Easter Island and East Polynesian Prehistory

Edited by
Patricia Vergne Casanova
CHAPTER 14

EXCAVATIONS AT ANAKENA
THE EASTER ISLAND SETTLEMENT SEQUENCE AND CHANGE OF SUBSISTENCE?

HELENE MARTINSSON-WALLIN
FARÅ WALLIN

Abstract

This paper presents some of the results of the Kon-Tiki Museum excavations on Easter Island in 1986-88. Here we will concentrate on certain observations of the settlement sequence in Anakena, and visualize how the subsistence may have changed through the times in this area, or if such changes in Anakena may be seen as results of social changes within a highly specified settlement area with specific high status settlements. We will also put forward the question if the 14C analysed Anakena settlement sequence could be general for Easter Island, or at least suggest a re-consideration of the earliest settlements of Easter Island.

During the years 1986-88, the Kon-Tiki Museum conducted archaeological investigations at Anakena on Easter Island. There were several reasons for choosing the Anakena area for excavations but one was due to the fact that the archaeologist Sergio Rapu, during his reconstruction work of ahu Nau Nau, uncovered a part of an earlier abu under the present one. At that time he did not investigate this structure more closely. Another reason was the fact that Anakena was a favourable landing place and according to old traditions the first “king” Hotu Matua landed and settled in Anakena. This area has subsequently probably been inhabited by the leading chiefs, the Hanga line of the Mitu lineage group, and this indicate that it was a central place of great importance in the past (fig 1). Thereby was a hypothesis set fourth that settlements dating back to the initial colonisation and traces of continuous use of this area could be possible to find.

Our aim can be summed up in two parts where the first one was to search for traces of settlement from the earliest time up to the time of European contact and establish a chronological sequence. The second part was to investigate the development of the central ahu named Nau Nau.

When performing this work, 31 trenches were excavated in the area, and some of them were placed in close connection to the ahu structures Nau Nau and Atuire Huki (Skjelsvold 1994 pp. 5-121). Through the test excavations several cultural layers and architectural sequences were explored. Samples for 14C datings were secured from all cultural layers and architectural phases. In two areas more extensive excavations were carried out. A trench, 38 square meters in size, was opened in front of ahu Nau Nau, to investigate in what way this structure had been modified through time (fig. 2). Furthermore, 78 square meters of a cultural deposit found about 75 m east of Nau Nau, named “Nau Nau East”, was excavated (fig. 3). A quite extensive fine material was uncovered, and several features of varying appearances were investigated. The limitations of the cultural deposit was established to the east, north and south. To the west the area had been disturbed by activities belonging to the late phase of ahu Nau Nau and/or by the restoration work of this structure (Martinsson-Wallin and Wallin 1994 pp. 122-216).

Fig. 1: View of Aukäna in 1938. The restored ahu Ature Huki and ahu Nau Nau.

Fig. 2: Excavations in front of ahu Nau Nau, 1937.
Through these test excavations several cultural deposits were found in Anakena. The earliest one was situated right on the bedrock, 3 meters below the plaza of the restored ahu Nau Nau. Due to the position of this layer only a limited area was excavated, and its total extension was not possible to explore during this investigation. It was dated by charcoal samples and animal bones using the 14C method to ca AD 800-1000 (cal). In test pits on the seaward side of Ahu Nau Nau III (restored ahu) were two horizons exhibiting cultural deposits found, one down on the bedrock, and one in level with the foundation stones. Between these layers was a light sandy layer with a few scattered cultural remains. The cultural deposits indicated human activities during the time AD 1200-1600. On the surface behind the rear wall of Nau Nau III and in the sand layer behind the rear wall of ahu Nau Nau IV were different artefacts such as toki (adzes) and obsidian mata’u (spearhead) found, as well as human skeletal remains from burials and possible cannibalistic activities. These finds probably stem from the time after AD 1600 up to post contact times (fig. 4).

The settlement/activity area named
“Nau Nau East” was dated to about c. AD 1200. The faunal remains recovered at this site may indicate a change of subsistence over time. The early society may have relied more on a subsistence based on hunting and later on, at least after AD1500-1600, domestic animals and cultivated plants may have formed the main bulk of the subsistence. Issue concerning change of subsistence will be addressed farther on in this paper.

In two test trenches situated c. 80-100 m south-west of ahu Nau Nau two different cultural layers were found, which were dated to c. AD 1200 and c. AD 1500 respectively (fig. 5). Some trenches also indicated areas without cultural deposits, as for example in the palm grove south-east of Nau Nau, and in a trench c. 75 m south of ahu Nau Nau, and furthermore in a trench at the hare paenga named “Hotu Matua’s house”. Two trenches were placed at a short distance from the entrance to the “Anakena park area”, in a spot considered to have been favourable for a settlement because of its close position to the ceremonial area, the sea, and a creek which in ancient times had its outlet in Anakena bay. However, no indications of prehistoric human activities were found there.

The result of the excavations show continuous traits of human activity in Anakena dating from c. AD 800-1000 and up to modern times.

Concerning ahu Nau Nau and its chronological sequence, four different phases could be distinguished. The earliest phase which was named Nau Nau I, was found situated below the present, today restored ahu, named Nau Nau III. The front wall and slightly inclined plaza of Nau Nau I was completely buried by up to 1.5 meter of erosion soil. The front wall exhibited both fitted nicely worked and crude stones side by side. This early phase of ahu Nau Nau was dated with charcoal found in the paved plaza, to c. AD 1100-1200. Probably due to erosion from the hill south of the structure this early ahu was modified and used as an eastern wing to a new platform built to the west. This phase is named Nau Nau II, and the platform exhibited fitted nicely carved stones (paenga) in the front wall. Charcoal found in the plaza indicated a date to c. AD 1200-1300. Ahu Nau Nau III, the present restored ahu, was dated to c. AD 1300-1400, with charcoal found in its plaza. Finally, Nau Nau IV which is a later addition to the east of Nau Nau III, was dated with one sample to c. AD 1450-1750 and with another to c. AD 1700-1900.

Ahu Atere Huki situated north-east of Nau Nau, was furthermore dated to c AD 1300-1500, with charcoal found in the ramp, and another sample found close to the base of the seaward wall.

A Re-Consideration of the Earliest Datings of the Easter Island Settlement Sequence

As we have seen the earliest indication of human activity at Anakena probably took place about AD 800-1000. Furthermore, building of monumental ahu was probably not established until about c. 200 years later. A question worth considering is if these dates are generally valid for Easter Island. The old dates of Poike dich AD 401-594 (cal. one sigma), and ahu Tahai of AD 685-933 (cal.
one sigma), seems so far quite isolated concerning earliest settlement and ahu, and they may thereby be questioned. So far the earliest dated settlement is the one in Anakena, and several dates, for example at ahu Ko To Riku, Ahu Tahai III, Aku Huro'la Urenga, and ahu Nau Nau I, indicate that an initial phase of building ahu structures was c. AD 1100-1200 (Martinsson-Wallin 1994).

We hereby suggest a date of AD 800-1000 to be used when referring to the initial settlement of Easter Island, and that an initial date of monumental ahu structures may be set to AD 1100-1200.

**About Change of Subsistence**

Stratigraphic change of the faunal remains in a cultural layer may indicate change of subsistence. Before one decides on such an interpretation aspects concerning intra site variation, excavation methodology, condition of preservation or if the refuse really is tied to ordinary eating activities or offerings etc., have to be explored and evaluated.

Furthermore, it has to be investigated if this change is indicated at inter site level as well or if site specialisation is to be found. Problems concerning how to compare assemblages at inter site level have for example been discussed by Dye (1996:73-85).

However, if one have good indications that a change of subsistence have occurred, then the important question arise of why this change occurred. Two main explanations are usually to be found in the archaeological literature namely; a functional/ecological explanation or one that emphasises ideological/social aspects. The former theory focus on how natural resources are exploited by man and argues that a change of subsistence is forced on the society due to over exploitation of the resources. A theory based on ideology argues that the prevailing ideology causes an over exploitation since one food item or group of food items are valued higher than the others. The change of subsistence is seen as a shift in how different food items were valued. We suggest that one theory not completely exclude the other but that there are a dynamic interaction between them.

Throughout Polynesia there are several prehistoric settlements that may indicate a change of subsistence over time. Early settlements have exhibited faunal remains tied to hunting activities (native bird, dolphin, turtle, and pelagic fish) and later the emphasis seem to shift to a subsistence based on domesticated animals (hen fowl, pig, dog), inshore fish, and cultivation (Kirch 1973, Dye 1990, 1996, Dye and Steadman 1990, Leach et al. 1984, Anderson et al. 1994). However, the idea concerning change of subsistence in Polynesia have for example been questioned by (Sweeney et al. 1994, and Anderson et al. 1994:49).

A change of subsistence may possibly be indicated within the prehistoric Easter Island society (Martinsson-Wallin and Wallin 1994:168, Steadman et al. 1994:91). The reason for this change has mainly been explained as an over exploitation of the resources. Steadman have for example indicated that several native birds have been extinct, probably due to human activities (Steadman et al. 1994:91). Pollen analysis have exhibited that a deforestation started at c. AD 1100 and this may eventually have lead to that no seaworthy crafts could be built and thereby the deep sea fishing and dolphin hunting decreased (Steadman et al. 1994:91, Bahn and Fenley 1992, Fenley et al. 1991).

We argue that the causes stated above only form part of the explanation of why changes are indicated in the complex prehistoric Easter Island society. Considering the indications of subsistent change on other Polynesian Islands (where for example deforestation is not indicated) we suggest that the changes seen may also be due to a more general shift in ideology within the Polynesian chieftain. Resources tied to the sea and the land were always used within the Polynesian society but that there have been a shift in emphasis on how to value the different resources. An hypothesis is that in the early Polynesian societies, where an ideology of expansion led to that many islands initially were settled, the sea and resources from the sea were valued high. This lead to that these resources mainly were controlled by the chiefs and were surrounded by tapu...
restrictions. Sanctuaries may have been directed to the sea and the skill of fishermen and equipment tied to fishing and hunting activities were highly valued and included in rituals. When the settlements where established and the land became important to the settlers, possibly due to the fact that the ancestors were buried there, the control of the land started to be important. An inter-expansion was thereby replaced by an intra-expansion which resulted in a more stratified society. The increasing importance of religious structures may be seen as a way to manifest and sustain such an expansion.

Prehistoric faunal deposits relating to settlements in Anakena show that the dolphin (Delphinidae sp.) has probably been a highly valued natural resource for the settlers in Anakena. It was found in all cultural deposits, but was clearly dominating in the earlier cultural contexts. In cultural contexts dated after c. AD 1500-1600 the remains of dolphin decline. Hen fowl is generally more common in late contexts, but still in low quantities (compare Stedman et al. 1994). The Polynesian rat was found in all cultural layers in Anakena. At the extensively excavated settlement "Nau Nau East" there is a marked difference in the composition of faunal remains between the late upper sandy layer and the early layer consisting of dark brown soil (Martinsson-Wellin and Wallin 1994 pp. 175-176).

Our conclusion is that the cultural layers in Anakena, dated to c. AD 800-1600, have a clear dominance of dolphins, which indicates the special importance on this resource. Hen fowls were on the other hand found in remarkably low quantities and mainly in late contexts. The Polynesian rat was recovered in all cultural layers, also in the earliest dated one. If this is the earliest settlement on Easter Island in general, this indicates that Easter Island first was settled by Polynesians arriving from the Central Polynesian area. Concerning a possible South American influence, it may be secondary and be reflected in the construction of nicely carved blocks of stones in early ahu structures, which in Anakena dates to c. AD 1100-1300 (ahu Nau Nau I and II).

Anakena – Reflections of High Ranking Settlements

Who were the persons living in Anakena and how should the different cultural deposits be interpreted? These questions and others relating to site specific activities will be addressed here. The composition of the earliest cultural deposit (so far in Anakena) give indications that the people tied to this settlement had a subsistence based on hunting and fishing activities and that this could be the remains of the first settlers in Anakena. In connection to this settlement no ceremonial structure was found and if such a structure existed at the time it has not yet been found or it is completely destroyed.

The other cultural layers found have been contemporary with some of the large ahu structures in the area. The activities that produced these cultural layers should probably be seen as quite specific, because of the close connection to the temple grounds.

The settlement/activity area “Nau Nau East” was contemporary with ahu Nau Nau I-III, and possibly with ahu Ature Huki. The cultural deposits found behind ahu Nau Nau may also be seen as “holy” refuse, and not as refuse from ordinary settlements. Ordinary people, were probably not allowed to live in this area. (Maybe this explains why we only found a few fishhooks in all of our excavations in Anakena. Coastal settlements usually give more finds of fishhooks).

If taking a closer look at “Nau Nau East” some interesting indications of ceremonial activities were seen at the site. In the southern part of the excavated area, a crude stone statue was situated (fig. 6). This may be seen as a representation of a god, maybe protecting the area. Other specific features were four pits placed in line containing stones, bones, and artefacts. These pits were interpreted as refuse pits for specific “holy” refuse (fig. 7). Such pits have for example been recorded in association with ceremonial structures in central Polynesia (Emory 1933:14). At the northern part of the area a stone line was uncovered, it is alternatively interpreted as a part of a house foundation, a sanctuary, or some kind of boundary line (fig. 8). One fact
Fig. 6.- Crude stone statue at the southern part of Nau Nau East settlement, 1998.

Fig. 7.- Refuse pits at Nau Nau East settlement, 1998.

Fig. 8.- Stone line at the northern part of Nau Nau East settlement, 1998.
was that the composition of the surrounding fill differed on the south respectively north side of the line. On the south side the fill consisted of dark brown cultural soil, and on the north it was made up of shell and gravel, here was also an area containing yellow stone powder (kia'a). Considering all these features, it is suggested that the area was used by people connected to the ahu and involved in ceremonies performed at the ahu. This may include statue carvers who finished moai statues or woodcarvers who manufactured kava kava sculptures, which is supported by the find material, consisting of among other things hammerstones, sharp obsidian tools, polished stone chisels and coral files. That this site has been considered sacred and used by high ranking people, also in more recent times is suggested by the close location of the hau paea named “Hotu Matua’s house”, and in the sandy level at “Nau Nau East” a fire damaged circular disc, probably an eye of a wooden sculpture, was found in an hearth. This may indicate the burning of idols, an activity probably quite common due to the contact with missionaries (Martinsson-Wallin and Wallin 1994:200).

A few burials, but also human bones mixed within the ordinary debris, were also found in the sandy layer at this site and in the upper layer behind ahu Nau Nau III and also in the mixed debris behind Nau Nau IV. Some of the bones were partly burned, this may be indicative of ceremonial human offerings and/or some kind of cannibalistic activities.

At Anakena there are high quantities of dolphins and rat bones and surprisingly low counts of fish and chicken bones in cultural deposits with earlier dates than AD 1500-1600. If the same is valid for other sites on the island, dated before AD 1500-1600, remains to be explored. A few excavations of cultural deposits dating from c. AD 1400-1600 have not exhibited the same faunal composition as in Anakena. Pattern seen in Anakena may reflect site specialisation tied to high ranked persons. Probably a result of a stratified society as well as a change of subsistence. To be able to draw far reaching conclusions concerning change of subsistence on Easter island it is of importance to perform further excavations on other settlements and thereby try to establish the time frame and development of the Easter Island society.