last stone house" located before reaching the cliffs with carvings, i.e., Mata Ngarau. Weisser's comment on the map conveys the same meaning with "*Äußerstes Steinhaus*" (Figure 7a) – "the outermost stone house", also positioning it before (at the north side of) "*Felsen mit Skulpturen*" – cliffs with sculptures, Mata Ngarau. Therefore, both Geiseler and Weisser listed the house with embedded stones to be last/outmost; thus, they did not identify the entrances opening to the Mata Ngarau court as houses proper, nor did they mention a House #47 standing behind the sacred precinct. This detail explains the problem: the Germans measured the real outermost House #47, but then confused its metric data with "last" House #39 *before* Mata Ngarau (Figure 7a and Figure 7b, #4).

The 'Orongo survey carried out by the *Mana* Expedition in 1914-1915 (i.e., after the *manupiri* stone was removed by Agassiz's expedition) confirms that House #39 was nearly demolished (Routledge 1920:445):

> "[House] No. 39. Condition: *Middle of north wall and roof broken down* [our emphasis]. Exterior entrance broken … Chamber: plan peculiar. Rectangular main chamber 16'4" x 4'8" [4.98m x 1.42m]; in addition, on each side of the entrance are two large recesses, concave in form, which extend from the walls of the passage to the respective ends of the house. These recesses measure at each end – that is, at their narrowest points – about 2'4" [0.71m]. Their roofs are domed. The effect given is that the passage penetrates the house and divides its southern side into two parts."

It is worth noting that the length of House #39 (4.98m) is close to that of House #47 (4.72m); both have a peculiar plan with secondary chambers. Looking at the plan of Mata Ngarau published by Mulloy (1997: Bulletin 4, Figure 2) one can notice a similarity in the dimensions of both houses (Figure 8a). The broken roof of House #39 was documented by Routledge (Figure 8b). Moreover, she also mentioned that the middle of the north (i.e., inner) wall of the house was broken down. This would be a perfect position for a walled-in boulder, as, similar to other 'Orongo houses, the best lighting was received only by the wall facing the crawl-in passage (Routledge 1920:431). Mulloy's description of House #39 is as follows (1997:80, House #9 in his nomenclature):

> "From House 9, two central ceiling slabs had been removed. Several foundation slabs on the northwest, interior wall tipped slightly inward but were determined to be in stable condition. These were not realigned because to do so would have required tampering with much original masonry. Interior restoration included only replacement of displaced ceiling slabs."

The inward-tipping of the vertical slabs of the northwest interior wall is also in agreement with the extraction of a walled-in boulder. Therefore, consolidating several historical surveys of 'Orongo, it appears possible to amend the previous identification of the house that sheltered the *manupiri* stone (Horley & Lee 2009:115): it should be House #39, located just to the north of the sacred precinct of Mata Ngarau. It is important that Mulloy's map of Houses #47 and #39 (Figure 8a) show that the former has a perimeter of densely-set slabs, while the latter reveals a breach in the interior wall facing the entrance. The width of the damaged section is about 1.5m (marked with arrows in Figure 8a). The transverse profile of the house (Figure 8c, BB') documents a 70 cm-tall vertical slab of inner masonry that was seemingly adjacent to the *manupiri* boulder. Slabs of similar height are seen in the longitudinal section (Figure 8c, CC'). Thus, assuming that the first course of cantilevered slabs started approximately at the same height, one can estimate the dimension of the damaged part of the interior wall as 1.5 x 0.7m, which is sufficient to accommodate the *manupiri* stone (0.88 x 0.60m) together with the second carving seen by Weisser – a Makemake mask 0.32 x 0.40m in size, collected by the Franco-Belgian expedition to Rapa Nui and now in the collections of the Museés Royaux d'Art et d'Histoire, Brussels, Artifact ET 35.5.90 (Horley & Lee 2009:115-117). Based on this information, we propose a tentative reconstruction of a possible view of the *manupiri* stone when it was embedded in the wall of House #39, and painted red and white, according to the results discussed above (Figure 4).

The Stone with the Birdman Carving

The second stone from the Peabody Museum bears Catalogue Number 05-2-70/64851 and measures 35 x 47 x 25cm (Peabody 2009b). The front side of the artifact features the well-known carving of a birdman "sitting" on a large vulva, with several other bas-relief *komari* concentrated around its hand and beak (see, e.g., Heyerdahl 1976:Plate 179, Esen-Baur & Forment 1990:284, Lelièvre et al. 2010:113). Such distinct clustering of female genitalia carvings in front of a *tangata manu* may be tentatively explained by the fertility emphasis of the later phase of the birdman cult.

To our great surprise, there is *another* motif depicting a fish (considered in the next section) carved in bas-relief on the back of the artifact, which, to the best of our knowledge, has neither been illustrated nor mentioned in the literature (Figure 9). As will be shown later, this can be positively identified as a small blenny, or *patuki*. To simplify further reference, we will call the artifact 05-2-70/64851 the "*tangata manu – patuki* stone" henceforth.

In contrast with the *manupiri* stone (Figure 1), the front and back of the *tangata manu – patuki* stone has quite homogeneous patination, which can be clearly appreciated from the top view when both birdman and fish carvings are seen (Figure 9). Therefore, it seems that the birdman rock was displayed as a free-standing object, with both sides exposed to spectators. We were unable to find any change of coloration that may suggest partial burial of the rock to increase its stability. The minor soiling noticeable at the base (see, e.g., Figure 9, lower right) seemingly points out that the artifact was exposed to its full height. An abrupt rock color change is very prominent at the sides of the artifact (Figures 9 and 10), which display clear traces of breakage. The broken sections are dark-grey in contrast with the light-brown front, back and top surfaces of the rock. The bottom part of the stone is rough and broken.

The dark round hole seen in the center of the base (Figure 9, upper right image) was drilled to accommodate the metallic peg that now holds the *tangata manu – patuki* stone on its wooden display base. The natural cavities in the rock base are covered with an intact reddish oxide layer, as if the stone were broken off from its base comparatively recently. At the same time, the carvings of the *tangata manu – patuki* stone are not affected by the side breakage area, clearly postdating it. The good preservation state of the stone and an absence of lichen suggest that it may have been kept in a place sheltered from the elements – perhaps inside a house at 'Orongo.

A detailed study of the foot of the birdman (Figure 11) offers several curious insights. First, it features six toes; other examples of polydactylism are known from Rapa Nui rock art (Lee 1992:63, Figure 4.30). It can be seen that the lines denoting the toes were carved last as they expand to the background in front of the foot. There is also a subtle incised curve just below the foot (marked with three arrows in Figure 11). It may have been an outline of yet another vulva petroglyph, because a small portion at the right side of the curve bends down. However, there are no further outlines of a complete *komari*. At the same time, this incised line follows the curve that delineates the area where the rock was removed to form the bas-relief foot (see the rightmost arrow in Figure 11). This, in turn, can be interpreted as evidence for the intermediate steps in which the bas-relief was created. First, the carver delineated the motif with an incised line, laying out another curve at a distance to denote the quantity of rock that should be removed to achieve bas-relief sculpture. This closely resembles the carving of monolithic *moai*:

> "A fairly clear picture of the methods of work which were followed was gained by studying the quarries carefully. Deep, parallel furrows have been hewn in the rock with the help of stone picks, and the rock between these furrows has been broken out, possibly by use of the excessively large and heavy picks" (Skjølsvold 1961:368).

Upon achieving bas-relief, smaller details (such as toe lines) were added, and then the carving was polished to obtain a smooth surface. The incised *komari* seen on the birdman body (Figure 13a) was most likely added to the composition later, as well as a sun-like motif incised to the right of the *tangata manu* (Figure 9, front view), with its "disk" hatched in a way similar to that of a round-body bird from Papa te Kena (Lee 1992:53).

Iconographic Analysis

The birdman cult and bird/man symbolism have already been treated in detail in a multitude of papers and books – yet there are still some particular points that require clarification. The birdman design represents a crouching human body combined with the head of a frigate bird with its characteristic hooked beak (Figure 12a). The neck of the birdman protrudes from the front, which is usually interpreted as a depiction of the inflated gular pouch of frigate bird. This hypothesis appears plausible, because the pouch has the important red color. Nowadays, frigates do not nest on Rapa Nui, but "they must have done so in the past, for the artists who carved the [birdman] designs would not have been aware of the gular pouch (which is only inflated during mating) without first-hand knowledge" (Lee 1992:20). However, when one looks at a living frigate bird with an inflated gular pouch, it becomes evident that the bird's proportions are different, with the pouch extending well below the wings and far beyond the beak (Figure 12b); it is not so in the carved designs (Figure 12a).

It is reasonable to suggest that the birdman design became highly stylized and it would be naïve to expect a life-like depiction of such particular details. On the other hand, we know that the ancient Rapanui were careful observers and masterly carvers who are rightfully famed for developing the elaborate art style that represents the essential features of the objects.

Let us consider, for example, the frigate bird as it appears in rock art (Figure 12d, e). The most pronounced characteristics of these carvings are that they have a thin beak and show a bird with a long neck (without a

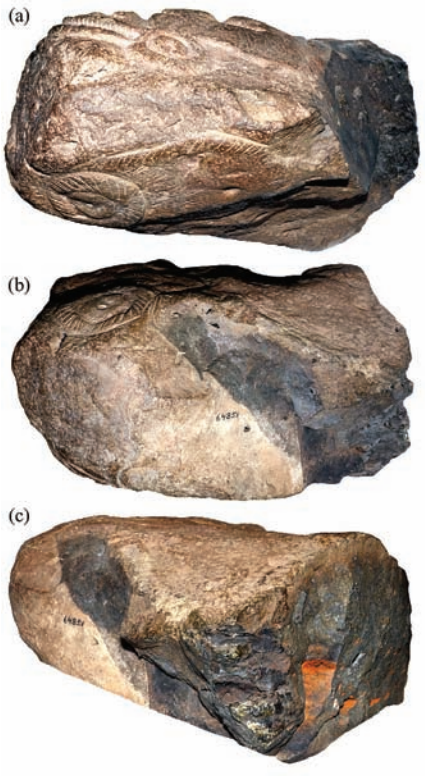

Figure 10. Side views of the *tangata manu – patuki* stone, Peabody Museum number 05-2-70/64851 (Copyright 2011 President and Fellows of Harvard College): a) left edge, seen from top; b) right edge, seen from the top and c) from the bottom.

Figure 11. Possible traces of outline used to mark the area of rock removal to form bas-relief carving of the foot. Note that the foot has six digits. The *tangata manu – patuki* stone, Peabody Museum number 05-2-70/64851 (Copyright 2011 President and Fellows of Harvard College).

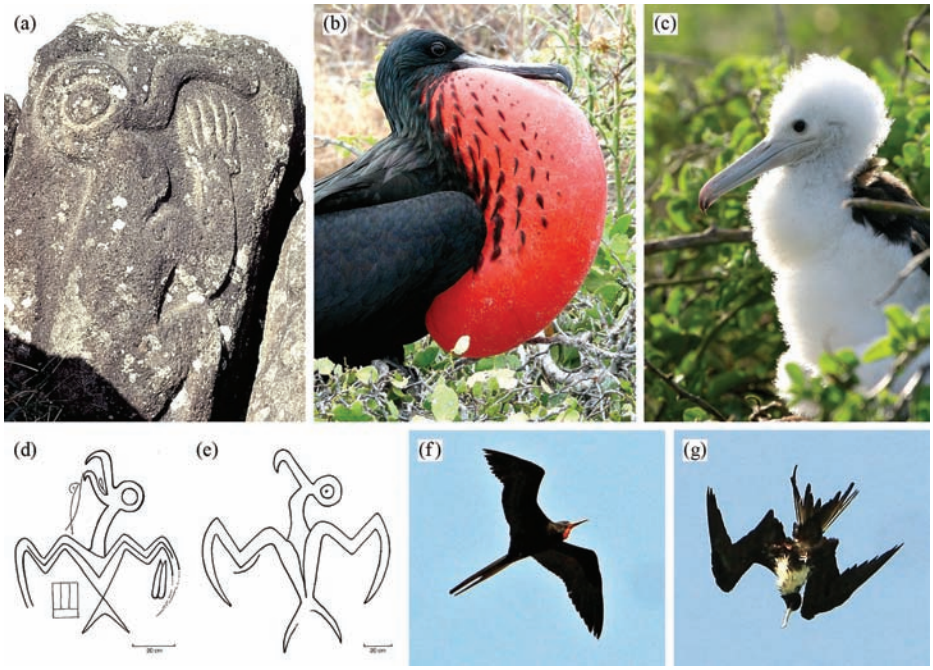

Figure 12. Iconographic analysis of birdman carvings: a) classical birdman from Locus #40, Mata Ngarau (photo courtesy of G. Lee); b) frigate bird with inflated gular pouch (photo by Clark Anderson/Aquaimages); c) juvenile frigate bird (photo courtesy of D. Sweet). Frigate bird in rock art (drawings by G. Lee): d) from Motu Nui cave; e) at exterior quarries of Rano Raraku. Typical silhouette of frigate bird (photos courtesy of S. Ryan): f) normal flight; g) diving stance.

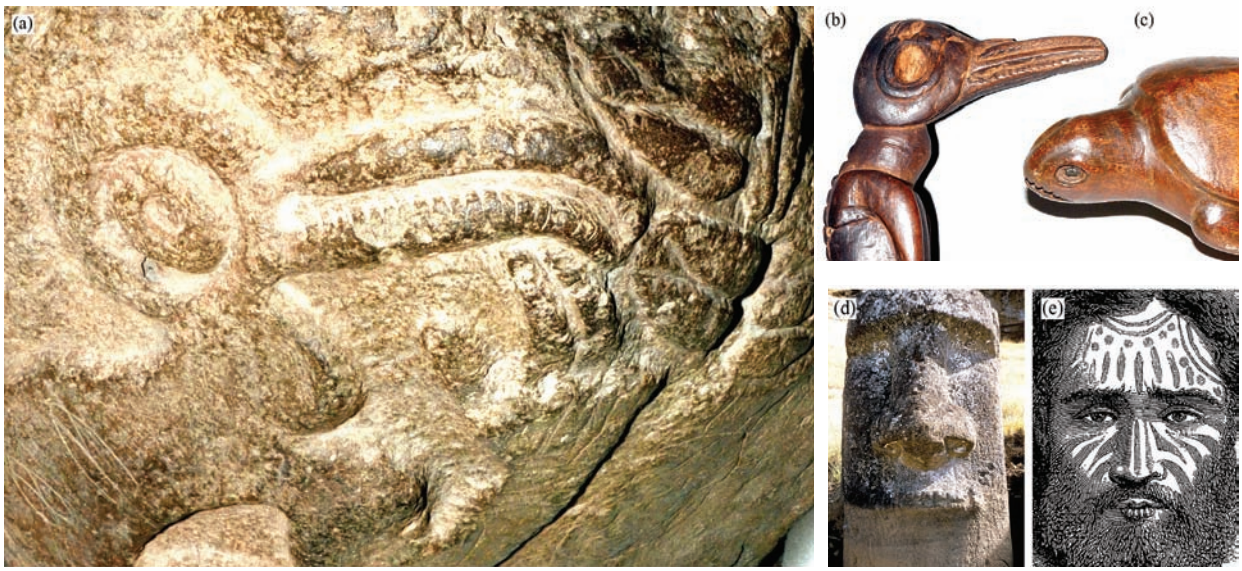

Figure 13. Hatching pattern on beak / mouth edges: a) the *tangata manu – patuki* stone, Peabody Museum number 05-2-70/64851 (Copyright 2011 President and Fellows of Harvard College); b) birdman figure, Peabody Museum number 99-12-70/53606 (Copyright 2011 President and Fellows of Harvard College); c) turtle pendant, Peabody Museum number 99-12-70/53608 (Copyright 2011 President and Fellows of Harvard College); d) *moai* RR-045 with hatched lips excavated by the Norwegian Archaeological Expedition (image courtesy of the Kon-Tiki Museum) and e) portrait of Easter Islander with tattooed lips (etching made after drawing by Pierre Loti, from *L'illustration* 1872).

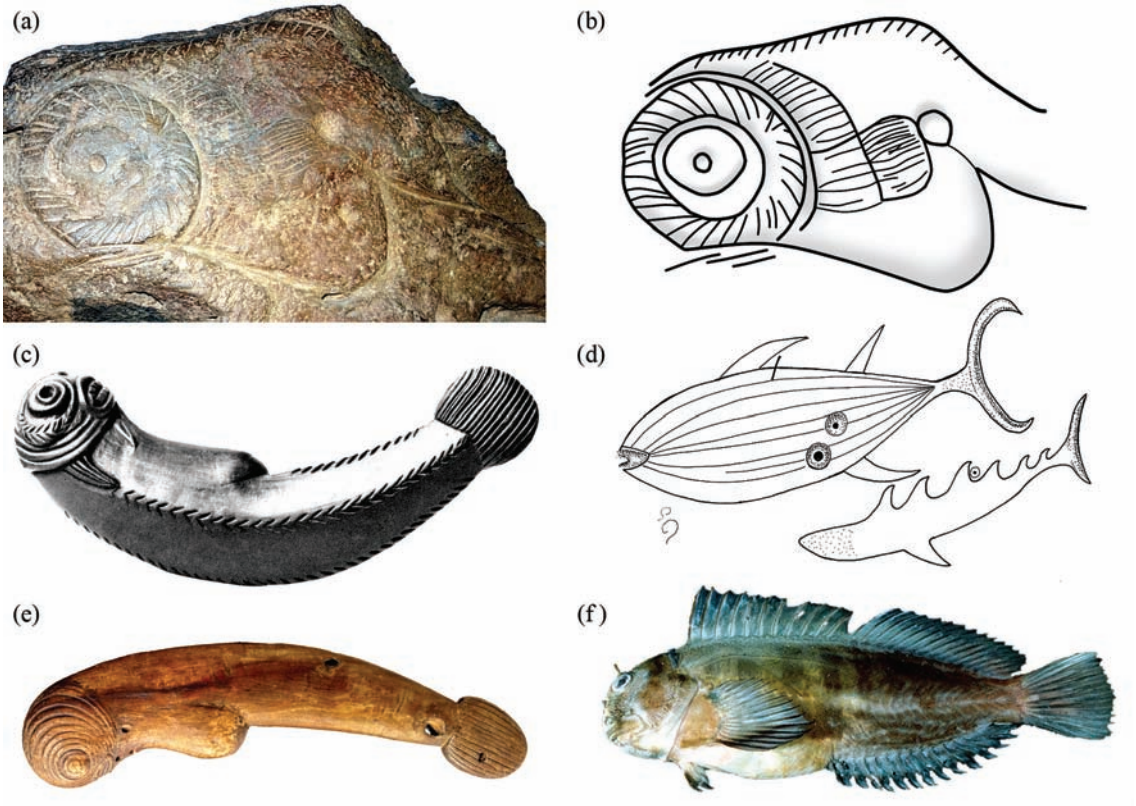

Figure 14. Identification of the fish motif: a) the motif carved on the back of the *tangata manu – patuki* stone, Peabody Museum number 05-2-70/64851 (Copyright 2011 President and Fellows of Harvard College); b) tracing thereof; c) fish carving, Berlin Museum (photo from Chauvet 1945:Figure 105.1); d) tuna and shark depicted at Papa Vaka site (drawing by G. Lee); e) *patuki* fish club Oc, EP.30 (image Copyright Trustees of the British Museum); f) *patuki* fish (photo by J.E. Randall; courtesy of WorldFish Center – Fish Base <http://www.fishbase.org>).

pronounced gular pouch), with half-folded wings and a v-shaped tail. All of these features have *nothing* in common with the reality if one considers a frigate bird in its normal flying mode (Figure 12f), with its head pulled in (so that the neck looks very short), wings with smooth outlines, and tail feathers joined together. The situation changes drastically when a frigate bird begins to dive (Figure 12g). To gain speed, it folds its wings, opens its tail and pulls the head out, acquiring *all* the attributes characteristic of its depiction in the rock art. A dive ends with a catch – and the frigate bird from Motu Nui has a fish incised near its beak (Figure 12d), perhaps supporting this interpretation. Despite the head-up depiction, all the frigate birds shown in Rapa Nui rock art are actually in a diving stance, thus highlighting their predatory qualities. Indeed, "the frigate bird became a symbol of the warrior class … parallel[ing] the aggressiveness of the warriors who were referred to as *tangata rima toto*, or "men with bloodied hands" (Lee 1992:20).

If Rapanui artists reproduced flying frigate birds so faithfully, why did they scale down its gular pouch in the classic birdman design? In our opinion, the carvings are faithful – however, their model is not a frigate bird in its mating attire, but a juvenile bird (Figure 12c). Indeed, the latter has a larger head in proportion to its body, and a thicker-looking beak (exactly as that of birdman carvings; the beaks of flying frigate birds are shown as being thin). The fluffy neck of a frigate chick makes exactly the same graceful contour seen in classical *tangata manu* designs. Analyzing the evolution of the birdman motif, one can see that juvenile frigate bird features and proportions become more prominent in later style carvings, usually executed in bas-relief (Lee 1992:5). Finally, the election of the *tangata manu* might have been viewed as his ceremonial birth for a new sacred life, which can be quite appropriately illustrated with the image of a juvenile frigate bird.

Another iconographic question concerns the hatching that appears on the beak of the birdman carved on the *tangata manu – patuki* stone (Figure 13a). This detail is uncommon in rock art (to the best of our knowledge, none of the numerous Mata Ngarau birdmen have it), but it is a wide-spread feature in wooden birdman figurines (Figure 13b; see also Esen-Baur & Forment 1990:199, 200, 240; Heyerdahl 1976:Plates 40-41, 113, 123a). It also appears in birds (Esen-Baur & Forment 1990:256), turtles (Figure 13c; Heyerdahl 1976:Plate 130d) and fishes (Esen-Baur & Forment 1990:209; Heyerdahl 1976:Plate 126b) – except for cases when the latter (especially sharks) are given full-scale teeth (Figure 14c; also Heyerdahl 1976:Plates 52a, 122, 126a, c). The monolithic *moai* seldom show similar marks, with the best examples seen in buried parts of the statues, protected from the action of the elements (Figure 13d).

In rare cases, the lips of anthropomorphic wooden carvings (excluding *moai kavakava*, *ua* and *paoa*) are also shown as hatched (Esen-Baur & Forment 1990:260; Heyerdahl 1976:Plates 78a, 110). In view of this evidence, it seems that beak/lip hatching is a particular feature of woodcarving that makes almost no appearance in stone-hewn images. If this is true, the *tangata manu – patuki* stone is an important monument of Rapa Nui art that features a hatched beak of a bas-relief birdman carved in stone. But what can the meaning of such hatching be? For human beings, the answer is easy because early visitors saw the islanders with exactly this type of lip tattoo (Figure 13e). Confirmation can be also found in *tapa* figures from the Peabody (Esen-Baur & Forment 1990:287) and Ulster Museums (Esen-Baur & Forment 1990:141), painted with common tattoo marks. However, this explanation does not hold for birds, birdmen, turtles and fishes. Nevertheless, one can make an educated guess (citing the absence of this detail in the carvings of lizards): edge hatching may be the ancient Rapanui way to denote *sharp* edges. Birds and turtles have sharp beaks capable of a strong bite, but the softer jaws of lizards (*moko*) from Rapa Nui are inoffensive.

Returning now to the motif carved on the back of the *tangata manu – patuki* boulder (Figure 14a, b), it has a large eye surrounded by a hatched ring, a rounded belly with a strange circular depression, as well as incisions that look like pectoral and dorsal fins. The latter suggest that we are dealing with a fish – but what a strange fish it is! It looks nothing like the tuna and shark forms common to Rapa Nui rock art (Figure 14d). However, it has parallels with carved wooden fishes from Berlin (Figure 14c) and London (Figure 14e). The latter was collected on Rapa Nui in 1872 by Hugh Cuming and is identified as a war club in the form of a *patuki* fish (Lelièvre et al. 2010:85). According to the *Comisión para la Estructuración de la Lengua Rapanui* [Commission for the Structuration of the Rapanui Language] (2000:133), a *patuki* is defined in the following way: "*Pātuki* – fish from *blennidae* family; it is *Cirripectes patuki*, de Buen." One can trace the latter to the white-dotted blenny, *Cirripectes alboapicalis*, living in the "Southern subtropical Pacific from Easter Island to Lord Howe Island and the southern Great Barrier Reef. Largest [reported size is] 15.5cm. *C[irripectes variolosus] patuki* De Buen is a synonym" (Randall et al. 1996:376).

As can be seen from the photograph (Figure 14f), the wooden clubs depict the most essential characteristics of this fish – its bulging eyes, rounded gill covers, protruding belly and the shape of the tail fin. In rock carvings (Figure 14a, b) and the Berlin fish (Figure 14c), pectoral fins are shown. Deep hatching is used in both cases to denote the dorsal fin, as well as the darker area encircling the eyes of the fish. The mouth of the Berlin carving is half-open, revealing two rows of teeth. This

detail is also characteristic of white-dotted blennies, which have "teeth and jaws movable and very numerous, and a canine tooth posteriorly on each side of lower jaw" (Randall et al. 1996:376).

The association of a birdman with a fish is not a coincidence; originally, the seasonal arrival of large fish (such as tuna), accompanied by flock of seabirds, might have served as a supporting base for the establishment of the *tangata manu* cult:

> "Sooty Terns … feed primary in association with porpoise schools and large predatory fishes, especially tunas such as Skipjack and Yellowfin … these birds rarely feed in the absence of fish schools, a characteristic of which the Polynesians were well aware. This strong relationship between the birds and tunas results from the fact that a large proportion of the foods taken by the birds (primarily squid in the case of Sooty Terns) is made available at the surface only by the feeding activities of the tunas. It appears that this relationship is especially marked in the case of Sooty Tern, shearwaters and Skipjack Tuna … The ancient, symbolic value of the frigate bird and the ecological connection of the Sooty Tern with the arrival of valued porpoise and Yellowfin Tuna fish were, in my opinion, central to the rationale upon which the birdman cult was built" (Van Tilburg 1994:60-62).

It comes as a mild surprise that Rapanui decided to carve a modest blenny on the rock bearing an image of the sacred *tangata manu* instead of the large and valuable tuna fish. It is true that blennies are small and were generally used as bait for a larger catch; however, they were special in another aspect: "according to the legend, a small *patuki* left overnight on an *ahu* gained sufficient power to fertilize an entire field" (Seaver Kurze 1997:71). Such powerful fertilizing abilities can be considered as a plausible explanation of the *tangata manu – patuki* association on the stone 05-2-70/64851, illustrating the rejuvenation of nature and the repletion of food resources that coincided with the annual birdman competition.

It is worth emphasizing the existence of several carvings of fish at 'Orongo that are hidden inside the houses of Mata Ngarau, where they appear associated with *komari* and (in a single instance) a bird with a long bent neck (Horley & Lee 2009:122). An island-wide survey of rock art reveals some other sites featuring adjacent or superimposed birdmen and fishes: the Hau Koka boulder (Lee 1992:164), the seawall of Ahu Iho Arero (Lee 1992:172) and a prominent panel at Papa Tataku Poki in front of Ahu Tongariki (Figure 15). The latter site is particularly special, because it features several house foundations and is located close to the Orohie area below the Rano Raraku quarries – the famous residence location of the *tangata manu*. However, we know that the house of the sacred birdman was not necessarily "nailed" to this particular place: "Orohié was mentioned with pre-eminence, but there were other bird-houses on the Raraku slope and one on the adjoining ahu of Tongariki, some used more particularly when there was more than one bird-man" (Routledge 1917:351). This evidence seems suggestive that one of the birdman houses was located at Papa Tataku Poki, offering a good explanation for the numerous elaborate birdmen and fish petroglyphs seen at this site, and also highlighting the "ecological facet" of the *tangata manu* cult.

Another point of interest with the *tangata manu – patuki* stone is a considerable number of *komari* carvings. A particularly big vulva form is attached to the bottom part of the figure (Figures 9 & 11), as if suggesting that the birdman was a female. This conclusion is beyond historical possibility because "women were never nominated [as birdmen], but the *ivi-atua* [priest] might be male or female" (Routledge 1917:343). Curiously enough, the *Mana* Expedition collected a birdman name of "*Ko hi* [he?] *Vie a Ure Moroki*" (Routledge, n.d.) that tentatively translates into "a wife (woman) of Ure Moroki." However, as Routledge's notes have numerous spelling mistakes (Love 1990:121) this particular name may also be misspelled.

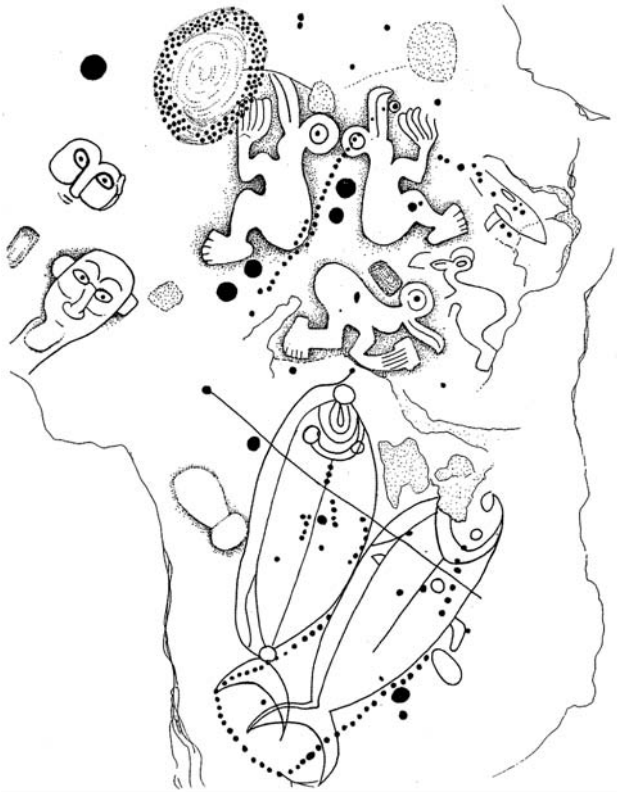

Figure 15. The large panel at Papa Tataku Poki with carvings of Makemake faces, birdmen and tuna (drawing by G. Lee; after Lee 1992:184-185, Figure 6.20).

The same boulder features a dense set of *komari* clustered around the hand and beak of the birdman (Figure 13a). The careful execution of these vulva forms, carved in relief, does not fit the explanation of secondarily-applied "*mana*-draining" motifs, allowing for more detailed discussion. It has long been known that at the late stages of its development, the birdman cult had a considerable connection with fertility rites, however, in our opinion, the extension of such a connection was not analyzed in sufficient depth in the literature. Keeping in mind that the same rock 05-2-70/64851 features a bas-relief carving of the *patuki* fish that supposedly possessed the *mana* required to fertilize crops (Seaver Kurze 1997:71), it is tempting to extend this characteristic to the *tangata manu* by suggesting that he also had a magical power to increase procreation/fertility. In this case, it becomes straightforwardly clear why the *tangata manu* is so strongly associated with a human fertility symbol – the *komari* – in the rock art of 'Orongo. It is worth noting that the procreative powers of the birdman were probably not associated with his personal sexual abilities. This fact is confirmed by the living memory of the islanders: "the Bird-man's wife came to [his seclusion place at Rano] Raraku but dwelt apart, as for the first five months she could not enter her husband's house nor he hers on pain of death" (Routledge 1917:348). Therefore, if the sacred *tangata manu* had the beneficial influence over abundance or fertility, it should have been connected with his magical power, or *mana*, gained by him as a victor of the birdman ceremony. This point is of crucial importance, because before the introduction of the *tangata manu* cult, the corresponding function was performed by the hereditary king, or *ariki mau*:

> "In view of all available evidence, kingship on Easter Island may be defined as follows. The king was the man with the most aristocratic pedigree and the most exalted social position on the island. His person was overflowing with *mana* and his sacredness caused him to be feared and respected. His function in society was to *insure through his very being the abundance of crops and the fertility of the ground and to exercise his influence on animal life* [emphasis ours]. Certain religious activities were derived from his sacredness and he held supervisory control over various practices connected with religion" (Métraux 1940:136).

Therefore, a shift of power from the king to the ruling birdman and his clan may not end with political issues (enforced by the military support of the *matato'a*). It could have been a deeper phenomenon with the *tangata manu* absorbing the *spiritual* role of the *ariki mau*, becoming a person whose existence ensured the abundance of crops and fertility of the land. The final answer to this question requires much additional research that goes beyond the framework of this paper. However, it should be stressed that if more evidence supporting such an extended spiritual influence of the *tangata manu* can be found, it would significantly influence our perception of the role played by the sacred birdman, simultaneously increasing the contrast and complexity of socio-political change that occurred in hierarchy, religion, philosophy and social organization of the Rapanui following the establishment of the *tangata manu* cult.

Conclusions

The study of two carved stones from the collection of the Peabody Museum of Archaeology and Ethnology provided many interesting insights about Rapa Nui rock art connected with the famous birdman cult. It was shown that the *manupiri* stone features traces of red and white pigments, applied consistently to the general "coloring model" seen in painted house slabs and petroglyphs of 'Orongo with red designs emphasized with a white background. Analysis of the literature allowed the improvement of the identification of the house to which the *manupiri* stone originally belonged. The study of the *tangata manu – patuki* stone revealed a previously undocumented carving of a *patuki* fish, which was associated in Rapanui lore with fertilizing powers. The juxtaposition of fish and birdman carvings on the boulder from 'Orongo and on the prominent site of Papa Tataku Poki both offer supporting evidence for the "ecological side" of the birdman cult.

We also propose that the stylized late-stage birdman image bears a much stronger likeness to the juvenile frigate rather than the mature bird. This result invites further discussion concerning the perception of a newly-elected birdman as his ceremonial "birth" for a sacred life. The pronounced association of the *tangata manu* and *komari* motifs (seen in conjunction with the carving of a *patuki* fish endowed with fertilizing powers) establishes the basis for a promising hypothesis that the shift from hereditary kingship to the rule of the birdman resulted in much deeper changes in social organization and hierarchy than previously thought. Thus, in addition to the transferring of political power, there might also have been a transfer of spiritual function from the *ariki mau* to the sacred birdman in that the *tangata manu* acquired the *mana* (by winning the competition) that was necessary to maintain the fertility of the land and to ensure the abundance of food resources on the island. This suggestion offers a straightforward explanation of a strong fertility aspect to the cult witnessed by numerous *komari* motifs carved throughout the village of 'Orongo.

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