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Variation and Meaning of Easter Island Ahu

Helene Martinsson-Wallin

Introduction

Studies of ahu on Easter Island started more than a hundred years ago and a major scientific contribution was provided by the Norwegian Archaeological Expedition in 1955-56.

The isolated location of Easter Island on the outskirts of the Polynesian realm and the numerous archaeological remains makes its prehistory interesting to study, particularly aspects concerning origin and change.

The ahu structures are the most well preserved prehistoric remains on the island, and in some ways they resemble other ceremonial structures in the rest of Polynesia. The Polynesian connection is also noted in the language, in other material remains, in the religion, and in the social organization. Some ranked differences between Easter Island and the rest of Polynesia however occur. These differences have been explained by some researchers as due to internal development depending on differences in the natural resources, and different historical choices (Mulloy and Figueroa 1978, McCoy 1976, Ayres 1973, McCoy 1976, Smith 1961, Campbell 1987, Cristino et al. 1980, 1981, Cristino 1986, Stevenson 1984, VanTilburg 1986). To investigate variations and change of the ahu structures a construction analysis was performed on the 164 image ahu. To carry out this analysis, the structures were divided into 112 different variables that belonged to 20 variable groups. In performing the construction analyses both descriptive statistics (cross tabulation with chi-2 test), and a multivariate correspondence analysis were used (Martinsson-Wallin 1993). One advantage of the correspondence analysis is that a large number of data are reduced to four mathematically based axes without loosing any important information. The relationships between different variables, those between variables and ahu and those between different ahu are then able to be shown in one single graph (Shennan 1988: 283-286, Bolviken 1982). The analysis is thereby as contextual as possible. The results of the correspondence analysis show that image ahu generally form a homogenous group (Figure 1). One central cluster is shown which probably represents the typical or classical appearance of ahu. The variables outside the cluster may be due to variations in time, space or function (social variations).

In exploring if the variations are temporal, a serration is presented (Table 1). The serration is accomplished by using the ranked first axis of the correspondence analysis. However one has to be careful not to create a too rigid chronological frame, and both social and spatial relationships might also be indicated by this pattern. The serration suggests that well dressed stones in the rear wall of the platform (3.2) seems to be an early trait and unworked stones (3.5) late. Furthermore, the rear wall seems to have changed from consisting of vertically placed blocks (3.8) to horizontally placed blocks (3.9, 3.10). Concerning the front wall the well dressed appearance (3.15) seems to be an early trait, and unworked stones (3.18) are a late trait. The platform seems to have been projecting towards the sea (4.2) in the earliest time and gradually changed to end up as a platform pulled back from the sea (4.4). The flat stone pavement in front of the platform (5.4) seems to be an archaic trait, which through an intermediate stepped appearance (5.5) changed to an inclined ramp (5.6). In the beginning there are no indications of statues on the platform (10.2), but the absence of statues is however ambiguous because there are indications that small statues of Rano Raraku stone and statues of other material may have occurred during early times, but maybe not placed on the platform. A clear trend is however that late structures have only one statue (St. 1). The size of the ahu has changed from large (S 3), to medium (S 2), to small (S 1), and the coastal

Variables Ranked axis 1

<table>
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Table 1. Seriation of variables based on the first ranked axis of the correspondence analysis. Negative values are early and positive values are late. The variables are the same as in Figure 1.
The C-14 dating of *ahu* Tahai I and *ahu* Vinapu 2 have been submitted to a closer examination and it is suggested that they may indicate settlement dates instead of dating the *ahu* structures. This especially pertains to *ahu* Vinapu 2, where the sample that indicated an early date of B.P. 1100±200 (A.D. 751-1144, calibrated with the aid of the calibration program CalibETH) was taken under the wall surrounding the plaza and not in close association with the stone structure. The early dating from *ahu* Tahai I, B.P. 1260±130 (calibrated A.D. 685-933) is indicated by a sample taken in close association with the construction. This sample indicates the so far earliest *ahu* date on the island, but as long as there exists only one such early *ahu* date, it must be considered as ambiguous for asserting the initial date of *ahu* building. Recent excavations in the Anakena area date an early type of *ahu* (with flat pavement in front of the platform instead of ramp) to B.P. 860±130 (calibrated A.D. 1051-1265). This *ahu* was situated on top of an earthen settlement layer that was dated with four samples to B.P. 1170±140 (calibrated A.D. 737-1014), B.P. 1290±100 (aquatic bird bone calibrated to A.D. 980-1174), B.P. 1015±65 (calibrated A.D. 947-1108), B.P. 900±120 (calibrated A.D. 1036-1236).

Early settlements have been found below other *ahu* sites on the island as well and may be a general trend (Martinsson-Wallin 1993).

The spatial distribution of *ahu* shows a pattern where the majority of the structures are situated by the coast, but very few are found on the extreme corners of Poike and Orongo. Large and well dressed structures that may be elite centers and/or early structures, are evenly distributed and no clear agglomerations are shown. There is however a tendency of a larger representation of early structures on the south coast (Figure 3). In the spatial distribution of *ahu* structures and their construction elements it is difficult to get indications of other earlier types of land divisions than recorded in ethnographic sources. The equal distribution in the different districts may indicate an even distribution of power. The south coast seems to have been an extensively used part of the island and there is a tendency that late structures have a larger representation there as well. The occurrence of many non-worked *ahu* with only one statue and many semipyramidal *ahu* may indicate a trend towards a non-stratification. Construction elements such as the statue headgear *pukao*, red coping stones, and crematory, are more frequent on the south coast. Other patterns concerning different construction elements are difficult to distinguish but there is a trend of high walls of horizontal stones in the Tupahotu district.

If involving the natural resources on the island in this analysis, it is indicated that the south coast is suitable for farming and the north coast may have been more associated with fishing. The localization of larger villages has probably been dependent on accessibility to good water resources and the accessibility to quarries may have been used as means for exhibiting power. The spatial distribution of the *ahu* close to the sea and the elite residence centers close by *ahu* structures may indicate that accesses to the sea and its resources were important and controlled by the chiefs in the society. The spatial distribution of *ahu* show that it seems not to be any great spatial variations of early and late structures. Early and late, large and small, well dressed and unworked monuments are found in the same areas. There seems to be a continuity of construction of *ahu* in the same areas (Figure 3). This stationary change is also indicated by the alteration and re-building of *ahu* over time.

**Interpretation**

A variation found among the image *ahu* was whether they had worked or non-worked stones in the rear wall of the central platform. This variation may depend on temporal as well as spatial change. It was for example indicated that structures with well dressed walls are earlier than structures with non-worked walls. But time and space don’t fully explain the variations. One has to go further, and ask for the meanings behind the patterns observed in the analyses.

One characteristic for *ahu* on Easter Island is the huge worked blocks of stone in the rear wall and the front wall. In addition, there are the well dressed statues, the large stone fish hooks, different types of rock carvings, and the *hare paenga* stones, which are examples of a skilled stone working technique. In relation to other islands in Polynesia, the working of stone has been extraordinary on Easter Island,
especially as it pertains to the ceremonial structures. It is suggested that the people on Easter Island consciously and unconsciously adapted the environment according to their needs, and through their actions they also changed their own conditions. This view presupposes that the meanings of material culture and the society as a unit, of which the ceremonial structures are a part, is based on the ideology that goes beyond the material culture and the society. Due to this reasoning, questions regarding the significance of worked and unworked stones are considered interesting. It is suggested that worked and specially selected stones on Easter Island and in the rest of Polynesia may be associated with power and to the divine, and these stones served as mediums between gods and humans.

Stratigraphical evidence from archaeological excavations and dating performed on Easter Island may be interpreted that the origin of the initial population, and the origin of the physical appearance of the typical *ahu* may not have coincided. However, it is quite likely that certain ideas concerning ceremonial structures were brought to the island by the initial settlers, but the appearance of the typical *ahu* seems to have come fully developed to the island. Studies of origin and cultural context of the Easter Island *ahu* have indicated the possibility of contacts between Easter Island and South America. This theory is supported by certain similarities in the material culture and in the occurrence of the South American sweet potato (*cumara*) on Easter Island. Recent computer simulations concerning Polynesian navigation and possible migration routes performed by G. Irwin indicated that prehistoric contacts between Easter Island and South America most likely could have occurred (Irwin 1992:164). Furthermore, studies of ancient Peru indicate that the prehistoric people of Peru, even prior to the Inca period, saw a special relationship between stones and humans, and stones and gods or spirits. Natural, but also worked stones, were seen as mediums between gods and humans in prehistoric Peru.

Contacts between Easter Island and South America are suggested as likely to have occurred in prehistoric times, and the techniques with well dressed stones in religious monuments may have been transmitted from South America to Easter Island. Ceremonial structures made with well dressed stones have a long tradition in the Peruvian highland as well as by the coast (Pineda 1988). The central issue here is that it is easier and more attractive to adopt external new material culture traits, if their meaning agrees with local conventions, and fit into the power structure and the realm of ideas in both of the cultures. The people may have been more eager to accept the material culture based on this concept, rather than a material culture based on non-shared concepts. The material culture may however be shaped somewhat differently in the two cultures depending on other internal conditions and traditions. How and when this contact may have occurred is not fully asserted. There are however indications of possible naval journeys performed by Easter Islanders to the South American continent and/or visits from South America to Easter Island (or East Polynesia), sometime between A.D. 800-1000 (Martinsson-Wallin 1993).

The strong ties between the ceremonial structures and the land on which they are situated have been indicated. *Mana* (power), was expressed through the stone structures and by the importance placed on the umbilical cord. The umbilical cord symbolized contact with the ancestors. The chief was named *iho* (umbilicus cord/pit/core), and he was considered to be the most sacred medium in relation to the ancestors. The ceremonial structures were thought of as the umbilical cord of the land, as was evident by the fact that the chiefs umbilical cord was placed there. It thereby became a relationship characterized by dependence and a complex network concerning ancestors/chief - land/ceremonial structure, which could be interrelated in various ways. Stones for ceremonial usage, often worked, and chiefs served as visible mediums in this network. *Ahu* formed a link between the gods and the people, and were surrounded by *mana* and sacredness and were also important as power symbols.

It is suggested that structural change may be possible within the framework of a culture, but also that the structure underlying the culture is a condition, an infrastructure, for change. The visible result of these changes may then be seen in the material culture. If the constructions are considered to have close ties to both the ancestors and the living chiefs, it may be possible to experience both continuity and contradiction. A continuity generation after generation, but also contradiction between the living and the dead. There are also contradictions between the living chiefs of different lineage groups, and within the family concerning the senior and the junior branch. All of these may be sources capable of generating change. A new chief distinguishes himself from the old dead chief by making the change visible in the material culture, in this case the *ahu*. In this way the stability is upheld in relation to the chief and the people, where the chief constitutes a link to the ancestors. The chiefs' relation to the ancestors must be stabilized, but different chiefs and junior and senior branches want to distinguish themselves through competitions with one another. This is a power struggle, which also may lead to changes. Examples of new situations that must be conceptualized are for example deaths and births. They constitute internal events within a society that may lead to change. These events do not need to generate large changes in the system but they may become incorporated into the ideology and the common conventions with the result that the *ahu* must change in order to legitimize the power since the structure in itself constitutes a kind of power symbol. The change is made visible when new construction details are added or it is re-built. New situations also occur when a contact is established between two different cultures. This event may also lead to change. Concerning both internal changes and change due to external influences the new situations need to be conceptualized through the prevailing conventions, and the changes may take the shape of an open conflict, but the situations may also be solved in other ways. This agrees with my interpretation concerning concepts about worked stones and *ahu* structures.

The material culture of Easter Island showed drastic changes in the late prehistoric phase, which was due to internal conflicts. It is suggested that the society moved in a non-differentiated direction at the end of the prehistoric phase. The ceremonial structures may be seen as symbols of
power, and one way of maintaining the power was through the use of certain tabu regulations. If a society moves towards non-differentiation there may be difficulties in maintaining the tabu regulations and then it will be difficult to exhibit the power through the monuments. It is further suggested that a non-differentiation may be a result of the fact that all people are able to assert that they originated from the same ancestor, and by using certain skills, for example, skills of an erotic nature or skill in war. Certain individuals thereby tried to associate themselves with a chief's family. The explanation as to why there was a drastic change on the island does not have to be dependent on changes in the environment or conflicts concerning access to water. Instead the leading segment of society could not maintain the power through their structures and their tabu regulations.

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References

References