

Stone Chicken Coops on Easter Island¹

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THERE SEEMS TO BE SOMETHING SPECIAL about Easter Island that makes people think big. Perhaps its those tall monolithic statues that once dotted the island's coast. Whatever the cause, the "think big" trend also came to include one of the island's architectural features which has been given the name, *hare moa*, which translated into English means "chicken house" or coop (Fig. 1-2). This structure consists of a dry laid, flat topped, and

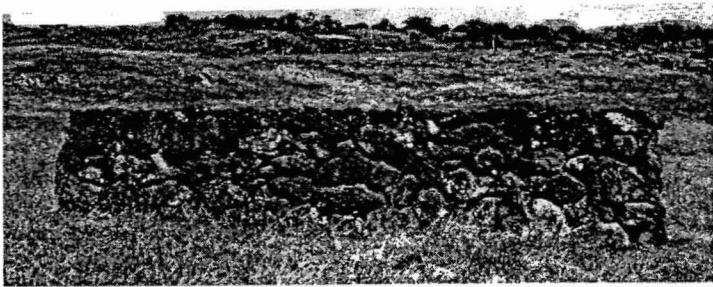


Figure 1. A typical *hare moa*, located near Hanga Kio'e (Photo by G. Lee).

basically rectangular heap of stones with vertical, or near vertical, sides. In its interior is a centrally located, long, low and narrow chamber paralleling the longer axis of the structure. Extending out from this chamber are one or two narrow lateral passages, or tunnel openings, leading to the outside. These appear on only one of the longer sides of the stone mass. Such structures have been found to range in length from five to six meters to as much as twenty meters in length, with width varying from two and one-half to three and one-half meters, and height ranging from one and one-half to two meters (Ferdon 1961:381-383; McCoy 1976:22-23).

How this structure came to be regarded as a chicken coop, and why it probably never was, is the purpose of this paper. That some anthropologists still regard it as such is all the more surprising when considering that a more realistically expectable chicken enclosure was observed on Easter Island by a Spanish expedition as early as 1770. It was said to consist of nothing more than a thatch covered runway, or enclosure for the fowls (Corney 1908:122). But let us return to the history of this mass of masonry that came to be regarded as *hare moa*.

The first description of these so called *hare moa* was by John Linton Palmer, sur-

geon on board HMS *Topaze* during that ship's visit to Easter Island in 1968 (Van Tilburg 1992:36). He described them as being twenty or thirty feet square and six feet high and containing apertures of a foot in size randomly placed at ground level. He was told, presumably by an islander, that these structures served as "hen houses", and he noted that fowl were in them. That is to say, he must have seen some of them moving in or out of the lateral holes of the structure. In spite of this observation, he confessed to doubting the hen house explanation since he had already noted other very similar structures with washed tops which he had been told were sepulchers (Palmer 1870:173, in McCoy 1976:23).

Fourteen years later, in 1882, German commander Geiseler, while exploring Easter Island, encountered a structure which, on the basis of his sketch (W. and G. Ayres 1995, fig. 9), resembled what is presently known as *hare moa*, even to having two lateral openings placed well above the ground, as in the case of one illustrated by Routledge some years later (Routledge 1919, fig. 86). After having purchased from the owner the right to dissect the structure, he found that the interior elongated main chamber contained bones of both birds and humans. Asking a native for an explanation for the bird bones being with the human skeletal remains, the man made a screaming sound "like an owl" and indicated that the birds had flown into the tomb by way of the two holes (W. and G. Ayres 1995:29-30).

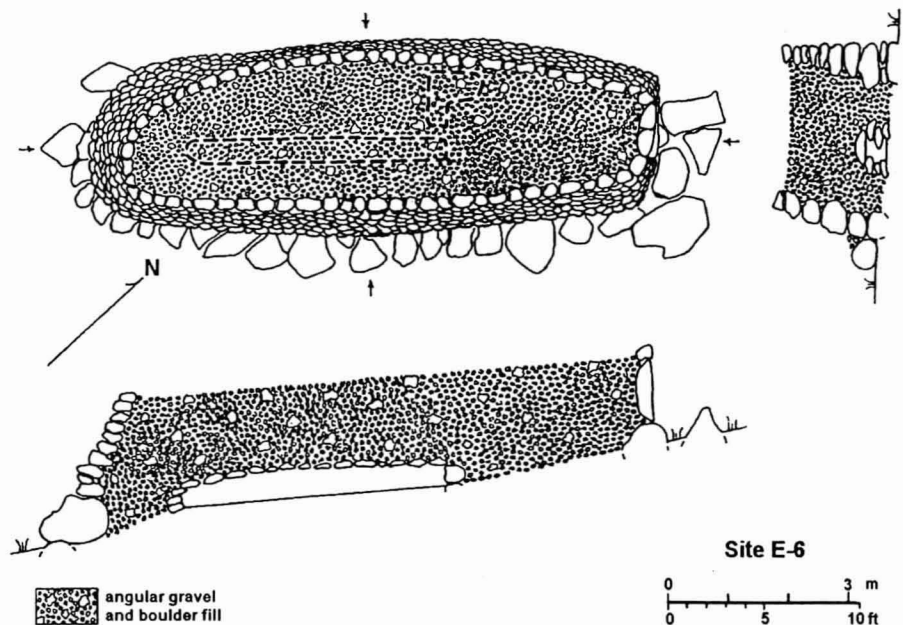


Figure 2. Plan view and profile drawings of a *hare moa* (from Essays in Honour of Arne Skjølsvold 75 years. Kon-Tiki Museum, 2000).

In spite of this strange mixture it was explained to him that the structure was a tomb, the two lateral passages having served as escape holes for the soul, or souls, of the dead entombed in the structure (W. and G. Ayres 1995:29-30). Geiseler's later discussion of burial practices reiterated his earlier statement that such structures served as tombs, and added that they were reserved for the higher ranking dead (W. and G. Ayres 1995:65). Given the short three and one-half day stay on the island, it seems probable that his information on this matter was obtained from the knowledgeable half-Tahitian ranch manager, Alexander Paea Salmon, who had, by then, spent some five years on the island and was fluent in the local language. This, it might be noted, was the same Salmon who was primary source of information on the customs of the Easter Islanders for navy surgeon George Cooke and paymaster W. J. Thomson during their visit to the island in the *Mohican* in 1886. In their reports there is no mention of the presence of chicken coops of any sort (Cooke 1899:691-723, Thomson 1891:447-552).

Nor in Geiseler's time could there have been much need for such a massive, protective stone chicken coop. As he noted, not only had they encountered innumerable chickens running wild over the island, but their nests were so numerous that it was hard to avoid them while riding horseback. He further was informed that this abundance of chickens and their eggs had resulted in a reduction in native fishing by about fifty percent (W. and G. Ayres 1995:73-74). Such an island-wide abundance of chicken meat and eggs could certainly not have been conducive to creating a need for families to build massive stone coops to protect their fowls against theft.

No further accounts of either chicken runways or massive stone *hare moa* were recorded until Katherine Routledge's expedition landed on Easter Island in 1914. Among informants used during her investigations was a man of about forty years of age, Juan Tepano, who had served his time in the Chilean army and spoke a little English (Routledge 1919:214). It was he who explained to Routledge that the structures now known as *hare moa* were built to safeguard one's chickens since it would be impossible for a thief to remove the stones overlying the chamber without creating a noise (Van Tilburg 1994:64, Routledge 1919:218). While Routledge appears never to have dissected a *hare moa*, she may have seen a partly destroyed example. At least she referred to the problem of determining a structure's function when she wrote, "Even when a building is comparatively intact, the original design and purpose can only be grasped by experience, and matters become distinctly complicated when the walls of an *ahu* have been made into a garden enclosure and a chicken-house turned into an ossuary" (Routledge 1919:211). A chicken house into an ossuary, or was it the other way around? Apparently the question never occurred to her.

As might have been expected, since this same Juan Tepano came to serve as one of the informants for Alfred Métraux during his field work on the island during 1934-1935, he too received the same information regarding the *hare moa* as had been given to Routledge. Coming from the mouth of a native islander Métraux, the ethnologist, dutifully subscribed to its stated function without question as did Father Sebastian Englert (Métraux

1940:3-4, 203, Englert 1948:48).

As a member of the Norwegian Archaeological Expedition to Easter Island and the East Pacific in 1955, I chose as one of my projects the dissection of one of the structures locally identified as a *hare moa* in the hope that evidence within its central chamber might further clarify its former function. Unfortunately, except for a fragment of bird bone, nothing else was encountered inside its vault. However, at least the nature and size of the internal chamber of this particular structure was revealed, measured, and drawn to scale, thus supplying data which had not formerly been available for these structures. As revealed, the chamber was 4.3 m in length with a height of 45 cm and a width of merely 35 cm. It was enclosed on both sides by a rock fill over one meter thick and was covered on top by an overburden of similar rocks somewhat over one meter in height (Ferdon 1961:381-383).

As this masonry structure having been capable of containing chickens, there is little doubt. Its interior chamber could, and did, obviously allow chickens to pass up and down its length. However, it is difficult to reconcile the claimed reason for building such a formidable masonry alarm system to forestall the theft of one's chickens. The very existence of such a system would, one must presume, indicate that, unlike most chickens, Easter Island fowl were uniquely quiet birds who were not wont to raise a theft-discouraging noisy ruckus when in the act of being caught. Furthermore, while the 1770 thatch-covered chicken run was practical in that it contained the feeding and egg laying area of the fowls so that they and their egg production could be easily obtained, the masonry *hare moa* hardly served that purpose. Its avowed object of protecting the chickens against, presumably, nocturnal theft, presupposes that during the day they were allowed to roam the countryside for feeding and nesting. It thus verges on the comical to envisage native families scurrying over their unfenced countryside each evening in their effort to round up their normally skittish fowls to place them in their stony nights' lodging.

As for the structure's possible use as a tomb, it must be admitted that the central chamber was certainly far too narrow to have accommodated a complete corpse. However, it could have offered ample space for several secondary entombments of human skeletal remains. Here it should be noted that both Routledge and Métraux were informed that at least certain of the dead were first exposed to the elements and their eventual remaining skeletal parts collected and buried in vaults (Routledge 1919:170-171, Métraux 1940:115). Thus, given Palmer's reasoned conclusion that they were tombs, and Geiseler's find of both human and bird bones in this dissected *hare moa*, it seems equally reasonable to believe that all such types of structures could have just as well served as tombs for secondary burials as for defensive chicken coops.

Originally, I considered the possibility that the *hare moa* may have been an early form of tomb which was later reused as a chicken coop, a similar view having more recently been suggested by others (Ferdon 1961:383, Van Tilburg 1994:64, W. and G. Ayres 1995:176). However, this view that it must have been one thing or another, or one thing and another at two different times has diverted attention from a far more plausible

possibility that satisfactorily explains the apparent divergent data.

Accepting as a given that the masonry structure opened by Geiseler in 1882 was a type of tomb later known as a chicken coop, or *hare moa*, we are faced with the need to explain the combined presence within its chamber of both human and bird bones. While it was explained to Geiseler that the two lateral openings on the side of the masonry structure were for the purpose of allowing the spirit out of the dead to leave the tomb, certainly the larger of these could also have served as an entryway for any fowls, including chickens, who might choose to enter them. Once inside, their idle curiosity may well have resulted in their serendipitous discovery of the presence of their dietary needs, calcium.

Hare moa type structures were indeed porous and would have allowed rain water to trickle down between the rocks and into the central chamber. The effect of such intermittent wetting and drying of the entombed bone material would, through time, result in a gradual accumulation of human bone meal as a consequence of the decomposition of this ossiferous material. Such meal contains both calcium and phosphorous, minerals required in the normal diet of chickens, especially the egg laying hens. Considering the limited natural sources of those minerals, especially calcium, on volcanic Easter Island, it should be no surprise that once chickens accidentally encountered supplies of decomposing bones in the so-called *hare moa*, of which there are said to be over thousand on the island (Van Tilburg 1994:64), they proceeded to enter the lateral tunnels of those structures as often as needed. Since the availability of calcium in a hen's diet is related to its egg laying ability, this new found bone meal source may well have increased egg production. Recalling the traditionally claimed power of the Easter Island Miru clan to increase egg laying production hens, and the association of that power with human skulls (Routledge 1919:240), one might suggest that the Miru were cognizant of an improved egg laying capability of those hens that entered such former burial chambers.

Finally, if the hundreds of *hare moa* on the island had, indeed, been chicken houses, as local tradition would claim, it could reasonably be expected that they would be located close to dwellings and garden plots for further protection. However, as reported by McCoy, this was not the case in the area covered by his survey. This, too, calls into question their function as domestic chicken coops (McCoy 1976:87). Thus, lacking further evidence implying an intended function as a chicken house for these structures, the probability that they were actually aged tombs whose deteriorated human bone contents came to serve one of the dietary needs of the island's chickens would seem to best explain the known observational data presently available regarding them.

FOOTNOTE

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