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

Paul Horley and Georgia Lee

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 iti manu; 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 who had been selected as the next tangata manu.

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 (manu) 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 ascribes patuki with fertilizing powers, the discovery of this fish in close association with tangata manu offers considerable support to a fertility-based upemtus of the late phase of the birdman cult.

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Rapa Nui Journal Vol. 26 (1) May 2012
bird; the right birdman has a beak with rounded ends, the left is carved in a classical conventionalized style although they are considerably eroded. The birdman on figures facing each other in a configuration known as consolidation that was vital to create the megalithic to valuable food resources to different tribes each year, original hereditary monarchy and while it gave access (As reported by Graeme Lay and published by www. WHAT'S NEW IN OCEANIA 2009a). It features bas-relief carvings of two birdman types – one in a standing pose and another in a kneeling or sitting position – and portrays a mythical semi-divine entity known as komari, which is possibly related to a connection between human and spiritual attributes or nui groups (Lee 1992:70). The hands of the birdman figures are shown together, forming a “cornpent 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 classically 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 primary area of the keke, but it is hard to see below. 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 large, so he reduced 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 of the right birdman is seemingly more symmetrical, and a stylized 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 – styled motifs devoted predominantly carved in bas-relief. This sacred precinct, called Mata Ngarau, is a natural basalt outcrop; here each boulder is richly 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), and 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 at a village in the ceremonial village of 'Orongo by Alexander Agassiz (1906), who visited Rapa Nui and the framework of an expedition to the eastern and tropical Pacific on the steamer Atalante. 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 types – one standing and the other kneeling or sitting position. A conical 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 birdmen on the left is carved in a conventionally conventionalized style and has a hooked beak that is characteristic of a frigate bird; the right birdmen has a beak with rounded ends, which is discussed in detail below. At the lower body of 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. The left 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, komari 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 komari mana 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 art has been termed manupiri, which is possibly related to a connection between human and spiritual attributes or nui groups (Lee 1992:70). The hands of the birdman figures are shown together, forming a “conical 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 right 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 primary area of the keke, but it is hard to 6 Rapa Nui Journal 6 Vol. 26 (1) May 2012 Rapa Nui Journal 6 Vol. 26 (1) May 2012
The kit retails for US$27.98 and includes over 550 pieces. Statues on Easter Island are manufactured by Kawada in Japan.

Moai Sightings

Moai appearances in a number of comedy movies in recent years – the main examples which come to mind are the following with the editors: “Readers of the RNJ at the movies and shared moai. “Mars Attacks!, where the Martians bowl them over head – which eventually comes crashing a full-size head which eventually.

Charles Darwin, and one of the items on show upstairs is the Museum”. An excellent new British movie has just appeared, produced by Aardman, a claymation comedy scientists!” In the course of the movie, one sequence about pirates, called “The Pirates, in an adventure with...
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The background image of the ‘Orongo house’ s interior was taken during the Petroglyph Documentation Project (photo by G. Lee).

The background image of ‘Orongo: e) manupiri painting on a rock plate that once adorned a house interior (photo by M. Oliver and W. Hyder, 1982), and g) incised komari on the ceiling plates of ‘Orongo house with remains of red pigment (photo by C. Cristina).”

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), and g) incised komari on the ceiling plates of ‘Orongo house with remains of red pigment (photo by C. Cristina).”

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).
Q. What theory or project of yours turned out to be “nully”? 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 draw 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 Eise-Baur & Formort 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. Eise-Baur and Formort (1990:281) note that there could be another vulva form carved above the komari incised over its neck. While no documentation 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 real-shaped tips (Figure 1), which are reminiscent of the laba 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 2b) and woodcarvings (Figure 2) 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-ether 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 directly at the back 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).

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 “Orongo petroglyphs were also painted. One may hypothesize that deposition of the pigment — perhaps, effected during the annual birdman competition — might have been used to offer the mana and therefore to “pacify” the spirits embedded in the carving” (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 (kiau) 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 aesthetic considerations, might have emphasized the sacredness of the red-colored designs.

The red-on-white painting scheme can be clearly illustrated with artifacts from “Orongo — 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 allows us to suggest that the manupiri boulder in the Peabody Museum collection was probably painted during its ceremonial life; the bas-relief komari 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 noua Hoa Hakana’ani, which was also collected from the ceremonial village of the birdman:

“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 tangata manu, which housed Hoa Hakana’ani’s. 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).

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studied from different sides (Figure 1). The side view shows that the stone is accessible from the front side. 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 komarai – 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 05-270-641852 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 location the rock was found/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 neither infer nor argue for 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 large stones set in the side of the wall. …”

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).

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The Peabody Museum database says that Stone 05-270-641852 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 location the rock was found/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 neither infer nor argue for 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 large stones set in the side of the wall. …”

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).
behavior among the Hawai‘i Island and eastern Maui
chiefs, so well attested in the inherent risk and uncertainty for rain-fed agriculture diminishing through time). On top of these factors, the still less than wetland taro cultivation (and apparently the per capita agricultural return for sweet potato was calls upon a (Darwinian) evolutionary explanation. The proximate causes. By definition, ultimate causation stated ultimate causative factors should be considered.

Setting aside what I feel are still-lingering questions, differences in production and intensification processes of prehistory in general. Certainly the costs of being aggressive and losing would oral traditions, advantageous. Why not cooperation? a significantly greater amount of labor investment than Kirch states, but ultimate causation must explain why a particular behavior (e.g., increased social complexity, Kirch 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 5. The manapiiri stone (left), Peabody Museum number 05-2-78/64852 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 manapiiri 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).
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 (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 interpersed 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.”

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

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in 1974 (Mulloy 1997:70). This observation does not agree with the presence of a heavy 9cm-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 Ngarua. 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 Ngarua. Therefore, both Geiseler and Weisser listed the house with embedded stones to be last/outermost, thus, they did not identify the entrance opening to the outermost house 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 Ngarua (Figure 7a and Figure 7b, #4).

The ‘Orongo survey carried out by the Mata 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, on the north side 10’8” x 0.7m... 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 Ngarua 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 floor was removed only by the wall facing the cliff in passage (Routledge 1920:431). Mulloy’s description of House #39 as is follows (1997:80, House #9 in his nomenclature).

“From House 9, two central ceiling slabs had been removed. Several foundation slabs on the exposed, 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. The southwestern corner of the manupiri stone was effectively restored including 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 Ngarua. 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 8e, B) documents a 70 cm-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 on 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 Musée du Quai Branly. 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 Ngarua (Figure 7a and Figure 7b, #4).

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“The second stone from the Peabody Museum bears Catalogue Number 05-2-70/68451 and measures 35 x 47 x 25cm (Peabody 2009b). The front side of the artifact features the well-known image of a birdman “sitting” on a large vulva, with several other bas-relief komari concentrated around its hand and feet, e.g., Heyerdahl 1976 Plate 179, Eisen-Baur & Forrest 1982 Plate 13, Leleu et al. 1990-98 Plate 248. In each case, the 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 birdman with a prominent front, as suggested by the incised line on the next section (Figures 9 and 10), which even in bas-relief remains a rather prominent motif. As the carver delineated the motif with an incised line, laying out another curve at the same time as adding the new 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 motif has been positively identified as a small menny, 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 evidence of coloration that may suggest, perhaps, that there has been an increase in its stability over time. 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 base 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 rock to its wooden display base. 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 cavities 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 polydactylyism 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 are deeply incised and lie 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 similar curve is noticeable 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 create the bas-relief feet (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 was removed to achieve bas-relief sculpture. This closely resembles the carving of monolithic motois. “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 those furrows has been broken out, possibly by use of the excessively large and heavy picks” (Skjoldvold 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 later, as it may also be influenced by the positioning of the rock to increase its stability. The incised line to the right of the tangata mana (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 a 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 design (Figure 12a).

It is reasonable to suggest that the birdman design became highly stylized and it would be naive 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. In this case, for example, the frigate bird as it appears in rock art (Figure 12a, 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
and personality, which he himself contributed to. Instead, achievements and his archives will affect the polarised

pixels constituting it. I believe that the status given to his big picture, he did not always see or understand all the
sometimes his treatment of the finer details of his research in newspapers all over the world testify to this fact. Yet,
could get all sorts of people interested in very specific
to make any topic seem relevant and interesting. He
reputation? Thor Heyerdahl was both an adventurer
Memory of the World Register influence Heyerdahl’s
1972 and his subsequent involvement in protecting the
United Nations had on policy making prior to the first
his work and correspondence in this field constitute
and the world’s oceans was a lifelong occupation, and
working together as one nation. His passion for nature
as Heyerdahl liked to call it. His work became linked
fighting political battles to preserve “the World Ocean”,
to the Secretary General of the United Nations of their


References


Notes

Figure 10. Side views of the tangata manu – paituki 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 – paituki 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 640, 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 quarters 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) mōai 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 105-3); d) tuna and shark depicted at Puna Vaka site (drawing by G. Lee); e) patuki fish club Oc, EP30 (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 sharp leading edges, 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 the aerodynamic shape of its depiction in the rock art. A dive ends with a catch – and the frigate bird from Motu Nui has a fish incurred 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 actually of a construction that allows the fluffy neck of a frigate bird to make 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 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 features that are being dealt with. The fluffy neck of a frigate bird 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 the kind of features in wooden birdman carvings (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 1990:199, 240, Heyerdahl 1976:Plate 13c; Heyerdahl 1976:Plate 13d and 13f) 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 13a). The shark bony fins are shown. In rare 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.
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” (Staver Kaurzer 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 house 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 adjacently or superimposed birdmen and fishes: the Hau Koka boulder (Lee 1992:164), the seawall of Ahu Ilo 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. “Orohú was mentioned with pre-eminence, but there were other bird-houses on the Raraku slope and one on the adjoining auh 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 rei-a-toa [priest] might be male or female” (Routledge 1917:343). Curiously enough, the Mana Expedition collected a birdman name of “Ko H[i]’v 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 1980:121) this particular name may also be misspelled.

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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 rei-a-toa [priest] might be male or female” (Routledge 1917:343). Curiously enough, the Mana Expedition collected a birdman name of “Ko H[i]’v 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 1980:121) this particular name may also be misspelled.
The same boulder features a dense set of komari clusters and break of the birdman (Figure 13a). The careful execution of these vulva forms, carved in relief, does not fit the explanation of secondarily-applied “mana-drawing” motifs, allowing for further 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 Karze 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 be 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 māu: “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 over animal life (emphasis ours). Certain religious activities were derived from his sacredness and he held supervisory control over various practices connected with religion” (Metraux 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 matua ai). It could be a deeper phenomenon with the tangata manu absorbing the spiritual role of the ariki māu, 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 beyond the hand 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. 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 Karze 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 be 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 māu: “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 over animal life (emphasis ours). Certain religious activities were derived from his sacredness and he held supervisory control over various practices connected with religion” (Metraux 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 matua ai). It could be a deeper phenomenon with the tangata manu absorbing the spiritual role of the ariki māu, 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 beyond the hand 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. 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 Karze 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 be 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 māu: “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 over animal life (emphasis ours). Certain religious activities were derived from his sacredness and he held supervisory control over various practices connected with religion” (Metraux 1940:136).
Easter Island's birdman stones in the collection of the Peabody Museum

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