

SPATIAL PERSPECTIVES ON CEREMONIAL COMPLEXES: TESTING TRADITIONAL LAND DIVISIONS ON RAPA NUI

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Abstract: *The ceremonial sites of Rapa Nui, the ahu, are complex structures that incorporate and display a variety of distinctions and social relationships tied to different land areas that belonged to senior and junior groups. Such distinctions will be analysed via a Correspondence Analysis using selected ahu structures and connected variables. A detailed case study of two ahu in the La Perouse area will focus on the organisation of the variety of prehistoric material expressions connected to these. The aim is to show how habitus works in a local context at the individual organizational level. Through these studies we highlight the complex relationships involved in creating a milieu, in which actors of different groups carry out their practices when creating monuments and organising place.*

INTRODUCTION

Rapa Nui, also known as Easter Island, is geographically the most isolated island in the world (Figure 1). Yet it was found and populated by Polynesian seafarers in prehistoric times (Martinsson-Wallin and Crockford 2002: 256). Prior to archaeological investigations there were several ideas, generally based on genealogies, about when and by whom the island was originally settled. Since there are several versions of genealogical accounts, and their chronological reliability is uncertain, these traditions are difficult to use when discussing temporal issues (Martinsson-Wallin 1994: 76). When radiocarbon dating and stratigraphic methods were introduced by Thor Heyerdahl and associates in the mid-1950s (Heyerdahl and Ferdon 1961), it was established that Rapa Nui was settled by humans around AD 400. This date was subsequently revised after analysing the context of samples (Martinsson-Wallin 1994: 83). This analysis in conjunction with the dating of an early settlement excavated by us at Anakena in 1986-1988

(Skjølsvold 1994), led to a proposed colonisation event at around AD 800-1000 (Martinsson-Wallin 1994: 83). Subsequent re-evaluation and re-dating of the early settlement at Anakena (Martinsson-Wallin and Crockford 2002; Wallin et al. 2010) as well as the introduction of chronometric hygiene now give us reason to believe that Rapa Nui was not settled before the 12th-13th centuries. Hunt and Lipo (2006) suggest that their assessments of radiocarbon dates show that the island was not settled until the 13th century.

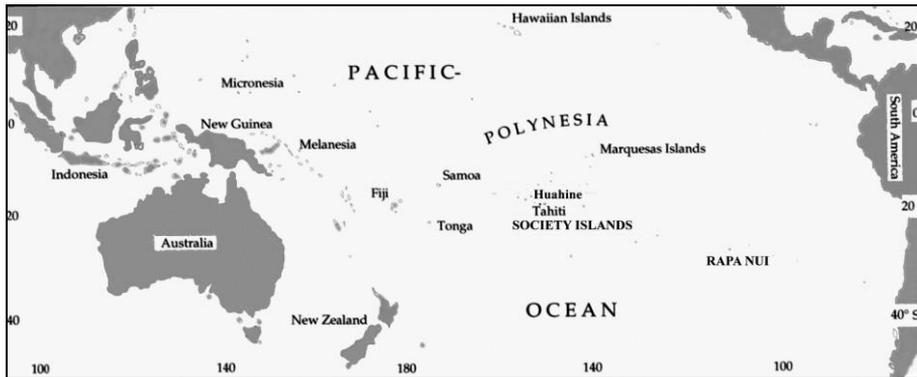


Figure 1. The Pacific Ocean with the location of Rapa Nui.

According to oral tradition the island was settled by Hotu-matua and his wife Ava-reipua, and the first landing place was at Anakena on the north side of the island (Métraux 1940: 56-65). There are variations in the content of the traditional accounts of the settlement history (Roussel 1869; Thomson 1891; Jausen 1893; Routledge 1919; Métraux 1940) but generally Hotu-matua is given as the first named chief of the island and that his and Ava-reipua's first son, Tuu-maheke, was born upon arrival at Anakena. An early account in regard to the land distribution among clan or tribal groups was recorded by Thomson (1891: 527);

To Tuumae-Heke, the eldest son, were given the royal establishment and lands from Anekena [Anakena] to the northwest as far as Mouna Tea-tea. To Meru [Miru], the second son, were given lands between Akahanga and Hanga-roa; To Marama, the third son, were given the lands between Akahanga and Vinapu. The land lying to the northward and westward of Mouna Tea-tea was the portion of the fourth son, Raa, and was called Hanga-Toe. To the fifth son, Korona-ronga, were allotted the lands between

Anekena and the crater Rana-Roraku. To the sixth and the last son were given the lands on the east side of the island. His name was Hotu-iti.

Routledge (1919) recorded during her visit in 1914-1915, that until recently there were ten paternal descent clan groups on the island but Métraux added (1940: 120) "I prefer the more general and more appropriate term tribe (*mata*)."
Routledge's map of the 'clan' areas (see Figure 2) does not entirely coincide with Métraux's information of tribes and land distributions and he suggests some revisions (1940: 122). Métraux concludes that;

In sum, the tribes (*mata*) of Easter Island seem to have been separate social groups made up of descendants of a common ancestor." (1940: 123)... /and that;/ ...the ten *mata* or tribes were divided into two main divisions corresponding roughly to the western and eastern parts of the island. The western and northwestern tribes were called Tuu (usually spelled Ko Tu) or *mata nui* (greater groups), and the eastern tribes were the people of Hoto-iti or *mata iti* (lesser groups) (1940: 124).

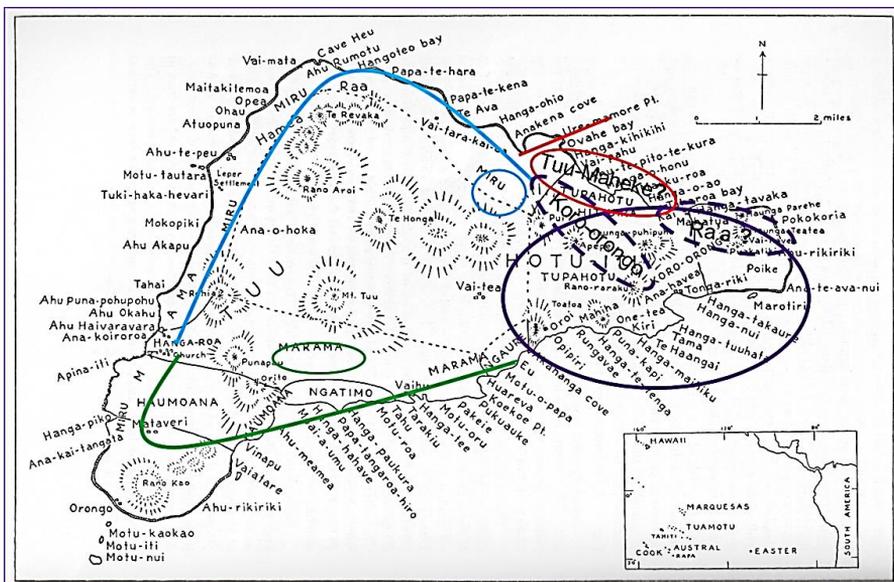


Figure 2. Early map with the main districts indicated. Red, blue and green indicates the lands divisions of the three oldest sons, and black ovals indicate the lands portions given to the three youngest sons of Hotu Matua (After Métraux 1940).

This shows that the concept of senior and junior branches existed in Rapa Nui. There is a discrepancy in the account of the land distribution to the six sons/clans of Hotu-matua since in historic times there seems to have been ten clan areas. It is also striking that Thompson's account that the Miru [Meru] clan was given the land from Akahanga to Hangaroa does not entirely coincide with Routledge's map and the current view that the Miru clan ruled in Anakena and considered the north coast towards Hangaroa to be their clan area. A subsequent subdivision of the Marama area on the south coast is very likely with the Ngatimo, Ngaure and Haumoana clan areas as well as the Tupa-hotu clan within the Korona-Ronga area (Martinsson-Wallin 1994: 103-104). Warfare and inconsistencies in the accounts in relation to who were the informants and their possible agendas are at play here. It is however clear that assured corporate decent groups were attached to certain areas as well as to specific ceremonial sites in prehistoric times.

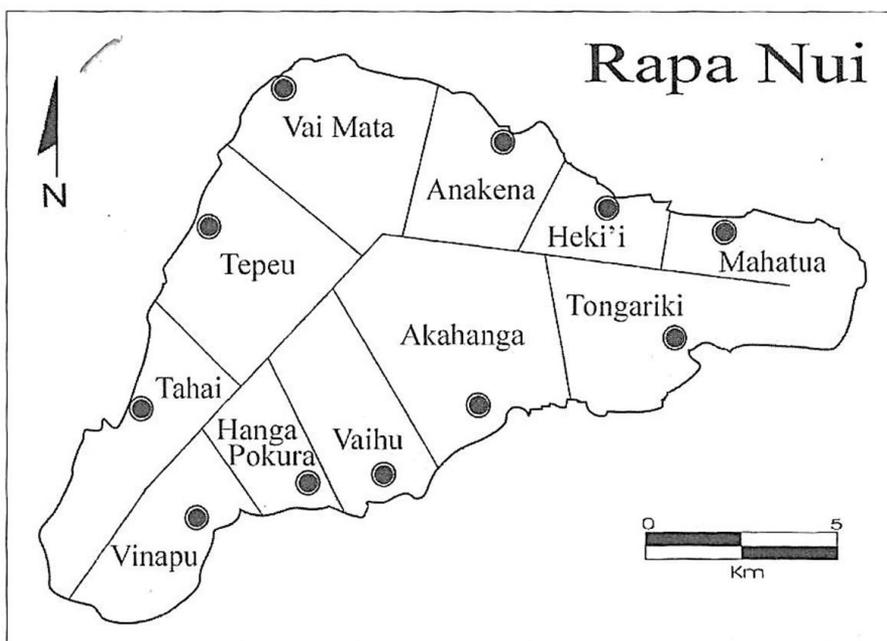


Figure 3. Hypothetical districts based on the dispersal of large main ahu structures (after Stevenson 2002).

Spatial studies of ceremonial sites (*ahu*) made by Martinsson-Wallin (1994: 85-107) show that these sites are distributed all over Rapa Nui

and thus are found in all historically known districts/clan areas. The study also indicated that there were larger and smaller ceremonial sites distributed in all districts with some minor reservations for the small district Ngatimo on the south coast. Martinsson-Wallin's spatial study of *ahu* sites has shown that features such as red lintel stones and hats (*pukao*) were also more frequently found on the south coast and that these features were probably added to the sites over time (1994: 106).

Based on traditional history and archaeological analyses of image *ahu* Stevenson (2002) has suggested a hypothetical land division also including the inland areas (Figure 3). In this paper we test this hypothesis by evaluating the relationship between *ahu* and traditional land divisions by use of multivariate statistics. Our aims are to investigate general organizational principles seen in the *ahu* structures at an island wide level, as well as making a case study at local level using what has been interpreted as ritual and secular material culture remains alike.

THE MILIEU - THE BUILT, THE COGNITIVE AND THE NATURAL ENVIRONMENT

Studies of the built environment on Rapa Nui show a huge number of prehistoric material remains, which have been built and re-built over time (McCoy 1976; Martinsson-Wallin 2000; 2004). Attention has focused on larger and smaller ritual places scattered around the coastal areas in the form of raised platforms and ramps constructed of stone boulders and slabs (*ahu*), and adjacent statues (*moai*). The statues are part of the ceremonial sites but statues are also found in the landscape on the way to the ritual sites and at all manufacturing stages in the quarries at Rano Raraku (Van Tilburg 1986). In addition to this there are structures which are interpreted as chiefly settlement areas with boat shaped stone foundation houses and adjacent pavements (*hare paenga*). There are also various stone buildings such as so called chicken houses (*hare moa*), garden stone wall enclosures (*mana vai*), stone lined fire places (*umu pae*), stone cairns as territorial markers (*pipihoreko*) and stone towers (*tupa*) (McCoy 1976). Traces of rectangular shaped house foundations are also found at inland locations, as well as, a unique water feature (a dam) recently excavated in a gully on the slopes of mount Terevaka (Vogt and Moser 2010).

Pollen records from the crater lakes (Flenley et al 1991) and results from archaeological excavations (Orliac and Orliac 1998; Martinsson-Wallin 1998, 2004; Meith and Bork 2010) have shown that the original natural landscape has been greatly modified due to human impact. Large scale deforestation of the indigenous giant palm trees (Mieth and Bork 2010) is evident. The reason for this modification was probably a combination of intensification of cultivation (horticulture) (ibid 2010), and utilisation of palm trees in transporting statues and large boulders to construct the ritual sites as well as utilisation of wood for domestic activities. A factor that facilitated the intensification of cultivation is probably the introduction of the sweet potato (Wallin 1999; Wallin et al. 2005; Wallin 2014). Thereby a population increase could be supported as well as it created a surplus so that the population could focus on competition in constructing ritual sites and statues and adjacent structures. This work and the surplus production were under control of the chiefly segment. Ethnohistoric accounts from the 18-19th centuries indicate that the whole island was cultivated. Research by Stevenson and Haoa (1998), Stevenson et al. (2002), Wozniac (1998) and Mieth and Bork (2010) have confirmed this. Due to deforestation as well as wind and water erosion, new forms of agriculture were necessary. These new techniques include rock mulching in which stones were placed around and on the garden plots to keep humidity and aid soil fertility. In the contemporary barren landscape many of the rock gardens are visible in areas with scattered lava stones usually of fist size up to a couple of decimetres in size. In some places excavations have shown that new soil and fertilisers were produced from cracking up and rubbing the rocks to powder (personal communication Sonia Haoa Cardinali Sept 2013).

The multitude of ceremonial sites and activities in relationship to the production of these sites is remarkable and shows that the cognitive and ideological realm have been very important to the people of Rapa Nui. A phenomenological approach to the landscape and a 'transported landscape mindset' based on the Polynesian ideological realm is indicated in oral traditions and place names (Kirch and Green 2001).

To further analyse the past Rapa Nui society we will use the concept of *milieu*. This word derives from the French words *mi* (for mid) and *lieu* (for place) and is often compared with the word environment. To us this concept goes beyond how the word environment usually is

perceived. We define *milieu* as the centre of a place where people acted and lived, which also includes its social and cultural surroundings, as well as the physical location in the landscape. This view includes a theory of practice where the 'habitus' of different actors is built-in to the ideas of social order, symbolic power and domination (Bourdieu 1977), and is reflected in the physical remains left behind on the landscape for us to observe. The concept of 'habitus' was used and elaborated by Bourdieu in investigating relationships of various groups/classes in French society. He discusses this concept in relation to constructivism, which, according to him;

is a twofold social genesis on the one hand, the scheme of perception, thought and action which are constructive of what I call habitus, and on the other hand of social structure, and particularly of what I call fields, and of groups, notably those we ordinarily call social classes (Bourdieu 1989: 14).

He writes about cultural capital (e.g. esoteric knowledge, excluding /including), economic capital (e.g. control of material assets and its management) and social capital (e.g. kinship). Symbolic capital is a state of the other capitals and only exists if the values of the other capitals are recognised by other agents within the same 'field' (e.g. the chiefs of the various clans/tribes).

Previous studies of *ahu* structures clearly indicated that large ritual centres are distributed evenly all around the coast of Rapa Nui (Martinsson-Wallin 1994; Stevenson 2002). What does this mean in terms of understanding the social organisation and cognitive landscape of Rapa Nui and the concept of senior and junior relationships in prehistory? This is something that we will investigate with two studies in this paper. The first study embraces the ritual sites around the island based on Martinsson-Wallin's survey (1994) and their relationship to the traditional clan/tribal areas as indicated by Routledge (1919) and Stevenson (2002). A second local case study, will include the large ritual site of *ahu* Heki'i and the adjacent *ahu* Ra'ai, both of which have been subjected to archaeological excavations (Martinsson-Wallin et al. 1996; Martinsson-Wallin 1998). These two *ahu* structures are located on the northeast coast at Hanga Ho'onu bay where an extensive survey has been carried out by Christopher Stevenson and Sonia Haoa Cardinali (2008). The results from these surveys and excavations will be used by

us to understand the dynamics of ritual place. This will display how status and power was used and manifested in the material remains.

Since prehistoric Rapa Nui society was founded on people of Polynesian descent (Mulloy and Figueroa 1978; Martinsson-Wallin 1994; Martinsson-Wallin and Crockford 2002; Martinsson-Wallin et al. 2013) it is likely that important structures and concepts found in Polynesian society, such as the idea of senior and junior branches, have also been central in Rapa Nui, as indicated above. These concepts are important to discuss in relation to genealogies and expressions of status seen in the material remains. This will provide us with a better understanding of the Rapa Nui past, the meaning of the dispersal of monuments and the relationship of material remains observed in the *milieu* of the monuments. The archaeological remains are grouped around the ceremonial sites in ways that do not just reflect a single household unit but signal the existence of a corporate household or residential activity, a world centred on a strong chief attracting a large part of the population. The concept of house societies (Levi-Strauss 1987; Fox 1993; Kirch and Green 2001; Kahn and Kirch 2013), is here seen as a useful analytical frame to understand agglomerated power seen in the *milieu* around *ahu* structures. An analysis in regard to this can show if different power relations may be observed around various monuments.

RAPA NUI STATUS RELATIONS IN A POLYNESIAN CONTEXT

It is clear that genealogy and the concept of senior and junior branches were present in Rapa Nui society as well as that these branches were highly competitive in their struggle for power and used status objects in the expression of power. Genealogies were perhaps the most effective way to show status and gave rights to chiefs to claim power and influence in society. Genealogy and the concept of senior and junior branches in the chiefly sections was the core of social organisation and have been described in chiefdoms throughout Polynesia (Sahlins 1958; Goldman 1970). Rapa Nui was described by Goldman as an 'open chiefdom' with a high degree of competition for power, since the position of high chief was not directly inherited, but bestowed upon the person best suited for the position within the extended family group (Goldman 1970:17). On account of the complexity and multitude and elaboration of archaeological remains it is suggested that Tongan (see Clark this volume) and Hawai'i (Kirch 2010) societies were highly

stratified by the 16th century. Kirch (2010) has further suggested that Hawai'i had the characteristics of an early state at the time of European contact. Meleisea (1995) and Martinsson-Wallin (see Martinsson-Wallin this volume) also suggest that Samoa was more stratified in the past than after European contact. We have suggested elsewhere that Rapa Nui society shows tendencies of becoming increasingly stratified subsequent to the societal unrest during the 16th century, just prior to contact, visible in the birdman ritual/festivity (Wallin and Martinsson-Wallin 2010). However, the position of paramount chief over the island was given to one of the leading chiefs as a result of competition and not directly inherited (Métraux 1940: 333).

Social organisation in Polynesia has generally been defined as consisting of ramage groups, a descent group composed of individuals descended from one ancestor through any combination of male and female links, developed out of segmentation into lineages of related individuals headed by a senior male individual (Goldman 1970: 542-549). Several such lineages are also headed by the senior branch that has the closest relation to the common ancestor and several such units made up a clan or tribe group. If the population started to grow due to, for example, favourable economic conditions, this may have led to higher degrees of stratification. Different heads within this organisation were the leaders of different sections but one representative might eventually become the paramount chief. Routledge wrote in a personal communication to Williamson that on Rapa Nui:

...smaller family units aris[e] within the larger family unit, and again subdivid[e]; and that process can be traced, not only in tradition, but in what appear to be comparatively recent times. "The little clans were the children of the big ones." (Williamson 1924 Vol. II: 56).

Routledge mentions that these larger units consisted of ten *mata*, which she indicated to average about 300 to 400 people each (Sahlins 1958: 168). In traditional history it is also stated that the *mata* group which descended directly from the first settler supplied the paramount priest-chief or *ariki-mau* and this position was inherited from father to the eldest son within this family (Métraux 1971: 138-139). However, according to Métraux (1971: 129-130) this paramount priest-chief had power outside his *mata* only concerning religious matters and not

concerning the political power in the different *mata*. This means that the idea of a paramount chief existed, but was not the ruler over the entire island even though the *ariki-mau* must have had great importance when it came to the religious sphere and how it should be expressed, since we can see quite similar ritual expressions all around the island. Métraux also mentions (1940: 138-139) another important powerful group in Rapa Nui and that was the *mata-toa* or the warriors. Métraux further suggests that the *mata-toa* had the real power and ruled the *mata*, however, as Sahlins suggest, it is quite possible that high chiefs were also war leaders, which is the case all over Polynesia (Sahlins 1958: 168-169).

Status objects / monuments and expression of power

Power is usually also expressed in material portable objects (things) as well as in houses and ceremonial structures. This is seen all over Polynesia in staffs, tapa cloth, wood carvings, red feather girdles, fine mats etc. Rapa Nui is extraordinary well represented in exhibiting some of these status objects. There are various kinds of wooden sculptures, excellent stone tools such as large fish hooks, the obsidian spear heads of the warriors (*mata'a*), the rongorongo inscriptions etc. Beside these small objects there were gigantic statues of different size, large ceremonial structures, sometimes with extremely nicely cut stone blocks, as well as chiefly houses called *hare paenga*, the latter with an oval shaped cut curb-stone foundation. Also petroglyphs can be included in "monuments" as places of symbolic meaning.

RAPA NUI STATUS RELATIONS - KO-TU'U AND HOTU ITI DIVISIONS

According to Thomson the genealogy of chiefs in Rapa Nui included fifty-seven names starting with *Hotu-matua*. Other records by Jausen and Métraux include 32 and 29 names respectively, whilst Roussel gave only 23 names. Some names coincide and others are unique to the different accounts (Martinsson-Wallin 1994: 76). As mentioned above, all accounts agree on the point that the first name is Hotu-matua and the second name is Tuu-maheke. However, this suggests the records probably did not include a straight line of successors but rather different important chiefs from different lines. It is therefore quite possible that the first name in the various records was the first chief of

some importance, maybe established by the order of the birdman ritual – in other words the line may not be so ancient. According to traditional history the first high chief Hotu-matua divided the island into different land areas (Figures 2). Thomson (1891: 527) and Métraux (1940: 121) relate that the three oldest brothers belonged to the *Ko-tu'u* clan (*mata nui*), and the three youngest brothers belonged to the *Hotu-iti* clan.

The exact prehistoric land distributions are unclear especially regarding the statement in Métraux (1940: 121) that Tuu-maheke got “lands extending northwest from Anakena as far as Maunga Teatea”; the latter location is situated on the Poike peninsula. It is also stated that *Ra'a* got the land between Hangaoteo to Maunga Teatea and thereby it could be inferred that Tuu-maheke got land from Anakena to Hangaoteo and not all the way to Maunga Teatea since there otherwise seems to be an overlap. However, it has to be considered that original land divisions are likely to have changed over time when the population grew and also due to competition and warfare and that the six sons for example could represent six generations with continuous land divisions. This also pertains to competitions between senior and junior branches both within and among the *Ko-tuu* and *Hoto-iti* areas. These two main groups *Ko-tuu* and *Hoto-iti* are probably representations of senior and junior clan divisions or branches, since the three oldest brothers were given *Ko-tuu* and the three youngest brothers *Hotu-iti*. It is also well known that there were major fights between the two divisions (Métraux 1940: 74). Routledge mentions (1919: 280) the story that when Hotu-matua became old he came to favour his youngest son Hotu-iti, and Hotu-matua was eventually buried at Akahanga probably situated on the border of *Ko-tuu* and *Hoto-iti* area, which underpins such a tension and could indicate that the junior branch got more powerful with time, which can be expressed through the elaborated *ahu* complex at Akahanga.

The clans/tribes (*mata*) of Rapa Nui were separate social groups made up of descendants from a common ancestor and traditional history also suggests that among the *Ko-tuu* and *Hoto-iti* branches there are yet other divisions and groupings probably also founded on the senior/junior (west/east) concept. This division is probably deeply rooted in the Rapa Nui traditions. If these divisions and competitions between senior and junior branches actually existed as it is stated in the traditional history, they would also be possible to detect in the practices

of how the Rapanui organised their work, and how *habitus* based distinctions shaped the material remains on the island.

CORRESPONDENCE ANALYSIS OF IMAGE AHU

To explore if the general Polynesian senior/junior competition concept can be traced in the monumental architecture of Rapa Nui we use earlier collected archaeological data from all around the island (Martinsson-Wallin 1994), and analyse it using relational statistics. A selection of 78 image *ahu* is used in a Correspondence Analysis (CA). The *ahu* numbers and the variables and their numbers are based on the ones in Martinsson-Wallin (1994: 150-160). A selection and re-arrangement of the original variables has been done. The construction variables used in this analysis are the ones listed below with variable numbers seen in the graph (Figure 4), indicated within brackets.

- Ahu size (three variables Size 1, Size 2 and Size 3)
- Shape of central platform (2.2 and 2.3)
- Dressed rear wall (3.2)
- Undressed rear wall (3.5)
- Rear wall of one layer of blocks (3.8)
- Rear wall of two layers of blocks (3.10)
- Rear wall of three layers of blocks (3.12)
- Dressed front wall (3.15)
- Undressed front all (3.18)
- Front wall with lintel of red lava stone (3.19)
- Location of central platform (4.2 projecting towards the sea, 4.3 parallel with rear wall of the wings, 4.4 pulled back from the sea).
- Construction of ramp (5.5 stepped, 5.6 inclined).
- Paved ramp (6.4)
- Unpaved ramp (6.6)
- Absence of wings (7.2)
- One wing (7.4), two wings (7.5)
- Dressed rear wall of wings (8.4) and (8.9 paved with *poro* stones).
- Construction/appearance of plaza (9.4 enclosed or partly enclosed by wall, 9.7, levelled surface, 9.9 partly paved, 9.10 no paving).

- Number of statues (10.3 presence, 10.4 one statue, 10.5 2-6 statues, 10.6 7-15 statues)
- Presence of Pukao (11.2 absence, 11.3 presence)
- Absence (12.2) or presence of crematoria (12.3)

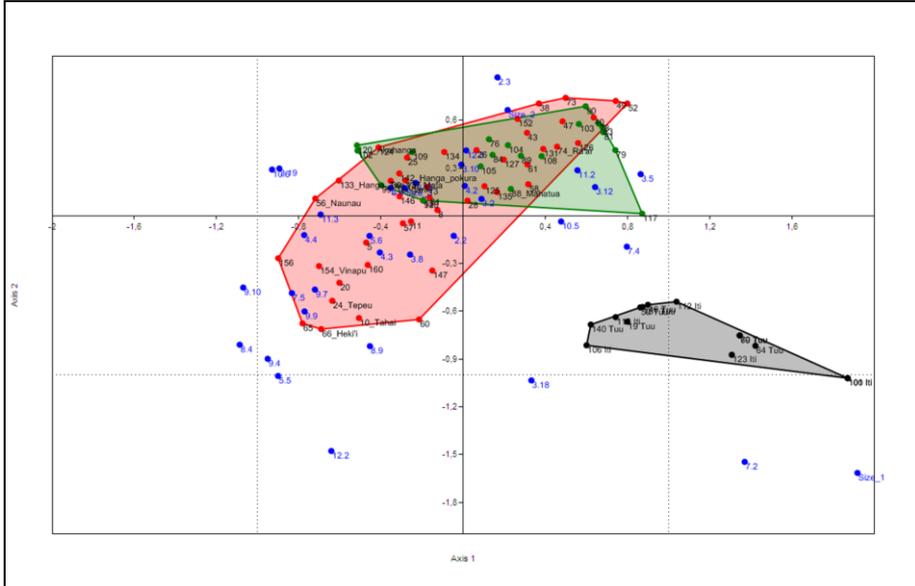


Figure 4. The CA of Rapa Nui ahu structures and their connected variables. Red field indicate the Ko Tu'u senior division, the green field the Hotu Iti junior division and the grey field indicate a mixed field of small low status ahu.

The CA carried out on the 78 ahu, compares each site in relation to each other, as well as to the variables indicated above. This means that similarities and differences are detected in the graph if the sites/variables appear close to each other or not (Figure 4). Different relations which otherwise would have been quite difficult to detect are thereby visualised. When interpreting the graph, we colour coded the two main island divisions (Figure 4). The red field indicates structures tied to *Ko-tuu* clan areas dominating the western part of the island and the green field indicates structures tied to *Hoto-iti* clan areas on the eastern side of the island. An additional grey field was also included that comprises small structures from both areas.

Interpretation of the graph

The CA analysis show that status is expressed differently among the prestige monuments in the two main clan districts Ko-tu'u and Hotu-Iti. Variables tied to high status are large size, number of statues, presence of *pukao*, red scoria lintel, two wings, *poro* paved ramp and dressed stones, which appear more frequently in the Ko-tu'u division. The analysis also shows trends that Hoto-iti structures can usually be placed in the middle size group (2) and that status *ahu* in this area are *ahu* Mahatua, Tongariki och Akahanga. Small structures indicate lower status and are associated with undressed stones, few statues, and one or no wings. Such monuments are situated in both areas which shows that low status (junior distinctions) were not important to express in any distinctive way. Instead their existence was probably of importance as statements of the existence of competitors, which made the senior expressions even more impressive. Senior and junior branches are more visible in the monuments in Ko-tu'u than in the Hoto-iti area, since the lower part of the red field in the graph (Figure 4) includes exclusively Ko-tu'u (senior) expressions and the upper part of the red field merges together with the Hotu-iti (junior) field. Within the green Hotu-iti field the high status structures (Akahanga and Tongariki) are located in the left part of the cluster in close relation to some of the high status monuments of the Ko-tu'u division. Overall, the CA analysis clearly indicates that there is a distinction between the two traditionally indicated main divisions on the island, which in a more or less unconscious way seems to be driven by the 'habitus' driven idea of *how things should be done* which was deeply rooted in what tradition *ordinated them to do*.

THE LA PEROUSE CASE: INTERNAL ORGANIZATION OF CENTRAL PLACES WITHIN A DISTRICT

To obtain a detailed understanding of the *milieu* within a lineage group that dominated a district and the local group relationships, we will conduct an in-depth analysis of the *ahu*-structures Heki'i (Figure 5) and Ra'ai and the adjacent built and natural environment. Local group relationships can possibly be compared to the kind of house society organisation as described by Kahn and Kirch (2013) concerning the organisation of houses and ceremonial sites in the Opunohu Valley in

the Society Islands (see Wallin this publication). These structures were chosen since we have carried out careful survey and excavations at these two *ahu* sites and therefore know the area in some detail (Martinsson-Wallin and Wallin 2000, Martinsson-Wallin et al. 1996, Wallin and Martinson-Wallin 1997, 2008). Secondly, Stevenson and his team (that we also collaborated with in 1996-97) have re-surveyed the surroundings of La Perouse and published the results (Stevenson and Haoa 2008).



Figure 5. Ahu Heki'i, rear wall.

LANDSCAPE AND LOCATION OF AHU HEKI'I AND AHU RA'AI

Métraux and Routledge indicate on their maps (Figure 2) that the land area where *ahu* Heki'i and Ra'ai are situated belonged to the Hoto-iti branch, but according to the legend, recounted by Thompson and Métraux, the land from Anakena and eastward towards Maunga Tea-tea was given to Tuu-maheke the oldest son of Hotu-matua and he belonged to the Ko-tu'u branch. This interpretation is also supported by the CA analysis where *ahu* Heki'i is clearly placed at one end of the Ko-tu'u field (Figure 4). This might indicate that *ahu* Heki'i, which is a dominant structure on this part of the north coast, could have belonged to a senior branch of the Tuu-maheke lineage. The senior/junior relationships were of course visible also within the lineage groups, and in that light it is likely that *ahu* Ra'ai is an *ahu* belonging to a junior branch in relation to

ahu Heki'i. In line with this, small *ahu* located close to these main structures could belong to other senior/junior relations as well as to specialists tied to the main structures. However, different sizes and kinds of *ahu* structures clearly indicate different distinctions within the group that together was a unit.

A quantitative study of local relationships at La Perouse (Hanga Hoonu).

The survey by Stevenson and Haoa (2008) of the La Perouse area, was based on previous surveys carried out by University of Chile. Prior discoveries of archaeological remains were confirmed and new discoveries added on. Our analysis on the two *ahu* structures mentioned above focused on the type of sites that were found within a radius of 250 meters from each of *ahu* Heki'i and *ahu* Ra'ai (Figure 6).

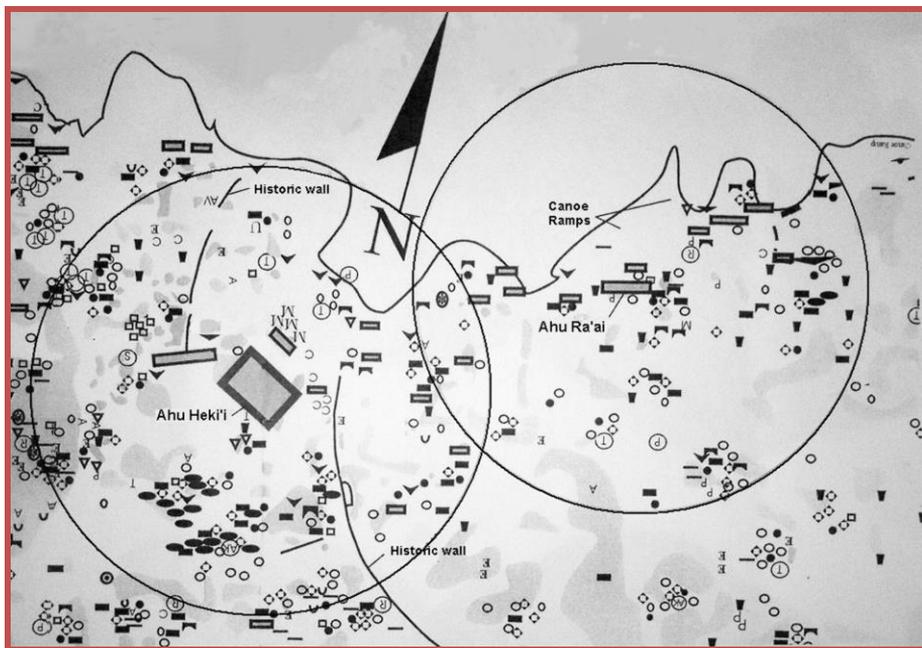


Figure 6. The two survey areas indicated by circles with a radius of 250 m from the *ahu* in the center of the circles (Based on survey map by Stevenson and Haoa Cardinali 2008).

A closer description of the remains observed follows below to understand the complexity of the *milieu* included in the case study areas.

The following features described by Stevenson and Haoa Cardinali (2008: 15-34) have been identified:

- *Ahu* structures and their size (same sizes used as in the CA analysis)
- Semi-pyramidal *ahu* late prehistoric shape of *ahu*.
- Alignments, rudimentary alignments of stones, indicating pathways, agricultural areas or unknown purposes.
- Ana kionga, a modified cave with built entrance.
- Water hole, a fresh water resource.
- Cave, can be of different types with open entrance or a hole into the ground, and different sizes.
- Crematoria, usually located on the seaward side of an *ahu* structure and contain burned human bones.
- Avanga, is a tomb in connection to *ahu* structure.
- Enclosure, is usually shelters of stacked stones or boulders.
- Agricultural feature, of the “rock garden” type or visible as depressions in the ground.
- Hare Moa, or so called “chicken houses” are built of stacked stones containing a chamber.
- Hare Paenga an oval shaped house with a crescent shaped pavement in front of the entrance. Usually called elite house.
- House, stone demarcation square or rounded, may have postholes.
- Mana Vai, are usually rounded stone walled garden enclosures, singular or grouped.
- Cairn, of stacked stones in a conical shape, probably marking boundaries of areas.
- Moai, a stone statue generally carved from the Rano Raraku tuff
- Pavement, usually a small set of beach cobbles (poro stones) in front of an oval shaped house without Paenga stones.
- Paenga stone, a stone that originate from an oval shaped house.
- Beach-canoe ramp is a stone paved area slanting into the sea.
- Petroglyphs, are pecked pictures on flat surfaces showing different kinds of animals, canoes, geometric designs etc.
- Pipi Horeko, are solid circular cairns of stacked stones with flat top interpreted as boundary markers.

- Platform, made of stacked stones in different shapes from squared to circular. Working or resting places.
- Shrine, simple *ahu* structure.
- Taheta, are artificial depressions in the bedrock or on boulders for grinding stone adze.
- Terrace, interpreted as house foundations located sloping ground.
- Topknot, *pukao*, the cylindrical shaped “hat” of red scoria placed on top of the statues.
- Tupa, is a tower structure with square to rectangular entrance to a room, sometimes called ‘turtle-watching towers’.
- Umu Pae, an earth oven lined with stone slabs on edge.

By quantifying different types of archaeological remains in the two areas it is obvious that the area around *ahu* Heki'i has almost twice the amount of archaeological remains as around *ahu* Ra'ai. This fact indicates a higher degree of competing activities around *ahu* Heki'i. The composition of archaeological remains around the two *ahu* sites is similar, but the frequency of remains is much higher around *ahu* Heki'i. We have interpreted this as *ahu* Heki'i representing the senior branch *ahu* with Ra'ai being a secondary junior centre. The dating of the sites also point to Heki'i being founded first (Martinsson-Wallin 1998; Wallin and Martinsson-Wallin 2008).

A few significant differences can be distinguished (Figure 7-9) and they are:

- There is a large elite village (*hare paenga* houses) in relation to *ahu* Heki'i, indicating the seniority and status tied to this structure. Food production seen in a larger amount of *manavai* is also present here, as well as a high amount of *umu pae* earth ovens for preparation of food.
- The terraces/platforms and topknots are more abundant around *ahu* Heki'i, indicating a higher population as well as a of a higher status complexity.
- Indications of markings of borders (*pipi horeko*) are more abundant at *ahu* Ra'ai towards the south which may indicate that this *ahu* was in the periphery of the district. It is quite possible that the combined complex Heki'i/Ra'ai actually was

located at the border between the Ko-tuu and Hotu-iti areas on the north coast as probably the Akahanga complex was on the south coast. Both Ko-tuu and Hotu-iti have connections to Anakena in that Hotu-matua landed there and his first born son of was given the northern part from Anakena towards Maunga teatea but according to the legend Hotu-matua himself was buried at the other border, at Akahanga.

- A basalt workshop is indicated at *ahu* Ra'ai as well as a higher frequency of petroglyphs, indicating diversified working and ritual focuses there, perhaps specialized towards adze manufacturing. A high amount of *taheta* may also indicate grinding of adzes.
- Natural good access to the sea is also indicated close to *ahu* Heki'i but not at *ahu* Ra'ai, which suggests a selected favourable landscape position at Heki'i. To access the sea at Ra'ai necessitated the building of canoe ramps.

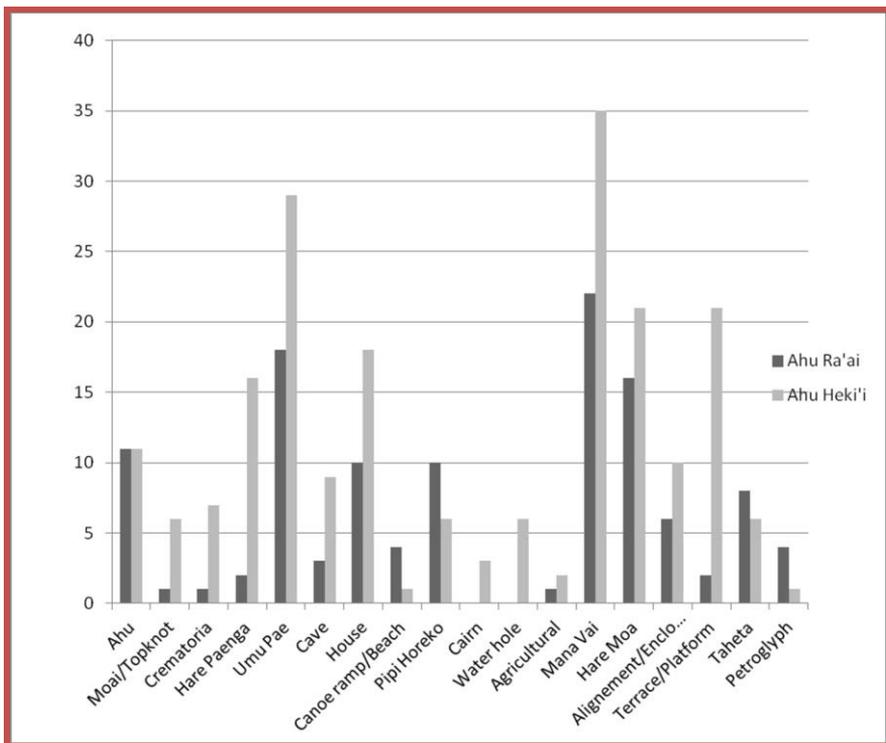


Figure 7. Actual number of features in each area.

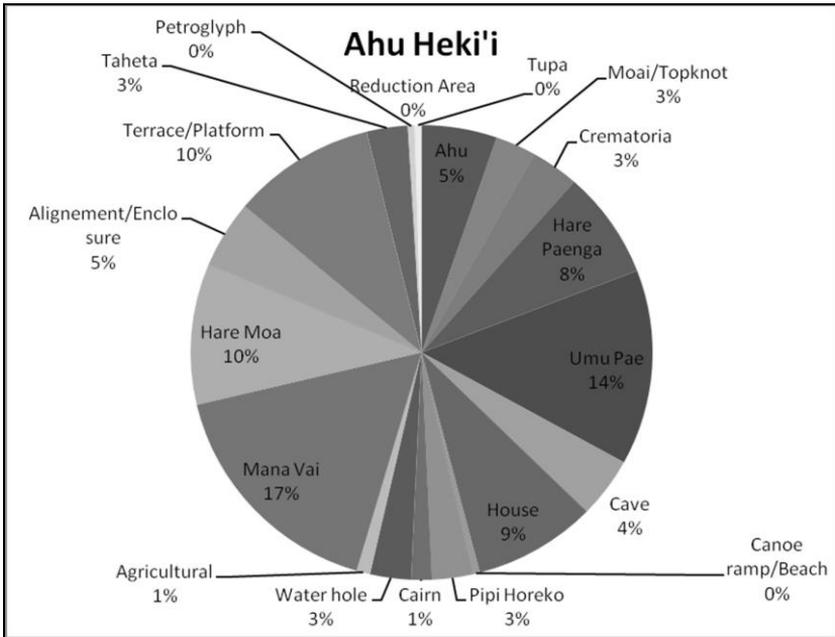


Figure 8. The percent shares of different features within the ahu Heki'i area.

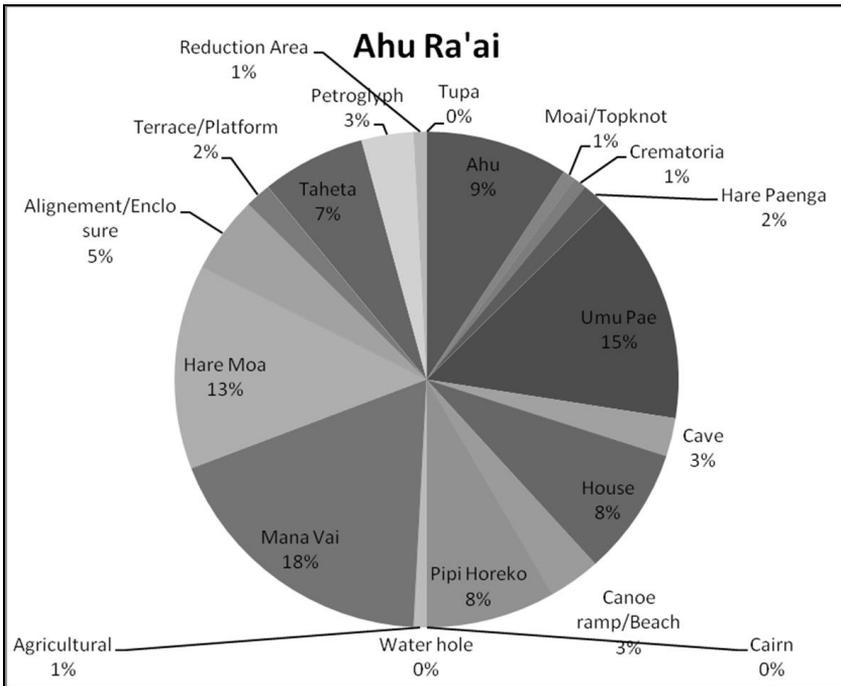


Figure 9. The percent shares of different features within the ahu Ra'ai area.

DISCUSSION AND CONCLUSION

Bourdieu has discussed the functions of kinship and the way that there are official and practical ways to express these (Bourdieu 1977: 33-34). Our two analyses can illustrate such relations. In the CA of 78 *ahu* structures situated around the whole island, a general trend is shown that the strict genealogical and ritualised expression of power relations involved material statements of group unity which ordered the social world as well as legitimised that order. Such general expressions are seen in the religious architecture and in the manufacturing of the *moai* statues. Here we argue that social groupings based on senior and junior branches can be detected archaeologically in the status of image *ahu* structures and how they were distinguished by the combination of different construction variables. Official status was expressed differently in the areas tied to the two traditional main groups called Ko-tu'u, which controlled the western part, and Hotu-iti that controlled the eastern part of the island. These were highly visible expressions acted out by the community directed by the prevailing habitus. It was obvious for the individual to what group their belongings were tied. All are born into one or other of the clans, Ko-tu'u or Hotu Iti. This belonging was expressed into the monuments by practice, which is seen in the Correspondence Analysis as similarities and differences. However, in both clans there are senior and junior branches competing in their own ways. Therefore senior actors in the Hotu-iti clan can be seen as equal to some of the lower senior actors in the Ko-tu'u clan as well as some of the junior actors in the senior Ko-tu'u clan. Such relations make it clear to whom it may be a reason to compete with, since too large gaps in status distinctions may be meaningless or impossible to challenge.

Our detailed case studies of the *milieu* around these strict official *ahu* expressions are indicative of the practical use of kin relationships expressed within local groups and are different from the official expression since what we see in these contexts was tied to the daily life within such groups. Smaller and less elaborated *ahu* structures supported the large official structure, and they were not important for status differentiations, hence they are not especially elevated investments. The most striking difference, besides the supporting smaller and/or less elaborated *ahu* structures, in the comparison between the two compared *ahu* milieus is the presence of 16 *hare paenga* houses at Heki'I (Figure 7). In contrast only two such houses are

close to *ahu* Ra'ai. The presence of a high status village and the large sized *ahu* is a visible status distinction that also demanded higher food production/consumption at Heki'i, visible in an abundance of *manavai* as well as *hare moa* structures and in a higher frequency of *umu pae* ovens (Figure 8-9). Such differences indicate the importance of these house societies and the fashions their official genealogies embedded in the habitus they expressed.

The structuration processes founded in senior and junior relations, which is a common trait in Polynesian societies, can also be seen at all levels from surrounding local *ahu*, between adjacent *ahu* structures, as well as in the expression of high status *ahu* on an island wide scale. The CA analysis shows that the same amount of small *ahu* existed in both areas, and these structures do not express status distinctions in themselves, but instead probably have the function of being junior expressions or expert structures built to support the main structure in the area. Local and practice based kinship relations can be detected. The local practices observed around a senior structure (Heki'i) and a junior structure (Ra'ai) display that certain actions were undertaken in relation to them. However, a clear household distinction, of different domestic features, was seen in a significantly higher density around Heki'i compared to Ra'ai, and clear differences were also seen in the amount of status houses (*hare paenga*) (Figure 7-9), and other status features. It is also evident that Heki'i had a more favourable landscape location with access to the sandy beach, as well as water-holes and caves.

To sum it all up we suggest that the distinctions around large *ahu* structures express the tensions within local groups and their belonging to the larger clan group. It is on the local level that powerful chiefs could exert their power and express themselves through commanding the labour of the bulk of the population. The strong houses could, through strong genealogical connections, attract and feed large groups of people needed for the work involved in the construction of large structures and the making of large *moai* statues. The attraction of being, as well as belonging to, the realm of a powerful senior high chief dominating large areas decreases the possibilities for competitors to 'play the same game'. A complete domination of a top title holder ruling over whole islands, was the case in some parts of pre-historic and proto-historic Polynesia (Society Islands, Hawaii, Tonga, Samoa), and it resulted in hierarchical

solutions where in some cases power became hereditary and divine. However, this was probably not the case on Rapa Nui, instead, competition worked on different levels – from the local family/lineage level to the general clan/island wide level. Internal control was too high to let a single title holder reach the top alone, even if the *ariki-mau* title holder could be distinguished as an island wide authority in certain situations related to ritual. It is also likely that the *ariki-mau* was challenged by the *mata-toa* title holders which are indicated by the violent activities and the deliberate destruction of ceremonial sites and statues.

ACKNOWLEDGEMENTS

We would like to thank our friend and colleague Chris Stevenson for inviting us to the La Perouse Project. Our gratitude also goes to Sonia Haoa Cardinali for good collaboration and friendship on Rapa Nui, from 1987 and onwards. We also thank all collaborators who participated in the project and the Rapanui people in general who have been patient with us! We are also grateful to the Kon-Tiki Museum in Oslo for sponsoring our participation in the project.

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