ABSTRACT
In the last decade, researchers have attempted to understand the structure of Ancestral Polynesian ritual space through Proto-terms found in lexicons of Proto-Polynesian and Proto-Oceanic. This practice can be seen as a “re-construction” of the marae complex based on linguistic and ethnological data. In this paper I review research that has been done on the Polynesian marae-complex since the late 19th century in order to identify how archaeologists have used words and semantics in their interpretations of this history. Comparing words and meanings of words as a source to gain a deeper understanding of past and present phenomena seems to have been a common practice in Pacific research. In the field of research on Polynesian ritual space, the use of words and reconstructed terms may be described under three headings: a relational approach, concerned with meanings of individual features; a conceptual approach, in which various structures are seen as representing individual concepts; and a lexical approach, which reconstructs the historical development of ritual structures based on interpretations of the semantics of Proto-morphemes. The paper ends with a discussion of these practices and the problems and prospects that they entail.

INTRODUCTION
In the same manner as archaeologists reconstruct sites to their “original” state using the building material of the past, linguists, culture-historians and archaeologists have attempted to re-construct1 an “original” Polynesian ritual space using words of present and past Polynesian languages and their meanings. In this paper I am going to explore the history of this approach, and possibilities and problems related to it.

The methods of historical, or comparative, linguistics were developed by European scholars working with Indo-European languages from the late 18th century onwards. After the realization that languages from Northern Europe to India had stemmed from one common language, both linguistic and archaeological research became a quest for the origin(s) of the people who spoke this language. Soon, culture-historical oriented scholars were using reconstructed words from comparative linguistics to make inferences about the first Indo-European culture. This method was termed ‘linguistic palaeontology’. The methods of both historical linguistics and linguistic palaeontology were fully developed by the 1880s (Lehmann 1993:1-47), and, building on these methods, linguists had reconstructed parts of Proto-Austronesian as early as the mid-1930s (Blust 1976:20, 1990:137, Pawley and Ross 1993:429).

In Polynesia, early attempts to systematically treat the relationships between the various languages and to amass a database in order to reconstruct Proto-Polynesian were made by Churchill (1912) and Tregear (1969 [1891]). However, most works dealing with the combination of language and culture-history in Polynesia at this time were either unsystematic or presented erroneous hypotheses based on insufficient data (e.g. Fornander 1878). The first compilation of a Proto-Polynesian word list was published by D. S. Walsh and Bruce Biggs in 1966, the same year as the orthodox model for settlement of the region began to take shape (Emory and Sinoto 1965, Green 1966, Pawley 1966, Walsh and Biggs 1966). Based on this Proto-Polynesian word list, A. Pawley and K. Green made a first attempt to locate the Proto-Polynesian homeland from linguistic evidence (1971), while the first attempt to locate the Proto-Austronesian homeland was done by Hendrik Kern as early as 1889 (Blust 1976:35). Linguistic palaeontology, as reconstructing parts of a culture through language, began with the writings of Patrick V. Kirch and Roger C. Green in the 1980s (Green 1986; Kirch 1984, 1989).

APPROACHES USING LINGUISTIC DATA IN ARCHAEOLOGICAL RESEARCH
As early as the 1920s, researchers in Polynesia used words and their meanings to understand cultural institutions, features and structures for which no specific ethnological information existed. In particular, archaeologists used words and their meanings in their discussion on how Polynesian ritual space, often termed marae, had developed. Based on how various researchers use linguistic data in their interpretation of archaeological data, I suggest that three different approaches to investigating the history of the Polynesian marae-complex, with the help of language, be defined: the relational, the conceptual, and the lexical approaches (Figure 1).
Figure 1. A phylogenetic tree displaying the relationships between the various approaches towards studying the marae complex through language.

The relational approach
The first approach is an intuitive one, in which the researcher compares only individual features. Either the meanings of a single term from various island groups are reviewed, in order to understand the function of a feature for which there exists no specific ethnographic information, or one common term helps the researcher to identify features that are described ethnographically but not found archaeologically. This approach is used in various disciplines throughout the Pacific, and it was used extensively by Kenneth P. Emory in his *marae* research (Emory 1933, 1934, 1939).

The conceptual approach
The conceptual approach was first employed by A. Baessler (1898). He defined *marae* and *ahu* as two distinct classes of monument; the *marae* was built as an ancestral temple for the whole tribe, whereas the *ahu* was built as a memorial shrine to commemorate a beloved person. Baessler treated the structures as concepts, and mainly defined the meanings of these concepts from ethnographic information, not linguistic data (Baessler 1898:252).

This approach treats the physical ‘structure’ and the ‘term-for-the-structure’ as one entity, as a cultural concept, and the origin and development of Polynesian ritual space becomes a case of structural history. Generally, lexical data are used to establish *marae*, *ahu*, or *tohua* as concepts and ritual structures at one stage in history, usually the Ancestral Polynesian Culture, corresponding to the Proto-Polynesian language stage. The semantics of these terms are mainly elicited from ethnographic sources and are not purely linguistic reconstructions. The investigators try to identify the essential conceptual meaning of the term / structure rather than to trace a specific line of development back to an original ritual monument. The approach was used by Kenneth P. Emory (1943, 1970, 1972) and later by B. Gérard (1974). This approach was also used in the ethnographic comparison between the *ahu* of Easter Island and the *marae* of East Polynesia by W. Ayres (1973). The most comprehensive work using this approach has been presented by Mark Eddowes in his 1991 MA thesis “Ethnohistorical Perspectives on the Marae of the Society Islands: The Sociology of Use”.

The lexical approach
From the early 1980s and onwards, the main advocates of the lexical approach, or what is basically linguistic palaeontology, have been Roger C. Green (Green 1986, 1998, 2000), and Patrick V. Kirch (Kirch 1984, 1989) (Figure 2). They have also contributed towards refining the methodology of this approach (Kirch and Green 1987, 2001).

This lexical approach is based upon the methods of historical linguistics. Linguists first subgroup the languages in a phylogenetic tree, then reconstruct the phonetic structure of these languages. Finally, they reconstruct the ancestral phonemes, usually with a suggested meaning for each term (Biggs 1979, 1996; Walsh and Biggs 1966). Culture-historians and archaeologists then investigate the semantics of these reconstructed terms by comparatively exploring the meanings for cognates in present day languages, utilising mainly linguistic, but also ethnographic sources (Figure 2).
Based on these various semantic meanings and an archaeological survey of ritual spaces, archaeologists and culture-historians re-construct an original meaning of a term and relate this to other re-constructed terms of ritual structures or spaces thought to exist at a certain point in time, generally Ancestral Polynesian.

MODELLING ANCESTRAL POLYNESIAN RITUAL SPACE THROUGH TIME

In the first synthesis of his marae research, Kenneth Emory wrote that the earliest Polynesian shrines were individual uprights mounted on small stone mounds, called *afu* in Ellicean (1943:13). He further suggested that these later developed through a row of uprights, into a platform with uprights and backrests called *ahu* (Figure 4). During this process an open area, a *malae*, was attached to the front of the *ahu*. Emory believed that *ahu* was the original concept, term, and structure, and that the Polynesian ritual space acquired the name marae sometime during its transformation. The remnants of the original concept could be seen in the Ellice Islands, and likewise the remnants of the early East Polynesian religious complex could be found in the New Zealand Maori *tuahu*.

In the mid-1970s, B. Gérard charted the ethnographically attested forms of *ahu*, marae, and *tohua* in all island groups in Polynesia, and compiled information on the morphological variation in these structures in order to analyse their development (Gérard 1974). He, and later M. Eddowes (Eddowes 1991), believed that *ahu*, marae and *tohua* had existed as three independent types of ritual structure in Ancestral Polynesian times. They suggested that the development of Polynesian ritual space(s) should be seen as a fusion or co-location of the three ritual structures/spaces into one, and that this fusion took place in East Polynesia. In the process, the symbolic significance of these ceremonial spaces changed. Eddowes believed that some of the simpler marae found in the Society Islands were similar to early Polynesian “temples”. Emory, Gérard and Eddowes’ approach must be classified as conceptual, although Eddowes based much of his synthesis upon the lexical works of Kirch (1984, 1989) and Green (1986).
Polynesian ritual space to be akin to a classic West Polynesian malae, with backrests at one end and a god-house in close proximity. The ahu, as a platform or enclosure in East Polynesia, would then have evolved either from the backrests or from the foundation of the god house. The principal concept, from which the East Polynesian marae evolved, was in the view of Green and Kirch view the PPn *malae, and not the PPn *ahu as in Emory’s theory.

In 2001, Patrick V. Kirch and Roger C. Green published the most coherent statement of the lexical approach to date. In this work (Kirch and Green 2001), they also refined their views on how the Ancestral Polynesian ritual space was organised and how it developed into the East Polynesian marae. Their main emphasis was on the changes in meaning of re-constructed terms from Proto-Oceanic to Proto-Polynesian. The term tohua cannot be re-constructed as a Proto-Oceanic nor a Proto-Polynesian term, and therefore plays no part in the development of an Ancestral Proto-Oceanic nor a Proto-Polynesian term, and therefore Polynesian, as PEP *qafu or PPN *malae, that interpretations of the development of various social and religious institutions, settlement patterns, or how the first Polynesians perceived their island landscape, should be included. The development of meanings of all other features found within a marae complex should be considered when exploring a re-construction or interpretation of Ancestral Polynesian ritual space, or marae. Polynesian ritual space was probably never one singular entity or concept with a fixed set of meanings, at least not until protohistorical times.

Another point to consider is that most researchers within this field work mainly with lexical and ethnological data. Archaeological surveys have, up to now, only been used to a limited extent. Typologies and construction sequences are only implicitly considered, with one or two exceptions (Emory 1943; Green 1998, 2000). Archaeological data on early Polynesian ritual spaces are not abundant but I am of the opinion that existing data have not been explicitly used or discussed in re-constructing Ancestral Polynesian ritual space. A few archaeological excavations have revealed structures that could be interpreted as early East Polynesian ritual structures. For example, Yoshihiko Sinoto uncovered in 1974 an upright placed on a carved coral base at the Vaitō’otia site (Figure 5) in the Society Islands (Sinoto 2002:257), dated to between AD 1100 and 1300. This structure, which Sinoto interprets as a shrine, is visually identical to the ahu of the Ellice Islands. The significance of this structure for the re-construction of Polynesian ritual space has so far not been discussed by any of the conceptual or lexical oriented researchers as part of their model-building, even though it was uncovered before most conceptual or lexical contributions were published. The exception is the paper by Anderson and Green (2001) on the finding of an early East Polynesian ritual structure on Norfolk Island, but this is not discussed as a part of Green’s lexical re-constructions (i.e. in Kirch and Green 2001). On Easter Island, archaeologists from the Kon-Tiki Museum in Norway have excavated an ahu structure dating to AD 1100 (Martinsson-Wallin 1994; Skjølsvold 1994), and a similar structure was found at Tongariki in 1993, although dates for this structure have not yet been published (Figure 6).

The excavated structures just mentioned are not Ancestral Polynesian, but they might be related to the Proto-Nuclear Polynesian or the Proto-Eastern Polynesian language stages, and as such they are interesting examples of early Polynesian ritual spaces, at least when the data that are considered by most researchers come from the 18th, 19th, and 20th centuries.
Figure 5. Yoshihiko Sinoto holding an upright at Vaito‘otia, Huahine, Society Islands in 1974. Dated to c.AD 1100 (Photo courtesy of Dr. Y. Sinoto, B.P. Bishop Museum).

Figure 6. Ahu Tongariki, Easter Island. The earliest construction phase (currently undated). (Photo R. Solsvik).
AN “ALTERNATIVE” MODEL

I suggest that a possible model for further consideration is that the marae might be an invention of southeastern Polynesian societies at around A.D. 1000. Only later, from the 12th or 13th centuries, was this concept “exported” to the more central parts of the region (cf. Green 2000). Hawaiians, in the far north of the region, seems to have had their own form of ritual space from c. AD 1200 onwards. Perhaps the term marae - defined as a ceremonial or sacred space – is not Ancestral Polynesian at all – but refers to a more secular space. This is the meaning of the word in both Proto-Oceanic (POc *ma(i)ku) (Green 1998: 271), and was one of several meanings in 19th century Tahitian (Davies 1851: 133). In the 12th century there co-existed a typical marae complex on Easter Island, an shrine with an upright in the Society Islands, and later in the 13th century possibly a ritual space in the form of a domestic building in Hawai‘i (Kolb 1991). To me, this indicates a greater physical variation in ritual spaces than is suggested by lexical theories. Instead of re-constructing one type of ritual space, we may have to re-construct several.

CONSIDERATIONS FOR FUTURE MODEL BUILDING

Reconstruction, either performed on actual monuments or as theoretical research into cultural origins, is not a straightforward exercise. Since all the models that I have reviewed above have been simple, I suggest that we should begin to construct complex models. I do not propose to throw away linguistic palaeontology, or the lexical approach as I have termed it in this paper, but it should be expanded in several ways.

First, we need to consider not only the terms ahu, marae and tuahu, but we have to re-construct the meanings and histories of all the terms related to these ritual structures. These include both the terms of the structural parts of the marae or ahu, as well as concepts related to the ritual practices that took place on these ceremonial structures.

Secondly, I am of the opinion that we have to expand our analysis to consider how these concepts and terms were actually used by various social groups, and in different situations. We also need to consider the linguistic contexts these terms were used in. How different words were used in various social situations, or related to shifting grammatical contexts, can give valuable information on the significance of the range of semantic meanings of a term (cf. Hoëm 1995). This can be studied both through the present uses of the terms, or in old “texts” such as recorded chants. This is important, because a re-constructed language is based on surviving cognates in contemporary languages. Not all words, nor all meanings, can be re-constructed, and invariably the proto-language is on the conservative side of things when we talk about variations in meanings and plurality of terminologies. Also, because the meaning of a re-constructed term has to be inferred from a range of contemporary meanings, we would do well to expand the database before a historical semantic hypothesis is put forward. The world of historical anthropology tends to be a homogeneous rather than a heterogeneous world.

Thirdly, I suggest that we need to realise the probable degree of variation in the ritual spaces that we re-construct linguistically. This can be easily demonstrated by comparing ceremonial structures on various island groups in East Polynesia. The term ahu exists in a hierarchy of structures and concepts. In New Zealand, the word tuahu is firmly grouped under the social-spatial term pa. Besides tuahu the Maori had several other ceremonial spaces, like marae and heketua, that are grouped under the term pa or perhaps under the term wahi tapu. On Tahiti, the term ahu is just a structural part of the more inclusive marae. In fact, based on some early European observations, it appears as though Tahitians used marae as a general term for ritual spaces, and sites like ahu and tahua were grouped under this term. The meaning of any one such term, then, comes from its place in the lexical and social-conceptual hierarchy of which it is a part, and not only from its re-constructed history. By lexically analysing the part-whole of terms associated with ritual spaces from each island group (cf. Cruse 1986:157-180), we can reach an understanding of how people categorised ritual spaces, both socially and lexically.

I believe that research concerned with these issues also would benefit from viewing ‘historical-anthropology’, with linguistic palaeontology constituting the main part of its method, as a multi-disciplinary approach and not as an integrated method. Archaeology and linguistics study qualitatively different histories and distinct realities. They can be reconciled (Shnirelman 1997), but only as long as we regard them as separate entities and distinct records. Being separate entities, linguistic, ethnographic and archaeological data represent distinct realities. On an epistemological level, they do not always tell the ‘same’ story. It is also important that archaeological data should be introduced into the discussion to a greater extent. Ethnological comparison has been central to most previous models, but, with more substantial archaeological excavations, models based on typological, chronological and spatial data, in addition to the linguistic data, can be re-constructed.

NOTES

1. In this paper I have preferred to use the term ‘re-construct’ to describe the practice of using terms from a Proto-dictionary to talk about the development of the marae complex, to avoid confusing it with the archaeological restoration and reconstruction of sites and monuments.

2. The term tohua was for Gérard, and probably for Eddowes as well in this context, an ethnographic term and not a linguistic reconstruction of a PPn word. Today tohua are reconstructed as...
3. This was, of course, not a permanently ceremonial space, but it was used at times for rituals (Johansen 1958:93).

REFERENCES


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