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COLOUR AS A SYMBOL IN
NEW ZEALAND PREHISTORY

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A thesis submitted in fulfilment of the requirements for the degree of
Master of Arts in Anthropology at the
University of Otago
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This thesis explores a new method for looking at the symbolic importance of prehistoric material culture by investigating a non-functional attribute. The attribute selected is the colour red and its relevance to the study of various items of prehistoric Maori material culture is explored.

The operational and positional meanings of the symbol are defined through the use of records kept by 18th and 19th century explorers in the Pacific; semantics of Polynesian terms which can in some way be associated with the colour red; and studies which deal with social institutions of traditional Polynesian cultures. The antiquity of the colour symbolism is investigated using a method adopted from historical linguistics. The operational and positional meanings of the symbol are defined for five cultures from East Polynesia: Tahiti, Hawaii, the Marquesas, Easter Island and New Zealand. Common symbolic associations between all five are most likely to be due to a common origin and have been conservatively maintained in each of the cultures.

Common associations for the colour red in East Polynesia are shown to include the category tapu and the atua, a concern with genealogy and chiefly status, and often an association with warfare. In prehistoric New Zealand, archaeological support is found for these
common associations in the form of burial practices, the colouring of godsticks and burial chests, and the material excavated from Kauri Point Swamp.

Using the symbolic associations for the colour previously defined, their relevance to the study of various items of prehistoric material culture from one region is explored. Information on the prehistory of Southern New Zealand is collated and a number of new interpretations put forward.

A final element of this thesis considers the conservative nature of the symbolic associations defined. A model is suggested relating this conservatism to other aspects of culture and the situation in Polynesia is contrasted with other areas of Oceania. The thesis concludes by emphasizing the importance of New Zealand's place in East Polynesia when considering aspects of prehistoric symbolism.
Acknowledgments

This thesis straddled the traditional boundary between archaeology and social anthropology and I am grateful to a number of social anthropologists, Prof. Peter Wilson, Dr Ian Frazer, Dr Erich Kolig, and Mr Alan Mark (all of the Anthropology Dept., University of Otago), who gave freely of their expertise. Dr Don Bayard provided invaluable help with the theoretical, linguistic and computing elements of this thesis.

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In 1959 Jack Golson used artefact typologies to define two phases of New Zealand Eastern Polynesian culture and thereby provide New Zealand archaeology with a chronological dichotomy which is still with us today. Since then artefact studies have expanded beyond questions of chronology to include the relationship of material culture to all aspects of prehistoric society. Artefact function, for instance, has received considerable attention either through the analysis of edge damage (see for example Harsant 1983) or by comparison with modern day ethnographic forms (see H. Leach's 1979 study of the octopus lure). Other studies have investigated regional variations in artefact form using European contact literature (see for instance Orchiston 1972; Simmons 1981) or have looked at the manufacturing techniques and function of particular artefacts (see for example Best 1977; Moore et al. 1979 for adzes, Anderson 1982d for fish hooks).

A few studies have gone further seeking to understand the symbolic associations of various artefacts. In New Zealand the first such study was Jackson's (1972) analysis of the pare carvings. He
argued that the central figure in the carving acted to mediate the basic opposition of life and death. More recently Gathercole has investigated Maori shell trumpets and godsticks arguing that the former "had a sacred function hallowed in myth and associated with Tupai, a thunder demon who could strike down offenders against tapu" (1976:195), while the latter was organised in sets of three representing the three-fold structure of Maori carving and Maori life (1979:291). Kaeppler has undertaken similar studies in Polynesia arguing that Hawaiian images were social metaphors, "objects that transformed the deep structure of society into visual manifestations" (1982:84).

The potential of such studies, particularly those concerned with the symbolic, to inform on aspects of prehistoric societies not normally considered by the prehistoric archaeologist has been little explored. Anderson(1982b:68) concludes in his recent review of the Southern Archaic, that if we are to incorporate patterns of wealth, exchange and territoriality into new hypotheses concerning socioeconomic structure and change we need to develop approaches to material culture which go beyond the simple typology used by Golson. The sources of the material used, the production techniques and the functional and non-functional attributes need to be considered. This thesis takes up the study of symbolism in material culture to explore one way in which non-functional
attributes may be investigated. The non-functional attribute selected is the colour red and its relevance to the study of various items of prehistoric Maori culture is explored.

**Colour as an Attribute**

Most investigations of material culture select as a unit of study a class of artefacts which are broadly similar in form or function. Thus in classic descriptive papers Duff (1956) dealt with adzes, Hjarno (1967) with fishhooks and Skinner (1974) with amulets. While analyses of this type are particularly suitable for studies concerned with change of form as a function of time, they do not permit analysis of the wide range of relationships between different forms. It is the range of these inter-relationships which are of particular importance to symbolic studies. Gathercole (1979:291) for instance, links the three-fold nature of the godstick groups to lintel design and symmetry of the Maori raft. To study these inter-relationships an attribute should be selected which occurs in a number of artefact forms; colour is such an attribute. What is more, colour is archaeologically visible being a feature of many classes of portable artefact and rock art.
Colour is symbolically important to a number of societies. Perhaps the best known colour symbolism study is Turner’s (1967) analysis of the Ndembu red, white and black colour classification, and its magico-religious associations. Within New Zealand Jackson (1972) has argued that the red colour of the Maori pare carvings symbolised both death and rebirth. In colouring the pare red, he suggests, the Maori drew a link between the ambiguous position of the people in the doorway beneath the pare (between the social world outside the house and the social world within the house) and an equally ambiguous symbolic position between life and death. This ambiguity also explained the tapu associations of the colour. Ann Salmond (1978) has used lexical and textual material to recreate the logical pattern behind the Maori cosmological view and has placed categories of lightness/darkness and colour in relation to life/death and tapu/noa. The colour red is associated with tapu and falls between the poles of ora (life) and mate (death).

A number of late 19th century and early 20th century writers made comments on the significance of the colour red in traditional Maori society: Colenso stated "Red was one of their natural colours, yet, its use was in a measure limited, and this, I think, is to be attributed to its having been originally deemed a sacred (tapu) colour" (Colenso 1882:64); Best wrote
"Tapu objects marking a tapu place were often painted a red colour" (Best 1974:92), and Stack noted that, "Red was the sacred color with which sacred things and places were painted" (Stack 1979:155). The comments reflect the notion that the colour red was of some symbolic importance throughout New Zealand. Handy (1927:130-1) describes the colour red as being associated with ideas of chieftainhood, mana and sacredness suggesting that its symbolic significance may have extended over much of Polynesia. The colour red then, seems a particularly suitable attribute with which to investigate symbolic approaches to prehistoric material culture.

Evolutionary Studies of Colour

Although some anthropologists have shown an interest in symbolic associations of colour the bulk of the research has concerned the evolutionary sequence of certain basic colour terms. This interest was triggered by Berlin and Kay (1969) who adopted the position that:

Although different languages encode in their vocabularies different numbers of basic colour categories, a total universal inventory of exactly eleven basic colour categories exists from which the eleven or fewer basic colour terms of any given language are always drawn. The eleven basic colour categories are white, black, red,
green, yellow, blue, brown, purple, pink, orange, and grey. If a language encodes fewer than eleven basic colour categories, then there are strict limitations on which categories it may encode. The distribution restrictions of colour terms across languages are:

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(Berlin and Kay 1969)

Berlin and Kay's methodology was severely criticised by Hickerson (1971) and Conklin (1973), but although some details have been changed their findings have remained substantially unaltered. Criticism led Kay (1975) to make some amendments to the Berlin and Kay treatment. In response to Heider (1972) the definition of the colour foci was extended to include the light warm and dark cool categories as well as a new term GRUE with a focus in both green and blue. The revised sequence took the form:
where at stage one white refers to warm colours with a focus in white, red or pink, and black to cool colours with a focus in black, dark green and blue. At stage II red refers to warm colours with a focus in English focal red. Stage III may be GRUE with a focus in blue, green or both, or yellow. Stage IV adds either yellow or GRUE while at stage V GRUE splits to green and blue. Grey is a wild in the new sequence (Kay 1975:260).

Kay and McDaniel (1978) have further modified the hypothesis suggesting that the evolutionary sequence reflects the progressive differentiation of colour categories rather than the encoding of foci. They suggest that the colour categories reflect neurophysiological processes and are best modelled using fuzzy set theory. Colour is perceived via three types of opposed neural response states, red/green, yellow/blue and black/white. Hue is determined by the relative strength of response in each state (1978:620). The non-focal colours in the Berlin and Kay sequence derive either from the union or intersection of two or more of the six basic colour foci. This can be modelled using fuzzy sets. Fuzzy set theory is similar
FIGURE ONE

The Relationship Between Hue, Saturation and Brightness in the Description of a Colour
to standard set theory except that degrees of membership are permitted. Below stage V, besides the six focal colours there are categories (light warm, dark cool, GRUE) which are best modelled as fuzzy union. Above stage V there are no more primary colours to add so the categories brown, orange, pink, purple and grey are modelled as fuzzy intersections of the primary categories with the condition that at the point of maximum intersection the degree of membership in the resulting colour is unity (i.e. 100%).

Some aspects of Kay and McDaniel’s (1978) work have met with criticism. Mervis and Roth (1981) argue that although fuzzy set theory provides a good description of the continuous nature of colour categories and can account for categories like GRUE, it is not capable of separating non-basic colours like peach, lime and navy from basic colours like orange, green and blue. They argue that according to fuzzy set theory, "set A is contained in set B if every item with a positive membership value in A has at least a higher membership value in B" (Mervis and Roth 1981:404). But human categorisation tends to give the best member of a subcategory a higher membership value in its own category than that for some larger supercategory. The fuzzy set prediction is simply not the way we categorise things. This point aside however, the basic formulation of Berlin and Kay (1969), as modified by Kay (1975), remains the same.
Some have seen the Berlin and Kay argument and its modifications as an attack on cultural objectivity: that cultures arbitrarily select certain differences and make them significant. This argument may be turned around however, to state, "it is not ... that colour terms have their meanings imposed by the constraints of human physical nature; it is that they take on such constraints insofar as they are meaningful" (Sahlins 1977:167). Sahlins finds that the "emergence of basic colour terms in natural languages follows a natural perceptual logic" (1977:171). He writes, for instance,

The triad of stage II is not a simple order of three equivalent terms but a mediated opposition .... Red is particularly suited to this role because of its ability to maintain saturation over a wide range of brightness values. Therefore red is especially like black in opposition to white, but occasionally like white in opposition to black. Where the complete triad is in cultural use, then, one can expect ... that certain meaningful values of red will themselves be opposed in moral sign, positive and negative (Sahlins 1977:176).

Sahlins makes the point that the Berlin and Kay discussion ignores the actual cultural significance of the colours. They are relegated to the expression of sensation rather than codes of social, ritual and economic value. He argues that the perceptual structure is latent until made meaningful by the attribution of cultural elements. In this regard the
significance of the evolutionary change is not in the units themselves but in the relationship developed by the units.

For the archaeologist the significance of colour lies with its relationship to the other aspects of culture rather than with the biologically based perceptual structure. The evolutionary studies provide some significant results: that the primary foci are universally perceived and that the physical properties of the colour red make it particularly suitable as a mediator between black and white, but it is to the symbolic significance of the colours, to their social, economic, and ritual importance that we must turn if we are to learn anything of their relationship to prehistoric social and ideological structure.

Approaches to Symbolic Studies

There are few published papers concerned with symbolism in archaeology, and those that are have all appeared in the last few years. This reflects the lack of influence that approaches like structuralism, cognitive, behavioural and symbolic anthropology, and personality studies have had on archaeology. As Kohl (1981:94) notes, this lack of influence can not be put down to the difficulty of dealing with the hard artefactual data of archaeology, but rather it reflects the fact that these approaches "do not regard culture as man's extra-somatic means of adaptation to his
environment or do not share the materialist perspective that pervades the discipline".

Leone (1982) has reviewed recent developments in the archaeology of 'Recovering Mind', discussing approaches involving structuralism and cognition, ideology and Marxism. He cites two authors, Conkey (1978) and Fritz (1978) who have begun to look at methods for investigating symbolism in archaeology. Conkey looked at symbolic universals in Upper Paleolithic rock art, seeing them as a component of "the evolution and expression of the process of information exchange and transmission among hominids" (Conkey 1978:62). Fritz argues that certain archaeologically retrievable remains will be manifestations of ideational organisations and hence allow the reconstruction of systems of rules and meanings embodied in these remains as symbols. Ideational systems are defined as "a set of reference values that trigger homeostatic responses when internally or externally induced perturbations threaten to change the values of the critical values beyond predetermined limits" (Fritz 1978:39). Although developing approaches to symbolic archaeology both papers still work from a functionalist viewpoint seeing symbol systems as contributing to the overall maintenance and communication flow within a cultural system. Ultimately systems approaches like these reduce to an argument about the rationality of cultural
process with respect to the environment and as Hodder (1982a:7) notes this is commonly defined as a duality between cultural and adaptive utility. Hodder argues that besides the functional relations of culture there is a structure and content which must be understood in relation to its context. Context is important because the meaning of any object is not just determined by the way it contrasts with others, but also derives from its symbolic associations and function (ibid.:9). Hodder concludes that,

It is at least clear that the way in which standard sets of symbols are used in relation to social strategies depends on the series of concepts and attitudes that are historically and contextually appropriate ... The concern must be to examine the role of material culture in the ideological representation of social relations. Excavated artefacts are immediately cultural, not social, and they can inform on society only through an understanding of the cultural context (Hodder 1982a:10).

Other approaches are outlined by Miller (1982). The application of Chomsky's transformational grammars to archaeology is perhaps best demonstrated by Hodder (1982b). Hodder's ethnographic work in Kenya, Zambia and the Sudan allowed him to formulate a number of rules which described the relationship between various items of material culture and different social and ethnic groups. He stresses that the artefacts may be used in the strategies and ideologies of various groups
to emphasise or deny, maintain or disrupt ethnic distinctions of information flow depending on the particular situation (equivalent to context) (1982b:85). Componential analysis has also been used by some archaeologists to create a subdivided hierarchy of contrasts (Miller 1982:21). Arnold (1971) for instance, described the verbal, non-verbal and material aspects of the ethnomineralogical categories of Mayan Ticul potters arguing that this demonstrated a link between the etic composition of the pottery and the emic categorisation of the potters. Dunnell has developed a systematic theoretical scheme for classifying artefacts which treats attributes as human activity and therefore manifestations of ideas. He suggests that this forms a link between the phenomenological and ideational realms (Dunnell 1971:132).

Although both are interesting approaches, they suffer from the strictures of absolute category structure developed by componential analysis. In truth there is a considerable degree of fuzziness to categories, especially when applied to social phenomena (Miller 1982:22).

The theme of inexactness of category formation and symbolic association has been taken up by some social anthropologists in their discussions of symbolic anthropology. Turner begins a recent review by stating,
linguistic, structural and cognitive anthropology study symbols, signs, totems, icons, indices, and similar cultural and communicational devices as parts of abstract systems elicited by investigations from texts, observations and controlled interviews (Turner 1975:154).

The problem with these abstract systems as Firth (1974) and Turner point out, is that they fail to take account of the dynamic nature of symbolic interpretation. Because symbols tend to be multivocal, new signata (meanings) may be added to an old signans (vehicle) either privately by a group or individual, or publically (forming a standardized interpretation) "if the exegete [one who makes an exposition] has sufficient power, authority or prestige to make his views stick" (Turner 1975:154). Turner argues that ethnosciente, componential analysis and cognitive anthropology all tend to see the study of concrete social situations as a study of "fallen men, his crystalline structures of thought flawed and fractured by fissions and violations" (Turner 1975:149); so too structuralism with its "formalistic search for binary oppositions and multiple permutations" (Leach 1974:117). Leach defines structuralism as an order of natural phenomena perceived by our brain which is in turn used to segment and order our culture (1974:21). The use of the binary opposition as the basic unit of analysis implies a presence/absence, or digital mode of categorisation and consequently a structured set of
relations. Rosch (1977:26) however, argues that categorization is analogue in nature; the concept category should be thought of as a prototype and distance from the prototype, rather than the presence/absence of attributes. If Rosch is correct, formulations of symbolic systems as a set of abstract, rigid, logical relationships is bound to fail because it cannot model the inherent variation in analogy.

A more pragmatic approach is needed where the anthropologist seeks to explain a symbol by placing it in its setting. Turner (1967:26) argues for such an approach distinguishing three levels of symbolic information:

1) The level of indigenous interpretation, where the indigenous informants provide information on ritual behaviour.

2) The operational meaning, observing the actual use to which a symbol is put rather than the use to which it is said to be put.

3) The positional meaning, the meaning of a symbol derived from its relationship to other symbols (Turner 1967:51).

Symbols with several signata often form semantic systems within their own right and are known as dominant or core symbols (among other names) (Turner 1975:152). Turner notes that the meanings attached to
dominant symbols can be polarised between those associated with bodily functions (oretic pole) and those concerned with ethical values, morals, religious doctrines and social organisation (ideological or normative pole).

Turner develops this in his discussion of polarity, particularly the oretic significance of the basic colour triad, black, white and red. Although each of the colours has multi-vocal symbolism there is always a human physiological component; for red it is blood, for white breast milk and semen and for black faeces and urine. These colours, Turner (1967) argues, were among the first symbols to be used by primordial man to classify reality, and as such are present cross culturally, although other signans have been added to the colour symbols by various cultures around the world. Essentially Turner is arguing that at least some of the symbolic associations come from nature. Sahlins (1977), in his critique of evolutionary colour theories outlined above, argues from a different perspective, stating that colour terms do not have their meanings imposed by constraints of human and physical nature. Colour in culture is a process of relating, not just recognising, for of the many attributes of Turner’s biological phenomena that could have been chosen, it was colour which was selected.
It is the argument of Sahlins which is preferred over that of Turner in this study for, as will be argued below, underlying similarities in the signata are attributed to a common historic source rather than an underlying organic structure. Turner's use of the indigenous, operational and positional meanings, to interpret a symbol in relation to its setting is preferred to the systems approach of cognitive and structural anthropology because of its emphasis on the pragmatics of symbol use in a cultural context. In addition Turner's method allows one to concentrate on those aspects of culture which can be explained rather than try to fit all examples (for some of which there may be insufficient detail) into some abstract symbolic system.

Methodology and Sources

Colour Selection

The short review presented above indicates that there are as yet few archaeological studies of symbolism. There are even fewer which deal with colour. To my knowledge there are only two papers which deal specifically with colour in archaeological contexts. Wreschner (1981) traced the use of red ochre in the Paleolithic noting that although red ochre users have always been in the minority, there are striking
similarities in its use across both time and space. Wreschner follows both Berlin and Kay rather than Sahlins in attributing this similarity, particularly a connection between life/blood and red ochre, to some as yet not understood "perceptive categorisation, wiring or programming" (1981:633). The other study was Reinhold (1970) who investigated the importance of the colour purple in the Ancient World. He concluded that its association with high status individuals was due to the difficulty and expense in procuring a purple marine dye.

The prime motivation for the use of the colours red and purple in these studies was their visibility; either archaeologically or in descriptions of the Classical World. Similarly in this study the colour red was selected because of its archaeological prominence in New Zealand in the form of red ochre and haematite, as a pigment used in rock art and as the natural colour of certain lithics (notably red argillite, red cherts, and red obsidian). Red seemed suitable for a symbolic analysis because its role as an important symbol had been discussed in a number of works concerned with traditional Maori and Polynesian Society. One colour was selected rather than a set of two or perhaps three (the red, white and black triad for instance) because analysis of a number of colours requires the definition of a symbol system with all the inter-relationships carefully documented. The reasons
for rejecting such systems models have already been indicated and in cases where other colours are of symbolic importance they may be incorporated into the analysis through the study of the cultural context. The final reason for selecting the colour was purely technical. Part of the methodology outlined below for defining the symbolic associations of the colour requires that its ancestry be traced. Branstetter (1977:22) has shown that the terms for the three colour categories black, white and red in the Polynesian languages have shown little variation, whereas yellow has shown some semantic blending and the terms for GRUE and blue have varied considerably among the daughter languages. Conservatism in colour naming was a more desirable feature than variation.

Information Sources

Turner (1967) outlined three sources for the study of symbolism, the level of indigenous interpretation, the operational meaning and the positional meaning. In the analysis of symbols from past cultures there is little chance of gaining information at the level of indigenous interpretation particularly if the cultures under investigation have been the subject of considerable culture change (see for instance Dening 1966). Following Jackson (1972:34) there is, however, sufficient textural evidence to investigate the positional and operational levels.
The operational level is defined by Turner in terms of the actual use to which the symbol was put. Normally such information is recorded by the ethnographer as a result of direct observation; however acculturation and change as a result of European contact had a considerable effect on Polynesian societies and is a source of potential variation which is difficult to control. The alternative is to turn to the records of the 18th and 19th century voyagers who explored the Pacific. Their diaries, journals and monographs are by no means ethnographies but are packed with numerous observations on a number of Polynesian/European interactions. The difficulty with these descriptions is that their writers were prone to draw conclusions based upon their own European cultural backgrounds. As one recent author comments, J.R. Forster wrote his New Zealand account with "an unquestioning belief in the strangeness of the natives' world" that expressed itself in ethnocentric emotional description (Prickett 1974:35-36). Some authors have tackled this subject directly contrasting the opposing views of the Polynesian and European. Dening (1980) for instance, has written on the early history of the Marquesas from such a perspective, arguing that the European explorers were voyagers; men of no settlement who "came to exploit the natural and social environment with no sense of obligation to replenish what they had exhausted or to feel the consequences of what they had
caused" (1980:23). Others have commented on the reliability of particular explorers. Barratt (1979) for instance, notes that the 19th century Russian Pacific explorers were trained in the tradition of Cook and as a consequence their accounts are more objective than others. Although such studies are not available for the whole of Polynesia the sheer number of European contact sources available does provide an alternative. If as many sources as possible are used for each island group single irregularities due to author bias will not be given undue emphasis. In the absence of detailed analysis of European/Polynesian encounters this is the approach adopted here and the collated references to the use of the colour red are employed to define Turner's operational level.

Turner (1967) defined the positional level as the meaning of a symbol derived from its relationship to other symbols. The importance of this level is emphasised by Hodder (1982a) in his discussion of context. For any symbolic analysis to succeed, sources of the information that discuss the "series of concepts and attitudes that are historically and contextually appropriate" (1982a:10) must be found. Two sources provide this information, the semantics of the Polynesian terms which in some way draw an association with the colour red, and studies which deal with the social institutions of traditional Polynesian cultures.
Semantic analysis owes its origin to ethnoscience and the technique of componential analysis developed during the 1950's. Componential analysis employed a descriptive linguistic model to segregate aspects of culture into intelligible contrasting sets. Certain distinctive features (for example sex and generation in the field of kinship) were used to break up the range of variation in culture and the complex cross-over of these features allowed segregation (Burling 1970). Some early claims that componential analysis was the superior research tool for anthropology were sharply criticised (Berreman 1966; Keesing 1972) and a more modest goal was advocated,

to produce a format statement that will account for or predict the terms that can be appropriately used in various non linguistically defined circumstances (Burling 1970:42).

More recently Keesing (1979:25) has noted that any ethnographic description draws heavily on linguistic materials so that both linguistic and ethnographic analysis should be seen to be mutually supporting. He suggests three areas where linguistic description should incorporate cultural analysis; however all three are equally applicable when determining how semantic analysis may be applied to understand symbolic categories. Firstly certain key cultural terms should be investigated semantically to ascertain how they
relate to other terms. Keesing gives as an example the importance of the Kwaio term *mana*. In Polynesia *mana* would also be important as would *tapu* and *noa*. Second, semantic distinctions should be investigated for their semantic importance. For the Kwaio, distinctions like human versus ancestor, and magical versus non-magical were of importance. Finally semantic representations of culturally important symbolic oppositions and reconstructions should be investigated. Semantic analysis is used to inform on the positional level of a symbol by investigating how the words for red relate to cultural terms from all three of Keesing's areas. The results are then linked to a discussion of the social institutions of Polynesian cultures. Within Polynesia generally there has been a recent efflorescence of studies concerned with traditional societies. These range from large monographs on all aspects of culture (see for example Oliver 1974) to more circumscribed studies on single institutions (see for instance Shirres 1982 on *tapu*). All tend to have a high regard for the inaccuracies of some earlier work and rely on European contact records or indigenous manuscripts. A good example of the recent high scholarly standard is Sahlins (1981) who has completed a structural analysis of early post-contact Hawaii. Such studies combined with some semantic analysis should provide the positional level (Turner 1967) or context (Hodder 1982a) so important for symbolic analysis.
Temporal Control

To write prehistory is by definition to deal with time. While it is relatively easy to outline methods for describing the positional and operational levels of a symbol, it is not so easy to show how this symbol applied in the past. The method normally adopted is the direct historical approach (Steward 1942) wherein evidence is accumulated for historical continuity between the ethnographic and archaeological cases. The direct historical approach can be used to great advantage when the form of the artefacts is compared. Green (1979) for instance, has demonstrated a stylistic similarity between the decoration present on Lapita pottery sherds and the patterns associated with ethnographic Polynesian tapa decoration and tattoo design. He argues that the similarity is not simply due to chance, but is evidence of conservatism in art style between a people thought to be the first to settle the Eastern Pacific and the present day Polynesians. It is difficult, however, to apply the direct historical approach to anything other than form. When the meaning of an artefact is sought there is often very little concrete material from the past with which to compare the present, and even that which does exist is open to a myriad of interpretations. What is needed is a method of ensuring a meaning defined for the present was applicable in the past.
A solution to this problem is suggested in the paper by Green (1979) cited above. Although Green stressed that his study dealt with analogues of form rather meaning he did note the parallel between his methodology and that used in historical linguistics. Historical linguistics deals with cognates defined primarily on the basis of form, but also meaning. While Green felt that he had insufficient information to construct meanings for the decorative designs he studied, in cases where both form and meaning could be defined a model based on historical linguistics would clearly be applicable and would provide a method for gaining the temporal control required. Present meanings could be compared with their past equivalents by the construction of a proto-meaning for an item.

Recent reviews of historical linguistics in Polynesia have outlined a series of postulates upon which linguistic studies are based. These need only be slightly modified to conform to the linguistic model proposed for this study. The first principle is simply that for a historical relationship to exist the systematic similarities present must be too great to be explained by chance (Clark 1979:251). Within Polynesia the linguist is particularly lucky because Polynesia forms an obvious subgroup whose members are geographically isolated from all non-Polynesian languages (except in the case of the Outliers) and evolved over a relatively short time period. Borrowing
from outside the Polynesian area seems to have been minimal. Internal borrowing, although a problem for some languages is reduced for the region as a whole with several languages isolated in marginal areas (Pawley and Green 1971). A cultural feature common to a number of island groups in island Polynesia is thus likely to represent a historical relationship. If there is an extensive specialised terminology associated with this cultural feature Pawley and Green (1971:18) have postulated that this cultural feature was of some importance to the speech community.

To construct the historical relationships between the various forms of meaning in the different island groups, distinctive attributes need to be defined and these attributes used to construct subgroups. Subgroups are defined according to their unique retention of certain attributes within a family. The temporal relationship between subgroups is based on the principle that since daughter forms constantly diverge from one another, greater diversity of daughter forms implies a longer period of separation, and further that the larger the number of shared innovations in a subgroup, the longer the period of separate development before the break up of the protoform (Clark 1979:252). Within Polynesia the normal case for a linguistic split has been the migration of at least one part of the speech community from one island group to another (ibid.:253).
The attributes in this case will be the positional and operational levels of the symbolic associations of the colour red. Comparison of the symbolic associations between the various cultures of Eastern Polynesia will allow the construction of a protoform for the symbol based on shared retentions between the various island groups. It is this protoform which will provide a meaning for the symbol which is applicable to the past. The idea for this method is not new (see for instance Alinei 1981) but this is, as far as I am aware, its first explicit statement and application.

Conclusion

The foregoing has outlined a methodology for the study of a non-functional symbolic attribute of prehistoric Maori culture, the colour red. The evolutionary study of colour terms has been rejected in favour of the view that the symbolic associations of colour are of primary archaeological importance. A review of various approaches to symbolic studies in both archaeology and social anthropology concludes that the pragmatic approach of Turner, using the positional and operational levels of symbolism is more desirable than analyses involving symbol systems. The question of temporal control has been dealt with and an approach
modelled on historical linguistics put forward.

The goal for this thesis is to use this methodology to provide new interpretations for items of material culture from prehistoric New Zealand. These interpretations, it is hoped, will provide information on aspects of social and ideological conservatism and change. To this end the following chapters outline the symbolic associations for the colour red for cultures in Eastern Polynesia and use these to construct a Proto-Polynesian 'meaning' for red. Archaeological evidence for the use of red in New Zealand will be investigated and this compared both with the Proto-Polynesian meaning and the contact New Zealand Maori meaning. A final chapter evaluates the results and considers their importance for New Zealand and Polynesian prehistory as a whole.
CHAPTER TWO

THE SYMBOLIC ASSOCIATIONS OF THE COLOUR RED IN THE ISLAND CULTURES OF EASTERN POLYNESIA AT EUROPEAN CONTACT

Introduction

Because prehistoric New Zealand lay within the East Polynesian culture area, any investigation of Maori symbolic associations should take account of the comparable data from the other islands of this area. Using the methodology outlined in Chapter One, common aspects in the symbolic associations of the colour red will be used to define the significance of the colour to the proto-Eastern Polynesians. Traditional archaeological theories for the origin of the East Polynesian culture have suggested that it developed in Western Polynesia over a period of approximately 1000 years (from 1000 BC to 0 AD/BC) during which time people who were originally associated with Lapita pottery made a number of changes in their material culture and languages. After a thousand year pause they resumed their eastward expansion and the islands
Island Groups of the South Pacific

FIGURE TWO
of Eastern Polynesia were occupied during the first few centuries AD. It is the common symbolic associations of these people which are of interest.

Recently Irwin (1982) has attacked a number of assumptions made by the proponents of this hypothesis. He argues that there is no reason why people should have remained in Western Polynesia for a thousand years before settling the rest of Polynesia. Instead he suggests that people probably continued to move east in the first few centuries of the first millennium BC. Irwin hypothesizes that early settlement may have been established in the Northern Cooks from where people continued on to the rest of marginal Polynesia. Repeated contact between Western Polynesia and these early settlements allowed the development of the Proto Nuclear Polynesian language.

Irwin’s hypothesis suffers from a lack of data – there is no evidence for early sites in the Cook or Society Islands – but it does very elegantly account for the settlement of Eastern Polynesia and removes the rather arbitrary thousand year wait in Western Polynesia. His hypothesis is interesting for this study because it would imply that some Eastern Polynesian islands have had a considerably longer period of occupation than others. Much emphasis has been given to the similarities in the Archaic Eastern Polynesian material culture in recent years; however if Irwin’s ideas are correct the differences may again
In the ensuing discussion the five island cultures of East Polynesia which were chosen for detailed study are broken up into two groups. Hawaii and Tahiti are discussed first and these are followed by the Marquesas, Easter Island, and New Zealand. Both groups, of course, have a number of points in common, but in each the intra-group similarities are more compelling. The distinction between the two groups was first recognised by Burrows (1970). By analysing aspects of material culture and social institutions Burrows was able to divide Polynesia into a number of culture areas. Hawaii and Tahiti were placed in Central Polynesia while the Marquesas, Easter Island and New Zealand were placed into a separate category called marginal Polynesia. The physical distance which separates the islands from each group makes it unlikely that the similarities are due to repeated contact, but are more likely to be due to common ancestry. In theory these similarities could be used to trace the sequence of island settlement in East Polynesia and indeed such an analysis has been attempted by Hoon (1974). This study, however, does not attempt such a task. As will be indicated below, the complex nature of the symbolic associations does not lend itself to presence/absence criteria and it would be naive to attempt to reconstruct the order of settlement without recourse to a detailed understanding of the whole
breadth of prehistoric culture from each island.

In the sections below only five island cultures have been selected for discussion. This is obviously an incomplete coverage of East Polynesia. While it is realised that too few cultures will affect the accuracy of the reconstructed proto-‘meaning’, reliability of analysis must not be sacrificed simply for breadth. Only those island cultures were selected for which a reasonable understanding of the symbolic associations could be achieved. From the five selected there are only two striking omissions, the Cook Islands and the island of Mangareva. Although Buck (1927, 1944) has written substantial volumes on the Cook Islands, the accessible ethnohistoric literature is meagre. Buck (1953) gives details of European contact with the islands of the Cooks but in the majority of cases contact is only passing. When prolonged contact was made the records leave little which can be used to investigate colour symbolism. Even the missionary Williams (1838) who described the destruction of the Rarotongan idols provides few additional details. Other islands of the Cooks are also poorly represented. Mark (1976) provides a review of ethnohistoric and ethnographic sources for Mangaia, but the majority are publications using secondary sources. There are insufficient primary sources to define the symbolic associations for the colour from any individual island and the Cook group as a whole. From those sources
which do exist it is impossible to determine whether this paucity is culturally significant.

The second omission, Mangareva, results from a paucity of ethnohistoric and ethnographic sources in English. The best ethnohistoric material is to be found in the journal of Beechey, who, on December 29, 1825 was the first European to land on Mangareva. Unfortunately his journal makes only a single mention of the colour red, some red European cloth being given to a chief (Beechey (1831:172). The main ethnographic sources are Buck (1938) and Laval (1938, 1968, both in French). Buck (ibid.:172) states that the Mangarevans had no red dye which may be the reason for the lack of mention of the colour. For instance, while the Mangarevans used the term maro ukura, it referred to a bark cloth streamer attached to the masts of canoes of chiefs, rather than to a red feather garment.

In Chapter One it was argued that rather than adopt a systems methodology a more pragmatic approach should be selected which concentrates on those aspects of culture which can be explained. This view was extended to the selection of island cultures for symbolic analysis. Those islands or island groups were selected for which it was felt there was sufficient information to define adequately the symbolic associations of the colour red. The analysis of Hawaii, Tahiti, Easter Island, the Marquesas and New Zealand form the rest of this chapter. Discussion of
the similarities between Hawaii and Tahiti, and later, between all five cultures is provided at the end of each group.

**Method**

For each island culture studied Buck's compendious book, "Explorers of the Pacific" (1953) was used to compile a list of explorers who made contact with the island. This was supplemented by other accounts in English from sources like missionary reports and diaries and later ethnographies listed in Taylor's "A Pacific Bibliography" (1965). A number of recent ethnographic and historical accounts of the islands completed the list of references.

The accessible journals of early explorers and others were read and references to the colour red and other colours were noted together with a description of the relevant context. As indicated in Chapter One other texts were consulted where these might help elucidate the symbolic associations of the colour.

Once all the sources from a particular island had been read, the statements concerning red and their context were summarized and transferred to separate sheets of paper. The references could now be organised into various categories and regrouped at will. It will be seen below that the major categories selected
reflected the physical nature of the colour source (red feathers, tapa etc.) or the way in which the colour could be applied. This form of organisation makes it easier to distinguish between citation of ethnohistoric sources and my own analysis.

When sorting into relevant categories was completed, the information was summarized in a book noting references. The summaries were then used to construct the sections on each island. In general, colour use in each category is documented and then the whole brought together in the discussion section. A brief conclusion outlines red colour symbolism in each island's culture.

**Tahiti**

**Red Feathers**

Tahiti was discovered by Capt. Samuel Wallis on June 18 1767. Wallis anchored at Matavai Bay which was to become the focus for Tahitian/European interaction (Buck 1953:23). Almost immediately Wallis’s ship, the *Dolphin*, became the subject of a series of actions which proved very confusing to the Europeans. Wallis relates how a Tahitian came alongside the ship.
FIGURE THREE
The Society Islands and the Marquesas

Marquesas
- Nuku Hiva
- Ua Huka
- Fatu Hiva
- Hiva Oa
- Fatu Hiva

Society Islands
- Maupiti
- Bora-Bora
- Huahine
- Raiatea
- Moorea
- Tahiti
- Mehetia

Tuamotu

Archipelago

Mangareva Island

TUBUAI

OR

AUSTRAL ISLANDS

0 300km
He gave one of the men a bunch of red and yellow feathers, making signs that he should carry it to me. I received it with expressions of amity, and immediately got some trinkets to present to him in return, but to my great surprise he had put off to a little distance from the ship, and upon this throwing up the branch of a cocoanut tree, there was a universal shout from all the canoes, which at once moved toward the ship and a shower of stones was poured into her on every side (Hawksworth 1773:444).

Peace was restored when the Europeans accepted a gift of "six large Bales of contry cloth, from six to Eight yards in Each bale" (Robertson 1948:165-6).

Further confusion was to follow, however, when the Europeans raised the British pennant on the shore. Following the British ceremonial, the Tahitians responded with their own. Wallis has an excellent description of the incident which is worth quoting in full.

As soon as the boats were put off, the old man went up to the pendant, and danced round it a considerable time: he then retired, but soon after returned with some green boughs, which he threw down, and retired a second time: it was not long, however, before he appeared again, with about a dozen of the inhabitants, and putting themselves in a supplicating posture, they all approached the pendant in a slow pace, but the wind happening to move it, when they were got close to it, they suddenly retreated with the greatest precipitation. After standing some time at a distance, and gazing at it, they went away, but in a short time
came back, with two large hogs alive, which they laid down at the foot of the staff, and at length taking courage, they began to dance. When they performed this ceremony, they brought the hogs down to the water side, launched a canoe, and put them on board. The old man, who had a large white beard, then embarked with them alone, and brought them to the ship: when he came along side, he made a set speech, and afterwards handed in several green plantain leaves, one by one, uttering a sentence in a solemn slow tone, with each of them as he delivered it; after this he sent on board the two hogs, and then turning round, pointed to the land. I ordered some presents to be given to him, but he would accept of nothing (Hawksworth 1773:447).

Carrington (1948:162), who edited the journal of Robertson, first mate of the *Dolphin*, relates the later history of the pennant stating that after Wallis left, Purae, whom the Europeans identified as Queen of the island, took the pennant to her marae at Mahaiatea and incorporated it into her maro'ura.

The maro ura were long red feather girdles used by the ari'i-maro-ura (great sovereigns) and according to Rose (1978:5) symbolized the divine origin of the leadership. He also notes that the girdles themselves were important political symbols, manipulated by the high chiefs in the socio-political system. Henry (1928:195 cited in Rose 1978:5) describes how the feather girdles were used only at special events such as the investiture of a high chief, the reception of another chief, the conclusion of peace
or the preparation for war (pure ari'i) and the pa'ia'atu'a ceremonies where god images were refurbished with feathers. The maro'ura to which Wallis's pennant was attached formed one of the battle prizes of Tutaha (Pomare I's great uncle) when he attacked and defeated Amo, Purea and Teri'irere between the voyages of Cook and Wallis (Oliver 1974:chapter 26). Cook described this maro in 1777, noting that it was composed of both red and yellow feathers ("but mostly of the latter") and "then the whole sewed to the upper end of the English Pendant, Captain Wallis desplayed" (Beaglehole 1967:202).

The accounts from Cook's voyages are interesting not so much for their descriptions of feather girdles, but for the considerable trade which developed between members of Cook's expedition and certain notable Tahitians for red feathers. Cook also attended ceremonies at Tahitian marae and was able to observe the use of red feathers in sacred contexts first hand. On Cook's second voyage a number of feathers from Amsterdam were brought as trade items and when offered to the Tahitians sparked a seemingly insatiable appetite, particularly by, as Cook puts it, "the Principal people" (Beaglehole 1961:380). The demand for red feathers led Cook to be repeatedly petitioned to allow a Tahitian to journey with him (ibid.:400,402), and led both Forsters to make rather emotional comments on the trade.
The rage after these trifling ornaments was so great, that Pototoa a chief, whose magnanimity and noble way of thinking, we never questioned before, wanted even to prostitute his own wife, for a parcel of these baubles (J.R. Forster 1778:367).

While J.G.A. Forster (1777,II:71) comments,

A single little feather was a valuable present, much superior to a bead or a nail, and a very small bit of cloth, closely covered with them, produced such ecstatic joy in him who received it, as we might suppose in a European, who should unexpectedly find the diamond of the Great Mogol.

As well as *maro'ura*, red feathers decorated the Tahitian god images, played a role in ceremonies connected with the dead, and were used in sacred ritual associated with the major *marae*.

God images are divided into two types by Oliver, *ti'i* images where spirits sojourned more or less continuously, and which were mainly connected with sorcerers and diviners, and *to'o* images where spirits were occasionally invoked, and which were mainly connected with gods. The latter could be made of wood, stone or wickerwork and while most were anthropomorphic, or zoomorphic in form, a few, notably those connected with the principal gods, were simply cylinders of wood or wickerwork. The most important feature of the *to'o* images, however, was their red feathers, which were either kept inside the image or
attached to the exterior (Oliver 1974:71-74). The lack of shape of the to’o images caused the Europeans some surprise and led the missionary Wilson to ridicule the images (1966:211). Some to’o were kept in dwellings, and Morrison (1935:58, 67) describes two of these, but most were stored in the marae in shelters called fare ia manaha (Oliver 1974:77). The feathers, so vital to the to’o images were replenished at ceremonies called paiataua. During the third climactic day the marae’s tutelary image was exposed and red feathers removed and given to the subordinate images in exchange for new red feathers. The new red feathers were returned to the tutelar image, presumably to become sanctified. Finally ti’i images were presented and received their allocation of red feathers (ibid.:116-7).

Oliver (ibid.:75) notes that while it might seem as though the feathers were sacred as of right, at least one early explorer (Moerenhout) stated that they first had to be consecrated. Once this was achieved, however, they featured prominently in ceremonies on the marae, perhaps acting as the principal means for attracting the attention of the spirits. Cook, during his second voyage, summarized the religious associations of red feathers stating that they were bound to the end of a small cord of twisted coconut fibre and "used as Symbols of the Eatua’s or Divinities in all their religious ceremonies" (Beaglehole 1961:411). In the journal from his third voyage there
is a detailed account of a sacrificial ceremony on a marae. Cook describes how priests present red feathers to the chief Otoo, touching them to his feet. Other priests surround the human sacrifice, praying while holding the tufts of feathers in their hands. The eye from the sacrifice is then removed and presented first to Otoo and then to a bunch of red feathers. Later in the ceremony more red feathers are placed at the feet of the sacrifice which now lies on the marae (Beaglehole 1967:200). Morrison (1935:206) describes a similar ceremony connected with the building of a war canoe.

Small bunches of red feathers were also associated with the bodies of the dead. Bligh for instance described the funeral attire of what he called a lower class male. He noted that a small bunch of red feathers had been tied to the ring finger (Bligh 1979:131). Rodriguez similarly described one corpse covered with tapa, with a bunch of red feathers tied between the fingers and another stuck in the fold of the maro (Corney 1913,III:53) and a second female corpse with two small yellow feathers fastened to the hand (ibid.:93).

The importance of red feathers as symbols of political power has already been mentioned and it is interesting to connect this with the trade in red feathers undertaken with the Europeans and the important political changes which occurred in Tahiti.
the other islands of the Society group after contact. Post contact history has been dealt with in detail by both Oliver (1974) and Newbury (1980) and is linked to the establishment of the war god 'Oro. 'Oro was established in Tahiti during the first half of the eighteenth century, originating from similar cult practices on Ra'iatea. Associated with 'Oro was a set of sacred regalia including the maro'ura and maro te'a (Newbury 1980:16).

Between the discovery of Tahiti by Wallis and the arrival of Cook the chief Amo and his wife Purea attempted to gain supremacy for their son Ter'irere by declaring a general rahui and starting to build a large marae at Mahaiatea. Amo and Purea were crushed, however, by Tutaha (Pomare I's great uncle) who removed the feather girdles from the marae of Toorai and Mahaiatea. They were forced to acknowledge the supremacy of Pomare I (Otoo) as having the right to the dignity of the maro'ura at Maraetata. The political situation was now polarised between Tutaha and Vehiatua I although the exact historical facts are disputed (see Oliver 1974:1225-1232). Tutaha was beaten and killed, and Vehiatua I died, possibly a few months later, of natural causes. Whatever the sequence of events Otoo (Pomare I) was now universally acknowledged to be the chief of highest rank status, but not in political power. Indeed as Oliver (1974:1233) notes, a number of leading families including the Oropa'a and Papara were
equally, if not more, politically powerful. Pomare did, however, have access to the maro'ura which incorporated Wallis's pennant which was housed at the marae 'Utu'aiamahurau at Pa'ea. Oliver stresses this point noting that this marae was also an established center of 'Oro worship with an 'Oro image. He suggests that,

What previously seems to have been a general connection between all Opoan feather-girdled kin-Titles and the god 'Oro (in which ever of his manifestations locally prevailed) came to be superceded in social importance on Tahiti-Mo'orea by a specific connection between one such Kin-Title (the Wallis maro) and one particular 'Oro image (the Papara to'o) (ibid.:1235).

Oliver argues that eventually it was only the Papara image and its associated Wallis maro which could be offered human sacrifices.

Oliver provides a detailed description of the next major conflict, the Mo'orean war of succession. Pomare I, it seems showed a marked reluctance to join his allies in the conflict and this seems to have led to a stalemate situation, and a truce with terms unfavourable to the Tahitians. What is more interesting are the details of Cook's support for Pomare. Oliver quotes Cook's comments at the end of the war.
The terms [of the truce] were disadvantageous and all blame fell upon Otoo for not going to assist Towha in time. The current report was now, the Towha assisted by the forces of Waheatua would, as soon as I was gone, come and fall upon Otoo; this called upon me to support my friend by threatening to retaliate it upon all who came against him when I returned again to the island, if there was any truth in the report at first this had the desired effect, for we heard no more of it (Beaglehole 1967:214 cited in Oliver 1974:1249).

As Oliver notes, this statement was in the form of an official British policy concerning Tahiti and the Society Islands. Pomare was proclaimed 'king' by the Europeans, in the recognition of his Tahitian rank status rather than his political power. The consequences of this European patronage are neatly summed up by Oliver (1974:1250).

To the ritual minded Maoris the numerous courtesies extended to Pomare I by the English — including the daily associations, the meals on board, the royal salutes, et cetera — must have added some luster to his already pre-eminent rank-status. The large quantities of English gifts that passed through or ended up in Pomare I's hands, provided him with unmatchable resources for rewarding supporters and courting loyalty, or at least the neutrality, of other chiefs. And, with Cook's promise of armed support, Pomare I was provided with the means of complementing his rank status and gift-bribed cooperation with coercion-sanctioned authority.
After Cook left Tahiti, no other European visited the island for eleven years until Bligh arrived in 1788. Bligh found Pomare in a bad state. Evidently Cook's threats had succeeded in warding off opposition for some years; however eventually Pomare's enemies must have concluded that Cook was not going to return. Pomare's lands were attacked and laid waste.

Bligh continued Cook's position of adopting Pomare I as the rightful 'king' of Tahiti, and attempted to reconcile the differences between the opponents. The support was continued after Bligh's departure by certain of the Bounty mutineers. In general European support for Pomare is seen in the material goods which were traded. The trade in red feathers is particularly interesting because these were so important in status and ritual related objects. During Cook's second voyage Forster (1777, II:57) records gifts of red feathers to Otoo (Pomare I) and his father J.R. Forster provides a similar description of trade with Potatou and his wife Wainee-ou (1778:391). Cook during his third voyage made more presents of red feathers (Beaglehole 1967:192) and when leaving Tahiti for the last time was petitioned by Otoo to send red feathers, muskets and horses (ibid.:221). Similar trade practices were maintained by the earliest missionaries, Wilson (1966:219) giving details of a present made to Iddeah (Pomare I's wife) of red feathers and a scarlet coat.
The acquisition of red feathers by the Pomare family from Europeans is interesting, particularly in light of Newbury's (1980:31) comments that at this time "the politics of Tahiti were firmly rooted in traditional patterns of aggrandizement". This aggrandizement followed three directions: an active increase in the sanctions behind specific statuses; the elimination of rival statuses; and finally, and perhaps most importantly, the occupation of many different statuses, particularly those which might involve access to territory elsewhere. Pomare achieved the first by ensuring that human sacrifices could only be presented by him as holder of the Wallis maro and Papara 'Oro image. He, and more particularly his son Tu, attempted the second through astute political manoeuvring and warfare. To understand how Pomare went about achieving the third, the nature of chiefly ownership and tribute needs to be understood. Newbury (1980:22-31) has reviewed the subject. He argues that an Ari'i extended his political position into other tribal zones through tribute levies. Ari'i did not own land as such, but could gain access to tribute either by inheriting the right of access to family estates or by receiving tribute from co-proprietors. Newbury argues that tribute was an assertion of an Ari'i's command of resources and was also an essential accompaniment to religious rites.
The discussion above indicates that red feathers played an important part in religious rites connected with the marae. Feathers were often exchanged during these occasions, particularly at paiatua ceremonies. A number of ethnohistoric accounts note the exchange of feathers. Wallis, for instance, met with 'Queen' Purae and had his hat decorated with feathers (Hawksworth 1967:234). Morrison (1935:190) describes a ceremony performed to welcome a visiting chief of rank from another island. The host began the ceremony by tying a pig and a small bunch of red feathers to a plantain tree.

It seems reasonable to suggest that red feathers were important artefacts for gift exchange, presumably due to their importance in religious practices. They may have been appropriate as exchange items to stimulate tribute, particularly since tribute and red feathers were essential accompaniments to religious rites. If Pomare was able to monopolise the early trade in European red feathers he might have gained a considerable advantage in the early stages of his path to aggrandizement. The importance of European commercial support is given prominence by Oliver but his position is criticised by Newbury. Newbury (1980:31) claims that by the period 1800-1810 it is doubtful whether any chief had control of the European market. However much of the red feather trade was undertaken before this period, and access to an
overwhelming supply of red feathers (by Tahitian standards) could have been of considerable political advantage.

Red Tapa

Cook described three colours of bark cloth besides white: red, brown and yellow (Beaglehole 1955:133). Red tapa cloth worn by particular groups of people is mentioned by a number of early explorers. Morrison records warriors dressed in red tapa on two separate occasions. The first is in the form of a passing comment stating that a group of warriors wore red and white (1935:48). The second, however, gives a more detailed description.

When they are accoutered for war, they bind a piece of red cloth or matting, or both, round their waist with a sash made of the fibers of cocoa nut platted into sennet, at each each end of which hangs a tossel of the same. (ibid.:69)

Unfortunately no other descriptions could be found to substantiate Morrison's claims. Both the Forsters mention men wearing red tapa. J.R. Forster (1778:415) notes that red and yellow cloth of a good quality is used to clothe their "people of quality" but also states that a fine soft white cloth was the dress of chiefs. Forster's son George provides a description of the dyeing process stating that "the yellow juice of a small species of fig" when combined with the juice of a
species of fern produced a crimson dye which, however, quickly faded. He notes that the cloth dyed with this preparation was highly valued by the Tahitians and worn "only by their principal people" (Forster 1777, I:355).

Robertson, first mate of Wallis's *Dolphin*, makes a number of comments concerning red tapa. He interpreted the red cloth worn by an old woman distressed at the loss of her sons in the fighting which accompanied the arrival of Wallis's ship, as a mourning costume (1948:194). In his subsequent records a number of individuals are described as dressed in mourning. Hugh Carrington, who edited Robertson's journal, notes that he is mistaken in attributing red tapa to a mourning costume, rather this colour was reserved for the island's elite. This view is certainly strengthened by a description from Robertson himself when he relates how Pickersgill and sergeant Scrolld came across the "Queen of the Country" (presumably Purae) and many other Tahitians gathered under a very long house awaiting entertainment. All are said to have dressed in mourning (Robertson 1948:203). Robertson describes the dress of Purae in detail stating she wore a red "gown" over a white and yellow "petticoat". Other explorers also make mention of important personages wearing red tapa cloth. Banks (Beaglehole 1962:324), for instance, describes a young woman of an *ari'i* family dressed in a short red tapa
cloth cloak.

Brief mention is made by Wilson (1966:161) of the body of Orapiah lying in a ghost house. He described the corpse in an upright posture clothed in red cloth. Other ghost houses particularly those of chiefs, seems to have been decorated with great lengths of plain white tapa (Kooijman 1972:43). In life, these long bundles of white tapa seem to have served as status symbols. They were known as *ruru uehe* and were often suspended from the roof of a chief’s house. Such large bundles often formed items for gift exchange and as the manufacture of any quantity required a communal effort, it was looked upon as a "principal repository of social affluence" (Oliver 1974:148).

**Red European Cloth**

Brief mention can be made of Tahitian/European trade for red European cloth. It is interesting that the trade flourished before European feathers became readily available. The Spanish interpreter Maximo Rodriguez who stayed on the Island of Tahiti in 1774 used pieces of red baize in payment for work undertaken by the Tahitians (Corney III, 1913:116). He also found cause to wonder at the ease with which he could obtain pearls by trading for them with sheets, axes and red handkerchiefs (ibid.:111). Cook’s supply of red feathers during his second voyage ruined the market, Forster (1977:306) recording that red baize, a bed
sheet, an axe, a knife, nails, looking glasses and beads all took second place to a tuft of red feathers fixed on a wire.

**Red Ochre**

Although Förster (1977:314) commented upon the abundant supply of ochre (both red and yellow) on the hills in Tahiti, its use seems to have been restricted to the decoration of certain items of carving. Banks, for instance, describes a cock figure on a *marae* painted red and yellow (Beaglehole 1962:297) while Förster (1977:61-2) describes a red painted carved figure on a tall pillar at the head of a Tahitian war canoe. Finally Morrison (1935:67) mentions that the fronts of houses were walled with carvings "painted with a reddish colour".

Only a single mention of body painting was found. Oliver (1974:502-507) describes the mourning customs in which the principal is dressed in the famous Tahitian mourning dress and is accompanied by a number of attendants (who were both male and female) wearing only loincloths and improvised headdresses; they were blackened all over with candlenut soot, over which were painted red and white stripes and circles (ibid.:505).

One other comment by Wallis indicates body staining
where a group of sailors met a band of Tahitians. The meeting was by chance but it sparked a series of rituals by the Tahitians.

They gathered green branches from the neighbouring trees, and with many ceremonies, of which we did not know the meaning, laid them down before us: after this they took some small berries with which they painted themselves red, and the bark of a tree that contained a yellow juice, with which they stained their garments in different parts (Hawksworth 1773: 474).

Discussion

Simon Kooijman concludes his discussion of Tahitian tapa by noting that red dyed tapa was the prerogative of the higher ranks and that this was also the case with red feathers (1972:41-2). The discussion above has described red feather use in maro’ura and god images. Red feather usage in religious ceremonies on the marae has been noted and an argument developed which suggests that Pomare I may have gained considerable political advantage by monopolising the early European trade in red feathers, since they formed an important mechanism for social aggrandizement in Tahiti.

The key to understanding colour symbolism in Tahiti is provided in a statement by Newbury.

The ritual validation of status before
the gods and people at family, district and tribal marae was frequent and essential as a concomitant of political leadership. No European accounts failed to mention religious practices so deeply interwoven into the management of secular affairs. Later missionaries found it impossible to make such a distinction, even when the efficicacy of traditional religious beliefs had been called in question (1980:15).

A link between red feathers, marae, religious practices and political leadership has already been suggested in the discussion above. It remains only to outline this in more detail.

Oliver summarizes the cosmological beliefs of the Tahitians identifying four high level atua, Tu, Tane, 'Oro, and Atea all created by Ta'aroa. Below these atua were a number of others with specialised functions like Hina, goddess of the moon, Tipu, principal god of healing and Ti'i, god of sorcery. Further down still were innumerable minor atua who functioned as spirits associated with particular areas of the land and sea, and tutelars of specific social units (Oliver 1974:57). Atua manifested themselves in a number of forms. Some existed in a natural form, be it rock or fish. Others occasionally transformed themselves into certain forms, often zoomorphic, while almost all atua had the ability to posses some object or inanimate being, including humans (ibid:58). Atua might be called into a fabricated image, a to'oo, but when the object was natural it was called an ata.
Besides atua there was a category of ghosts, 'oromatua, the active souls of deceased humans (ibid.:61). These could be helpful, malignant or indifferent.

The relationship between these cosmological entities is, according to Oliver, summarized by the concepts ra'a, mo'a, noa and tapu. Both the terms ra'a and mo'a are so closely linked that Oliver (1974:66) translates them both as 'sacred'. Any of the atua or oromatua, or anything in association with them was considered to be ra'a/mo'a but the degree of sacredness varied very much with the type of spirit. Because they were thought to be in a more direct line of descent from the gods, the holders of high ranking kin titles were also thought to be ra'a/mo'a. Certain objects and persons, being associated with what was sacred were also tapu which Oliver defines as "restricted, dedicated to the use in sacred ritual, set aside from normal use" (ibid.:67). Oliver contrasts ra'a/mo'a to the term noa which he defines as secular.

One interpretation would see the ra'a/mo'a category symbolized by the use of red feathers generally. The symbolism is certainly implied by the use of small bunches of red feathers during prayer to the atua (see Oliver 1974:84 for instance) and would also take account of Cook's early interpretation that the feathers represented "Eatua". It is in line with Oliver's claim that the feathers served both to direct the attention of the spirits and to "transmit... some
of the spirit's sacredness to entities requiring consecration" (ibid.:75). More specifically, the red feathers in the maro are seen by Oliver not only to connect with the atua but also to form a "direct magical conjunction between it [the maro] and the generative powers of the male loins and genitals, which it encloses, thereby featuring the wearer's function as perpetuator of a descent 'line'" (ibid.:763).

Red feathers were linked specifically to two gods. Oliver (ibid.:75) uses evidence from Henry to suggest that Ta'aroa may originally have been covered with red feathers. But the god more commonly associated with red feathers, particularly in the late period, was 'Oro. According to legend, the first maro was red and was the insignia of rank held by the title holders of the Varae marae in the Opoa district of Ra'iatea. Myths link 'Oro closely with Opoa, stating that at one time the god made his home there (ibid.:763). The yellow girdle it seems, was traditionally associated with the Vaiotaha marae on Porapora.

It may be that in Tahiti, as in Hawaii (see next section), the adoption of a god which emphasized some particular facet of life (in 'Oro's case, warfare) could be undertaken to add religious backing to some secular political enterprise. It is interesting to note that the traditional date for the adoption of 'Oro from Ra'iatea roughly coincided with the rise of
politically ambitious chiefs like Amo and Tutaha. It is likely, however, that the association with red feathers, atua and the ra'a/mo'a categories preceeded any rise in the importance of 'Oro and that this symbolic association was simply enhanced by the rise of the god.

Any connection between the atua and red tapa is less apparent although there is clear evidence that red tapa was reserved for the elite class in Tahiti. Although it cannot be substantiated, an argument which suggests that the common colour of red tapa and red feather maro symbolized a link between the tribal elite and the highest ranking chief of the kin group would not seem out of place. A closer connection between red tapa and red feathers is apparent in the garb of warriors. Descriptions of warriors wearing red tapa are given above and both the Forsters (1777,II:58; 1778:336) cite instances where warriors were ornamented with red feathers.

Rather less can be said about the use of red ochre. The red coloured cock figure described by Banks might be linked to 'Oro since a number of "Oro's ata forms were birds. One is especially interesting, "Oro being in the form of a red feathered duck" Orovehi'ura (literally, 'Oro in his manifestation of the red feather covered) (Oliver 1974:59).
Conclusion

Feathers are by far the most important source of the colour red on Tahiti, and red feathers seem to have had an important religious function. Whether in the form of maro, god images or simply as small bunches they seem to have combined status verification and the principal means for attracting and channelling the power of the atua. In this scheme maro, status, and a link to the atua were combined with genealogical verification and the generative powers of the male. It is suggested that red feathers symbolized the ra’a/mo’a concept linking a number of different facets, which were in Oliver’s definition, sacred. To a degree these associations with red feathers spilled over to incorporate red tapa and red ochre use. Certainly red tapa was worn only by the elite and may have suggested a link with the tribal maro. Red ochre, particularly in its use on the marae and canoe carvings may have formed a link with ‘Oro.

Hawaii

Feathers

Any discussion of colour as a symbolic element in protohistoric Hawaii must be dominated by the red and yellow feather cloaks and helmets which have been the subject of acclaim since Cook discovered the
FIGURE FOUR
The Hawaiian Islands
islands in 1778. These garments have been the subject of several studies which trace their changing form and pattern of use after European contact. A recent study by Kaeppler (n.d.) is of particular significance since it is based on a detailed study of actual cloaks collected by Cook and later explorers. Kaeppler is able to draw conclusions about cloak form and function which could not have been made solely on the basis of ethnohistoric material.

Buck, for instance, working without the extensive museum research undertaken by Kaeppler, describes three types of cloaks under the general term 'ahu'ula ('ahu meaning garment and 'ula meaning red). Buck's first type is a rectangular cape of coarse netting to which was attached large feathers, with the border decorated with red and yellow feathers. His second type is described as a rectangular cape of fine netting, sometimes completely covered with small red and yellow feathers, while the third is a circular fine mesh cloak completely covered with small red and yellow feathers attached to form various geometric patterns (Buck 1957:216). Buck (ibid.:233) argues for an evolutionary progression from simple rectangular cloaks to circular cloaks which became a sign of rank for superior chiefs.
There are several statements from the ethnohistoric literature describing the association between high status and red and yellow feather cloaks. Whitman (Holt 1979:55) describes feather covered capes and helmets worn by chiefs on important occasions, while Dixon (1789:271) states;

These truly elegant ornaments are scarce, and only possessed by chiefs of the highest rank, who wear them on extraordinary occasions. There are cloaks of an inferior kind, which have only a narrow border of red and yellow feathers, the rest being covered with feathers of the tropic man of war bird.

Freycinet (Wiswell 1978:14) also implies a varying degree of social standing reflected in the type of cloak worn; describing the dress of the principal attendants of Riorio as varying from magnificent red and yellow feather cloaks through cloaks of scarlet cloth to shorter capes which included some black feathers in addition to the prominent red and yellow. Generally red and yellow feather capes and helmets were held to be insignia of the aili (Emerson 1951:76; Beckwith 1932:124) and to dream of these garments had but one significance, royalty (Beckwith 1932:114).

Malo (Emerson 1951:76) commented that the 'ahu'ula were aili insignia in time of war and he goes on to note that they were also possessed by warriors who distinguished themselves in battle. Indeed, Ellis (1917:116-117) describes them simply as war cloaks.
while Kotzebue (1830:177) describes warriors garbed in yellow, red and black feather cloaks. The prestige associated with the capes and cloaks is reflected in their value; Cook recording the difficulty he had in trading for either these or the helmets. Malo (Emerson 1951:76) comments generally on the high value set upon feathers by the Hawaiians, stating that they were one of the most valued possessions and Whitman (Holt 1979:55) notes that the Hawaiians themselves were required to furnish feathers as taxes to the paramount chief.

The various forms of Hawaiian helmet (mahiole) were status related, the crested helmets covered with feathers being associated with high chiefs and kings while those decorated with human hair or mushroom-like ornaments were confined to warriors and lesser chiefs (Buck 1957:231).

While there is no doubt that feather cloaks and helmets were status related, Kaeppler (n.d.) does draw more specific conclusions covering the change in form of feather cloaks. She argues that the changes from rectangular to circular which Buck rather vaguely defined as evolutionary, were post contact phenomena and were linked to two social transformations. The first of these transformations derived,
elevation of the war god Kuka'ilimoku, resulting in the change from genealogical prestige gives power and therefore authority to power gives authority and therefore prestige.

This transformation was directly connected with the rise of Kamehameha I. In the second transformation, the power of the priests was removed through the overthrow of the kapu system and the akua (state gods).

During the first transformation the feather cloaks which had been symbols of ritual protection became sources of power verification. This change was objectified by a movement from cloaks with high collars to those with a circular shape and narrow and/or shaped necklines. Kaeppler hypothesizes that the high collared cloaks were modelled on protective war mats (where the collar would shield the neck from sling stones, clubs etc.) and that the feather equivalents were worn by high status males during battle and "other dangerous and sacred situations". With the introduction of European style warfare, high collars were no longer needed and they gradually dropped out of fashion. The first stage transformation also manifests itself in a change in the colour of cloaks. The high collar cloaks seem to have been predominantly red in colour but later forms came to include more yellow feathers in their construction. Kaeppler (n.d.) equates yellow feathers with a political rather than religious symbolism, for yellow feathers, "being more scarce and precious [than
red feathers], could only be commanded in great numbers by powerful personages". The first transformation also saw a change in the designs worked into cloaks, the triangular design from the island of Hawaii becoming dominant over the others. By the second transformation the symbolic significance of the designs has been lost and new combinations flourished. Further support can be gained for the preponderance of feather cloaks being red before the first transformation from comments by Bayly (Cook’s third voyage, Beaglehole 1967:281) who, dressed in a red jacket, was taken as the "Aree de hoi" (king) of the ship. Red cloth continued to be sought after, however, and its presence in European gifts is recorded by Dixon (1798:261), Freycinet (Wiswell 1978:11) and Vancouver (1798:192).

Kaeppler goes on to argue that the cloak fabric (nae) itself linked genealogical and sacred concepts. The cloak fabric was probably woven in separate fragments to the chanting of special prayers which were then enshrouded in the mesh. This meant that the 'ahu'ula was in effect a "red shoulder and back protector which had the double sanctity of nae and red feathers protecting the backbone", this having a sacred association with genealogy (see Kaeppler 1982). Kaeppler suggests that this protection enabled warriors to pass behind the back of a kapu chief, an action which under normal circumstances would lead to death. Feather helmets extended such protection to the head.
After the first transformation the practice of making the cloak fabric from a number of pieces changed so that the cloak fabric was woven as a single unit.

In summary, the two transformations of Hawaiian society which Kaeppler defines saw a shift in the style of feather cloaks from a rectangular style with high collar covered in predominantly red feathers and made from a number of pieces of fabric, to a circular low collared style with predominantly yellow feathers sewn into a single piece of fabric. In the first instance this reflected the rise of Kamehameha I and his associated form of the god Kū, Kūkā'īlimoku, and in the second the overthrow of the state gods and the loss of the symbolic importance of the feather cloaks. It is this association between items of material culture and Hawaiian gods which is crucial to our understanding of the wider implications of the use of red feathers in both cloaks and images.

**Feather God Images**

Buck describes feather god images as covered with red feathers having yellow feather crests and with the features, eyebrows and the nose often outlined in black (1957:507). Valeri (1982) argues that the feather images represented Kū in his violent form, Kūkā'īlimoku. This form of Kū contrasted with his more controlled form Kunuiakea, and both forms of Kū formed a contrastive opposition with the god Lono. Valeri
describes a cyclical series of rites which began with Kū in his uncontrolled and destructive state represented by red feather images. Within the temple (heiau) the power of Kūkā' ili moku was then appropriated and domesticated by men participating in the ritual. This ritual was under the auspices of Kūnuiākea and his image carved in wood. Finally the power was spread across the land and to women by those who had participated in the rituals through the god Lono and his rites. Valeri suggests that a monthly cycle saw the transformation of Kū to Lono, but that this was in turn part of a longer yearly cycle which saw Kū as the dominant god in the rituals for eight months, and Lono dominant for the other four. This longer cycle was applied by giving emphasis to different aspects of the ritual at appropriate times of the year. During the rise of Kamehameha I, for instance, Kū in his uncontrolled form was given a great deal more emphasis.

If we accept Valeri’s assertion that the feather god images represented Kūkā' ili moku, then one is led to suggest that red feathers might be linked directly with this form of Kū. However, for several reasons such a close association seems unlikely. For one thing, at contact there were several well known war gods: Kuho‘one‘enu‘u, associated with the chiefs of Oahu; Kūkā' ili moku with Hawaii; and Kukeolo‘ewa with Maui (Kaepppler 1982:99). Kaepppler also notes that 18th and early 19th century writers didn’t assign particular
gods to particular images (ibid.:86) but rather images may have provided the receptacle for different gods depending upon the particular occasion. Transportable images were needed for war gods but also Kaeppler suggests, for Lono. She suggests that two forms can be identified in the feather images collected by Cook. One form has a crest and a violent facial expression while the other has either the head bare or decorated with hair, and a more peaceful expression. Kaeppler associates the former with Kū in his violent form and the later with Lono.

Kaeppler’s reconstruction does not, however, take account of Malo’s (Emerson 1951:144) assertion that Lono’s image consisted of a long white tapa sheet hung from a crossbar. If we can accept that Cook was considered to be the embodiment of Lono (see Sahlins 1981 for a recent discussion of this theory) then there is evidence from King’s journal which supports this association between white tapa and Lono. King (Beaglehole 1967:501) records that:

The Natives were shy in their first approaches, & we saw in many parts upon the Shore, pieces of white Cloth flying, as we suppos’d mean[t] for emblems of Peace, as had many of the Canoes.

The European association between white and peace is inevitable, but to the Hawaiians an association with Lono seems more plausible.
A number of tapu associations with white tapa are recorded in the ethnohistoric literature including white tapa-draped stakes marking tapu spots (Wiswell 1978:73), children arrayed in white tapa for the circumcision ceremony (Emerson 1951:44) and white tapa passed over sick people being used to exorcise the evil spirits (na mea) (Kamakau 1964:138). None of these are inconsistent with a Lono association for white tapa.

If Lono was represented by white tapa, and not a feather image, what then is the significance of the two forms of image identified from the Cook collection. As stated above, Valeri (1982) describes two forms of Ku. She suggests Kūkā’ilimoku and Kūnuiākea formed an opposition: conquering versus peaceful, active versus passive, unstable versus stable which symbolized a recurring theme in Hawaiian kingship and cosmology. Valeri develops this argument to the point where Kamehameha I becomes the unstable pole, while his son Liholiho becomes the stable. Valeri contends that this diarchy was no more developed that in the Hawaiian cosmology. It is this opposition therefore, rather than Kū and Lono, which would seem to form a more appropriate explanation of Kaeppler’s two image styles. The kahu (keepers) of the war god would then have two images as Kaeppler (1982:106) suggests, but both would be forms of Kū. This interpretation ties in with Valeri’s analysis of the ritual surrounding battle. She suggests that before a battle took place, and
during the actual engagement, ceremonies were performed to the Kūkā‘ilikumoku feather god, but that after victory had been attained new ceremonies were required at a *julu* to the pacified form of Kū, Kūnuiākea. It would seem reasonable that different forms of feather image might be used at each.

To conclude, it seems likely that the red feather images represented various forms of the god Kū. Crested images with violent expressions probably represented Kūkā‘ilikumoku while those without head decoration or with only hair and pleasant facial expressions probably represented Kūnuiākea. The opposition represented by the two forms of Kū image seems to have been central to a number of aspects of Hawaiian chiefly and cosmological life.

Women did not have access to the red and yellow feather cloaks and capes; however the wives of important chiefs did use feathers for other forms of body decoration. When not used to cover god images, feathers from captured *ahu‘ula* might be used to decorate combs used by high status females (Emerson 1951:76) or to decorate their hair (Wiswell 1978:62). Red, yellow and sometimes black feathers were used to form the collars worn by important women (Vancouver 1798,II:65; Dixon 1789:271). Kotzebue (1830:237) describes Queen Nomuhana attired in European clothing but with "a collar round her neck of native manufacture, made of beautiful red and yellow
feathers". Small bunches of red feathers were also used as fly flaps, Kotzebue describing boys using tufts of red feathers to drive away flies from Ka‘ahumanu, one of the royal wives of Kamehameha I (Barrere 1975:17). Kepelino describes feathers of many kinds fastened to a stick and used to drive off flies. These sticks, called kahili, were the insignia of chiefly rank. Buck (1957:579) notes that the kahili, particularly the large ones, became insignia of rank during historic times and probably evolved from the simple fly flaps.

Red Ochre

Like Tahiti, there is only limited mention of the use of red ochre by the Hawaiian sources. The most interesting comments are by Halo who states that the kahuhu (priests) of the shark gods painted themselves with turmeric or red clay mixed with sea water (ihee kai), wrapped their heads in a red or yellow malo and spoke in strange voices (Emerson 1951:116). Halo goes on to discuss part of the ceremony surrounding the construction of a 'ahuakini heiau, describing how the whole island was ritually purified. At the boundary of every ahupua'a (land division) a carved image of a pig’s head was set up. A priest smeared with red clay (‘alaea) accompanied by a man representing a deity travelled from one image to the next, right around the island painting each image in turn with red clay and
eating a food offering. The land was then declared purified. Kaeppler (1982:93-94) notes that Lono could take the form of a pig man, Kamapua'a, and that the red coloured pigs heads symbolized this form and were called *pu'a kukui*. Only a single reference to a god image painted red was found, that of the god Kapula'alaroa, god of play. Kamakau (1964) states that one side of the image was *kapu*, while the other was free, but does not mention if this was symbolized by painting only one side of the god red.

**Tapa**

Interesting records exist of red tapa given to Cook as presents in the days before his death on the island of Hawaii. The priest Koua (or Koa) visited the ship in the company of two chiefs and presented Cook with pigs, fruit and a red cloth cape.

He introduced [sic] himself with much ceremony, in the Course of which he presented me with a small pig, two cocoanuts and a piece of red cloth which he wrapped around me: in this manner all or most of the chiefs or people of note interduce them selves, but this man went farther, he brought with him a large hog and a quanti[ity] of friuts and roots all of which he included in the present (Beaglehole 1967:491).

The incident is also related by King (Beaglehole 1967:504) who goes on to describe a similar episode at a *heiau* where Cook again is presented with a cloak of
These actions have recently been interpreted by Valeri using the now established theory that Cook was perceived by the Hawaiians as a reincarnation of the god Lono (see for instance Emerson 1951:145; Kuykendall 1938:16; Wisniewski 1979:8). Valeri argues that Cook was first identified as Kūnuiākea. When brought to Hikiau he was then the subject of a series of rituals which Valeri suggests were normally performed to form a link between the king and god. During these initial rituals it is significant that both Cook and the image of Kūnuiākea were wrapped in red cloth. Valeri argues that at the completion of this series of rituals, Cook was brought to the Lono side of the temple and "went through a rite identical to the hanaiapu rite in which the image of Lono as god of the Makahiki festival was consecrated by the feeding of his bearer" (Valeri 1982:24). She suggests that only after this rite had been completed was Cook recognised as Lono-of-the-Makahiki. If Valeri's reconstruction is correct, there would seem to be a clear association between red tapa cloaks and Kū. Valeri notes that the 'king' of Hawaii at the time of Cook's arrival, Kalaniʻōpuʻu, has been waging war with king Kahekili of Maui and so had been emphasising Kukaʻilimoku at the expense of Lono. Hikiau, the temple of Kūnuiākea, and closely associated with Lono, was in a bad state of repair during Cook's visit, and it is possible that this neglect might
explain the use of red tapa cloaks where red feather cloaks might seem more appropriate.

Only passing mention is made of red tapa used in other contexts. Malo records that a variety of colours were used by women for their loin skirts (Emerson 1951:49), while Freycinet noted that the wives of higher chiefs wore very thin yellow tapa decorated with flowers or lines traced in red and black (Wiswell 1978:84). The red dye was obtained by combining nouni root (Morinda citrifolia) with the leaves of the koukoui tree (Wiswell 1978:83).

Discussion

The destruction of red feather cloaks before the first transformation provided by Kaeppler draws a strong association between the garments and warfare. Other authors have also stressed this link. Malo, for instance, commented that the 'ahu'ula were ali'i insignia in time of war and he went on to note that they were also possessed by warriors who distinguished themselves in battle (Emerson 1951:76). Ellis (1917:116-117) described the garments simply as war cloaks while Kotzebue (1833:177) described warriors garbed in yellow, red and black feather cloaks.

The association with war is also brought out strongly by the red feather covered god images. It is argued above that the feather images were used to symbolize the god Ku in both his major forms. Kaeppler
(1982:98) suggests that Kū may have been a "social metaphor for degrading others". In rank orientated societies (and Cordy 1982:42-3 would argue that precontact Hawaii was one of the most stratified Polynesian societies) there are always those of higher rank and those of lower. Kaeppler argues that elevation of one's own status was undertaken by degrading those above, and that this was the primary purpose of warfare.

A couple of ethnohistoric descriptions lend support to this interpretation. Malo (Emerson 1951:76) states that the feathers from captured ʻahuʻura were often incorporated into war god images. A similar theme is suggested by the fate of Cook's bones. Valeri (1982) suggests that Cook, associated with Lono, was seen as a rival to Kalaniʻōpuʻu, who was emphasising Kūkāʻilimoku when Cook returned to Hawaii with a broken spar. Sahlins (1981:25) argues that in death, "Cook was ... historically sacrificed as a rival, to be ideologically recuperated at a later time as an ancestor". Cook's bones were treated as those of a dead king, transforming him into an ancestral spirit (ʻaumakua) of his successor. They were cleaned and scraped and placed in a casket covered with red feathers (ibid.). Cook, then, provided genealogical protection to his victor just as the generalised protection from a feather cloak (Kaeppler n.d.) was incorporated into a rivals' god image.
This association between red feathers, status acquisition and warfare cannot be extended to explain the use of red ochre. The evidence cited above described red ochre used by priests of shark gods and on images associated with Lono in his pig-man form. The sharks who became supernatural beings did so when a person changed form after death to become a shark ancestor. The importance of the ancestors is also seen in the associations typical of Lono: land, agriculture, lizards and genealogy, among others (Kaeppler 1982:94). The Hawaiian word for red ochre, 'alae'a, has a number of meanings which include ancestry.

_alae'a_ s. Red dirt; a kind of Spanish brown dug from the earth
2. Any red colouring matter; red ochre.
alae'a _adj_ Relating to the practice of the priest offering the yearly sacrifice;
alae'a _s._ A family tree, tribe or clan

There is, however, no evidence of the 'status elevation by degradation' associated with red feathers, although there is the common thread of the importance of ancestry.
Conclusion

As in Tahiti, feathers were by far the most important source of the colour red in Hawaii. Yet unlike Tahiti there seems to be a clear break between the symbolic associations of red feathers and red ochre. It is argued that red feathers were strongly associated with destructive influences in Hawaiian society. This is brought out by the red feather cloaks' and images' association with warfare and the degradation of status which it involved. This contrasts with the use of red ochre which is associated with Lono. Although both feathers and ochre are linked through their concern with descent, the opposition of Ku and Lono is an overriding theme in Hawaiian cosmology.

The Symbolic Associations of the Colour Red

in Tahiti and Hawaii

Both island culture obtained the colour red from feathers, red tapa, some red European cloth and red ochre. Red feathers dominate in both islands, in Hawaii being used for red feather cloaks, helmets and god images and in Tahiti for feather maro, god images, and as a means of contacting the atua in religious ceremony. In fact maro were found in both island groups. The Hawaiian maro are rare, only three being
in existence (in the Bishop Museum) and have been the subject of extensive research by Rose (1978). He concludes that the feather sashes were probably outward symbols of kapu investiture. This investiture seems to have been restricted to high kapu chiefs of one important family (Keawe) in late times and may have been associated with the kapu pi'o or kapu wohi. Hawaiian maro, however, feature far less frequently in the ethnohistoric accounts than their Tahitian equivalents. The Tahitian maro were absolute status symbols, worn only by the highest arii during ceremonies at the marae. As status related garments they perhaps parallel the Hawaiian feather cloaks although it seems that the latter were more numerous.

Both island cultures used feathers to decorate their god images and it is interesting that in both cases the images referred to specific gods. In Hawaii these images represented the god Ku, in both his violent and peaceful manifestations, and in Tahiti the images represented the war god 'Oro, although there is some evidence to suggest that they may have been associated with the god Ta’aroa. In Hawaii, analysis by Valeri (1982) has made it clear that differing emphasis might be given to the various gods during ritual to reflect the domestic policy of the ruling chiefs, and the rise of the god 'Oro on the island of Tahiti might indicate a similar tendency.
In both islands items decorated with red feathers were important political symbols. In Hawaii discussion of the god Ku has emphasized his rôle in the degradation of one group so another might rise, particularly through the use of warfare. Captured feather cloaks were stripped of feathers and these incorporated into god images as permanent symbols of this domination. In Tahiti warfare provoked similar actions. A feature of the troubled political situation after the arrival of the Europeans was the acquisition of red feather maro and god images. It has been suggested that the ability of Pomare I to control the early trade in European red feathers might have given him a considerable advantage in the traditional Tahitian method of aggrandizement. Perhaps the major difference in feather use between the two island cultures was that in Tahiti small bunches of feathers seem to have functioned as a means of contacting the atua and a channel through which their power could be apportioned. Such an overt link with the atua does not seem to have been part of the Hawaiian symbolism although it is worth noting that in both islands there was a strong genealogical connection symbolized by the red feathers.

Information on other sources of the colour red is less extensive. There are clear associations between red tapa and high status individuals in Tahiti, perhaps providing a link with red feather maro,
although this cannot be conclusively demonstrated. In Hawaii red tapa was probably associated with Kunuiakea and it is argued that it may have been used in place of red feather garments.

Finally, in the use of red ochre we find a clear divergence. In Tahiti there is some evidence to suggest it was associated with 'Oro, although the reports are too meagre to be sure. In Hawaii, however, red ochre seems to have been connected with Lono, hence forming a major contrast with Ku symbolized by red feathers.

**Easter Island**

The Dutchman, Jacob Roggeveen discovered Easter Island on April 6 1722 and the European-islander interaction was characteristically violent. Although a number of other explorers visited the island, including the Spaniard Felipe Gonzalez, Cook and much later Beechey, their duration of stay was short so that Easter Island does not have an extensive range of early ethnohistoric records. The following discussion is therefore somewhat limited. Later ethnographers, particularly Métraux (1940) provide excellent records, but their fieldwork was conducted a long time after European contact. Because discussion must rely in large measure on these later records the conclusions
must be somewhat tentative.

Tapa

Tapa cloth was used to make cloaks (among other things) and Métraux (1940:218) states that the painted versions of these (kahu or nua) were status related. The length of the cloak was important, that of a chief often falling below the knee. Roggeveen provides a brief description of the cloaks,

their covering cloths round the body was a field-plant, sewn together 3 to 4 thick, but neat and tidy, which material (as it is called in West India) is a sort of piet; further that the earth of the land (as we saw it in various places) was red and yellowish, which being mixed with water they then immerse their clothes in it and allow to dry, which is evident because their dye comes off (Sharp 1970:96).

It is unclear from Roggeveen's account whether he actually saw the red and yellow earth being applied to tapa (ibid.:96 footnote), but Métraux (1940:218) suggests that Roggeveen mistook the yellow and orange stain of turmeric for the earth dyes. He goes on to note that, "some cloaks were particularly famous for their quality and beauty of their stain". The two journals from Gonzalez's voyage make mention of the Easter Islanders wearing coloured cloaks (Corney 1908:93,127).
There is limited mention of trade for European red cloth. Cook when he visited the island on March 11, 1774 noted a man wearing a European red silk handkerchief (Beaglehole 1961:242). Sometime later in 1824 when Beechey visited the island he noted that red Indian cloth was being used in place of tapa which was very rare (1831:53).

Body Painting

Turmeric features in a number of accounts describing body painting. Cook, in his summary of Easter Island comments:

The Men are coloured in this manner [tattooing] from head to foot, the figures they mark are all nearly alike only some give them one direction on the body and some another according to fancy, they also make use of Red and White Paint, to their faces and sometimes to other parts of their bodies, the former is made of Tamrick but what the latter is made of I know not (Beaglehole 1961:351).

Beaglehole notes that Cook was mistaken in attributing the red colour to turmeric and suggests that it probably came from a red earth pigment. Forster supports this assertion describing women with their faces stained a reddish brown by the "ruddle" over which they had laid a bright orange turmeric root, or streaks of shell lime. Analysis of turmeric, however, suggests that Cook's original description may be more
correct. Turmeric mixed with burnt shell or coral (CaO) turns a bright red colour and this reaction may be acknowledged in Churchill's (1912) definition of the word *meamea*: red, ruddy, rubicund [inclining to redness], scarlet, vermillion and yellow. Similarly *hakameamea* is defined as redden and to make yellow. As Churchill comments when discussing the word *egaega*, both red and yellow seem to fall easily into a single class distinction.

Gonzalez provides another interesting account of body painting in his description of young women:

> They are all, as a rule, of agreeable aspect and shade of colour, which they modify by means of a very fine pigment of vermillion or red lead, with which they daub their features, although they do not all make use of it. The principal men, or those in authority, paint the whole of their bodies with some herb, or liquor, having a bright red hue, drawing great numbers of lines, pyramids, cocks, and most hideous masks [*rostros feisimos*], but all disposed in such order and symmetry that it would require the most dexterous pencil to imitate them (Corney 1908:98).

Again there is some doubt as to the actual source of the pigment used, although the description "some herb or liquour" might imply the use of turmeric. Gonzalez is certain that turmeric was grown on Easter Island describing it in a garden plot with several other typical Polynesian cultigens, including sweet potato, taro, yams, and gourds (Ccrney 1908:123). Of more
significance is the description of the designs painted on the bodies of the principal men. Such lines would appear to be more in the nature of tattoo marks, and are taken as a description of such by Métraux (1940:244), yet the colour of the designs is clearly stated as bright red. Whether this suggests red tattoo marks (which would appear unlikely), designs painted on in red pigment, or simply a mistake in translation remains unclear. Gonzalez is clear, however, on the colour preference of the Easter Islanders, stating that the principal men and women show a particular desire for everything of a bright red colour, but despise black (Corney 1908:98). He goes on to note that young people did not have lines painted over their bodies, but had only a design traced around their neck.

Métraux (1940:336) summarizes the evidence for body painting and concludes that both men and women painted their face and bodies a variety of colours using red, yellow and dark dyes. He suggests the red pigment (*kiea*) was produced from the red brown weathered and mineralized tuff found in several places on the island. The white was also obtained from an earth pigment, while the black came from charred ti leaves mixed with sugar cane juice. Yellow or orange pigment came from turmeric (*Curcuma Longa*) which the Easter Islanders called *pua*. Métraux (1940:237) describes how the grated root was wrung out in a piece of tapa, and the resulting liquid allowed to settle,
then decanted to remove the starch. The water was allowed to evaporate and the resulting powder was mixed with sugar cane juice to form a body paint.

Métraux cites the first missionary to come to Easter Island, Eyraud, as stating that only women used red colours whilst men used a number of dyes (ibid.:237). In a ceremony to invoke rain, Métraux (ibid.:330) describes *ariki paka* (noble priests) as being painted on one side black, and on the other red with a stripe down the centre. Similarly the man who found the first egg during the annual Orongo birdman ceremony had his head shaved and his face painted red and black (de Lapelin cited in Métraux 1940:337). When Beechey (1831:46) first arrived on the island he met men painted black, red, black and white, and red and white. He singled out two individuals in his description both painted entirely black, who made way for two other islanders bedecked with albatross feathers whom Beechey identified as chiefs.

Although there are no specific accounts, it would not seem unreasonable to suggest that body painting by women and some men occurred on special or ceremonial occasions. Women may have used red pigment, either from turmeric or a type of red ochre, to colour their faces while men may have indulged themselves with a wider variety of colours. If the description from Gonzalez’s voyage is correct, high status men also made use of red pigments, not only to colour their faces,
but also to paint designs over their bodies. Only a little information exists on the associations of multiple colours. Métraux describes the kahu standard, an insignia of rank, as consisting of three to five white and black sticks, with cocks' feathers (presumably red) stuck into the end of a pole (1940:135) and the use of red and black body painting in ceremonial occasions is mentioned above.

**Feathers**

There is only limited information available on feathers in the contact sources; however Métraux has considerably more to say on the subject. Forster (1777:589) mentioned that the "aree" (presumably ariki, which can be very broadly defined as nobility) wore a long, pluming black feather headdress, and Beechey describes two individuals whom he describes as chiefs wearing a headdress of (presumably white) "pelican" feathers. Métraux provides a description of nine types of headdress, the most interesting of which are;
iraukiebie Five to six superimposed coils of black feathers which was the chief's insignia of high office and presumably similar to that observed by Forster.

hau kurakura A small crown of red feathers worn by warriors in time of war.

haupeu peu-teu-ki A headdress of long green and black feathers worn by dancers.

hau teatea A white headdress made from the feathers of white cocks (Métraux 1940:223).

The white cock feathers were particularly esteemed and kept in special gourd or banana leaf containers (ibid.:225). Métraux (ibid.:130) relates a tradition discussing the mana of the ariki-mau (supreme chief, but largely a position associated with high prestige and little political influence). The son of an ariki-mau, Rokoro-te-tou, was said to possess an over abundance of mana and this caused sharks and seals to overrun the island and eat people. The sharks and seals, together with white fowls and a white feather headdress were said to symbolize his power. The white feathered cock also featured in a ceremony to remove a curse of an enemy (ibid.:325).

White seems to have been a colour associated with tapu while black was associated with the ariki. Métraux (ibid.:327) describes small piles of stones (piphereko), with the topmost painted white which marked tapu places. They were to be seen when a dead
body lay exposed near an ahu (ibid.:116) or when a rahui was in effect (ibid.:328).

Statues

White painted stones were also described in association with the famous Easter Island statues. Roggeveen (Sharp 1970:98) described one statue as having a basket balanced upon the head in which lay heaped white stones. The journals of Gonzalez's voyage include a description which states, "there is a small cavity on the upper surface of the latter [topknot] in which they place the bones of the dead," (Corney 1908:93) and while Forster, in his description of the statues, makes no mention of white stones or bones, he does describe the red scoria cylinder placed on top of the statue, which he likens to the headdress of an Egyptian divinity (1777:567). These cylinders were quarried from the volcanic cone at Punapau, and according to Mëtraux (1940:303) are "covered with meaningless designs" similar to those found on the wall of the ahu Hanga-te-tenga. Skjolsvold (1961) has reviewed the various functional interpretations offered for the large cylinders and concludes that Mëtraux's proposal, that the cylinders represent the hair tied into a topknot (pukao), is the most probable.
The statues themselves may have been painted red and/or white. Métraux (1940:294) states that the statues on the _ahu_ at Vinapu were painted red as was the statue called Haka-nana-ia from Orongo. Archaeological excavations at Vinapu reported by Mulloy (1961:109) confirmed that some statues were painted, traces of red and white diagonal stripes being reported beneath the chin and across the body. Heyerdahl (1961a:462) notes that the Haka-nana-ia statue (removed on board HMS _Topaze_ in 1868, and now in the British Museum) was one of the smallest and best preserved statues on the island. The statue was discovered inside a stone house at Orongo and was made from a basalt different to the consolidated volcanic tuff normally used for statues. Its sheltered position meant that the surface painting was still intact; the face and back had been painted white, and the body was decorated with low relief carvings painted red (Heyerdahl 1961b:74). Heyerdahl (1961a:468) also mentions some small badly weathered red scoria statues.

One can speculate that several of the completed statues when raised on the _ahu_ may have been painted. Any pigment, particularly if it was a coloured earth is unlikely to have been permanent so perhaps the statues were painted for particular ceremonies. It is also conceivable that some of the petroglyphs found on Easter Island were painted. Some of the _ahu_ themselves featured a line of red scoria curbing along
the leading edge of the central platform. The platform itself was cobbled in white coral lime covered stones (Seelenfreund pers.com.) taken from the sea.

Painting

The most detailed study of painting on Easter Island has been made of the ceremonial village at Orongo. Here colours including dark blue, black and yellow as well as the more predominant red and white have been recorded. Ferdon (1961:221) summarizes the importance of the site, stating that Orongo acted as a pan-Easter Island socio-religious centre which was linked to a bird cult in association with the god Makemake during the 18th and 19th centuries. Ferdon provides a brief description of the site before excavation,

Previous to excavation, Orongo could be described simply as a long series of grouped stone houses having thick walls, corbeled roofs, and tunnel-like doorways which faced the sea. At the narrow southern end of the ruin, a cluster of rooms radiating from a naturally formed, miniature court appeared to form a specialised area. Bounding two opposed sides of this court were groups of large natural boulders decorated with numerous low relief and pictographic representations of bird men and a face said to represent the god, Makemake (1961:222).
The houses at Orongo, particularly those in good repair contained a number of paintings. These were originally recorded by Routledge (1920) and the details are summarized by Ferdon (1961). Paintings can be grouped under three motifs: those connected with birds; those of the dance paddles, including the weeping eye motif associated by Ferdon (ibid. 253) with the rain god Hiro; and boats including copies of European square rigged vessels. Ferdon (ibid.: 251) uses some fragments of tradition to suggest that the god Makemake is associated with the colour red in these paintings; traditions which involve Makemake copulating with red earth to form the original man and woman. Routledge (1920) describes a number of paintings of boats at the site, including those modelled on European ships, as being painted in red and white. Other paintings on Motu nui (the island from where the first egg of the sooty tern had to be collected) are described by Métraux (1940: 336). Large heads carved in mud and painted red, adorn caves used while awaiting the arrival of the first egg. Such faces are linked by Ferdon (1961: 252) to the god Makemake. Birdmen are also associated with Makemake, but Ferdon suggests that they may originally have been associated with Makemake's companion god Hau.
Burial

The red and white colours found in the paintings at Orongo also make their appearance in the archaeological evidence for Easter Island burial practices. McCoy discusses a number of burial types. Bodies were placed on destroyed ahu either on the ramp amongst the loose rubble or in prepared cists. Other bodies were placed in an ahu poepoe, a boat shaped structure thought by Routledge to be a late development.

Archaeological excavations have been undertaken at the Ahu Kihi Kihi Rau Mea (site 8-374), an ahu with a single platform with tombs built into the landward side. Four of the tombs (A, C, F, and M) revealed red scoria and white coral fragments closely associated with the burials (Seelenfreund n.d.). Seelenfreund goes on to note that tombs on the northeast coast of the island contained more red scoria and coral than tombs on the south and northeast coasts. She links this to the tradition that the Miru descent group owned the west coast of the island and suggests that red scoria and white coral were placed in Miru tombs.

Cremation formed another method used on Easter Island to dispose of the dead. McCoy (1976:102-3) notes that the earliest cremation pit from Vinapu I is dated to 1228 ± 200 AD and suggests that there is evidence that the practice continued into the late period, although it is not reported in historic times.
Archaeologically, cremation sites are recognised by scatters of small beach pebbles (*kikiri*), obsidian flakes and pieces of red scoria, often forming low mounds. Another type of burial site consists of a slab lined pit, which may or may not be associated with the pebbles, obsidian and scoria (ibid.:103).

**Discussion**

Analysis of the symbolic significance of colour in Easter Island is handicapped by the nature of ethnohistoric information. Massive de-population in the 19th century (probably the most devastating anywhere in Polynesia) meant that by the time the European ethnographers arrived on the island, much information had already been lost. The sources which did survive provide little information on actual colour use and the discussion above relies heavily on the 20th century ethnographic work of Métraux. The conclusions drawn below must therefore remain tentative.

It is clear that cloaks worn by both men and women were status related, there length and probably fineness of colour being important. It is more difficult to be sure about body painting. The use of red pigments, particularly by men to paint designs over their bodies seems to have been significant, although there is insufficient contextual evidence to suggest more than that body painting featured at ceremonial occasions.
Métraux clearly associates red feather headdresses with warriors while black feathers are associated with a chief's high office, and white feathers with mana. These associations can only be understood by an appreciation of the rather complicated Easter Island social structure at European contact. As Bellwood (1978a:365) states, Easter Island society consisted of a small number of independent warring tribes under the control of an unstable warrior class. The warriors (matatoa) seem to have risen to power at the expense of the ariki, the traditional leaders who could trace their genealogies through the miru family. The matatoa were associated with the religious cult of the Manutara (sooty tern) and the god Makemake and it seems likely that this cult rose at the expense of the ahu stone images. The destruction of the ahu and statues, together with evidence that attempts were made to cover the ahu with mantles of stone, suggests to Mulloy and Figueroa (1978:122) that this represents a revolt against the religious pattern associated with the statues, and the ahu, and possibly the social class they represented (the ariki). McCoy argues that the ultimate cause for the conflict which led to the overthrow of the old order might have been population increase in the face of scarcity of water and environmental degradation (McCoy 1976:144).
Even before the conflict, however, social structure does not seem to have been very complex. The geographical distribution of the *ahu* (primarily along the coast) suggests to Mulloy and Figueroa (1978:134) that they were the product of semi-independent kin groups who were not under any island wide authority. The statues probably represented "famous chiefs or priests whose spirits had entered the ranks of the tribe's tutelary deities" (Métraux cited in Skjolsvold 1961:377) under this system. The fact that at least some of the statues were painted might suggest that there was a link between body painting and the chiefly or priestly status of some ancestral deity.

Even after their destruction, the *ahu* seem not to have lost all their importance, for there is ample evidence of their use as later burial sites. The red and white colours associated with the statues reappear in the paintings at the Orongo Village and on the island of Motunui. These sites are where the bird man ceremonies were held, and presumably owe their rise in importance to the ascendancy of the *matatoa* class. Goldman (1970:96) suggests that the warrior class not only acquired political power on Easter Island, but had also sought and gained an ascendant religious position as well. The adoption of the red and white colours in the majority of the Orongo paintings, the use of red feather headdresses by the warriors and the red body painting of the principle men all suggests that the
matatoa had adopted a ready made colour symbolism which had been used in connection with the ahu statues and burials. The use of red and white contrasts with black, the colour Métraux gives for the headdress which symbolized the chiefs high office. The preference for the matatoa-inspired red over the chiefly -(ariki)-inspired black would also explain a statement by de Agüea e Infanzó-h on Gonzalez's voyage that the people of Easter Island liked everything of a bright red colour but despised black (Corney 1908:98).

Conclusion

Colour, through the medium of body painting and dress seems to have played an important role in Easter Island society. One suggestion, put forward by Perdon (1961:251), is that the colour red in the Orongo paintings symbolized the god Makemake. His traditional evidence, involving Makemake copulating with red earth to form life is far from conclusive. From the evidence of burials and statue painting it seems more likely that the colours red and white were associated with ritual connected with the ariki class, statues and the ahu. With the rise of the matatoa, the overthrow of the statues and the destruction of the ahu, the colours were transferred to the birdman cult, the worship of Makemake and an association with the warrior class.
Although the first European voyagers to discover the Marquesas were Mandana and his chief pilot de Quiros (July 21 1595), their journal did not record any mention of colour (Markham 1904). It was left to Cook, during his second voyage to make the first reference to colour, notably red feathers. Cook (Beaglehole 1961:369) complained that inflationary prices paid by one of his crew in red feathers ruined his ability to trade for produce. Some indication of the demand is given by Forster (1777,II:23) who notes that while iron was not sought after, "some large hogs were purchased for pieces of the mulberry-bark, covered with red feathers". Besides pigs, headdresses and ornaments were given in exchange for red feathers. Handy describes the pa'e ku'a headdress, typical of Nuku Hiva, as itself consisting of red and green feathers attached to a coconut sheath and bark cloth background (1923:284). Local informants told Handy that the red feathers were obtained from the manu ku'a, a bird which formerly inhabited Nuku Hiva but was now extinct. Handy also notes that the pa'e ku'a referred to a headdress of red cocks' plumes. Linton points out that a species of kuku has a red cap of the same shade as the feathers in the pa'e ku'a from Hiva Oa. Linton (1923:435 citing Stewart) goes on to note that a priest
(tava) on Nuku Hiva was seen to wear red and white feathers in bunches over his forehead and temples.

It is perhaps significant that "no other explorer mentions red feathers. Dening (1980:16) argues that the Marquesans, when they first met the Europeans tried to make them manageable by treating them as atua, "men gods from beyond the sky". He goes on to note that to the Enata (the Marquesan people), the tapu of an individual, an animal, the vegetation, mountains, sea and soil were linked in a relationship to the haka'iki (chief). Through the haka'iki this relationship continued to the atua, the gods, and in a line which "ran back to the beginning of time" (ibid.:53). Red feathers from the European atua would seem to have fitted easily into an existing Marquesan symbol associated with the haka'iki.

To the Enata, a red cloth made of banyan bark, called a hiapo, was tapu to sacred personages: tama haka-iki, first born males (Handy 1923:41); chiefs; priests (ibid.:280) and warriors (ibid.:128). Warriors on Nuku Hiva wore a garment called the kahu ku'a (ibid.:128), "a sheet of red cloth tied around the neck in front and falling over the shoulders and back like a cape"(ibid.:282). A fuller length version was called kahu ma'o. The importance of red banyan cloth in traditional Marquesan society meant that, like the red feathers, European red cloth was sought after by the Enata. Marchand, who sighted the islands on June 12
1791 (Buck 1953:56) quickly formed the conclusion that ribbons, red cloth and other "trifles" were in greater demand as trade items than iron tools (Fleurie 1791:127). Krusenstern arrived at Nuku Hiva on May 6 1804 (Buck 1953:70) and records the visit of the "king" (presumably a haka'iiki) to the ship. "I led him to my cabin, and gave him a knife and a piece of cloth about twenty ells long, which he immediatly bound around his loins" (Krusenstern 1813:114). The Russian cloth was evidently seen as suitable material from which to fashion a hiapo. Krusenstern was prepared for the demand for when the Englishman Edward Robarts, who had been living in the Marquesas since 1798, swam out to the ship, an officer gave him "a bit of red cloth, a few fish hooks & some nails, he thinking I was a native" (Dening 1974:129). Europeans quickly learned to exploit the tapu associations of the red cloth. The Russian explorer Lisiansky was able to place a tabu on his ship to allow a dinner break by hoisting a red flag in the yards (1814:68-69). Red coloured European textiles also replaced the more traditional cloth in the production of ceremonial garments for priests, Handy (1923:227) recording an instance where a priest wore a long white mantle overlain with a shorter mantle of red imported cloth.
Red and Black

For many categories of Marquesan artefact there were no more desirable European equivalents. The first explorers commented upon a number of Marquesan structures and artefacts which featured colours in various combinations. Black and red sennit (coconut fibre) cords were used to decorate the poles of structures used to house corpses and a similar cordage was used to bind the corpse (Bennett 1840:328). Bennett goes on to describe large public buildings in the valley of Vaitahu, housing drums and *poedishes* (ibid.:317). This was probably a *fae tukau*, a sacred structure erected in a *me'a* (Linton 1923:294), for Bennett notes that it was *tapu*, at least to the Enata. Again the frame is described as bound with red and black sennit. Linton (ibid.:290-291) suggests this form of decoration was applied to all houses, "for the attachment of the front posts to the stringer, and of all the cross poles of the roof to the rafters". In addition Bennett records that boards set up at the entrance to a house were covered in white tapa and then decorated with white and black sennit. Such boards were used to ornament small buildings erected to honour the children of a chief (ibid.:321).

In addition to sennit Linton (1923:441) describes a wooden image covered with white tapa which in turn has been painted with designs in red and black. He suggests that the roughly finished back of the head
of the figure might indicate that it was attached to the beam of a house in the me’a. Handy describes other red coloured images placed on the ridge pole of the fa’e tukau (1923:232). These images were formed of bamboo wrapped in tapa cloth in the shape of a bird and were dyed with the juice of the fruit of the mahiha (Handy gives no species name). The images were called manu ku’a after a mythical bird of red plumage. Between the manu ku’a were placed three small pieces of sharpened wood, called humihuki, with their ends bound with red and white cloth. These ornaments indicated that the house was tapu (ibid.:233).

The majority of Marquesan houses were erected on stone platforms termed paepae. Linton (1923:284) states that many of the platforms had red stone ke’etu which were large rectangular slabs of cut stone used to face the front of the elevated house floor. Handy (1923:118) describes the paepae on me’a as being faced with ke’etu.

A clue to the colour symbolism involved these buildings is provided by other black coloured items. Krusenstern (1968:152) comments that men generally appeared very black, being tattooed and rubbed with a black pigment. Thomson (Craig 1980:103) makes similar comments and notes how the tattoo marks were interwoven with the system of tapu. Black feathers formed part of the headdress worn by warriors, according to Bennett (1840), and a prophet (presumably a tau’a), according
to Robarts (Dening 1974:77). Black would seem to be associated with things male, and black and red together, males in a *tapu* context.

Dening (1980:73) provides an alternative interpretation for the colour black based on his analysis of the *meie*, a group whom he would place as a distinct class of commoners. To Dening, 'black' was a synonym for what was 'common'. Those without land, those who worked the shores and did menial tasks that took them into the sun which darkened their skins were 'common' and 'black'. They stood apart from those who would protect themselves against the sun in their house or could bleach their skins with *papa* *ØPhaseolus amoenus* juice in preparation for the feasts.

While women certainly sought to whiten their skins with various vegetable preparations, Dening's categorisation of a ranked society divided into *meie* and a *tapu* elite is challenged below. His discussion of black seems to be in opposition to the whitening of skins before ceremonial occasions and this opposition does not seem to be supported in the contact literature. Dening's work is not extensively referenced so it is difficult to check his hypothesis. The association between male status and *tapu* is more clearly defined so must be accepted in preference.
It is nowhere stated that houses were necessarily male and tapu, but this would not seem in any way unlikely. Tapu associations with houses are the Polynesian norm; Prickett (1982a:114) for instance, in his study of Maori dwellings notes that, "the concepts of tapu and noa, which governed men in the wider world, were nowhere more vital than in the close physical confines of the dwelling".

Although Bennett described red and black sennit applied to a structure designed to house the dead, Handy describes such places decorated with the colours red and white. Wooden poles cut from the fau tree and decorated with white and reddish cloth marked out the tapu area around a priest’s house (Handy 1923:232) while similarly coloured ribbons of banyan cloth decorated the taha tupa pa’a, the platform of the dead (ibid.:116). The death of a priest, particularly the inspirational priest (tau’a), mouth piece of the tribal god, required extra rolls of sacred white and red bark cloth to be placed in the burial house. The burial house itself might be surrounded by a stone wall topped with whitened stones (Bennett 1840:331). Similar walls were used to mark other tapu activities (for instance men making a fishing net ibid.:338). Cut and stripped fau stakes bound only with white tapa and plaited coconut leaves were called koufou and were signs of tapu (Handy 1923:235), and Bennett (1840:317) notes that the white cloth pennants on public buildings
indicated that the place was tapu.

A number of early explorers commented that their first encounter with the Enata often involved white tapa cloth. Fanning anchored in Resolution Bay, Tahuata on May 21 1798 (Buck 1953:65) and described how a large canoe came out to meet him, crewed by some thirty of the Enata including an old man who "quickly displayed a white flag together with a green branch" (Fanning 1924:65). One of Vancouver's ships, the Daedalus under Lt.Hergest had visited Tahuata some years before Fanning in 1792. Again the account of the first encounter with the Enata mentions white tapa.

One of the natives swam off with their usual ensigns of peace, a green bough, wrapped in a white cloth; this he threw into the ship, and immediately returned to the shore (Vancouver 1798:147).

Lisiansky (1814:73) records a similar incident, as does Porter (1823:77) who upon seeing the Enata's white 'flag', "caused a similar emblem of peace to be exhibited". While it is probable that by the date of Porter's visit (23 October 1813) the Marquesans knew of the European association between peace and a white flag, earlier encounters were in terms of Marquesan, not European symbolism. It has been argued above that the Europeans were initially seen as atua and were therefore tapu. White cloth featured in a number of ceremonies connected with the atua. Handy (1923)
claims that temple assistants wore white cloaks and notes that on Nuku Hiva cleaned bones of the dead were wrapped in strips of white cloth. Bennett describes how a chief's hair was bound up with white tapa (1840:305), the head of every person, and therefore more especially chiefs, being sacred (Handy 1923:258). White would seem to be an important symbol employed during transactions with, or in connection with, tapu.

An interpretation of the white/red and black/red colouring of artefacts would see red expressing the elements of both the black-equals male, warrior tapu, and white-equals tapu, atua symbolism. Under this interpretation it would not be surprising to find that the gorget-like ornaments described by Cook (Beaglehole 1961:373) and Bennett (1840) were worn primarily by priests (Krusenstern 1813:373) and leaders (Forster 1777:116).

**Body Painting**

Colouring the whole or part of the body was mentioned by a number of the explorers who visited the Marquesas. The pigment used was usually turmeric, although coloured earths were used on occasion. Thomson (Craig 1980:11) states that turmeric was cultivated so that persons might besmear themselves before feasts and important occasions. Women, chiefs, but not ordinary males painted their bodies with yellow turmeric according to Bennett (1840:308). Both Fanning
(1924:129) and Lisiansky (1814:86) confirmed that women besmeared themselves on ceremonious occasions but Lisiansky also noted its use by men. Linton (1923:421) concluded that both sexes painted their entire bodies yellow. Handy, however, was more specific. He stated that a group known as the ka’ioi, adolescents of both sexes who were allowed considerable sexual freedom, were characterised by their excessive use of turmeric (which he inaccurately describes as saffron). The colour was produced by grating the root of the ena (or eka). The stain could be produced from either the baked or unbaked root, however that from the baked root, ena moa, was forbidden to all women in the Marquesas and to all commoners on Ua Pou. This statement is particularly interesting when it is considered in relation to the description of the ka’ioi given by Garcia (quoted in Handy 1923:41).

Among them, there were even a number of true buffoons (saltimbanques), young men and women, more embalished still than others, and especially oiled and saffroned with a kind of yellow pigment which made them demons as red as fire.

The contradiction implied in Garcia’s description; yellow pigment producing ‘red devils’, and the difference between baked and unbaked turmeric is easily explained. The results of some simple experiments show that turmeric is an acid base indicator. While it retains its characteristic yellow colour under acid
conditions, at a pH greater than seven it turns red. Other experiments indicate that if turmeric is heated the chemical which produces its colour, curcumin, undergoes a change from yellow to red. The difference between baked and unbaked turmeric may have been apparent in its colour and this would help to explain its restriction in use.

Several substances with a basic pH were available to the Marquesans, the most obvious being burnt shell or coral (calcium oxide). Another potential source was the various preparations used to whiten the skin before ceremonies. Both Thomson (Craig 1980:23) and Robarts (Dening 1974:59) described how women painted themselves with a vegetable preparation to whiten the skin. Handy (1923:292) stated that bleaching the skin was universal among women and the *ka'ioi* before festivals. Juices extracted from the leaves of the *akou* tree (Handy does not give a species name) the *papa* vine (*Phaseolus amoenum*) or the *niou* (*Siegebeckia orientalis*) might be used.

The evidence for the use of earth pigments is not great. It has already been mentioned that men in general added to the dark colouring produced by their tattoo by rubbing themselves with charcoal (Krusenstern 1813:152). Rubbing with red ochre is mentioned by Handy (1923:274) when describing a woman performing spells for revenge. Both Handy (1923:241) and Dening (1980:73) mention that human sacrifice victims had
their faces or bodies smeared with red pigment, presumably indicating their tapu status. Neither author makes it clear as to the actual source of the pigment.

Discussion

The use of the colour red in contact Marquesan society has been discussed under four divisions: European items, red and black combinations, red and white combinations, and body painting. Running through each of the four there is a series of common associations. Both the red feathers and the red European cloth were, at least initially, associated with the European atua, and were used by sacred personages like chiefs, priests, warriors and first sons. Red and black was associated with the sennit lashings of buildings, and black in general with males. Red or red and black coloured images were set on top of special tapu houses. White and red coloured fau stakes clearly symbolized tapu-areas, and white cloth alone was connected with ceremonies involving the atua. Finally body painting, with either a red or yellow pigment was practised by women and some men, possibly chiefs, at feasts and other ceremonies. The feasts, koina, were closely linked to the hakaʻiki. According to Dening (1980:57) each major event in his life, - his birth, his naming, his circumcision, his betrothal, tattooing, and marriage to mention a few, was recorded
by a koîna. The preparation for such a feast was marked by a tapu as were other major social events like the making of a canoe, the weaving of a fishing net and the preparation for battle.

The common thread through all the categories of colour use is this association with tapu, defined by Dening (1974:25) as,

"a social category out of which flowed concrete social actions and rights. Certain men were tapu temporarily or permanently. Their permanent tapu or sacredness meant that a reverence peculiar to objects which should not be profaned was owed them."

Dening feels that the tapu system extended into a class system, differentiating a tapu class (those closely involved with the chief in all social activities) from the commoners, meie (Dening 1974:203 1980:73). The meie, to Dening, are physically distinct, with different diet, codes of beauty and rights of property. Such a distinction is at odds with the views of Handy (1923:38-39) who argued that although there was a certain group who acted in communal religious activities, this affected a man's position "in the social scale only indirectly, as it brought him wealth" (ibid.:39). He sees a distinction based only on political leadership of the haka'iki and differential wealth among families. Certainly, as Dening would argue, groups of individuals would band together for
particular tasks, thereby becoming temporarily tapu, but it is difficult to see these groups as a permanent class.

Conclusion

The symbolism running through the use of the colour red in the Marquesan society at European contact was concerned with tapu and its relationship with the haka'iki. More specifically red feathers were the perogative of chiefs, and red garments were connected generally with sacred personages. Red or red and black colours were connected with tapu and buildings. White, and red and white were connected with tapu and the atua. Finally body painting with turmeric, producing yellow or possibly red was connected with tapu of ko'ina and other ceremonious occasions.

New Zealand

Introduction

Of all the island cultures in East Polynesia the Maori has received the most study, so it is not surprising that the significance of the colour red has already attracted some attention. Shawcross, in her work on the protohistoric Maori of the Bay of Islands (1769-1840) devotes several passages to a discussion of the significance of the colour red, particularly the
FIGURE SIX
New Zealand
part it played in Maori/European interaction during the first period of contact.

The majority of authors agree that iron was the most desired trade item by the 18th century Maori above European garments, cloth, glass beads, looking glasses, and other small articles. However, as Shawcross points out, when the *Adventure* was in Queen Charlotte Sound in April 1773, the ship's carpenter painted several Maoris with vermillion paint, and the enthusiasm this induced led to Bayly commenting that in addition to spike nails, red articles were the things most valued by the Maoris (Shawcross 1967:74). Shawcross notes several other examples of the very favourable reception given to red European articles and argues that while the trade in these items was of a much smaller volume than iron, it was probably of a similar value. Shawcross suggests that this interest in the colour reflected its use by the protohistoric Maori in two important areas. Firstly the colour was used to ornament valued possessions like war canoes and the clothes and weapons of important individuals and secondly it was used to adorn members of the community for public occasions (ibid.:72). The red articles bought by the Europeans could easily be adapted into existing Maori categories of ornamentation. Red paint replaced red ochre, red wool replaced red feathers, and red cloth could be used to form cloaks.
The theory that only those trade items which could fit easily into established traditional categories were sought has recently been restated by Butts (1981:79-80) in his study of protohistoric Maori material culture. Butts suggests that European items were adopted if they performed the function of the traditional item more efficiently, with a longer useful life or if the material from which they were made was easier to work.

**Clothing**

A number of early explorers recorded that the red cloth they gave as a trade item was converted into cloaks by the Maori. At Dusky Sound Cook had a red baize boat cloak made for a chief (Beaglehole 1961:117). The item was evidently valued, for when presented with the cloak the chief gave his whale bone patupatu in return (Forster 1777, I:141). In his summary of New Zealand, Forster (ibid., II:519) goes on to comment "half a yard of broad cloth or red kersey" was one of the best trade goods in Queen Charlotte Sound and was valuable enough to secure a "teeyhee" (tiki). Banks (Beaglehole 1962:412) records a transaction between a Hawkes Bay Maori and Cook where a dog skin cloak was exchanged for a piece of red baize. It seems likely that the baize was destined to replace the more traditional garment as a cloak. Certainly when Bellingshausen visited Queen Charlotte Sound in
1820 he noticed that the Maori were wearing woven pieces of red or white cloth over their shoulders as cloaks (Barratt 1979:41). Monneron notes a particularly interesting episode where a chief was presented with a jacket and some red breeches. The chief put on the jacket, possibly interpreting it as a cloak, but did not put on the breeches, keeping them under his arm (Ollivier and Hirgley 1982:154). Finally Le St Jean Roux (from du Fresne’s voyage of 1772) describes how an old chief coveted the red cloak he wore and was induced to come on board the *Mascarin* in the hope of acquiring it. Other explorers make mention of red cloth in transactions with chiefs. De Surville, for instance, records fine red cloth being given to a chief he met upon arriving in New Zealand (ibid.:23). Marsden (Elder 1932:103) records giving a red and white print cloth to the son of a chief at Whangarei and Nicholas (1817:107) notes how Marsden used red cloth and iron implements to pay those who worked his ship and the chiefs he met.

Banks describes a particularly interesting cloak at Anaura Bay. Two men, both wearing cloaks, came alongside the *Endeavour* and were quickly identified as chiefs by Cook’s crew. One wore a cloak of dog skin strips, but the other wore a cloak “covered almost entirely with small tufts of red feathers” (Beaglehole 1962:415). Beaglehole comments that the cloak, a *kahukura*, was a very distinguished garment.
They certainly must have been rare, for no similar garments are elsewhere described. The only other traditional red cloaks mentioned are mats covered with red ochre worn by warriors. These are described by Nicholas (1817, I:131) and Earle (1966:137).

The war mats also served a protective function so it is unlikely that the red cloth obtained from the Europeans was used to replace them, although it may have been used to form an outer covering. It seems more likely that the European cloth was either used directly for cloaks, perhaps in imitation of the very rare and presumably prestigious cloaks Banks reported, or as a source of material with which to decorate traditional garments. The later is suggested by Angas (1847:324) who notes that red wool was used to replace kaka feathers. Perhaps the best summary of the way the Maori looked upon red cloth is reported by Cruise who records a discussion with the chief Mauwhera who, upon requesting a present of a red night cap and a pair of spectacles, remarked that these must be the insignia of a great man in England (1974:57-8).

**Body Painting**

Cloth was not the only coloured European trade item to draw an excited response. There are a few recorded instances where red paint produced a similar reaction. One such incident is related by J.R. Forster who describes how the artist Hodges noticed that his
female Maori subject had her face coloured with ochre. He proceeded to daub her face with his own vermillion which drew favourable comments from her companions (1778:591). Le St Jean Roux also found cause to comment on the interest shown in his red paint by the Maoris he encountered. He suggests that this might be attributed to the dingyness of their own colour (McNab 1914, I:369). European red paint was identified as an excellent substitute for red ochre, commonly used as a body paint.

Body painting was often observed throughout New Zealand by the early explorers yet their records suggest that there were restrictions on who might use the pigment, and when it might be applied. From the wealth of ethnohistoric material available it is clear that the women often painted their heads, faces and sometimes bodies with a mixture of oil and red ochre. By and large the Europeans did not regard this practice favourably, for reasons made apparent by this quote from Banks,

they are very fond of painting themselves with Red Ochre which they do in two ways, either rubbing it Dry upon their skins, which some few do, or daubing their faces with large patches of it mixed with oil which consequently never dries: this latter is generally practised by the women and was most universally condemned by us, for if any of us had unthinkingly ravished a kiss from one of these Fair Savages our transgressions were wrote in most legible Characters on our noses.
At Anaura Bay Banks visited the settlement of a group of Maoris and commented upon the fresh ochre and oil smeared upon the women and children. Males apparently painted themselves less often, but Banks does describe one male individual vigorously rubbing himself with dry rather than oily ochre (Beaglehole 1962, I:417). Le St Jean Roux (McNab 1914, II:375) confirms that the women and youths that came alongside the ship were daubed with red ochre, but comments that they were painted "right up to their faces", perhaps implying that they were painted all over the body. J.R. Forster, in his recently published journal, provides a detailed description of the appearance of some Maori women he met at Queen Charlotte Sound, but who he thought had recently come from the North. Besides a white feather placed in the hair, shell or greenstone pendants and blue tattoo marks on the lips, they had their faces painted red and the same greasy pigment mixed into their hair (Hoare 1982:292).

The practice of women smearing themselves with ochre and oil must have been relatively common, for many authors saw reason to comment upon it (Nicholas 1817, II:160; Polack 1838, I:396; Craik 1830:255; Bays 1831:160). By the 1840's, however, the practice seems to have diminished considerably, for Colenso in his "Excursion in the Northern Island of New Zealand
1841-2" comments that "This fashion of anointing themselves with red, is, however, nearly obsolete; being only followed by a few of the old grandees of other days" (Colenso 1959:12). Similarly Shortland, in 1856 (p.112) describes how in "former days" persons painted their bodies and clothes with some red substance. As Shawcross (1967:67 footnote 46) notes, the later well known ethnographers of the traditional Maori, Best, Buck and Firth, make little mention of body painting with red ochre. One can only conclude that body painting quickly died out after European contact.

A few authors, Du Clesmeur (McNab 1914,II:471), Forster (1778:591) and de Surville (Ollivier and Hirgley 1982:42), while making comments about the use of red ochre and oil by women, also note that body painting was practised by men. Although Polack (1840:85) suggests that all men rubbed themselves with oil and ochre, the majority of authors suggest that the practice was restricted to a few special occasions. The Maoris identified as warriors are often described as having red painted bodies. Cruise (1974:132,136) makes repeated mention of the fact as does Nicholas (1817,II:19). Bays (1831:157) comments that New Zealand warriors generally painted themselves with ochre and oil, while Markham (McCormick 1963:50) describes warriors engaged in a sham fight all covered with oil and ochre, their hair dressed with feathers.
Guillaume Labe, first lieutenant on de Surville's ship records that the Maoris who crewed five canoes at Cape Surville had "put red on their forelocks" (Ollivier and Hirlgley 1982:63). Cruise also comments on the crews of canoes being painted red, noting in one instance how warriors returning by canoe were painted red (1974:90) and in another, how ninety paddlers of a large war canoe were painted and decorated with feathers (ibid.:193). During Forster's stay at Queen Charlotte Sound men in a canoe, thought to be from the North had their cheeks painted red (1777:507).

Both de l'Horne (Ollivier and Hirlgley 1982:124) and much later Polack (1840,1:80) comment that use of ochre on the body of males was restricted to minor leaders (in the former case) and young chiefs (in the latter). The other instances where males are described as painted with ochre, all appear to be connected with special occasions. Thus Galkin (Barratt 1979:65) noted that when Maoris first came on the Russian ship, one man stood out, who

wishing to appear in his full glory, decorated himself with feathers of various hues, all stuck through his hair, and used fish oil in place of our pomade, mixing it with red chalk, moreover, and rouging his cheeks with that compound.

Rutherford (Craik 1830:195) claimed that during part of
the ceremony in which he was invested as a chief his head and body were smeared with a mixture of red ochre and oil. Cruise relates two interesting incidents in which old chiefs appear painted in ochre. In the first the Europeans visited Wetere, Tetoro's brother and find him seated outside his house, with his best mat placed about his shoulders, his hair tied back and ornamented with white feathers and his body smeared with red ochre (1974:33). In the second an old chief, Tepene, visits the Europeans and is described as being in full dress, his body smeared in red paint. It is noteworthy that with these few exceptions, the other individuals whom the explorers identified as chiefs were not described as painted with red pigment. Red ochre use by males seems to have been restricted to warriors (a categorisation which might also apply to the individuals in the canoe), to some young chiefs and some older personages during formal meetings with the Europeans. The possible significance of these restrictions will be discussed below.

Variations

Although by and large red ochre use seems to have been remarkably conservative in protohistoric New Zealand, there were a few regional variations. These can be broken into two groups, variation in the part of
the body painted and the use of other colours in addition to ochre.

Two other colours are mentioned in the ethnohistoric record. Cruise (1974:132,136) states that the chief Paro's warriors in the Bay of Islands painted their faces with patches of blue mud in addition to smearing themselves with red ochre. Both de Surville (Ollivier and Higley 1982:31) and Galkin (Barratt 1979:67) mention instances where yellow pigment seems to have been used in the same manner as red ochre, to stain the hair.

There was some variation in the part of the body painted. A number of authors cite instances where the whole body was painted while others state that the head and hair was painted, or perhaps only the face. With one exception those who had their bodies painted also had their heads coloured (the exception is cited by Roux (McNab,II:375) who comments that women and youths have pigment daubed right up to their faces. This is at best ambiguous.).

There is no clear regional break in the use of ochre on different parts of the body. Forster (Hoare 1982:278-9) comments that the inhabitants of Dusky Sound paint their hair and faces with "ruddle" (red ochre) while de Surville makes a similar observation at Cape Surville (Ollivier and Higley 1982:63).
Artefacts

Ochre was not only used as a pigment for body painting, but was also used to give a red colour to a wide range of artefacts. Perhaps the best known are the carvings, canoes and carved buildings prominent in the museums around the country. Unfortunately many of these pieces are now covered in layers of red paint so it is difficult to know whether or not they were originally painted with ochre.

There is limited mention of carved houses in the ethnohistoric literature. The Russians Bellingshausen and Novosil'sky both describe the central posts of chiefs' houses decorated by carvings smeared in red coloured pigment (Barratt 1979:36,60). Cruise considered that the number of red painted carvings on the verandah of a chief's house indicated rank. In his discussion of Maori colour perception, Colenso noted the use of red ochre to stain reception and store houses. In the far south, Boultee made similar comments about the houses and store houses of the village of Pahia (Begg and Begg 1979:170) carved with "faces of scarcely human aspect".

Of more prominence to the explorers were the large Maori war canoes. In an early study of these canoes Bostow (1878:75) claimed that they were stained with a clay pigment mixed with water, called karamea, which produced a bright red colour. Certainly a number of authors state that canoes were coloured red and
decorated with feathers (Colenso 1882:64; Polack 1840,1:220; Sharp 1971:92) but Bellingshausen (Barratt 1979:43) suggests that the colour was a deep red more reminiscent of the ordinary ochre.

Posts, sometimes carved, but all smeared with red ochre, were used to indicate that a certain place was tapu. Both d'Urville (Wright 1950:189) and Nicholas (1966:73) describe such posts as marking the site of a burial. Earle (1966:73) describes an "uncouthly carved figure, daubed over with red ochre" indicating that one side of the road was tapu while Firth (1929:249) suggests that similar uncarved posts were indicative of a rahui.

Red ochre was commonly associated with objects which were tapu, including bones of the dead (Best 1982:19). Both Smith (1974:18) and Hamilton (1972:100) summarize a number of earlier accounts and state that the bones of the dead were often exhumed, cleaned and painted with red ochre for display. Exhumation of the bones was performed during a festival called haihunga by Polack (1840,1:77) and the skulls of the deceased individuals were displayed covered in kokowai. A variation is noted by Shortland (1856:148) who described the skulls of ancestors with eye sockets stuffed with red cloth. The carved burial chests now seen in museum collections were described by both Duperry (Sharp 1971:66) and Markham (McCormick 1963:42) as being normally stained red (see Chapter Three for
Two other sources of colour for artefacts are recorded. Red sealing wax obtained from the Europeans was used to form a mount for mako sharks’ teeth often worn as earings (Hodgskin 1841:16), for the eyes of hei-tiki (Heaphy 1862:166) and for the eyesockets of preserved heads (Wright 1950:182-3). Red feathers formed the other source. They were used to ornament taiaha (Colenso 1868:354; 1891:452; 1959:28; Ollivier and Hirlgey 1982:40) and as ornaments for flax belts (Angas 1847:25). J.R. Forster records an interesting garment during his stay at Queen Charlotte Sound.

This day a good many Indians came early on board & I brought of them an Ahoo, an Awirookoora or Apron of red Feathers faced with white Dog- hair & ornamented with pieces of Mother of Pearl, taken from the Ear Shell, which serves their Girls for a Figleaf in their dances (Hoare 1982:290).

Hoare gives as a translation for the name of the garment; Awo, dog hair ornament; tuu, belt; and kura, red feathers. Mead (1969:64-5), in his study of traditional Maori clothing, has little to say about the garment short of description. He names it a maro kura, which when one compares this to the Hawaiian and Tahitian examples, seems a singularly inappropriate term.
Discussion

From the above it is clear that women were often painted with oil and red ochre when they met with Europeans. This practice extended to men identified as warriors, those paddling large canoes (although they may also have been warriors) and a few individual males often in special situations. It is clear that men painted themselves red less frequently than women.

Men, however, particularly those identified as chiefs, were keen to obtain European red cloth or garments which they would either adapt as cloaks, or use as a source of material to decorate their traditional clothes. Tufts of European material may have replaced red feathers in the manufacture of red feather cloaks (worn by high status males) and loincloths (used by female dancers). Red ochre was painted over large chiefly and public structures like carvings, houses and canoes and also served to mark areas which were tapu often through an association with a burial. European red sealing wax was used to decorate important artefacts like shark's teeth ear ornaments, tiki and preserved heads. Finally, the taiaha, a weapon repeatedly associated with chiefs was decorated with red feathers.

At first glance there appear to be several contradictions in this list. Women, traditionally thought to be noa (profane) are seen to use ochre just like the more tapu males. If males must use ochre, why
should its use be restricted to those who might be expected to be particularly tapu like warriors and chiefs. Then again, why should chiefs covet red cloth garments, possibly imitating prestigious red feather cloaks, yet allow women to make red feather loin cloths, surely the profane of the profane.

Such contradictions only arise if old and incorrect definitions of the categories tapu, mana, and noa are used, and if the role of women in traditional Polynesian society is incorrectly interpreted. Recently there have been a number of studies which re-evaluate these important concepts in traditional Maori society. Michael Shirres (1982) has used manuscripts from the George Grey Collection, dating from the period 1845-1854 to investigate that nature of tapu. From an understanding of these sources Shirres is able to propose that the concept is neither univocal nor equivocal, but analogical. According to Shirres, analogical terms are terms "the meaning of which, though different when applied to different things, are nevertheless related in some way" (ibid.:33). Tapu is applied to many different things and has different meanings but these meanings are all related.

Shirres defines two areas of tapu: intrinsic tapu and extensions of tapu. The atua which include Tuu (man), Taawhiri (the winds), Tangaroa (the fish), Rongo (kumara), Haumia (fernrcot), and Taane (trees and birds) have an intrinsic tapu which is bound up with
their existence and also bound up with their real world form. While the exact nature of the tapu of each atua differs there is a similarity in the relationship to its subject (Shirres (ibid.:40) calls this relationship the analogy of proper proportionality).

Extensions of tapu come from the intrinsic tapu of one of the atua. The manuscripts Shirres consulted listed several extensions of tapu from Tuumata uenga and Rongo (see table 1). These extensions of tapu can only be understood by reference to the tapu from which they extended.

For our purposes the most interesting intrinsic tapu is that of Tuumata uenga, man. One of these manuscripts states that man’s tapu starts with his birth as a child, but owes its origin to the mana of the ancestors.

There is a linking up of a child’s mana with his ancestors, from the line of people from which he has received his existence. Man’s mana, and therefore his tapu is acquired by inheritance (ibid.:39).

This link with the ancestors connects the individual with spiritual power, which is the source of tapu and mana. This leads Shirres to his definition of tapu as "being with potentiality for power" (ibid.:47).
### TABLE ONE

**Extensions of Tapu from the Intrinsic Tapu of Tuumata Uenga and Rongo**

<table>
<thead>
<tr>
<th>Extensions of Tapu</th>
<th>Tuumata Uenga Human Race</th>
<th>Rongo Kumara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things</td>
<td>Head houses hands clothes</td>
<td>hands pit baskets haangi places spades</td>
</tr>
<tr>
<td></td>
<td>houses fields food haangi</td>
<td>fields</td>
</tr>
<tr>
<td>Events</td>
<td>birth hair planting cutting</td>
<td>harvesting</td>
</tr>
<tr>
<td></td>
<td>planting harvesting battles</td>
<td>sickness death</td>
</tr>
</tbody>
</table>

Both Tuumata uenga and Rongo have intrinsic tapu which can be extended to give tapu to a number of objects and actions (adapted from Shirres 1982:fig 1).
There is a dynamic quality to this tapu which owes its origin to the different sources of intrinsic tapu. Shirres argues that there is always the potential for a clash of tapu from tapu of different sources. He suggests that this tension is expressed with food: "not eating expressing the keeping apart of one tapu from another, eating expressing the clash of tapu with tapu" (ibid.:44). It is the reconciliation of the clashes of tapu which was the central concern of much of Maori public ritual.

In Shirres's scheme noa is in opposition to extensions of tapu, but does not clash with intrinsic tapu. Shirres suggests that women have their own intrinsic tapu which is especially apt at making things which are tapu by extension, noa. This view is in marked contrast to that of the ethnographers Best and Smith who see the female's noa status as relating to the contaminating nature of their genitalia (Hanson 1982a:346). Allan Hanson, who has recently reviewed the role of the female as a polluting element in Polynesia comes out strongly against these "repellent theses". Whereas Best and Smith would argue that

Women remove tapu by polluting the atua, causing them to retreat before the female contamination and taking their tapu with them ... (ibid.:356).

Hanson suggests,
that women remove tapu by attracting it, by serving as the conduit through which it is repatriated to the spiritual realm (ibid.:356).

Hanson (ibid.:351) sees the female genitalia as the point of linkage between the world of the atua, and the real world of men. Women must also provide the passage through which the tapu of each individual passes, since both tapu and person are intimately bound up and and linked to Tuumata uenga. At death a person leaves the world via the same medium he arrived: through the genitals of Hine-nui-te-po, the female atua associated with death. Hanson goes on to suggest that this passage is two way. While the vagina provides a link to the atua through which tapu may be acquired, the genitalia may be used to drain tapu from a person or a thing. It is this capacity which allows females to perform the whakanoa rite. Under Hanson's scheme women are tapu as Shirres would have it but also have the ability to make extensions of tapu, noa by drawing the tapu back into themselves and thereby back to the world of the atua.

In marked contrast to the explanations of tapu, noa and the status of women put forward by earlier scholars like Best and Smith, the theories of Shirres and Hanson outlined above dispel the apparent contradictions in the use of red ochre by women, warriors and some chiefs, and the use of the pigment on artefacts connected with tapu. Women are clearly not
profane, polluting influences, the antithesis of *tapu*, but were intimately connected with the acquisition and removal of *tapu*. As Hanson stresses, this ability brought with it the danger that a *tapu* might be prematurely removed through the proximity of women. It is conceivable that it was this dangerous (rather than polluting) state that was indicated by women painting themselves red when meeting Europeans. This would tie in well with Johansen’s (1954:186) definition for the adjectival form of *tapu* as “requiring consideration”. There is limited evidence that in addition to painting themselves for Europeans, women used red ochre on other dangerous and sacred occasions”. Thus Cruise (1974:133) records how women were painted like men when preparing for battle and Stack (1877:66) relates a traditional incident where a wife accused of adultery was decked out in her finery, including red ochre and oil on the face, and given to her lover.

The notion that red ochre use implied the need for consideration extends easily to fit in with its use as a paint for posts indicating an area was *tapu*, and the painting of the bones of the dead after exhumation. To understand its use by warriors and on canoes and storehouses we need to introduce Shirres’s idea of the clash of *tapu*. Both warfare and crop storage involve aspects of the extensions of *tapu* given in table 1. In warfare one *tapu* body deliberately sets out to engage the *tapu* of another. When a canoe is sailed across the
ocean there is a clash of tapu between Tangaroa (the sea) and Taane (forest) (see Shirres 1982:43-44) for other examples). The use of ochre in both situations could be interpreted as a symbol of the clash of tapu, carrying a symbolic message 'a need for consideration'.

Explaining the use of ochre by isolated males is more problematic. From the descriptions available in the ethnohistoric record there is no one recurring contextual feature, although the examples given by Cruise and Galkin both relate to formal meetings between the Maori and European. It is possible that the use of red ochre in such a situation might imply that the tapu of the visiting party was equal or greater than the host, who in a subtle complement might symbolize this difference by the use of the pigment. Such an interpretation would find support form de l'Horne's statement that ochre was much used by minor chiefs. Junior chiefs with less tapu than their seniors might be more concerned with a clash of tapu and indicate their concern by painting themselves red.

The relationship between status, tapu and the colour red is discussed by Montgomery (1981:90-1). He shows how these three words are linked semantically to the acquisition of knowledge through the word kura. Williams (1971:157) gives the following definitions for the word kura:
These definitions of *kura* not only provide additional evidence for the link between red ochre and *tapu* but also provide evidence for a link between *tapu*, red feathers and chiefly status. This link is significant in light of the argument developed at the beginning of this section for the use of red European garments as cloaks associated with chiefs. From Banks' account we know that a red feather cloak was used by an old chief. It seems likely that the European garments were identified directly as *kura* through their colour and thereby acquired the additional signata (Turner (1967)). It is also noteworthy that the use of the *taiaha* as a chiefly status symbol is linked in the word *kura*, specifically through its ornamentation with red feathers. Finally the red feather *awe tuu kura* used as a loin cloth by female dancers may be explained by the
tapu definitions of kura in relation to the status of women proposed by Hanson (1982a).

Montgomery suggests that the complement of kura is ma which is defined as,

\[Ma: \]
1) White
2) Pale food
3) Clean
4) Freed from tapu

This statement is interesting because white feathers were often worn by both men and women on the head (Ollivier and Hingley 1982:124). Cruise describes the chief Wetera with his hair tied in a bunch and decorated with white feathers of the gannet or albatross (Cruise 1974:33). At Dusky Sound Forster (Hoare 1982:249) recorded a Maori family group "dressed out with their best garments, & bunches of white feathers on their head". Later, while still at Dusky a cautious Maori approached the Adventure.

Before he touched the bridge, he stept aside put a piece of white feathered bird's-skin through one of the holes in his ears broke a green branch off, & then he walked stately over: Just when he reached the Ship he stopped & struck the main shrouds with the branch & began to declame or scan a kind of poem or carmen (ibid.:258-259).

The action Forster describes would seem to be
consistent with tapu removal from a European ship which would have been associated with the atua. Certainly this association is stressed by Shawcross (1967) for the Bay of Islands. Such an argument would agree with the definition of ma as freed from tapu and the position Salmond (1978) gives white in her semantic analysis of the Maori cosmological view.

Whereas in Easter Island there is a clear connection between red and white symbolism, no such connection can be shown for the protohistoric Maori. This tends to suggest that the kura/ma opposition proposed by Montgomery is correct and that the white feathers were used as a symbol for nullifying tapu. It is interesting to note that white feathers on the head, the most tapu part of the body, and white feathers used in a ceremony performed on European atua would both be connected with intrinsic tapu. It is possible, though it cannot be demonstrated here, that white feathers were in someway bound up with Shirres's intrinsic tapu.

Besides white and red, two other colours were mentioned in the discussion above, yellow and blue. The yellow pigment mentioned is almost certainly yellow ochre and while its use might indicate a regional variation it is interesting to note a comment by Best (1905:640-1) that the Maori looked upon yellow as a light red.
The use of blue pigment was described by Cruise in the Bay of Islands and Sharp (1971:81) describes women putting blue spots on their faces using a pigment termed *para-eka-ouai-aoua*. The practice is acknowledged by Best who states that before Mataora discovered tattooing, "people painted patterns on their faces with red ochre, blue earth and white clay" (1982:230). Blue painting does not seem to have been a widespread practice and may have been restricted to the Bay of Islands. Perhaps its importance in relation to red can be gauged from a statement by Markham (McCormick 1963:80) referring to European soldiers, "the natives are in much greater fear of the red than the blue jackets".

**Conclusion**

The symbolism attached to the use of the colour red by the prehistoric Maori is probably best described by Johansen's definition of *tapu*, 'requiring consideration'. This consideration extended to the possible clash of *tapu* experienced by warriors, to the clash of *tapu* associated with death and to the clash associated with sailing on the sea. It also extended to the concept of the female as a link between the real world and that of the *atua*. Finally it extended to the *tapu* associated with chiefly status and ritual knowledge. Just as Shirres argues that his definition of *tapu* (as being with potentiality for power) is
widely represented over New Zealand, there seems to be a marked conformity in the use of the colour red. Both the use of red ochre and the desire for red cloth is widely attested around New Zealand but in each instance it is restricted in its use to particular individuals on certain occasions or to certain categories of artefact. Finally red seems to be symbolically important on its own although white may also have had some significance.

The Symbolic Associations of the Colour Red in Easter Island, the Marquesas and New Zealand

The sources of the colour red from the three island cultures may be summarized under the headings; feathers, tapa and cloth and body painting. A few extraneous uses of the colour are considered in a fourth group and all are then compared with reference to their cosmological associations. Similarities in the symbolic association from these three cultures may then be compared with those obtained from Tahiti and Hawaii. Since all the island cultures have a common ancestry, similarities between all five groups studied should reflect the associations held by the first people to settle East Polynesia.
Feathers

The overriding importance given to red feathers in Tahiti and Hawaii is matched to a much lesser degree in Easter Island, the Marquesas and New Zealand. In Easter Island use of red feathers was rare, the only reference being by the ethnologist Métraux to their use in headdresses by warriors. In the discussion of Easter Island colour symbolism some importance was given to this association when compared to the use of black feathers by the ariki and white feathers as a symbol of mana.

Evidence from the Marquesas also indicated that red feathers were used for headdresses specifically associated with priests and chiefs. Feathers formed an important trade item with the earliest European explorers to visit the island. It is argued that this trade was stimulated by the Marquesans identifying the Europeans as atua. Although somewhat tenuous, both this trade and the red feather headdresses are used to suggest that the feathers symbolized a link between the hak a'iki and the atua.

In New Zealand red feathers were used for kahukura, red feather cloaks worn by chiefs; avetuukura, loincloths by female dancers; and to ornament status related objects like taua. Definitions for the word kura link concepts like tapu, chiefly status and knowledge of the kara'kia and other valuable lore to both red feathers and ochre. It is
argued that red in general symbolized Johansen's rather broad definition of *tapu* "requiring consideration". More specifically, the colour red symbolized the inherent conflict in extensions of *tapu* (as defined by Shirres 1982) and the position of women in Maori society as a potential link between the real world and that of the *atua* (see Hanson 1982a).

Although the situation is somewhat confused in Easter Island (by the conflict associated with the destruction of the *ahu* and statues), red feather symbolism in all three island cultures seems to involve common elements of chiefly status, and relationship to the *atua*. The latter is difficult to define. It rests on Hanson's hypothesis that women formed a link between the spiritual and real worlds; a hypothesized link between red feathers and *European atua* in the Marquesas; and Goldman's comment that in Easter Island the *matatoa* class had gained as ascendant religious position connected with the god Makemake.

**Red Cloth**

In Easter Island yellow and orange cloth, stained with turmeric, was made into cloaks and was certainly linked to high status individuals and there is some evidence to suggest a symbolic link between the cloaks and the importance of the *matatoa* class. There is only limited mention of trade for European cloth.
In the Marquesas red cloth made into *hiapo* was *tapu* to sacred personages who included first born males, chiefs and priests. Warriors wore a red cloth garment called a *kahu ku'a*. In general red cloth use suggests that it comes under the gambit of red/black colour symbolism and its %males in a *tapu* context' associations.

In New Zealand tapa cloth was rare, and not apparently dyed red but the ethnohistoric record does document a considerable trade in European red cloth. Analysis suggests that this cloth was used to replace traditional cloaks (possibly imitating *kahukura*) and decorate war mats. The European cloth also provided a source of raw material with which to decorate other traditional garments. The New Zealand evidence suggests that red cloth was associated with chiefs and warriors and this link is strongly represented in both other cultures.

**Body Painting**

The importance of body painting in these three island cultures is enhanced when compared to that practised in Hawaii and Tahiti. This is particularly true of Easter Island and New Zealand. In Easter Island turmeric was used to produce a red tattoo pattern on males and women stained their faces with red ochre and/or turmeric. Body painting also featured during the Orongo birdman cult. It is argued that in
Easter Island body painting may originally have been symbolically linked to chiefly or priestly status through the painting of statues, but later was adopted by the matatao as they sought to verify their position through religious symbolism.

In the Marquesas both turmeric and coloured earths were used for body painting. Women, chiefs, but not ordinary men painted their bodies according to one informant, but evidently both males and females of the ka'ioi group (which has obvious parallels with the 'ariori society in Tahiti) made liberal use of turmeric. There is some evidence to suggest that red turmeric pigment produced when the root was baked, was restricted to men or members of the ka'ioi. A strong tapu association is suggested by the use of the red pigment to paint women performing a spell for revenge and the painting of a sacrificial victim.

In New Zealand a paint formed from red ochre mixed with oil was often observed by the first explorers smeared over women. The frequency of reports from early explorers compared with their scarceness by later commentators suggests that this action may have been a response to the presence of the Europeans. Males made use of the body paint only in certain situations. Warriors always seem to have been painted while chiefs might also ochre themselves for formal meetings.
For New Zealand it is argued that red body painting was a response to the inherent violence incurred during a clash of extended *tapu*. Hanson's hypothesis that women provided a link with the *atua* is used to explain red ochre use by women. This link was at times dangerous and during certain important occasions needed to be symbolically identified. Hanson himself extends this argument to incorporate the Marquesas among other Eastern and Western Polynesian cultures. After reviewing a number of rituals connected with women he concludes,

That the Marquesans viewed women as associated with a broad spectrum of influences, some of them dangerous and detrimental but others harmless or even beneficial. And that can be conceptualised more readily on the affinity thesis than in terms of an idea of women as polluting and repugnant to the gods (Hanson 1982a:362).

If Hanson is correct we may hypothesize that female body painting in the Marquesas fulfilled the same functions as it did in New Zealand. Hanson does not include Easter Island in his discussion and it is beyond the scope of this study to investigate the role of women in this society, but Hanson does find support for this hypothesis in the Marquesas, the Societies, and Hawaii, as well as New Zealand. It would make Easter Island rather anomalous if it did not follow the Polynesian trend. The fact that women did make use of
body paint in Easter Island is very suggestive that they were viewed as a means of contact with the spirit world and were in consequence, ritually dangerous and certainly in need of consideration'.

The use of body paint by males seems to have been more limited than by females, restricted to a narrower range of situations. For New Zealand it was argued that body painting by males was connected with the inherent clash of extensions of tapu. Although this hypothesis relies heavily on the concept of tapu as defined by Shirres using nineteenth century Maori sources, one cannot help speculating that the Shirres' analysis has wider, perhaps pan-Polynesian application. Certainly Shirres would argue that this definition for tapu had at least a New Zealand wide application. The use of red paint by males in Easter Island and the Marquesas would be easily explained if this intrinsic/extension concept of tapu could be applied. Perhaps the red tattoo pattern on Easter Island males reflected their status as warriors, and the painting of the first man to collect the egg of the sooty tern from Motunui symbolized his tapu status in connection with the god Makemake. In the Marquesas the use of the pigment by chiefs could also be explained by Shirres's hypothesis. Its use by the ka'ioi is not so easily explained but must presumably have been connected with their special status in the community.
Overall there are striking continuities in the use of body painting by the three island cultures. We may hypothesize that red ochre or yellow/orange/red turmeric smeared over the body symbolized either a consideration for extensions of tapu or the ritual importance of women.

Other Uses of the Colour

A number of other uses for the colour were reported from Easter Island and the Marquesas, but are not so easily categorised as those above. Mention has already been made of the fact that at least some of the Easter Island statues were painted. Although speculation, it is suggested that the completed statues raised on the ahu may have been periodically painted for ceremonies. A number of the houses in the ceremonial village of Orongo contained paintings, as did the caves on the island of Motunui also connected with the birdman cult. Archaeological evidence of Easter Island burial practices links the use of red scoria and white coral fragments to the traditional chiefly ariki.

Evidence from the statues, paintings and burial sites are combined to suggest an early association between the ariki and genealogical position symbolized by the use of red and white, which was later adopted by the matatoa when they became the dominant social group.
In the Marquesas red and black sennit was used to decorate a number of important structures. Analysis of the symbolism involved leads to the conclusion that red and black together symbolized males in a tapu context.

**Cosmological Associations**

Central to the understanding of colour symbolism from all three island cultures is its relationship with such concepts as the atua, tapu, mana, noa, and genealogy. For Easter Island it is argued that the colour was used to symbolize a link between the ariki and the famous chiefs and priests, represented by the statues, who had became tutelary deities of the tribe. This association later changed with the rise of the matatoa and the establishment of the Orongo birdman cult.

In the Marquesas two colour associations were defined, red black symbolising male and tapu, and red white symbolising tapu and atua. The common element, tapu, is defined as a social category ordering social actions, obligations and rites. The red colour symbolized tapu which was closely linked with the chief (haka'iKi) and through him to the atua.

In New Zealand a similar relationship to the ancestors and to Tuumata uenga (the atua connected with man) was found in the categories of tapu and mana. The extensions of tapu which come from this relationship,
particularly with regards to women were symbolized by the use of red body paint. Red ochre and other red colour sources were used to decorate other items which were also liable to become tapu by extension.

Discussion

The element which is common to all symbolic associations of the colour red is tapu. Connected with this are associations with the atua, with chiefly position, genealogy and warfare. Although necessarily hypothetical, a good framework for explaining these associations symbolized by the colour is provided by Shirres’s analysis of tapu in the nineteenth century Maori society. His definition of tapu, as being with potentiality for power, sets the origin for this ‘power’ with the atua. Although the evidence is at times scanty, a similar link is suggested by the analysis of material from Easter Island and the Marquesas. In all three societies the genealogical position of the social elite was of great importance, and linked both to the category tapu and to the atua who were often considered ancestral spirits. Chiefly association, symbolized by the colour red served to link these associations. Finally if Hanson’s hypothesis is extendable to Polynesia generally, the association between women and the colour red may be understood. Women were also linked to the atua through their procreative abilities and were therefore tapu, as
Shirres would put it, because they were especially effective at making something *tapu, noa*.

Easter Island, the Marquesas and New Zealand all have these symbolic associations with the colour red and therefore according to the hypothesis developed in Chapter One, must owe these associations to the people who first settled these islands.

At a general level these associations are also similar to those proposed for Hawaii and Tahiti. In these two island cultures feather cloaks, girdles and god images were closely associated with the *atua*, chiefly status, warfare and genealogy. Hence there would seem to be an East Polynesia-wide similarity in the symbolic associations of the colour red. Yet in Tahiti and to a lesser degree Hawaii, red feathers formed more overt symbols of the *atua*. In Tahiti they formed a direct channel with the spirits, and in both island cultures were formed into garments for elite individuals whose rank status must have approached that of the gods. It is notable that garments of equal importance did not exist in Easter Island, the Marquesas or New Zealand. Although the basic symbolic associations of the colour are similar for both groups of islands this symbolism was used to emphasize different aspects in each. In Hawaii and Tahiti where social structure seems to have been markedly hierarchical red coloured objects were very restricted in distribution. In Easter Island, the Marquesas and
New Zealand where it is argued that social structure was not so complex use of the colour red seems to have been more widespread.

Conclusion

Symbolic associations for the colour red in the island cultures of Hawaii, Tahiti, Easter Island, the Marquesas and New Zealand have a number of features in common. These include an association with the category tapu and with the atua, a concern with genealogy and chiefly status, and often an association with warfare. Because these associations have been retained with a high degree of conservatism a change of emphasis can be detected between Hawaii and Tahiti when compared to the other three island cultures. This change reflects the hierarchical social structure of these two islands where the rank status and consequently the divinity of a few individuals had become of prime importance. In Easter Island, the Marquesas and New Zealand, a wider cross section of the populace made use of the colour symbol, reflecting their simpler social structure.
Notes

(1) The pennant (or pendant, they are synonymous) to which Wallis refers may have been the red, white or blue ensign (although as it was connected to a maro'ura it is suggested that it was a red ensign). Until their abolition in 1864, Royal Navy vessels used the three different ensigns as tactical markers for the Red, White and Blue squadrons. Each ship would carry all three flags. In 1767 the red ensign would have differed slightly from its modern form, there being the cross of St George rather than the Union Jack in the corner (Barracough and Crampton 1978:25,32).

(2) Oliver notes that there was both a red feather and yellow feather girdle. The former, called a maro'ura, was associated with the 'Oro image at Opoa. The latter was called maro te'a and was associated with the 'Oro image at Porapora, also covered with yellow feathers.

(3) Kooijman (1972:15-16) gives a detailed description of the plants which could be used to give a red dye. The red dye called mati was prepared from the fruit of the Ficus tinctoria and the leaves of the Cordia subcordata. Different shades could be produced by replacing the latter with tahina or tahina (Nesserschmididia argentea), pohue or pohutea (Ipomoea pes-caprae) and ebu (Solanum reendum).

(4) Approximately one gram of commercially produced turmeric was added to 10ml of the following solutions:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Formula</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium hydroxide</td>
<td>Ba(OH)2</td>
<td>weak base</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>NaOH 10% w.v.</td>
<td>strong base</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>CH3COOH</td>
<td>weak acid</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>HCl</td>
<td>strong acid</td>
</tr>
</tbody>
</table>

All solutions were colourless before the addition of the turmeric, however after addition both the barium hydroxide and the sodium hydroxide turned a deep red colour. Neither of the acid solutions showed a colour change.

A solution of calcium oxide forms a weak base and is easily manufactured by heating sea shells. An oyster shell was heated over an open flame and the white powdery calcium oxide scraped off. Approximately one gram of the calcium oxide was dissolved in 10ml of water by gently heating. A gram of the ground turmeric was added to the solution and again a colour change from clear to red was observed.

Calcium oxide, produced by heating shells, would be a readily accessible weak base, which when mixed with turmeric and a little water produced a red pigment.
The colour compound in turmeric is curcumin, the formula of which is:

\[
\begin{align*}
\text{CH}_3\text{O} & \quad \text{O} \\
\text{HO}\text{CH}=\text{CH}-\text{C}-\text{CH}_2-\text{C} & \quad \text{CH}=\text{CH}\quad \text{OCH}_3 \\
\end{align*}
\]

Heating curcumin also produces a colour change. Heating between 100°C and 200°C for 30 minutes produces a progressively redder colour, however heating for longer periods above this temperature range chars the pigment.

(5) Thanks to Andrea Seelenfreund for discussion on these points.

(6) This discussion is revised from earlier versions presented as papers to the New Zealand Archaeological Association Conference, Napier 1983 and at a seminar in the Anthropology Department, University of Auckland. I am grateful for the constructive criticisms provided by the participants at both meetings.

(7) Kaeppler (n.d.) suggests that for Hawaii all ritual was concerned with "dangerous and sacred situations" and that other ceremonial occasions as such did not exist. Her assertion is typical of Polynesia generally and would seem suitable for the New Zealand case.

(8) Details on the distribution of bird species from which feathers were obtained are unfortunately rather sketchy. Buck (1944b) states that in Hawaii red feathers were obtained from the \textit{jiwi} (\textit{Vestiaria coccinea}) and the \textit{apapane} (\textit{Himatione sanguinea}), while yellow feathers came from the \textit{mamo} (\textit{Prepapnis pacifica}) and the \textit{Oo} (\textit{Moho sp.}). All are honeyeaters (Family \textit{Meliphagidae}) and both the \textit{mamo} and the \textit{Oo} are now extinct. According to Berger (1972:182), the \textit{jiwi} is close to extinction on Molokai and Oahu, but still fairly common on Kauai, Maui and Hawaii, while the \textit{apapane} (ibid.:169) still inhabits all six of the main islands. It is quite possible that extensive prehistoric and protohistoric hunting by the Hawaiians
contributed to the decline of both the Op and the Hamo (ibid.:114). Certainly these birds possessed proportionally fewer yellow feathers when compared to the extensive red feather covering of the Li'ili'i and apapane.

Oliver (1974:75) states that red feathers used in Tahiti were obtained from the green parakeet (Cyanoramphus zealandicus) which is now extinct (Beaglehole 1961:411). On Easter Island and the Marquesas feathers from the domestic fowl were used to ornament artefacts. In addition Handy (1923:284) states that red feathers were obtained from a "dove" called kuku on Nuku Hiva. It is possible that Handy was also referring to the parakeet. The parakeet (Cyanoramphus sp.) provided red feathers in New Zealand as did the kaka (Nestor meridionalis).

Because a number of species are now extinct, and others have had their distributions severely effected by environmental changes this century, it is difficult to reconstruct the relative abundance of red feathered species in the islands of East Polynesia. Little support can be found for any argument which cites abundance as a reason for the value of red feathers.

(9) A number of other caves around Easter Island feature paintings (Seelenfreund pers. comm.)
CHAPTER THREE

THE USE OF THE COLOUR RED IN PREHISTORIC NEW ZEALAND

Introduction

In Chapter One a method was outlined by which symbolism in material culture could be studied. It was hoped that analysis would provide information on aspects of social and ideological conservatism and change. By comparing the symbolic associations for the colour red in Tahiti, Hawaii, Easter Island, the Marquesas and New Zealand an hypothesis was developed that saw a number of similarities in the use of the colour, particularly in the latter three island cultures. In Chapter Two it was concluded that the common features included an association with the category tapu and with the atua, a concern with genealogy and chiefly status, and often an association with warfare. A difference in the use of the colour between Tahiti and Hawaii on the one hand, and the other three island cultures on the other, was seen to reflect the primary importance of a few individuals of high rank status in the former case, and the more wide
spread use of the colour in the latter.

The analysis in Chapter Two suggests that the symbolic associations for the colour red have been conservatively retained throughout the prehistory of Eastern Polynesia. This chapter looks at a number of archaeological and ethnological examples drawn from New Zealand which can be used to test this hypothesis. The wider implications of this conservatism will be discussed in Chapter Four.

The selection of material for this chapter is not as easy as it would first appear. Red ochre is often reported from archaeological sites in New Zealand, however the descriptions are fleeting, and it rarely features in conclusions drawn about the site. Indeed it may well be that much of the ochre or haematite recovered is in an unprocessed form (see below). In most cases there is little archaeologically retrievable information which would confirm or deny a symbolic significance. While isolated finds of ochre can add little of interpretative significance, its use on certain categories of artefact is of considerable value. Two such classes of artefacts are the godsticks and burial chests and both are discussed in detail below. Another potential area of information comes from sites of specialised function. Burial sites in particular have often been used by archaeologists to answer ideological and social questions about the past. Fortunately in New Zealand there are a few secondary
burial sites which evidence the use of red ochre. These are also discussed below. The third example chosen involves a site which is unique in New Zealand combining aspects of ideological importance with the use of the colour red. The site is Kauri Point Swamp where a large number of wooden objects were excavated. Details of Shawcross's interpretation, the artefacts recovered and the significance of the red ochre found at the site are discussed fully below.

These three examples provide some confirmation for the conclusions reached in Chapter Two. The fourth example attempts to take these conclusions and relate them to wider questions of social and ideological importance in the prehistory of one particular region. The region selected is Southern New Zealand.

Secondary Burial

Introduction

In his discussion of Maori death customs during the early European period, Oppenheim (1973:63) makes an interesting observation that both 'moahunter' and Classic Maori burial practices seem to have included painting of the body or bones with ochre. In Chapter Two it was argued that at European contact this use of red paint symbolized the clash of extensions of tapu.
associated with death (among other things). Oppenheim describes the cosmological links held by the Maori including the concern with tapu. Archaeological evidence demonstrating similar burial techniques in prehistory including the use of red ochre would provide strong evidence for the continuation of cosmological associations, including tapu, back into the past.

**Archaeological Evidence**

With a few exceptions the reporting of archaeological remains of human burials has been very poor in New Zealand. There are, however, a few reports which mention red ochre associated with burials. Both Teviotdale (1932) and Skinner (1960) discuss a secondary burial from Little Papanui. According to Skinner the burial represented a male whose bones had been exhumed and coated with kōkowai before being reburied above a midden. Teviotdale describes the skull from the burial as having the face and forehead thickly plastered with kōkowai. Steele (1931:84) describes a separate burial found in 1921 "at the raised base of the south cliff bounding Papanui Beach." He states that the skull and the heavier bones of the body had been covered with red ochre and placed high up in the cliff face.
In an appendix to his report on excavations at Katiki Point, Trotter (1967) describes burials found on the two adjoining beaches. Human material retrieved during the 1950’s included bones smeared with red ochre associated with a number of artefacts, a whale bone comb, a bone pendant and a number of perforated human teeth. Trotter goes on to state that at the nearby site of S146/23 bones from an eight to ten year old girl which included a red painted cranium and mandible, were retrieved.

Further evidence for the painting of burials comes from a site near Teviotdale, North Canterbury (Trotter 1975). Here three individuals were found, an adult man and two adolescent females. There is evidence to suggest that the male was a secondary burial. Both lower legs had been detached at the knees and the tarsal bones were found scattered in front of the pelvis indicating that the feet had been severed from the lower legs. The head had been removed and a large opening made in the base of the skull, presumably to remove the brains. Trotter comments that the skull was stained with specks of decomposed skin to which small particles of haematite still adhered. He suggests that the face and forehead were originally painted with red pigment. One of the two female burials also had red paint staining the remains of the skin. No evidence of staining remained on the third burial.
A number of artefacts stained with red ochre were in close association with the burials. Close to one skeleton was a mussel shell (*Mytilus edulis*) stained with ochre, while between the two females were a few pieces of woven fabric and plaited cord, again coated with red pigment. The painted female (thought to be 14 years old and to have died of a malignancy) was buried with a number of grave goods. These included two drilled and sharpened human fibula shafts, possibly used as pendants. Both seem to have been painted with ochre.

The Teviotdale burials are particularly interesting because they indicate the use of red paint on secondary burials which have not completely decomposed. If these burials had been deposited anywhere other than a dry cave it is unlikely that the red pigment would have survived. This may go some way to explaining why comparatively few secondary burials associated with red ochre have been found. It also explains why no archaeological primary burials have been found associated with red ochre. Any ochre applied to the skin of a deceased individual who was then buried and decomposed would be very difficult to pick up archaeologically.

The Teviotdale burials are also interesting because they demonstrate that female, as well as male corpses were painted red. This confirms the case for the use of red ochre by women developed in Chapter Two,
and adds support to Hanson's hypothesis concerning the role of women in Polynesian society. Further evidence is provided by the famous burial site at Wairau Bar. Duff (1956) suggested that the burials associated with grave goods represented high status individuals. He sexed these as male. B.F. Leach (1977), however, draws attention to the fact that Houghton's (1975) recent analysis of the material corrects a number of errors in Duff's original work. It now appears that individuals of both sexes were associated with burial goods.

Duff (1956:32-33) notes that a number of Wairau burials were minus the skull. A possible reason is suggested by a passage from Yate (1835:138-9). During the hahunga ceremony (exhumation), "a few old women dressed in their best, oiled from head to foot, and plastered with ruddle, receive the skulls into their lap, and in the presence of these momentoes of death, the Pihi or funeral ode is sung ...". Skulls from a number of individuals might be removed for these ceremonies serving to remind the participants of the deceased. This could account for a number of burials for which no skull has been found.

Conclusion.

Although limited by the lack of a large number of adequately reported sites, the evidence for the association of secondary burials with red ochre does confirm both the connection with tapu and the
significance of women developed in Chapter Two. Unfortunately none of the archaeological material is associated with an absolute date, so it cannot be used to demonstrate the antiquity of colour symbolism.

Godsticks and Burial Chests

Introduction

As early as 1924 (1924b), H.D. Skinner noted that the carving style on a godstick was very reminiscent of that found on a burial chest or skull box. Recently both classes of artefact have been the subject of extensive analysis. They are of interest to this study because the results of those analyses suggest that the artefacts were often painted with ochre. They provide archaeological and ethnological verification of the association between the colour red and death developed in Chapter Two.

Maori Godsticks.

In two papers Barrow (1959, 1961) described a total of 27 godsticks from various locations. Of these some 15 had clearly visible remains of red ochre, generally about the head and face of the carved image. Of the others, in nine cases Barrow made no mention of any pigment, while in only three did he specifically state that the godsticks were not painted. At least
one of the godsticks upon which Barrow made no comment (that from Little Pyramid Cave, Wickliffe Bay) was painted with ochre when originally found (Sinclair 1940). Barrow passed no judgement on the significance of the godsticks but did mention the Rev. Taylor's description. Taylor had actually acquired a collection of some 13 godsticks which formed the subject of Barrow's first paper (1959). Taylor made a number of useful observations, noting that the stick itself had no inherent virtue unless occupied by an atua. For this to occur the stick had to be "dressed", provided with a beard (pahau) of red feathers from the kaka, a sacred cord bound around the body and finally a coat of red ochre (Taylor cited in Gathercole 1979).

Taylor's work has been summarized by Gathercole (1979) in his recently published study of godsticks. Gathercole notes evidence from Taylor for an association between the sticks and the major gods Tangaroa and Rongo, and the tribal gods Maru, Kahukura, Rongomai and Hukere from the Wanganui and Taranaki areas. Although one godstick might be used more regularly in association with one particular god, no one style of stick had a specific association.

The identification of the god Kahukura with the god sticks is particularly interesting when it is remembered that the Hawaiian cognate, 'ahu'ura referred to red feather cloaks. In Tahiti sacred red feathers were called 'ura. Kahu referred to a painted cloth
cape worn by status individuals in Easter Island and *kahu ku'a* on Nukuhiva referred to a red cloth cape worn by warriors. In New Zealand, Beaglehole (1962:415) identified a red feather cloak described by Banks as a *kahukura*. Skinner (1922) notes that the god Kahukura was known all over New Zealand and was predictably associated with war. The fact that Kahukura and Maru (also associated with warfare) are associated with godsticks, particularly sticks covered with ochre and decorated with red feathers suggests strong parallels with the god images from Hawaii. It also provides support for a conservative colour symbolism, particularly since the cognates of *kahu* and *'ura* refer to artefacts which derive their colour from a variety of sources, yet all refer in some way to the concepts of *tapu*, chiefly position, genealogy and warfare.

**Burial Chests**

Burial chests have been the subject of a brief paper and a longer monograph by Lady Aileen Fox (1980, 1983). The burial chest consists of a carved image hollowed out with a detachable panel at the back to hold the disarticulated bones of an individual. The chests were often found in association with collective burials in a communal tomb. In the majority of cases the chests stood upright, although two forms, a box-like chest found on Banks Peninsula and triangular chests carved in the shape of animals, apparently sat
flat. The upright forms, and particularly the so-called skull boxes from Whangaroa Harbour which were provided with a long spike, are very reminiscent of a godstick. Spatially the distribution of burial chests is centered around Northland, particularly Hokianga and the Bay of Islands, however they probably extended south to the Auckland Isthmus, and a number of isolated finds from Tauranga, Turangi, Lake Horowhenua, Levin and in the South Island, from Banks Peninsula, Central Otago and Foveaux Strait have been made.

As Fox (1983:9) notes, many of the chests retain traces of their original coating of red ochre. Many of the examples which she would claim were stylistically early retain less pigment than those thought to be of a later date.

Given the nature of the material, interpretation of the significance of the form and decoration of the chests is difficult, however Fox is able to make a number of significant points. She argues that with a few exceptions the burial chests do not depict contemporary personages but probably represent supernatural figures. There are a large number of chests which are clearly female. Fox argues that whereas male images may have sought to represent divine ancestors, this is most unlikely for the female images. Rather the female images may symbolize the death of Maui who was killed by the goddess Hine-nui-te-po while attempting to gain immortality for
man. In Northern areas the chests may have symbolized the moon goddess Hinu, who was also identified as a killer of mankind.

The female attributes of the chests provide particularly strong evidence for Allan Hanson's (1982a) hypothesis concerning the role of women as polluting agents in Polynesia. In Chapter Two it was described how Hanson saw the female genitalia as a two way passage between the real world and the world of the atua. While they were the means of entry at birth, the genitals of Hine-nui-te-po provided the passage at death. The female burial chest would seem to symbolize this uniquely feminine capability. Their red colour provides supportive evidence for the claims made in Chapter Two that female body painting was linked to the status of females as embodying a link with the atua.

While both the burial chests and the godsticks provide strong supportive evidence for this study, there is unfortunately very little material upon which to establish an absolute chronology. Fox argues that the earliest of her five types can be tied to a date of 520±40 BP from the Waitore site through the common decorative technique of notching. An equally insecure link may be posed between the burial chests and burials excavated at Palliser Bay. Leach and Leach (1979) describe two burials, one a secondary burial of a partly decomposed adult female, and the second a primary burial of an adult male (burials A and F).
Skeletal material from both indicates that the jaw has been forced open at an unnatural angle. In burial A this happened after *rigor mortis* had set in, and in burial F an instrument was used to force open the jaw causing damage to the maxillary area. Leach and Leach (ibid.) note parallels between this practice and that figured by Duff from the Wairau burials (Duff 1956:46). The wide open jaw has a strong similarity to the open mouths of upright anthropomorphic burial chests. Leach and Leach suggest that artificial jaw placement either reflects a food offering placed in the mouth for the journey after death, or was undertaken to allow the spirit of the person to depart at death. Both are recorded in the 19th century literature. For our purposes it matters little whether either is correct. What is significant is that the gesture implies a continuity in one aspect of burial practice over a considerable area of New Zealand (Wairau to Northland) and over a wide time span (13th to 18th century).

A final point may be brought out from Fox's discussion. Noting that the burial chests were deposited in caves along with communal burials she suggests that "sanctity of caves was in the Maori tradition" (Fox 1983:6). Noting Polynesian parallels for the use of caves for the storage of sacred objects she concludes, "the cave was conceived by Polynesians as an appropriate place for housing the gods, a temple in effect, and by a short step, it became the proper
place for the deposition of ancestral bones" (ibid.). While clearly caves were used for a variety of tasks in prehistoric New Zealand, the suggestion that they acted as a form of temple will be returned to below.

Conclusion

In a pattern which may be typical of East Polynesia as a whole, and certainly reminiscent of Hawaii, godsticks in New Zealand seemed to have acted as a means of contact for a number of atua. The need to decorate the sticks with red ochre, red feathers and a flax cord, draws strong parallels with other East Polynesian god images, as does the association between the sticks and the god Kahukura. There is a resemblance in form between the godsticks and carved wooden burial chests. Like the sticks, the chests do not always relate to one specific god. The fact that they all seem to have been painted red and a number are obviously female supports both the link between red ochre and females and secondly the link between women and their position as a means of contact with the atua. Although neither group of artefacts can be adequately dated, the clear Polynesian parallels of the godsticks, and common features between the burial chests and prehistoric burial practice tend to argue for a chronology covering much of New Zealand's prehistory. This in turn adds support for the idea that the symbolic associations of colour have been very
conservatively maintained.

Kauri Point Swamp

Introduction

The Kauri Point Swamp site is unique in New Zealand because it produced a large number of wooden artefacts not normally encountered in archaeological sites. Most famous are the combs of which some 334 large fragments were retrieved representing about 187 complete combs. Also recovered were about 14,000 pieces of obsidian, wooden figures, horticultural tools, spears, flutes, gourds, wooden vessels, textiles and wood chips. The site is significant for this study for two reasons. Firstly there was a considerable quantity of red ochre associated with the artefacts, both smeared on pieces and lying independently in the swamp sediments. The second reason concerns Shawcross's interpretation of the site. He argued that the site represented a wai tapu, a place where highly tapu objects were deposited. Before a detailed discussion is entered into, the site needs to be understood in its setting.

Archaeological research at Kauri Point was first undertaken by Jack Golson and the Auckland Archaeological Society in 1961 to determine the relationship between the Archaic aspect defined in
FIGURE SEVEN

Kauri Point Pa and Swamp Sites

Contours at 5 foot intervals

Excavated area
Site of proposed Wai Tapu
sites from the near by Coromandel, and Classic Maori culture defined principally in the North Island from Oruarangi. Initial work concentrated on the adjacent pa site and Golson's preliminary report outlined three periods of occupation (Golson 1961). This was extended to five periods after a second season of work reported by Ambrose (1962). Although this and subsequent seasons of work produced 'a complex of surface and semi-subterranean earthworks, including extensive scatters of post-holes, evidently the remains of timber framed structures and also groups of pits, usually rectangular, of various sizes' (Shawcross 1976:278), it did not produce the diagnostic artefacts which Golson hoped would illustrate the change from the Archaic to Classic.

The timely success of Duff's search of the Waitara swamp inspired Shawcross to search the swamp adjacent to the pa at Kauri Point (see figure 7). Two main seasons of excavation were undertaken in 1962 and 1963 with shorter periods of work in subsequent years. Analysis of the wealth of material recovered has been reported in two publications, Shawcross (1964b) dealing specifically with the combs and Shawcross (1976) giving a full account of the excavations. A kauri gum probe was used to survey the whole swamp and a 6 x 3 yard rectangular area of remains defined adjacent to the pa. Excavation revealed this to be a rectangular structure featuring six upright posts linked by pairs of worked
timbers. The timbers were finely finished but according to Shawcross were intended for other functions, one notable specimen having tenon joints. Within and around the rectangular structure were scattered broken twigs and sticks, some having been worked. Seven lenses or floors of bright yellowish sand were found with a small quantity of wood chips. Shawcross (1976:284) doubts whether there were sufficient wood chips to indicate wood working. Finally there was a large number of artefacts. Of the 14 000 obsidian flakes found, 95% were within the 50 square foot timber structure while the rest were in close vicinity. Shawcross (ibid.) suggests that this might be explained if the structure were open to the air or the material was thrown in from the bank.

**Chronology**

Of particular importance to this study is the chronology developed for the swamp site. An early date for the association between red ochre and *tapu* at this site would go a long way to substantiating the argument developed in Chapter Two. Unfortunately the dating at Kauri Point Swamp is anything but straightforward. Shawcross (ibid.:295) reports seven radiocarbon dates from the site. Material was selected for dating which bracketed the cultural deposit, and a further two dates were obtained from material near the base of the deposit (see table two). The two dates from below the
# TABLE TWO

Radiocarbon Dates from Kauri Point Swamp

<table>
<thead>
<tr>
<th>NZ Lab.No.</th>
<th>C14Years BP 5568 1/2 life</th>
<th>Paired lab 2s. (after 2s. mean)</th>
<th>s.d. Clark</th>
<th>C.A.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) NZ593A</td>
<td>684±57</td>
<td>279</td>
<td>53</td>
<td>146</td>
</tr>
<tr>
<td>NZ809A</td>
<td>279±53</td>
<td>279</td>
<td>53</td>
<td>146</td>
</tr>
<tr>
<td>B) NZ813A</td>
<td>547±71</td>
<td>547</td>
<td>71</td>
<td>174</td>
</tr>
<tr>
<td>NZ812A</td>
<td>430±54</td>
<td>414</td>
<td>N.A. 106</td>
<td></td>
</tr>
<tr>
<td>C) NZ592A</td>
<td>398±56</td>
<td>414</td>
<td>N.A. 106</td>
<td></td>
</tr>
<tr>
<td>NZ811A</td>
<td>410±54</td>
<td>512</td>
<td>N.A. 100</td>
<td></td>
</tr>
</tbody>
</table>

C.A.R.) Calendrical age range at two standard deviations in years AD.

A) A pair of samples from the same level dating the end of the comb sequence. These two are significantly different so could not be paired.

B) A single sample stratigraphically later than the earliest pair of samples from the cultural deposits.

C) A pair of samples from the same level, dating the earliest cultural deposits. These two were not significantly different so could be pooled.

D) Two wood samples from the earliest deposits in the swamp sequence. These two were not significantly different so could be pooled.
cultural deposit agreed fairly well, but those from the top, R1950/1 279±53, R1418/2 684±57 BP, even when adjusted for secular correction were considerably different. In addition a date from within the deposit (R1950/5, 547±71 BP) gave a date earlier than those for the base of the cultural material. The two samples from the base of the swamp were only in very general agreement.

The confusion led Shawcross to return to the site for clarification. Continuation of the stratigraphy between the two sites, resting on a shell midden which had spilled into the swamp, allowed Shawcross to bracket the cultural deposit between two dates from the pa, which he gave as ANU-25, 495±100 BP (for the terrace preceding the defences) and ANU-16, 230±100BP (for a pit). Shawcross still felt that the later date was unsatisfactory so turned to the artefactual evidence. From a seriation of the combs (Shawcross 1964b) he argued that the later forms were very similar to those collected by Cook during his voyages, however they were on the whole plainer than those collected during the late 18th century. This allowed Shawcross to propose that the cultural sequence ended sometime during the mid 18th century. He suggested that it began about the middle of the 16th century (Shawcross 1976:296).
Shawcross's assessment, however, ignored the obvious possibility that the combs from the top of the sequence were older than the 18th century examples collected by Cook. This possibility has recently been explored in an unpublished paper by Rodger Green (ms). In this paper Green took another look at the radiocarbon dates which Shawcross abandoned. He adjusted the dates for secular correction against Clark's curve (Clark 1975. Shawcross had used Suess 1970), and then pooled six of the dates into three pairs using Wilson and Ward (1981) (see table two). The pooled dates for the beginning of the sequence gave a secular age range of 1430–1560 AD, at two standard deviations. The date obtained from mid-way in the sequence gave a calendrical age at two standard deviations of 1290–1480 AD and Green used this to argue that the probable beginning of the comb sequence is toward the end of the 15th century. The two samples from the base of the swamp sequence gave a calendrical age range of AD 1370–1460, at two standard deviations. This left only the two dates from the top of the comb sequence, NZ 593 with a corrected date of 690±60 BP and NZ 809 with a corrected date of 380±60 BP. Green argues that NZ 593 is closer in date to the age range for the beginning of the swamp sequence so the wood from which the sample was taken was probably in a secondary position. NZ 809 is not statistically different from the estimate for the beginning of the
comb sequence, but is different to the date within the comb sequence, NZ 813. Green concludes,

Calibrating the calendrical age of NZ 809 [see table two] provides a result suggesting that the upper limit of the end of the comb sequence is highly likely to be before AD 1770 and could easily be before AD 1650 (Green ms).

The problem remains of whether the comb sequence spans the whole period from 1460-1770 AD or whether it ceased sometime before the mid 18th century. The answer is sought by Green in the sequence from the pa site.

Recalculating the standard deviation of ANU-25 allows Green to give a calendrical age estimate at two standard deviations of AD 1350-1570 for the construction of the terraces on the pa, particularly the terrace which is thought to have interfered with a stream and created the swamp. The position of the midden which is dated to this period and also found in the upper portion of the swamp sequence, allows Green to conclude,

The entire comb deposit was contemporary with the first terrace modification, the subsequent midden, and other events in the pa occupation sequence which took place in a short period of time thereafter. The implication is that the swamp deposit ... containing the combs ... is not of long duration, at least in relation to the entire pa which carries on into the 18th century AD (Green ms).
ANU 46b produced a calendrical age range of AD 1400-1630 and dates a second shell midden deposited after the construction of a ditch and palisade around the initial terraces at the site. It is argued that shortly after this the defended area of the pa was considerably reduced in size and many of the pits and terraces abandoned.

The sequence can be briefly outlined: Initially the swamp and pa area was used for gardening then sometime around the end of the 15th century AD terraces were constructed on the headland and one of these led to the formation of the swamp. Shortly after this the deposition of combs began. While the combs were being deposited a midden, a ditch and palisade, a second midden and finally a late pit were deposited or constructed on the pa. This activity occurred over a fairly short period of time, probably no more than 150 to 200 years after AD 1500. Later a new defensive system was constructed on the pa which enclosed only half the area formerly defended. This smaller pa was occupied until the eighteenth century.

The Artefacts.

It is the collection of artefacts from Kauri Point which makes the site so unique. Nowhere else in New Zealand have such a large number of unusual artefacts been found in such a confined area, and with what would now appear to be very early dates. Besides
the combs, which are discussed below, a number of other artefact types were excavated.

Two wooden figures were found, possibly anthropomorphic, the more complete example formed from the fork of a tree with peg shaped feet, knees and a waist marked by a reduction in diameter. A groove at the fork of the tree might indicate a vulva. The figure had a badly decayed head which suggests it stood upright for sometime before being deposited in the swamp. Horticultural tools were represented by one complete digging stick and several incomplete ones. A single adze was recovered and a haft, although the latter which had been carved in the shape of a penis, is too large to have been intended for the adzes. Parts of the three barbed spears were excavated which probably formed some type of weapon. A number of fragments from undecorated flutes represent at least two examples. Numerous fragments of small gourds were also excavated although no minimum number is given by Shawcross. Some of the gourds showed incised decoration and several contained obsidian flakes or red ochre. Three wooden bowls were found: an elongated asymmetrical funnel shaped bowl, a perfectly preserved mallet shaped vessel, and an offset handled bowl interpreted as a drinking cup. Shawcross claims that no similar bowl to the first is to be found in ethnographic collections (ibid.:293). While true, this ignores Stevenson's (1939) comment that Maori wooden
bowls in general were highly variable in form. In fact Stevenson describes a number of "smaller utensils" some of which bear a marked resemblance to those from Kauri Point. The large number of combs recovered from the swamp doubled the number of combs known to exist in ethnographic collections. Shawcross (1964b) subjected the combs to a stylistic seriation and while a basic change from a square to a round topped frame was demonstrated, the seriation did not seem to "behave" as one might expect. Shawcross found that the stratigraphic sequence for the style of comb could not be explained by regular abstractions from a prototype. This led him to draw two conclusions. Firstly the order of manufacture and deposition was probably not coincidental; some combs might be retained for some time before deposition, well after they were stylistically outdated. Secondly he suggested that the Maori could not be viewed as a "mechanical translator of his art style" (Shawcross 1976:291), rather it seems that the artist was "deliberately exploring the variability of an almost formal language of motifs."

Other material recovered included kauri gum spindles (possibly the result of chewing kauri gum), some hanks of grass fibre and some finely woven flax made into rough wallets. The latter are particularly interesting because a number contained either obsidian or traces of red ochre. As mentioned above, red ochre appeared on a number of the artefacts and was scattered
about the site generally as independent lumps. The funnel-shaped and mallet shaped wooden bowls were smeared with red ochre as were a number of the combs. Unfortunately Shawcross (1964b:387) does not specify which parts of the combs were painted, nor indeed how many were painted. He comments only that "although a number of the Kauri Point combs show signs of red pigmentation, there is no evidence of painted designs.

The material excavated from the swamp is now on display at the Waikato Art Museum. Steve Edson (anthropologist at the museum) states in correspondence that the majority of the combs appear to have been lightly stained with ochre all over although there are greater concentrations around the engraved decorations and interstices between the teeth. The degree of staining varies considerably even to the extent that matched halves differ in shade. Unfortunately it is not possible to determine what effect the preservation measures undertaken on the combs had on the staining. An illustration by Barrow (1969) of one of the combs does, however, show that the frame of a comb has been painted with the pigment. This would suggest that the comb had been deliberately painted rather than the ochre simply rubbing off through contact with kōkowai smeared hair which might afford an explanation for the staining if the teeth alone were coloured. A number of other artefacts from the assemblage were also stained red. Two wooden bowls show traces of ochre staining
and a number of gourd fragments were vividly stained both on the inside and out (Edson pers. com.).

Besides painting, the majority of the wooden artefacts seem to have been deliberately destroyed. Shawcross argues that the teeth from the combs have been snapped and the frames broken. Two of the bowls had been holed, the digging sticks and spears broken and the flutes and gourds smashed (ibid.297). Shawcross argues that breaking of the artefacts was related to their status as sacred items. He notes instances where a number of artefactual classes found were used in sacred situations. The obsidian, for example, which had a very low proportion of cores (about 0.3%) (Shawcross 1964a), is suggested to have functioned in either scarification or hair cutting. Shawcross concludes, "a final element of the site, which fits the pattern of sacredness, is the presence of red ochre on artefacts and as an independent feature of the sediments" (ibid.:300).

Shawcross reviews the 19th century ethnographic sources looking for mention of sacred sites. Best (1924a:170) mentions such sites, calling them _tuahu_. One particular form, called a _tiepa_, is described as a platform of sticks upon which offerings were placed. Significantly Best records hair cutting as a ceremony performed there. Shawcross cites Best who claims that sacred sites connected with water were called _wai tapu_ (1925 cited in Shawcross 1976:301). Shawcross adopts
Taylor’s definition using *wahi tapu* as a general term for a sacred place, and *tuahu* for a structural feature.

Shawcross concludes that the Kauri Point Swamp may have been a *wai tapu*, with the wooden enclosure representing a *tuahu* and the matted sticks a *tiepa*. The site served as a dump for a number of sacred artefacts which had been deliberately broken, and possibly especially painted with red ochre.

In his discussion Shawcross includes a detailed appraisal of the errors to which his main ethnographic source, Elsdon Best, was prone, so the actual terms *wai tapu*, *tuahu* and *teipa* must be viewed with considerable caution. Perhaps a more profitable course which Shawcross might have followed was to compare the Kauri Point Swamp site with sites of similar form or function in East Polynesia. A notable parallel is the refuse pits found beside the *marae* in the Society Islands. Oliver (1974:101-102) terms these *tiriapera* or *turuma* and notes that they were an architectural feature of most *marae*.

**Red Ochre and Kauri Point Swamp**

If we accept Shawcross’s argument that Kauri Point Swamp represented a dump for artefacts rendered dangerous by their *tapu* associations then Green’s (ms) new dating suggests that *tapu* was an important institution as early as the 15th century AD. Moreover
the fact that the artefacts had been systematically broken, perhaps painted and then dumped implies some form of ritual. Shirres (1982:43) would argue that much of Maori public ritual was concerned with resolving the clash of extensions of *tapu*. This dumping of *tapu* objects would certainly not be inconsistent with Shirres's hypothesis. More significantly for this study, there is a clear association between red ochre and *tapu* objects. The flax 'wallets' and gourds containing ochre are particularly intriguing. Shawcross argues that the 'wallets' were formed from matting which was originally produced for other purposes, as may have been the gourds. One may speculate that both represent containers for ochre used in body painting and that in consequence the ochre acquired *tapu* by extension and had to be disposed of. If this is, in fact, correct there is a clear parallel with Tahiti where red feathers had to be brought into contact with a god image on a *marae* before they became consecrated. This is further evidence that *tapu* by association has a Polynesian wide distribution.

If ochre could become *tapu* by extension then it makes sense that it would be carefully collected for disposal. This would leave little ochre to be incorporated in archaeological sites. Although no quantitative measurements were taken, an examination of the archaeological collections in the Auckland
Institute and Museum, Canterbury Museum, Otago Museum and the Southland Art Gallery and Museum revealed that there was never a particularly great quantity of ochre, and what there was, was generally of a form loosely described as haematite. Although sampling error is liable to be an important factor, particularly from early excavations, it is argued below that much of the material found archaeologically is probably unprocessed.

Discussion

The Kauri Point Swamp site represents a site type which has few parallels in New Zealand. From the few other pa excavations which have been undertaken no other wai tapu structures have been excavated, although a number of interesting and possibly related features have been uncovered. At Managakaware Pa (N65/35) Bellwood (1978b) described a concentration of artefacts between two lines of palisading, a feature he reconstructed as a narrow entrance way (ngutu). Artefacts found included five pieces of a least three oneua (stone war clubs), two bird spear fragments, two adzes, eight pieces of human femur, smashed, burnt and covered with ochre and nearby the bones, a single large piece of ochre (ibid.:19). The artefacts were scattered near a hearth which Bellwood notes is an unusual feature in an entrance passage. Bellwood speculates that the remains may represent the cooking
of a human leg for food by victorious warriors.

Best (1975) records no ritual associated with pa gateways but he does note that tapu ceremonies were performed in a fenced area to prevent tresspass (ibid.:127). The fact that the artefacts found in the entrance were broken suggests a parallel with Kauri Point Swamp. The presence of abundant red ochre in association with the bones suggests some form of ritual rather than cannibalism, although its actual form remains open to speculation.

Another type of unusual structure associated with red ochre was excavated at Ngaroto (Shawcross 1968). Shawcross described two circular structures.

[The first] is made of a group of eight stake holes, formed in an oval about 90cm long by 70 wide, surrounding a large fire pit, 60cms in diameter. The second group consists of seven stake holes forming an oval 50cms long, surrounding a considerably smaller fire pit (ibid.:14).

The stake holes of the second enclosure were filled with red ochre. Shawcross suggests that the sites may represent a kind of small enclosure used to mark a tapu spot.

Neither site, however, provides as strong a link between the colour red and tapu objects as that found at Kauri Point Swamp. This site with its 15th century date provides strong archaeological evidence for the symbolic associations of the colour developed
Archaeological and Ethnological Evidence for Red Colour Symbolism.

The archaeological and ethnological evidence reviewed above tends to confirm a number of the conclusions reached in Chapter Two. The association of red ochre with secondary burials demonstrates a link between the colour and the category *tapu*. In addition the fact that some of the ochred burials were female adds support for Hanson’s reinterpretation of female status in Polynesia and for the practice of symbolizing this with ochre.

The review of studies of godsticks has shown close parallels between these and some other Polynesian god images, notably the Hawaiian feather images. This is strengthened by the godsticks’ association with the god Kahukura. The fact that it is the decoration of the godstick, rather than the image itself, which is important again has parallels with the rest of East Polynesia. Since both red feathers and red ochre are used it may be argued that it is the colour rather than the medium which is significant. This is consistent with the argument developed in Chapter Two.
A recent study of burial chests demonstrates that most were painted with red ochre and probably depicted supernatural figures rather than contemporary people. This helps confirm the association between colour and the *atua*. In addition a number of the chests were obviously carved to represent females. This adds support to Hanson's hypothesis that the female genitalia provided a means of contact between the real world and that of the gods. The wide open mouth design of a number of the burial chests may indicate a broad continuity of burial symbolism between Northland and the burial sites at Palliser Bay and Wairau Bar. It also indicates a continuity over a wide time span.

The third example, Kauri Point Swamp was selected because it had evidence of a wide range of artefacts in association with red ochre. The artefacts were deposited in the swamp sometime in the 15th century and this practice continued for the next 150 to 200 years. The wooden artefacts deposited in the swamp seem to have been deliberately broken and may have been painted with red ochre. In addition woven flax wallets and broken gourds had been deposited containing red ochre, possibly connected with body painting, although this remains speculative. Shawcross suggests the site represented a *wai tapu*, with a wooden structure corresponding to a *tuahu*. He suggests that the site served as a dump for sacred objects, and as such it has
clear parallels with the *tiriaperia* found next to *marae* in Tahiti. The site also provides support for the antiquity of tapu as Shirres would define it. All the artefacts deposited in the site could have become tapu by extension from some source of intrinsic tapu. The site provides good grounds for supporting the association between the colour red and *tapu*.

The discussion in Chapter Two saw the colour red in New Zealand as symbolizing the clash of *tapu*, and the position of women as a link between the real world and that of the *atua*. Both these associations are upheld by the examples given above, however they are less conclusive concerning the associations common to East Polynesia as a whole. Certainly a concern with *tapu* and the *atua* has been verified, but it is more difficult to demonstrate a link with genealogy, chiefly status, and warfare. The fact that burial chests were found in communal burials may suggest that these were identified with the ancestors of one particular group. The gods Kahukura and Maru which occasionally inhabited the godsticks are sometimes associated with warfare. No direct association can be demonstrated with chiefly status in the examples chosen but Fox does suggest that the burial chests may have been used by higher status individuals.
Regional Case Study: Red Ochre Use in Prehistoric Murihiku

Introduction

Having briefly reviewed some archaeological evidence which confirms some of the conclusions reached in Chapter Two, it is desirable to see whether the analysis of the symbolic associations for the colour red can lead to new conclusions concerning social and ideological aspects of the prehistory of a particular region. The region chosen was Murihiku which may be roughly defined as that part of the South Island south of the Waitaki River (although information from other South Island sites will be used in the discussion below).

Archaeological material which includes red ochre may be divided into three groups: remains of ochre and haematite and the artefacts associated with its preparation found during the excavation of open sites, ochre used in rock drawings, and ochre associated with material found in cave sites. The use of the colour red in all three areas is reviewed and the evidence interpreted according to the symbolic associations for the colour developed in Chapter Two.
Ochre and Haematite from Excavated Sites in Murihiku

Ochre has been found from a number of sites excavated in Murihiku, however the inconsistencies in the type of material salvaged by the various excavators who worked on the sites precludes any form of quantitative analysis. This is particularly apparent in the large museum collections from Murihiku sites where red ochre was not often favoured by collectors. Those collectors conscientious enough to record their excavations in some form did note its presence. A thorough search of these reports allows a presence/absence analysis to be undertaken and while individual reports may be inadequate by modern standards, they do allow broad trends to be demonstrated. This form of analysis has recently been used with some success by Anderson (1982b + c) to investigate sites from the interior of Murihiku.

The data from sites is presented in table three. The sites are arranged in the three chronological divisions defined by Anderson (1983a). Sites not mentioned in his book were assigned to a particular period on the basis of radiocarbon dates, or similarities in material culture. At first glance the table seems to confirm the generalisation that red ochre is associated with Classic sites. Anderson (1982a:125), for instance, suggests that, "nephrite adzes, chisels and pendants, flutes and toggles of
### Red Ochre Excavated From Sites In Murihiku

<table>
<thead>
<tr>
<th>Early Sites</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawksburn</td>
<td>Small pieces of ochre/haematite</td>
<td>Anderson pers. com.</td>
</tr>
<tr>
<td>Nevis</td>
<td>One small lump of reddish clay</td>
<td>George 1937</td>
</tr>
<tr>
<td>Woolshed Plat</td>
<td>nothing found</td>
<td>Trotter 1970a</td>
</tr>
<tr>
<td>Waitaki Mouth</td>
<td>nothing found</td>
<td>Teviotdale 1939</td>
</tr>
<tr>
<td>Waimataitai</td>
<td>nothing found</td>
<td>Trotter 1955</td>
</tr>
<tr>
<td>Shag River Mouth</td>
<td>Small pieces of haematite occasionally found</td>
<td>Teviotdale 1924</td>
</tr>
<tr>
<td>Little Papanui</td>
<td>nothing found</td>
<td>Simmons 1967</td>
</tr>
<tr>
<td>Pounawea</td>
<td>Ochre from Lockerbie's excavation</td>
<td>Teviotdale 1937 + a + b</td>
</tr>
<tr>
<td>Papatowai</td>
<td>Nothing found</td>
<td>Teviotdale 1937</td>
</tr>
<tr>
<td>Long Beach</td>
<td>Nothing found</td>
<td>H. Leach and Hamel 1981</td>
</tr>
</tbody>
</table>

| Middle Period        |                                                                            |                             |
|----------------------|                                                                            |                             |
| Shag Point           | Nothing found                                                               | Trotter 1970b              |
| Purakanui            | Five pieces of ochre from layer 2, one piece from layer 3.                 | Anderson 1981              |
| Long Beach           | Nothing found                                                               | H. Leach and Hamel 1981     |
| Dart Bridge II       | Ochre pieces near paving                                                    | Anderson and Ritchie 1981   |

| Late Sites           |                                                                            |                             |
|----------------------|                                                                            |                             |
| Long Beach           | Nothing found                                                               | H. Leach and                |
Murdering Beach: Ochre grinder next to late hut site.
Little Papanui: Much red ochre grinders, and ovens.
Katiki: Numerous pieces of ochre and grinders found.
Karitane: Numerous pieces of ochre and paua pigment containers.
Mapoutahi: Ochre, worked ochre and grinders.
Taiaroa Head: Scraps of ochre in midden refuse.
Kings Rock: Several ochre crushing stones and a grinder.
Kaka Point: One piece of ochre from George 1944 lower layers.

Red ochre excavated from prehistoric sites in Murihiku. The sites are broken up into the chronological divisions proposed by Anderson (1983a).
Diomedia bone and red ochre” are typical of Classic sites from Murihiku. Red ochre is not restricted to the Classic because odd pieces turn up at early sites like Hawksburn, Shag River Mouth and Pounawea. What does seem to be restricted to the late sites, and notably the late pa sites, is artefacts associated with the processing of red ochre, or the pigment in its final form. The pa sites in particular are associated with an abundance of ochre. At Huriawa (Leach and Hamel 1978) several paua shells filled with ochre were excavated. Trotter (1967b) excavated several pebbles used to crush ochre from Katiki Point, and Anderson and Sutton (1973) record worked kokowai and grinders from Mapoutahi. Teviotdale (1948) records scraps of kokowai mixed in with midden at Tarewai Point. He (ibid.:114) also notes a rather unusual feature from the same site.

Another interesting feature was a hollow in the clay, circular in shape and about twelve inches in diameter and five inches deep. It contained a layer of wood ashes about two inches deep a central layer of kokowai one inch in thickness, and another two inch layer of wood ashes, evidently an oven with kokowai in preparation.

Teviotdale’s interpretation would seem reasonable, particularly since Skinner when describing another example from Little Papanui (1960:189), quotes Dieffenbach (1843:159) who noted that according to Ati Awa informants a stage in the preparation of kokowai
involved "roasting". Skinner concludes that the oven at Little Papanui was abandoned because the pigment turned out to be a poor colour.

Baking of ochre in ovens is particularly significant because it implies that a number of other iron oxide minerals besides haematite could be used to produce kokowai. The oxides of iron occur in a number of mineral forms besides haematite. These are often described under the term limonite which generally consists of a mixture of cryptocrystalline geothite, lepidocrocite, absorbed water and traces of haematite (Degens 1965:82). Heating under oxidising conditions will tend to produce the more stable range of iron oxide minerals not all of which, in their natural state, need have been red in colour.

The colour of the iron oxides is very dependent on particle size. Haematite in its crystalline form is steel grey to black but when ground into thin splinters becomes blood red (Deer et al 1966:409). Only one iron oxide, maghemite, would seem to be unsuitable as it has a black colour. The chemistry of the hydrous iron oxides is complex, but for our purposes the important point is that given the technology of baking and grinding, which evidently the prehistoric Maori had, a wide range of iron minerals could have been exploited.

These minerals are very common over the earths surface so that trying to determine specific sources for all the ochre found in prehistoric sites...
would seem to be a rather pointless excercise. This is not to deny that certain sources were preferred and the ochre from them widely traded, only that, in general ochre could be produced in some form in virtually any region of New Zealand.

Besides the four late pa sites, both the sites of Murdering Beach and Little Papanui have signs of ochre processing. At Murdering Beach Lockerbie (1954) figures a *kokowai* grindstone next to a hearth in a late hut site, while at Little Papanui Simmons (1967) comments that the top layer had abundant *kokowai*, grinders and the oven mentioned above.

Up till now orthodox opinion has interpreted the larger quantity of red ochre during the Classic as evidencing a greater use of the pigment during the late period. Yet the mere absence of an item from an archaeological site does not necessarily mean that it was not used. To return briefly to the Kauri Point Swamp site, a number of flax wallets and gourds were described partly filled with red ochre. It was argued above that these represented *kokowai* which had become *tapu* by extension (perhaps because it was used for body painting) and therefore had to be deposited out of harms way in a *wai tapu*. If indeed red ochre was used to mark people and objects that were *tapu* throughout Murihiku, then it is likely that much of the processed ochre may also have become *tapu* and been disposed off carefully, perhaps in a place not normally investigated.
### TABLE FOUR

**Haematite and Limonite from Mapoutahi S164/13**

<table>
<thead>
<tr>
<th>Square</th>
<th>Layer</th>
<th>Description</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strip A</td>
<td>9A</td>
<td>A large lump of poorly silted medium to fine sandstone. A limonite and haematite compound</td>
<td>384g</td>
</tr>
<tr>
<td>Strip A</td>
<td>4/5</td>
<td>Fine limonite sandstone</td>
<td>1.3g</td>
</tr>
<tr>
<td>Strip A</td>
<td>3/4</td>
<td>Volcanic haematite</td>
<td>11.9g</td>
</tr>
<tr>
<td>Strip B</td>
<td>3</td>
<td>A very small piece of volcanic haematite and a small piece of sedimentary haematite.</td>
<td>0.13g 0.6g</td>
</tr>
<tr>
<td>Strip A</td>
<td>2A</td>
<td>Sedimentary haematite</td>
<td>0.42g</td>
</tr>
<tr>
<td>Strip A</td>
<td>4A</td>
<td>Sedimentary haematite</td>
<td>8.6g</td>
</tr>
</tbody>
</table>

This small assemblage from a salvage excavation at Mapoutahi supports the suggestion that 'red ochre' retrieved from many archaeological sites may be in the form of a raw material requiring processing by baking and grinding. Identifications by G.M. Mason, Anthropology Dept., University of Otago.
by present day archaeologists. The lack of red ochre processing tools in early sites may not, then, evidence less use of the pigment but simply its careful removal. Perhaps the lumps of red ochre or haematite which have been retrieved from early sites represent material which has either not been baked, or has not been ground\(^3\). Unfortunately there are few carefully excavated assemblages of red ochre and haematite upon which to test this hypothesis, however recent salvage excavations at Mapoutahi (admittedly a late site) has produced a collection which would tend to support this hypothesis (see Anderson nd). Identifications are given in table four and at least some of the material (the majority by mass) appears to be limonite.

To further test this hypothesis it would be desirable to find a dump for the *tapu* ochre similar to Kauri Point Swamp. Although no such site has been excavated from Murihiku, a tantalising hint is provided by a report of an expedition to the cave site of Rakautara (S49/3) on the Kaikoura Coast (Eyles 1975). Excavations revealed a midden with a number of fishhooks and bone tabs but at the back of the cave no less than 15 paua shell holders for *kokowai* were unearthed together with ten pestles and two mortars for grinding the pigment. Unfortunately the level of recording was too poor to ascertain whether this material was separated stratigraphically from the midden, but such a large number of items associated
with red ochre is very suggestive that they were cached deliberately, perhaps because they were considered *tapu*.

Two further examples lend support to this idea that red coloured *tapu* items were treated carefully. Recent excavations at Purakanui (see Anderson 1981a) revealed a fragment of human cranium covered with red ochre and jammed between two paua shells. Analysis of the fragment by Dr Phil Houghton of the Anatomy Department, University of Otago confirmed that it was from the right parieta1 bone of a very young child, probably new born and possibly even a late abortion". The fact that the bone fragment was smeared with red ochre is particularly interesting because human stillborn babies were considered to be a malicious form of *atua* (Best 1924a:128-131 cited in Hanson 1982a:345). Hanson (ibid.:350) suggests that a still birth symbolized the aborted attempt by an *atua* to enter the world as a human being, and that this failure might account for the *atua*'s malicious tendencies. If the fragment does in fact represent the remains of a still born baby it lends support for both the *tapu* and *atua* associations of red ochre and because of the early 14th century date for Purakanui, is good evidence for the continuity of the symbolic associations of the colour. Unfortunately excavations at Purakanui were undertaken as a salvage operation and were not sufficiently extensive to determine whether the fragment was removed
from the main occupation area. If the analogy with Kauri Point is extended, however, it would not be necessary for this sacred dump to be much removed from the main habitation.

The second example concerns a number of red argillite artefacts found in early sites from the South Island. These unusual artefacts come in a variety of forms and this coupled with their unusual colour, first stimulated my interest in looking at colour as a topic of study.

Red argillite artefacts are held by the National, Canterbury and Otago Museums and are listed in table five. Unfortunately all were obtained as the result of early excavations so any details as to provenance within the site have been lost. Although it cannot be demonstrated, the colour of these artefacts may indicate that they were of ceremonial importance. Certainly Best notes that some adzes were individually named and held to be of sacred importance (Best 1974a:16). The three amulets (D30.575, D21.5 and Skinner 1974 fig 4.84) and the lure point from Rakaia (E155.83) may also have been of some ceremonial importance (see fig 9). The latter is particularly interesting as it combines all the features of a triangular cross sectioned lure shank in the point. Duff (ms:147) states in his field notebook that the point was recovered in association with three hog-backed adzes, a serpentine reel and a fragment from
FIGURE NINE

Red Argillite Artefacts

A: D21.5, B: Otanerua, C: D30.575, D: E155.83. Descriptions and provenance are given in table five.
TABLE FIVE

**Red Argillite Artefacts**

<table>
<thead>
<tr>
<th>Museum</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canterbury</td>
<td>E139.26 Clarence River. Boulder flake (spuull from boulder in red argillite. No evidence of polish on the blade surface but there are small flakes up to 3mm across.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E163.599 22/6/63 No. 9 54/35.9 Moabone Point Cave. Broken piece of a quadrangular red phyllite adze.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E158.795 Redcliffs. A rectangular piece of red phyllite with an attrition saw cut along one edge.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E149.713 Banks Peninsula. A small red argillite adze.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E153.21 Rakaia. A small red phyllite chisel, probably unfinished.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E142.276 Redcliffs. Red phyllite lure shank. Part of a collection of worked stone pieces fossicked from the sandhill area east of Moabone Cave.</td>
</tr>
<tr>
<td>Canterbury</td>
<td>E155.83 Little Rakaia. Red argillite lure shank point. Attachment area is decorated with a face, while the back of the point is notched. The point was found in association with three large hog backed adzes, a serpentine reel and a fragment from a red argillite slate knife (Duff ms:147)</td>
</tr>
<tr>
<td>Otago</td>
<td>D30.575 Waitaki Mouth. Broken amulet in red argillite. Skinner describes the amulet as a lizard form with the tail dropped off (Skinner 1974:67).</td>
</tr>
<tr>
<td>National</td>
<td>Otanerua, Fanning Bay. Amulet in red argillite in the form of a turtle. This artefact could not be found at the National Museum.</td>
</tr>
<tr>
<td>Otago</td>
<td>D10.144 Summit of the Lammerlaws. Red argillite amulet in the shape of...</td>
</tr>
</tbody>
</table>
an ulu. Skinner claims it is an unfinished version of the ulu with two fish motifs from Okain's Bay (Skinner 1974:94).

Otago

D21.5 Little Paranui. The so-called red argillite 'dagger'. The two proximal edges of the handle are deeply notched as though to secure it to slats. The distal edges of the blade are barbed in reverse (Skinner 1974:94).
a red argillite slate knife. It is possible that this group represents a cache of ceremonial artefacts, although Skinner (1974:108) notes that large adzes of this type are relatively common. Less details are available for the other red argillite artefacts. The so-called red argillite dagger was found in a layer of "burnt charcoal, sand and fishbones" at Little Papanui (Rodgers 1922) but no more details of provenance are given. What is particularly interesting is that a number of these artefacts appear to have been broken. Thus all three of the pendants figured have been damaged as have two of the adzes, and three of the artefacts appear incomplete. Archaeologists have assumed that broken artefacts were disposed of in sites as a result of their damaged condition. At Kauri Point Swamp, however, Shawcross (1976) argued that the artefacts recovered had all been deliberately destroyed presumably as some part of a ceremony before deposition in the swamp. It is tempting to form an analogy between this practice and the damaged state of the red argillite artefacts. The analogy might be strengthened if the intrasite provenance of the artefacts were securely known, but this information has been lost.

Both the bone fragment from Purakanui and the red argillite artefacts from various South Island sites suggest that red coloured, and therefore *tapu* items may have been treated with some consideration by the prehistoric inhabitants of Murihiku. Although it
cannot be in anyway proved, there is the suggestion that the paucity of red coloured items from early and middle period sites (Anderson 1983a) may be due to the fact that red coloured artefacts were carefully collected and disposed off.

If this hypothesis holds true for the early period, it certainly does not for the late. Table three indicates that the pa at Katiki, Mapoutahi and Karitane and the late sites at Murdering Beach and Little Papanui all had considerable quantities of **kokowai** and the tools for grinding and holding ochre. It is unlikely that all this ochre was in an unprocessed state so clearly some form of change must have taken place. One explanation would be to associate this increased evidence of red ochre with the traditional arrival of the Ngai Tahu from the north.

Although most of the Classic artefactual material can be shown to have evolved from forms typical of the early period, the arrival of the Ngati Tahu in the 18th century did have an effect on certain types of weapons and ornaments. Both these types of artefacts are liable to have been status related so it is possible that the arrival of the northerners coincided with an increase in the importance of visual displays of status. This coupled with the traditional accounts of warfare during the late period might account for the increased evidence of ochre producton. This social unrest might also account for a failure to
remove ochre from occupation sites as has been suggested for earlier periods. Alternatively some of the ochre producing artefacts may have remained in situ simply because the sites were abandoned. Evidence from Murdering Beach, Long Beach and Katiki indicating that the sites were burned at the time of abandonment would support the latter hypothesis. Lockerbie's (1954) figure of a kokowai grinder next to a hearth at Murdering Beach is particularly suggestive.

Conclusion

Although the archaeological evidence for red ochre in Murihiku sites is sparse and suffers from a lack of adequate excavation techniques it is possible to use the symbolic associations for the colour developed in Chapter Two to make some new and interesting interpretations. A review of published archaeological reports indicates that much of the ochre and ochre processing artefacts have come from late sites. While this has been interpreted as a feature of the Classic in Murihiku the mere absence of material from early sites does not mean that it was not used. It is suggested here that the tapu associations of red ochre may have meant that it was carefully collected and cached. One example of these caches may be the site of Rakautara. Evidence for the careful treatment of items coloured red and considered tapu is suggested by a fragment of human cranium from Purakanui, and red
argillite artefacts from various South Island sites. The latter have either been cached with other ceremonial artefacts, or broken, possibly deliberately as a mark of their tapu status. The large amount of ochre form late sites is the exception and it is suggested that this may either be due to the arrival of the Ngai Tahu, and the associated social unrest or to the sudden abandonment of a number of late sites.

Rock Drawings from North Otago and South Canterbury

Introduction

The second major area of red colour use in Murihiku to be considered is the numerous rock drawings in caves and rock overhangs mainly in North Otago and South Canterbury. The drawings have stimulated occasional scholarly writings for a number of years, however recently they have been the subject of more intensive research. A book has been published dealing with rock art from the whole of New Zealand (Trotter and McCulloch 1981) and a thesis completed dealing specifically with rock drawings from the North Otago and South Canterbury regions (Bain 1982). Although it is difficult to interpret the significance of the motifs used in rock art, there are none of the problems of provenance experienced with red coloured objects. Provided that descriptions by the archaeologist are
adequate we can learn how red coloured drawings were placed in relation to drawings of other colours (white and black were also used) both within one site and between a number of sites. Variations may then be interpreted using the symbolic associations for red developed in Chapter Two.

Approaches to the Study of Rock Drawings in New Zealand.

It is proposed to deal with three recent studies of Maori rock drawings, that of Trotter and McCulloch (1981), a thesis recently completed by Pamela Bain and, because it formed a major source in Bain's work, an unpublished study by Anthony Fomison (ms).

Trotter and McCulloch (1981) review rock drawings from the whole South Island noting their distribution extends from Clifden in Southland and Notornis Valley (Lake Te Anau) to Monkey Face, Motunau Beach (Kaikoura). The bulk, however, are in South Canterbury, some around Waimate but most in the vicinity of the Pareora and Opihi Rivers. In the great majority of cases rock drawings are found in limestone caves or rock overhangs probably because this material provided the best medium upon which to draw.

Trotter and McCulloch provide a descriptive overview of the drawings but engage in very little analysis. In a discussion of drawing techniques they note that 90% of the South Island rock art is drawn in
charcoal, while red ochre is found less frequently, although it does seem to occur in most areas. The colour white was produced by rubbing stone over the greyish weathered surface of the limestone. After briefly describing the rock drawings under the subject categories of humans, animals, fish and bird forms, creature forms and patterns and designs, Trotter and McCulloch go on to discuss chronology. They present evidence from the few rock shelters with rock drawings which have been excavated. They suggest that most of these sites demonstrate one period of occupation. Midden remains from the caves include moa, other extinct birds, dogs, and rats, and radiocarbon dates generally seem to fall in the range 850-450 years BP. Trotter and McCulloch (ibid.:80-81) argue that the caves represent small camp sites occupied by groups moving to and from the interior. They suggest that drawing was only incidental to the occupation of the cave although it is acknowledged that red pigment would have to have been brought into the area. Trotter and McCulloch conclude that the prehistoric artists, 

Drew for that most human of all reasons, because they wanted to, because it gave them the same pleasure, the same feeling of satisfied achievement, that inspired artists to create, whether they use canvas and oils, pencil and paper or natural pigments and smooth rock face (ibid.:81).
This may well be true but the simple analogy with other forms of Polynesian art shows that all were designed to convey a message to a wider audience. Already in this thesis a number of studies have been reviewed which seek to understand this message (see for instance Kaeppler, 1982, nd; Gathercole 1976, 1979). Trotter and McCulloch seemed to have ignored the obvious point that rock drawings by their very nature are visual messages which must convey something to the viewer as much as the artist. Their argument that the rock drawings of the South Island have much less significance than had much of Classic art remains unconvincing (ibid., 68). Unconvincing also is the argument that the sites represent temporary camps by groups moving into the interior. The fact that the art is restricted to limestone caves seems an adequate reason for the observed distribution.

Whereas Trotter and McCulloch seek to discuss the whole range of rock art in New Zealand, Bain's (1982) study is more circumscribed, dealing solely with rock drawings from the North Otago-South Canterbury region. Her analysis is placed in a concise form in a recently completed article for publication (Bain nd). After briefly reviewing past work she introduces an unpublished study by Fomison. After a considerable period of fieldwork Fomison produced a synthesis of the drawings which grouped them stylistically and proposed a five stage chronology. It is this chronology which
is crucial for this study because colour was seen by Fomison as a critical chronological marker. Moreover Bain (1982, nd) provides what she considers a statistical validation for Fomison’s chronology. Both studies warrant close attention in this thesis.

Stage one of Fomison’s chronology consists of drawings based on "realism" and the common occurrence of naturalistic subjects. The main features include humans in a flexed position, the internal space blank and significantly the colour black. Stage two involves a style similar to stage one but with a greater use of the colours red and white. Stage three sees an increased variation in colour. The human body is treated more generally with less separation of the respective parts. "Mythical creatures" become more common at the expense of naturalistic subjects. In stage four there is no marked stylistic change; however there is a greater emphasis on the colour red, and motifs of linear form. Fomison includes as a fifth stage subjects which clearly show European influence (Bain nd). By equating the styles typical of each stage with characteristic artefacts and decorative forms Fomison (ms) concludes that the first two stages equate with Golson’s Archaic aspect and the latter two with the Classic. A final source of chronological evidence is a drawing of a vessel under sail which Fomison concludes is European, and categorises as stage three.
Rather then the argument for continuity of colour association developed in this thesis, Fomison’s chronology shows a considerable variation in colour use. Bain worked closely with Fomison’s manuscript testing a number of the conclusions statistically. She took photographs of the large number of tracings of rock drawings held at the Canterbury Museum and then broke the drawings up into a number of recurring stylistic variables. These were analysed according to both Fomison’s chronology and geographical distribution. To test Fomison’s chronological analysis Bain divided her own list of sites into two groups equating with Fomison’s stage one and two, and three and four divisions. Using the variables she had selected, Bain ran a discriminant analysis on the data using the SPSS computer package. Using the human drawings, for which there was a sample of 262 cases, Bain demonstrated that over 97% of the cases were correctly grouped and concluded that "it does seem that there are the two distinct groups which he [Fomison] has named 'Early Style' and 'Classic Style'" (Bain nd). At first glance Bain’s analysis seems to confirm that of Fomison and establish good grounds for the relative dating of North Otago and South Canterbury rock drawings. It suggests that some of the conclusions drawn in this thesis may need modification. Upon closer examination, however, a number of difficulties become apparent in Bain’s work. The statistical test
which Bain selected, discriminant analysis, "provides such information as how correctly the two groups were arranged, how many cases within each of the groups have been correctly classified and the percentage of cases correctly grouped" (ibid.). What it does not do is validate the description of the class. In other words the classes "Early" and "Classic" style may represent truly different stylistic groupings but these groupings may have no relation to chronology. The fact that 230 of the humans were 'Early' style while only 32 were 'Classic' style makes it appear more likely that we are dealing with a simple stylistic rather than chronological difference.

Bain's initial division into two periods was based on Fomison's analysis so it is important that the basis for his distinctions be clearly understood. Fomison used a technique called superimpositional analysis to order his rock drawings. Superimpositional analysis consists simply of identifying the sequential order of drawing deposition, working from the basic assumption that the drawing at the bottom of the sequence (the one that is drawn over by another) must be the oldest. Unfortunately Fomison does not state which sites he used for his superimpositional analysis noting in a foreword to his paper that he expects his chronology to be taken as given. Surprisingly Bain echoes this position.
Fomison's work still stands as the only attempt in New Zealand to form a relative chronology from an analysis of style and superimposition. To test this hypothesis fully would require as many years in the field as Fomison spent and a detailed background knowledge into the prehistory of New Zealand. From the author's [Bain's] fieldwork carried out in the North Otago region, where all sites were studied for style, pigment, deterioration and superimpositions no fault could be found with his analysis. This thesis is based therefore on the assumption that Fomison's chronological model is complete, and that New Zealand rock art can be divided into groups based on differences in style through time (Bain 1982:54).

Again the reader is asked to accept a chronology based on superimposition without even a list of which sites were used. Bain herself provides references which question the validity of superimpositional analysis. One in particular, Maynard (1979), provides some extremely relevant points. Maynard notes that superimposition itself is a useful technique which can be employed by the artist. As an example she notes that a solid figure placed over one in outline would 'stand out', possibly producing a desired effect. This is perhaps the reason why Fomison's "bichrome convention" (drawings infilled in red or yellow, presumably rubbed limestone, outlined by black) appears only at stage two in his chronology (Fomison ms:29). As Maynard notes, colour contrasts may be desired by the artist and are most effectively produced by the use of superimposition. Maynard is extremely critical of
an established chronological theory for Australian Aboriginal art based in part upon superimposition and concludes her review by arguing strongly against the acceptance of any superimpositional sequence which is not supported by evidence from a microscopic inspection of the drawings. Neither Bain nor Fomison provide any discussion as to why the superimpositions they use to form a chronology could not represent a technique used by the prehistoric artist.

Maynard (1979:84) makes a further significant comment concerning the identification of naturalistic or religious elements in rock art. She cites an Australian example where a respected authority interpreted a series of aboriginal rock drawings, identifying certain naturalistic and symbolic elements. Somewhat unexpectedly it was found that the rock art was of recent origin and an Aboriginal informant was able to give his own interpretations for the work. The results were dramatic. Both parties differed widely. Even in naturalistic forms the agreement was less than 10%. Maynard concluded that any attempt to interpret rock art form or function must be approached with the utmost caution. This comment leads one to question Fomison's method for dating his chronological scheme. It was stated above that Fomison compared certain stylistic motifs from rock art to what he saw as similar motifs in certain portable artefacts. In light of Maynard's comments this association must be
seriously questioned and it would seem unwise to use it as the basis of a chronological marker. If this is dropped from Fomison's scheme it leaves only a single drawing, thought to be of a European vessel as a secure chronological marker. To my mind this interpretation is not convincing. The sails with which the vessel is provided seem suspiciously Polynesian in design.

To summarize the lack of detail concerning the provenance and accuracy of the superimpositions used by both Fomison and Bain in their analyses of North Otago and South Canterbury rock drawings, coupled with uncertainties inherent in superimposition as a method of analysis combine to suggest that their chronological conclusions must be rejected. Even if Fomison's superimpositional analysis can be shown to be correct there are problems tying it to absolute dates. In effect Fomison's model may be no more than a floating chronology not tied to any specific dates, if it represents a chronology at all.

In addition to chronology, Bain looked at regional differences in rock art styles. Stylistic categories identified as dog drawings, bird drawings, Classic style human drawings and Early style human drawings were compared between regions again using a computer assisted discriminant analysis. From her initial work breaking the drawings up into a list of variables, Bain noticed that there were clear stylistic differences between drawings in South Canterbury and
North Otago. She used the statistical analysis to test her conclusions.

The four dog drawings from South Canterbury were compared with the seven from North Otago and found to be clearly separated. The same analysis performed on 21 bird drawings from North Otago and 16 from South Canterbury produced a similar result. However in this case Bain (nd) also ran an analysis within the North Otago region, separating out the sites S127/101, S127/40 and S127/33 as significantly different. Only one Classic style human drawing was found from North Otago, so again the analysis was run between sites in one region (South Canterbury). Results indicated a clear difference between sites within the S101 map boundary and those in S102. By far the largest sample came from Early style humans, there being 172 cases from South Canterbury and 58 from North Otago. Discriminant analysis indicated that just over 89% of the cases were grouped correctly although 14 of the North Otago and 11 of the South Canterbury drawings were incorrectly grouped. Surprisingly, in neither of Bain's papers (1982, nd) were statistical analyses reported to check internal variation within each region for early style humans. Bain seems too willing to attribute differences in North Otago/South Canterbury rock art to some sort of territorial boundary without considering the alternatives. In her discussion Bain (1982:111-114) argues that her rock art data is in
keeping with the new regional approach to New Zealand prehistory (see for instance Prickett 1982b) going so far as to propose that Skinner's (1921) Rangitata River cultural boundary between Murihiku and the Kaiapoi culture area should in fact be moved south to the Waitaki. She argues that the north/south stylistic difference during the early period may reflect a social system with hapu as coherent units whereas later, when the north/south difference is not so marked in the Classic style, the hapu system was more interrelated and no longer had territorial boundaries (see Anderson 1980).

These are interesting conclusions but one cannot help wondering if the Waitaki is the only significant rock art boundary associated with the two areas. For instance the analysis of the bird drawings found a significant difference within one region, separating out three atypical sites. One may ask, what makes the differences between these sites less significant than the Waitaki boundary? One wonders what interesting groupings might have become apparent had early human data been subjected to a Q-mode factor analysis rather than a discriminant analysis.

Even if it is accepted that the Waitaki represents the only significant geographical boundary, it does not follow that the difference in rock drawings reflects a cultural boundary. I find the wide variation in the actual numbers of individual rock
drawings for the various categories from the two regions particularly suspicious. If we disregard the territorial hypotheses an equally valid argument could be made for different drawings placed in different places for different purposes. An alternative explanation along these lines is discussed below. Bain adopts in her study perhaps the most obvious explanation without considering any of the alternatives. This is dangerous because it produces what appear to be sound conclusions which are all-to-quickly adopted into other texts (see for instance Anderson 1983a:20).

Conclusion

Two major studies of South Island rock drawings have been published Trotter and McCulloch (1981) and Bain (1982 citing much of Fomison ms) however it is the latter of these studies which is of particular importance to this thesis. Bain adopted Fomison's chronological system for rock drawings which saw colour as an important variable. Because the colour red was seen to vary considerably in significance in the scheme their findings seemed to contradict the continuity hypothesis developed in this work. On closer examination, however, it can be shown that there are serious problems with Bain's and Fomison's assessments of chronology, so much so that the position of the colour red as a chronological marker can be seriously
discredited. In her study Bain went on to propose a major stylistic difference in rock art between North Otago and South Canterbury with colour again featuring as a diagnostic variable. This also posed a potential point of contention with this thesis. It would be difficult to fit regional differences for the use of the colour in with the continuity hypothesis. Fortunately for this thesis a number of alternative explanations may be posed for Bain's regional distinction more in keeping with the continuity hypothesis. These explanations are expanded below with reference to the colour red.

**Rock Drawings Using Red Pigment**

One of the most interesting observations to come out of Fomison's work for this study was that red almost always overlayed black and Early black drawings seemed often to have red lines or marks over them for no apparent reason (Bain 1982:110). Bain considered this to evidence chronological variation and concluded, "if colour can be accepted as a chronological marker in association with different styles, then it is also important for geographical variations" (ibid.). Bain found that most of the Early style bird and dog drawings were drawn in black. Only in the Early style humans was there considerable colour variation. Bain (ibid.) admits that this is probably due to the large sample size of this category, but does not see this as
conflicting with her thesis that colour is a good geographical and temporal discriminator. I do not wish to argue that there are not, indeed differences in colour use between the two regions. Bain clearly states that most Early style drawings in North Otago were black, with only a few in red and red and black, whilst in South Canterbury more drawings were bichrome, particularly white drawings outlined in black. But I do not agree that these colour differences necessarily mark a cultural boundary between the two regions nor indeed a temporal sequence.

Nor, on the other hand has an understanding of colour symbolism progressed sufficiently to allow a detailed explanation to be presented of exactly what the colours do mean. It is possible, however, to apply some of the conclusions reached in Chapter Two to interpret the rock drawings particularly with regard to the colour red.

A study of rock drawings which has hitherto remained unmentioned was published by Ambrose (1970). Ambrose surveyed the Upper Waitaki region in response to planned hydroelectric development under contract to the Historic Places Trust. He noted superimposition at Shepherd's Creek (S109/5) and Gooseneck Bend (S117/8). At Shepherd's Creek he tentatively identified a superimpositional sequence with scratched figures as the latest (possibly post European) preceded by single line red designs and finally solid infilled red and
black designs. At Gooseneck Bend Ambrose noted that large red drawings were executed on very rough rock faces, possibly, he suggested, because the smoother areas had been taken up with carefully drawn black drawings. Ambrose noted that the style of black and red drawings differed markedly, but that this difference might relate "to time or culture" (Ambrose 1970:430 emphasis mine). In contrast to both Bain and Fomison he argued that superimposition need not indicate a great time depth between execution of each drawing but might equate with a brief ceremonial context (although admittedly Bain did note the problems associated with superimposition). As an example Ambrose noted red lines drawn across a bird and barred black circles drawn upon another main design which he thought might indicate an activity of this sort, or alternatively, in the case of the latter example, simply part of the complex composition. Ambrose noted some colour variations: group arrangements were more common in black than red, no red drawings were as small as several in black, and black drawings were more carefully drawn than red; but none of these need imply a stylistic change associated with time.

An interpretation for the rock drawings which requires neither temporal change nor geographic boundaries may be posed by returning to Fomison's comment that red seemed always to overlay black. Fomison (ms) himself acknowledged the ceremonial
significance of the colour.

I suggest that the earth-colour red may have already been gaining, at this early period of its rare use, the sacred significance of later times.

I wish to suggest that the superimposition of red had an ideological function rather than a territorial significance, and that the colour may well have functioned to indicate tapu, as argued in Chapter Two. This hypothesis might help to explain why some drawings were defaced with red lines, and might also explain the scarcity of red ochre from those rock shelters containing drawings which have been excavated. Ochre found in flax wallets and gourds from Kauri Point was probably carefully collected then dumped in the wai tapu. If the red ochre used to draw rock drawings became tapu by extension, one would expect it to be carefully collected and removed from the site. One may speculate that red drawings were painted over the black at the end of a drawing session to indicate that the site was tapu, or alternatively the black drawings were encountered at a later date (although how much later cannot be determined) and were over painted because they were not recognised and thought to be ritually dangerous.
This explanation deals only with the general statement that red drawings are almost always superimposed over those in black. The analysis of colour symbolism presented here is not detailed enough to interpret colour differences in style and colour combinations between sites. All that can be argued is that colour use in rock drawings does not necessarily demonstrate changing patterns of use through time or distance and can be accommodated in hypotheses involving some sort of 'paint red because it is tapu' explanation. The stylistic differences between red and black drawings and the scrawling of red lines across drawings make one wonder what conclusions Bain might have reached had she ignored Fomison's work and concentrated on aspects of stylistic similarity and change between individual sites, rather than between geographic regions".

Ochre and Other Red Coloured Artefacts from Cave Sites.

Introduction

Caves which served as sites for prehistoric habitation are particularly interesting for archaeologists primarily because their dry conditions allow for excellent preservation of artefactual material. There are also indications that some caves were looked upon as special places by the prehistoric
Maori. Fox (1983) noted that burial chests were associated with communal burials in caves and Monheimer and Skinner (1956) report such a burial form the Southern region (near Outram), though without the chest. The section above discussed rock drawings in caves in North Otago and South Canterbury and suggested that some of the drawings, particularly those in red might have been drawn to indicate that the site was *tapu*. A suggestion was also made that the cave site of Rakautara may have been a cache of *tapu* red ochre grinding stones and storage vessels.

Other examples of cave sites which have produced artefacts coloured red and of potential sacred significance are not hard to find. Skinner (1923) described a number of artefacts from Monck's Cave including a canoe bailer which had originally been coloured with haematite. Of particular interest is a canoe paddle which Skinner (ibid.:154) stated was decorated with five bands of red paint across the concave surface. This is very reminiscent of the red lines drawn across some of the black rock drawings discussed above. Monck's Cave also contained a broad, ground red argillite breast pendant, although this could not be located at the Canterbury Museum. A number of paua shells were discovered, one of which contained *kokowai*. Sinclair (1940) reported the excavation of a rock shelter at Wickliffe Bay on the Otago Peninsula. Besides human remains he uncovered a
godstick, showing traces of red ochré.

The artefacts recovered from a large number of cave sites in Central Otago have recently been reviewed by Anderson (1982b). Anderson reviews three areas of evidence, that from Maori traditions, historical recollections of Maori informants and early Europeans, and archaeological data to determine the nature of occupation in the region during the late period. He suggests that both the historical and traditional evidence shows a settlement pattern based on temporary occupation. Although the traditional evidence describes much warfare, Anderson argues that this probably represented only a sequence of provocation and retribution fought out by individuals who were closely tied through, "blood, marriage and former alliances" (ibid.:60). It seems unlikely that settlements ever became permanent enough to require fortification. Historical evidence suggests that weka hunting and possibly other fowling activities were the primary economic pursuit for these inland sites. Anderson rejects the importance of the Wakatipu greenstone source, suggesting that its whereabouts may have been lost during the 19th century. He also rejects the idea of permanently occupied villages based on potato cultivation.
Anderson suggests that archaeological material from cave sites in Central Otago indicates the collection of material for, and the manufacture of, various domestic items. *Celmisia* sp. tomentum was gathered to make *tikumu* clothing, and lacebark to make tapa cloth. Dog and bird skin garments are also evidenced as is the collection of scented gums of *Celmisia viscosa* and *Pittosporum* sp.

As a general overview of the late settlement pattern in the interior Anderson's essay is difficult to challenge but a number of observations can be made about sites from one region in the interior, namely the Strath Taieri.

**The Strath Taieri and Maniototo Plains.**

Anderson maps the distribution of sites recorded in traditional and historical accounts and based upon archaeological remains (Anderson 1983b:figs 2, 3, 4). Both the sites recorded in Maori traditions and those noted in historical reminiscences tend to be clustered around the Southern Lakes, and the Waitaki and Clutha Rivers. Only one historical reference mentions scrub *whares* on the Maniototo Plains. When this distribution is compared with Anderson's figure 4, which shows the spread of prehistoric finds from the area, there is a clear discrepancy centered about the Strath Taieri and Maniototo Plains. A large number of prehistoric artefacts have been recovered from this
# TABLE SIX

**Prehistoric Remains from the Strath Taieri and Maniototo Plains**

<table>
<thead>
<tr>
<th>Cave Sites</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Puketo</strong>i</td>
<td>A large kit containing dressed flax, unfinished mats, paua shell with <em>kokowai</em>, another paua shell, two albatross bones, flute blanks, dog-skin strips, a bag containing red ochre, a bag containing chewing pitch, two pairs of sandals, large bundles of stripped <em>Celmisia</em> sp. leaves, a parcel of <em>Pittosporum</em> sp. gum, a hank of flax thread, a fragment of net, a small package of <em>kauri</em>, bunches of albatross and <em>kakapo</em> feathers, and several unused mussel shells.</td>
<td>Hamilton 1896, Slatter 1982</td>
</tr>
<tr>
<td><strong>Strath Taieri</strong></td>
<td>fragments of dogskin</td>
<td>Skinner 1952</td>
</tr>
<tr>
<td><strong>Middlemarch</strong></td>
<td>Roll of <em>Hoheria</em> sp. <em>tapa</em></td>
<td>Rowley 1966</td>
</tr>
<tr>
<td><strong>Hyde</strong></td>
<td>Kit containing large hanks of cord, <em>tapa</em> cloth, strips of <em>Hoheria</em> sp. bark, a woven sash, and matting.</td>
<td>Skinner 1952</td>
</tr>
<tr>
<td><strong>Glenavon</strong></td>
<td>Two dogskins: in one a skull containing sprigs of <em>koromiko</em> tied with human hair and <em>Muchlenbeckia</em> sp. vine. Also a flax kit containing <em>Nestor</em> sp. feathers and human hair. Several pieces of <em>Hoheria</em> sp. <em>tapa</em>.</td>
<td>Skinner 1952</td>
</tr>
<tr>
<td><strong>Glenavon</strong></td>
<td>Two wooden bowls</td>
<td>Skinner 1952</td>
</tr>
<tr>
<td><strong>Cottesbrook</strong></td>
<td>Woman and child burial with remains wrapped in weka and moa skin.</td>
<td>Simmons 1968</td>
</tr>
<tr>
<td><strong>Nenthorn</strong></td>
<td>Wooden bowl</td>
<td>Skinner 1952</td>
</tr>
</tbody>
</table>
Nenthorn Wooden bowl with notched rim Skinner 1952
Ross Stream Wooden bowl with spout Anderson 1983b
Mount Stoker Wooden bowl Anderson 1983b
Rock and Pillar Wooden bowl Anderson 1983b
Strath Taieri Skinner type VI patu, Two handed club similar to a taiaha. Skinner 1974:159
Rock and Pillar/ Great Moss Swamp type VI
Wooden club, Skinner Skinner 1974:159

Open Site Remains

Patearoa Patu Skinner 1974:155
Cottesbrook Patu Skinner 1974:155
Barewood Station Three patu Skinner 1974:161
Strath Taieri Patu Hamilton 1896

Other remains of interest from Central Otago

Tallaburn Wakahuia containing huia and kaka feathers and a wooden box, box lined with Hoheria sp. tapa and wrapped in paper mulberry tapa and a cloak. Simmons 1968 Rowley 1966
Mount Benger Wooden bowl Anderson 1983b

Cromwell Gorge Descicated child burial. Hutton 1891

The artefacts collected from the Strath taieri/Maniototo areas suggest a range of activities not normally defined from archaeological remains. It is suggested that caves in the region may have formed sites for the caching of sacred artefacts (Adapted from Anderson 1982b:table 1)
area and these are summarized in table 6. Dating of this material is difficult. On stylistic grounds Anderson would argue for a late date but he does state, "there is nothing to rule out the possibility that at least some of the remains may be more than 400 years old" (1982b:67). Anderson uses the material from Puketoi and Hyde as evidence for the domestic manufacturing activities discussed above. He suggests that the wooden bowls may have served a variety of functions including pouring fat for bird preservation, and the preparation of dyes, fern root, tutu (Coriaria sp.) juice and taramea (Aciphylla sp.) gum (Anderson 1983b).

It is, however, to Anderson's (1982b) concluding remarks which I would now like to turn. He suggests that,

> Although it is difficult to document the point, the interior appears to have been a place of retreat from the frictions of coastal living to which families could repair in vulnerable peace to regain their strength and instruct their children in the traditional beliefs and arts of living (ibid.:75).

This suggestion seems to be particularly appropriate to the Strath Taieri Maniototo area. A number of the artefactual types listed in table six suggest a ceremonial rather than secular function and the fact that so many were found in caves or rock clefts, so
common in the area, might strengthen this interpretation.

The most obvious example is the woman and child burial found at Cottesbrook, although the cranium fragment found at Glenavon may also be significant. The Glenavon cache produced a number of interesting artefacts. Beneath a bundle of dogskin which contained the cranium fragment there was the remains of a finely plaited flax kit which contained red feathers from the kaka (*Nestor meridionalis*) and a lock of black human hair. Next to the flax kit a number of pieces of tapa cloth, probably the lacebark variety (*Hoheria* sp.) were retrieved (Skinner 1952). The finding of red kaka feathers is interesting because it parallels the find of a *wakahuia* at Tallaburn in the Lower Clutha Valley. Like the Glenavon example the *wakahuia* contained kaka feathers (in addition to huia feathers) and was associated with the *Hoheria* sp. tapa although at Tallaburn there was also tapa from the paper mulberry tree (Rowley 1966). The Lower Clutha Gorge around Tallaburn is pockmarked with rockshelters and overhangs and in this respect is very similar to the Strath Taieri. *Hoheria* sp. tapa was also found in a kit at Hyde and tied in a roll at Middlemarch.

Besides the red kaka feathers other red coloured artefacts were found at Puketoi. A woven flax bag was identified by Hamilton's (1896) Maori informants as a *pukoro*, a bag for straining tutu
berries (Coriaria sp.), but at the time of collection it was half filled with kokowai. Two paua shells, one with a matted flax ‘brush’ were also found, stained with kokowai. One of the paua shells had a carefully plaited handle. Three perna canalculus valves found in the cave may also have been used as kokowai containers.

With the coastal abundance of the various mineral forms of iron oxide from which kokowai could be produced, it seems unlikely that it was being collected in the interior. The kaka feathers from Glenavon were associated with what Skinner describes as a medicine bundle; the antidiarrhoeic (constipating) properties of the koromiko leaves being enhanced by both the human hair and the skull bowl. Similarly the wakahua from Tallaburn would seem to represent a significant find. Best (1977b:179) notes that the feathers formed an important item of exchange and the bird was restricted in distribution to the North Island. Nor do the wooden bowls necessarily represent strictly economic pursuits. Stevenson (1939) in his study of North Island wooden bowls noted that they probably represented a considerable investment of labour and may, in consequence, have been highly prized. It may be significant that three bowls formed part of the assemblage excavated from the wai tapu at Kauri Point Swamp. Skinner (1952:133) comments on the probable value of bowls from Glenavon, noting that one had been
carefully repaired. What may be two other bowls from Nenthorn (besides those noted in table six) are described by Anderson (1983b). These bowls were found in association with a human skull and a fire stick. It may be that the wooden bowls were not domestic artefacts, but were items of some importance in the community and were for some, perhaps ceremonial reason, cached in caves in the Strath Taieri/Maniototo region.

A final group of artefacts from the region consists of a number of patu both of the short club like form and the longer variety reminiscent of the taiaha. Anderson (1982b) lists six of the patu stating that they came from open sites, but in fact Skinner gives only the most basic location details so it is not possible to determine whether the artefacts were simply ploughed up or formed part of caches in caves like those described above.

Conclusion

If the patu, wooden bowls, kaka feathers, burials and tapa do in fact represent caches of artefacts placed in caves because they were of some ritual importance, quite possibly because they were tapu, a case could be made for seeing the Strath Taieri and Maniototo Plains as a place of retreat where various ceremonies were conducted. Anderson's (1982b) suggestion that the interior might have been the place for instruction in traditional beliefs and arts of
living seems particularly appropriate for this region. The arts of living are perhaps represented by the raw materials for garment manufacture stashed at the cave sites of Puketoi and Hyde while the traditional beliefs might be indicated by the variety of artefact caches which may have had a ceremonial significance. This explanation would help to make sense of the quantity of red ochre and red ochre containers found at Puketoi. Instruction in traditional beliefs was bound to involve some aspect of tapu which would in turn be symbolized by the red colour.

Approaches to Aspects of Social and Ideological Conservatism and Change in Prehistoric Murihiku

The three examples drawn from the prehistory of Murihiku show that it is possible to draw new conclusions concerning aspects of social and ideological conservatism and change based on an understanding of the symbolic associations of colour. Admittedly many of the conclusions reached in the second half of this chapter are speculative, but they mark a considerable advance over the practice of assigning some artefact of unknown function to a ceremonial context. One important aspect which may be drawn from the discussion of these examples is the need
for archaeologists to continually develop new ways of looking at their data. The argument concerning red ochre use during the early and middle period, for instance, is a complete reversal of the orthodox view. Similarly the discussion of the significance of the broken nature of the red argillite artefacts, runs contrary to the normally accepted view that broken artefacts were cast away as a result of damage.

Bain's study of rock drawings makes an excellent example of what can happen if the data is approached with too narrow a perspective. She introduces her study by stating "this thesis is primarily based on a study of North Otago and South Canterbury rock drawings and has, as its main objective, an analysis of stylistic variation between these areas" (1982:3). This objective assumes out of hand that this difference is significant and her study reduces to a simple typological analysis to demonstrate this point. In fact it is suggested above that serious doubts may be cast on the significance of this regional difference and the temporal framework within which it is set. The approach adopted in this thesis differs significantly from Bain's because it requires the significance of the variables to be understood before it is applied to explain prehistoric data. Although this method would have been very difficult to apply in Bain's case, she could have investigated intra-regional differences in addition to her main north south
division.

In a sense Anderson's (1982b) analysis of late sites from the interior of Murihiku suffers from a similar handicap. Although he used a wide variety of sources, his discussion shows a strong bias towards economic archaeology. The data which he synthesises is primarily concerned with settlement pattern and subsistence activities and only at the conclusion of this paper does he break away from this paradigm. This thesis approaches the data from a different direction, the association between a number of red coloured artefacts, including rock drawings, and caves is noted and it is suggested that some of these rock shelters may have been considered sites of importance by the prehistoric Maori. With this in mind, Anderson's (1982b) data from the late sites from the interior was investigated and a number of sites, primarily grouped in the Strath Taieri and Maniototo Plains were isolated. This, and a few other areas like the Lower Clutha Valley have an unusually high number of artefacts not associated with strictly economic pursuits. From an understanding of the symbolic associations of red coloured artefacts, it is suggested that a number of ceremonial artefacts were cached in this region. The reason why these artefacts were placed in this region is found in Anderson's suggestion that the interior was a place where instruction in traditional beliefs may have been undertaken.
As a means of understanding prehistoric ideology the colour red must be limited, simply because it could not symbolize the full range of prehistoric beliefs. There are, however, a number of other symbols and motifs which could repay attention. The so-called birdman motif found in Maori rock drawings is one and the importance of the latrine as a place of ritual, possibly a link with the world of the atua (Hanson 1982b) is another. The lack of archaeological remains of the latter serves to emphasize the need for data from controlled excavations if hypotheses are to be confirmed archaeologically. In a number of the points raised above, provenance within the site was an important issue. In Murihiku at least, too many of the interesting artefactual remains have been excavated by sub-standard means. Trotter (1982:101) concludes in his recent review of the archaeology of Canterbury and Marlborough, that there is no need for another 'Wairau Bar' to be excavated because there is more than sufficient information housed in our large museum collections. I cannot agree. It is not that excavation should be discontinued, simply that the questions asked of the material be directed at aspects of prehistoric culture other than those concerned with economic systems and typology. For the museum collections to be exploited to their full potential some excavation of key sites must be continued within a research orientation and not simply for salvage.
Notes

(1) *Tualhu* is clearly a cognate of the Tahitian term *ahu* which refers to the stone platform on a Tahitian marae, and to the Easter Island term *ahu*, which denotes the stone platforms used to support the statues.

(2) The prehistoric Maori developed a considerable technology for acquiring and processing material to produce red ochre. Colenso (1959:11), for instance, describes a technique employed to trap limonite from slow running streams.

[The red pigment] is generally obtained by laying a quantity of fern fronds in some running chalgeate (impregnated with iron) water, on which a fine ferruginous mud is speedily deposited; more fern is then laid, *stratum superstratum*, until they suppose they have sufficient quantity, when the whole mass is taken out, the ferruginous particles collected, made into balls, and baked for use.

Bidwell (1952:35) records a similar method used to collect limonite on the banks of the Waikato. In another work Colenso (1882:65) noted that red ochre could be obtained from haematite and limonite deposits in soil, or "like dust between the layers of shale". Different sources yielded different grades of ochre, Hamilton (1972:299) noting that the best quality pigment, that obtained from slow moving streams, was used to colour the head, body and clothing. Different sources might produce different colours, Bostow (1878:75) notes that a pigment termed *karamea*, when mixed with water produced a more vibrant red colour than *kokowai* (ochre mixed with oil). Beattie (ms) makes a similar distinction between a light and dark pigment.

The oil with which the ochre was mixed to produce *kokowai* came either from fish, most notably the shark, or from vegetable products. Colenso (1879:128) states that oil extracted from the fruit of the *titoki* tree (*Alectryon excelsum*) might be used while Hamilton suggests the *kohia* (*Passiflora* sp.) was also an oil source.

(3) Ochre was sometimes used in a dry state both for body painting and for rock drawings.

(4) After consultation with representatives of the local Maori community the bone fragment was reburied.

(5) One may speculate whether this lure point
represents an early version of the fishing talisman or māuri described by Best (1977a:3). Best notes,

The late Colonel Gudgeon stated that a stone māuri fashioned from red stone in phallic form is an heirloom of the Whānau-a-Apuni tribe; it is known as the Whātukura otangaroa, and it was formerly as a māuri for sea fishing.

(6) Rodgers (1922) titles his article "Note on a stone object resembling a dagger blade" and notes that a pendant supposedly in the shape of a dagger handle and guard was figured by Hamilton (1902). Hamilton's pendant is also figured by Skinner (1974:fig 4.192) but bears little resemblance to the Little Papanui artefact. Ridgeway and Skinner (1920) describe two wooden artefacts which they termed daggers, but which again bear little resemblance to the red argillite object and may in fact have been flax beaters. It seems unlikely that the object was ever thought of as a dagger by the prehistoric Māori.

(7) Full details of the variables selected and the raw data used are given in Bain (1982). Unfortunately there is an error in Appendix 13 and 14 of her work. Appendix 11 lists 45 variables which are supposed to equate with the data columns in appendix 13 and 14. However in these two appendices there are in fact 59 columns. Columns 7, 8, 10, 18, 24, 35, 41, 42, 43, 44, 46, 49, and 55 should be ignored reducing the number of variables to the correct number, 45.

(8) Bain (1982:52) states that pāua shells containing red ochre have been found from S127/33 and S127/37, but she does not state her source. She notes that shaped haematite 'pencils' are recorded by Duff (postscript to Ambrose and Davis 1958, see also Trotter 1970a) at Shepherd's Creek and by Edge-Partington (1898). In fact Edge-Partington did not associate the pencil he figured with a cave but described it as coming from a "kitchen midden" in Central Otago (1898,III:plate 190, no.11). Such a small number of finds is surprising when compared to the large number of rock drawing sites discussed by Bain (1982).

(9) A hint of what might have been achieved is provided by her analysis of bird drawings within North Otago. Here three sites were clearly discriminated from the rest (although there may have been other groups for which she did not test) and Bain (1982:90) suggests that these may represent the work of one artist.

A potential analogy that could be explored is provided by Strathern (1971:34) in his study of body decoration. Strathern noted that while the actual
items and their numbers used for body decoration by the Hageners (a tribe in New Guinea) tended to vary somewhat from individual to individual, there was an underlying group of items from which individuals were required to choose. In rock drawing studies it may be of benefit to see if there were any recurring motifs both at one site, and between different sites. This might indicate the types of restrictions imposed on the artists.

(10) But see Bellwood (1972) for an archaeological example from Otakanini Pa South Kaipara Harbour.
CHAPTER FOUR

CULTURAL CONSERVATISM

Introduction

In Chapter Two the symbolic associations for the colour red in five island cultures of East Polynesia were described and aspects common to each defined. These included an association with the category *tapu* and with the *atua*, a concern with genealogy and chiefly status, and often an association with warfare. In Chapter Three archaeological evidence was cited which helped to demonstrate the antiquity of these associations in prehistoric New Zealand and then the associations were used to help formulate new interpretations for aspects of Murihiku prehistory. Both chapters helped demonstrate that the symbolic associations for the colour red have been very conservatively maintained in East Polynesia. This chapter deals with the implications of these conservatively held associations.

Cultural conservatism, or continuity, is a topic which has received surprisingly little attention from archaeologists. Major treatises on archaeological theory deal primarily with change, rather than continuity. The first aim for this chapter is to
understand the relevance of continuity in anthropological theories of culture.

One theoretical scheme for archaeology which does include cultural continuity is D.L. Clarke's "Analytical Archaeology" (1978). Clarke places a concern with "repeated similarities or regularities in form, function, association or developmental sequence" (ibid.:20) as one of his three central aims for archaeology. These "repeated similarities or regularities" are used to construct a hierarchical series of archaeological units from artefact type through assemblage, culture, culture group to technocomplex. Clarke's approach is particularly interesting because it adopts the superorganic model originally put forward by Kroeber (although Clarke does introduce some modifications especially with regard to systems interaction and change). The basic formulation of repeated similarities or regularities being used to define the units of analysis is very reminiscent of Kroeber's cultural patterns. Clarke's work suggests a theoretical perspective which might be adopted to understand the cultural significance of the conservatively maintained symbolic associations discussed above. This is explored in more detail below.
Having identified the theoretical significance of cultural continuity the second aim of this chapter is to investigate its significance to the cultures of Eastern Polynesia. Discussion here centres on the significance of the apparent cultural diversity in geographically constrained archipelagoes (particularly those in Melanesia) when compared to the more isolated islands of Polynesia. This discussion allows comments to be made upon the relevance of the founder effect in the settlement of isolated islands.

The third and final aim of this chapter is to explain the implications of cultural continuity for New Zealand prehistory.

Cultural Continuity, Culture Area and Culture Pattern

Aspects of cultural continuity formed the basis of the culture area approach which flourished in the early decades of this century in both the United States and Europe. In the United States the concept developed as a practical method for mapping the distribution of the Indian tribes of North and South America. As Harris (1968:374) states:

Nothing is more obvious than the perspective utility of an ethnographic map which groups tribal entities in
Yet the approach was unable to add to an understanding of cultural differences and similarities. If the geographic location of cultures was emphasized, the definition of culture areas reduced to a form of environmental determinism. If the proximity of neighbouring cultures was cited as a reason for shared culture traits, no causal arguments could be developed, and the reason for the appearance of traits was simply put down to a long line of diffusionist exchanges. Obviously when a number of culturally similar areas were separated by great distances, cultural diffusion must be seen to be suspect.

Even with these anomalies, much work went into demonstrating diffusionist links during the 1920's and 1930's. Wissler defined the culture centre, from which an assemblage of traits diffused outward, and proposed a law of diffusion, "that anthropological traits tend to diffuse in all directions from their centers of origin" as a method for inferring the relative age of culture traits (Harris 1968:376). Archaeological work demonstrated that the degree of dispersion of artefact types from a centre of origin increased with time so that items furthest from the centre are likely to be representative of the earliest cultural level. Kroeber extended this approach to its logical conclusion by attempting to define culture areas on the basis of a relationship to some geographically delineated aspect of the environment.
comprehensive list of items through the use of coefficients of similarity. Other workers followed this basic method, in the Pacific the most notable being Burrows (1938) (But see also Buck 1966 and Duff 1956). Burrows looked at the distribution of social and material traits in Polynesia and was able to define two major culture areas, Western Polynesia and Central and Marginal Polynesia. Burrows used his findings to argue against multistratum theories for the origins of the Polynesians, preferring to see the development of his various ethnographic traits as a result of diffusion, local development and abandonment. Because it was based on a large number of traits, Burrow's analysis has remained substantially intact and as Bellwood (1978a:309) comments, "the divisions established by Burrows ... have remained of great importance for archaeologists to the present, and are of fundamental significance in Polynesian prehistory".

As part of the same intellectual tradition that was putting forward the concept of the culture area, Kroeber developed his idea of cultural pattern. Working from a biological analogy, Kroeber noted that the structure of organisms could be shown to fall into certain patterns (insects would be one example). He felt that similar patterns might be found in culture. The understanding of such patterns, to Kroeber, was a fundamental step in understanding the history of preliterate societies (Kroeber 1952:85-86). Presumably
he sought to define historically related cultures through the mutual sharing of a certain cultural pattern. As an example Kroeber noted the monotheism of the Hebrew, Christian and Muhammadan religions. He suggested that a culture pattern could be defined in the following terms: "a single deity of illimitable power, excluding all others except avowed derivatives, and proclaimed by a particular human vessel inspired by the deity" (ibid.:90). Kroeber's interest in cultural patterns was explored most fully in "Configurations of Culture Growth" (Kroeber 1944) wherein he attempted to discover the common features in the growth of "philosophy, sculpture, painting, drama, literature and music in Egypt, Mesopotamia, India, Japan, Greece, Rome, Europe and China" (Harris 1968:330). The book was not a success. The patterns he hoped would recur uniformly across cultures proved to vary widely both spatially and temporally. At the same time interest in the cultural patterns as a methodology was waning. Steward, one of Kroeber's students, was arguing for a functional relationship between agriculture, population density, settlement patterns, social structure and technological complexity, topics which were only of peripheral interest to Kroeber. It was these relationships, rather than cultural patterns, which have become the backbone of modern archaeology and of considerable importance to ethnology (Harris 1968:337).
Modern anthropology, both social and prehistoric, has, with one exception, moved away from studies of culture pattern and the age-area hypothesis. The exception is the cross cultural statistical studies developed especially by Murdock. Although Murdock makes use of the comparative method and is avowedly evolutionary in his approach, the fact that he uses a short time scale without the data of prehistory, brings his results close to the historical particularist scheme (Harris 1968:611).

The predominance of studies of culture change in prehistoric anthropology has led to a total rejection of the culture area concept as unacceptable. Like too many outdated theories the approach has been dumped without a consideration of what might be usefully salvaged. Although "Configurations of Cultural Growth" was a failure, other aspects of Kroeber's work produced some interesting and significant results. Perhaps the best known of his cultural pattern studies was his investigation of the western females' evening dress. Kroeber published a preliminary version of the study in 1919 demonstrating an "underlying pulsation in the width of civilized women's skirts" as well as similar oscillations in eight other measurements (Kroeber 1952:334). A more complete study was published in 1940 (Richardson and Kroeber reprinted in Kroeber 1952) where women's fashions from 1605 to 1936 were investigated
statistically using time series analysis. It was suggested that changes in dress style could be accounted for by two components. One was labelled the mode and took account of factors which made one year's fashions different from the last. The second was a much more stable factor which went through a series of slow cyclical changes and formed a base for each year's mode. It was this factor which Kroeber identified as the cultural pattern. He suggested that this pattern formed an ideal which could be characterised as "a skirt that is both full and long, a waist that is abnormally constricted but in nearly proper anatomical position, and decolletage that is ample both vertically and horizontally" (ibid.:371). Once fashion achieved this ideal it reached a state of equilibrium. Kroeber described such a cultural pattern as saturated. Deviation from this ideal, Richardson and Kroeber argued, seemed to correlate with times of social stress, specifically the Revolutionary and Napoleonic wars and the period during, and immediately after, World War One. This stress could not be shown to affect the attributes of dress design directly but it disrupted the established style and led to its overthrow or subversion (ibid:371).

Richardson and Kroeber's analysis has recently been subjected to renewed interest. Lowe and Lowe (1982) have published a re-evaluation of their work using more sophisticated statistics. They note that
Richardson and Kroeber actually proposed two mechanisms for change, one involving slow periodical change about the ideal configuration and the other concerned with social stress. No method of separating these was given in the original paper. Lowe and Lowe noted that the period for which there is the most reliable data (1789-1936) is bracketed by periods of social unrest. Richardson and Kroeber stressed the significance of the period of equilibrium between these two peaks, but it is possible that this represents an historical accident rather than a recurring cultural pattern. Lowe and Lowe used modern methods of time series analysis to investigate the periods of slow change suggested by Richardson and Kroeber. They found that rather than one period per variable, the dress dimensions exhibited multiple oscillations of varying wave length. These oscillations were used to project the type of dress style which should have been worn in the mid 20th century; however the prediction proved to be at variance with reality. Lowe and Lowe suggested that Kroeber was only partly correct. Rather than a deterministic system, the dress styles seemed to represent a probabilistic system composed of two parts, "a structural portion that constrains and biases future action in particular directions and a truly random portion, usually called noise" (Lowe and Lowe 1982:530). The structural portion is likened to a "grammar of esthetics" which determines appealing
combinations of measurements (short wide dresses, for instance, are unacceptable). This structural portion is made up from three sources:

inertia - the tendency of stylistic change, once set in motion, to remain in motion; cultural continuity - the tendency for change to be resisted, or damped; and the rule system of esthetic proportions that does not determine cultural/stylistic change at any point in time, but does constrain and bias it in a particular direction (ibid.:540).

Lowe and Lowe reach a second conclusion, that styles are equilibrium systems and that change can take two forms, either oscillation about the equilibrium as a result of random perturbations or structural changes involving a change in the point of equilibrium. They go on to note that not all forms of cultural variable follow an equilibrium system. A number of examples from the 20th century spring to mind which are clearly changing in fixed directions (divorce rates, alcohol consumption, total population) the most significant of which, in archaeological terms, is economic change. Lowe and Lowe suggested that the way changes in the economic/political sphere affected women's dress patterns was best described as random noise. In other aspects of culture, however, the effect may be more directional in nature. Even so they suggest that some other aspects of culture probably follow equilibrium systems and it would be interesting to learn more of
these.

The concepts of a structural portion and style as an equilibrium system, seem particularly useful for this thesis. While clearly the analysis presented in Chapter Two could not be put in a form suitable for the statistical treatment undertaken by Lowe and Lowe their conclusions provide an excellent explanatory model for the persistence of certain symbolic associations for the colour red. It seems possible to suggest that the 'inertia' of the symbolic association was introduced some time before East Polynesia was settled, although exactly when and where this association developed is beyond the scope of this thesis. The 'cultural continuity' aspect of the structural portion has been dealt with at length in Chapter Two and conservatism of symbolic association and its archaeological consequences have been investigated in Chapter Three. All that need be added here is to note that the equilibrium model proposed by Lowe and Lowe does allow for small changes in symbolic associations without affecting the overall continuity of the system. Thus the model is able to incorporate the differences in the use of red between the various island cultures (and the difference between Hawaii and Tahiti and the rest of East Polynesia) as well as the similarities. The 'rule system of aesthetic proportions' is seen best in the continued association between the colour red and things tapu. While clearly red could be extended to symbolise
related subjects, there were constraints which required this association to be connected in some way to the concept *tapu*.

Lowe and Lowe define the second part of their probabilistic system as a random portion usually called noise. This is related to external sociopolitical factors, which in the case of dress style acted randomly. This random noise is usefully employed to model the changes in colour symbolism which accompanied the political upheavals after European contact on Hawaii, and those before European contact on Easter Island. In the Hawaiian case a change in colour symbolism from red to yellow feathers coincided with the overthrow of the state gods and the loss of the symbolic importance of feather cloaks. In terms of Lowe and Lowe's equilibrium model this would seem to equate with a large amount of sustained noise changing the position of the equilibrium and therefore the "grammar of esthetics". In Easter Island the noise produced by the rise of the *matatoa* class, who overthrew the *ariki*, was evidently not great enough to disturb the equilibrium of colour symbolism, as the same colour associations were adopted by the new rulers.

This noise/equilibrium model may also be used to explain changes in colour symbolism in post contact New Zealand. It was noted above how a number of authors commented that the practice of painting the
body and face red was dying out by the mid 19th century. Changes were also apparent in the use of red ochre on artefacts. Recent restoration work on 19th century Maori carvings has revealed that a number of colours were being employed to decorate the finished product. Indeed Barrow (1969:15) clearly stated that it was erroneous to consider that all Maori carving should be painted red. An analysis of post contact Maori colour symbolism must await the published description of carvings restored to their original condition; however one may speculate that the 'noise' created by European introduced changes (not the least of which may have been the dismantling of the *tapu* system by the missionaries) may have led to a shift in the equilibrium system of colour symbolism.

**Cultural Continuity and Isolated Islands.**

Emory (1963) begins an important paper on Polynesian linguistics by stating,

> To anyone intensively engaged in comparing ancient culture of one part of Polynesia with another, it should become quite apparent that in language they are not only in remarkably close agreement, but that this has also been the most stable part of Polynesian culture (1963:78).

This thesis has demonstrated that there are other
aspects of culture besides language which are equally stable and this assertion receives support from studies of house design and gardening techniques in prehistoric New Zealand. Prickett (1974) reported the excavation of a prehistoric house in the Moikau Valley, Palliser Bay dated to the 12th century. Significantly the layout of the house conformed to that reported by the 19th century European explorers. Prickett noted a number of contemporary studies which indicate that the spatial design of dwellings has important sociological implications. He argued that conservatism in house design might indicate that at least some aspects of the social system had undergone little change throughout the course of prehistory.

H. Leach studied the effect of European introduced cultigens on traditional Maori horticultural practices. She demonstrated that those European plants which could be readily assimilated into established Maori gardening practices were quickly adopted. Forty years after the first contact with the Europeans in Northland the five pre-European food plants were still being grown but had been joined by potatoes, turnips, cabbage and maize. All the introduced crops were identified in terms of traditional cultigens. Thus the potatoes were seen as yams, the turnips were treated as young kumara, the cabbage was used as a source of green leaves with which to wrap food for the hangi and the maize either roasted like fern root or made into cakes.
following a process used for some wild fruits. H. Leach concluded that the traditional Maori gardeners were conservative in gardening techniques. Change occurred most readily when it could be accommodated in established categories (H. Leach n.d.).

In the section above a model was suggested which helped to place continuity in a theory of culture. This model may also be applied to describe a 'cultural aesthetic' which limits variation in house design and gardening techniques. Moreover the model helps explain why cultural and linguistic continuity is so evident in Eastern Polynesia, but not in some other culture areas around the world. Even within the Pacific basin, Polynesia is unusual. There is a striking contrast between the continuity in Polynesia and the diversity in Melanesia. Chowning (1973:1), for instance, notes of Melanesia that,

It is literally impossible to make more than a handful of generalisations that will apply to even the majority of societies in Melanesia, and many of these generalisations do not distinguish Melanesia from Micronesia, eastern Indonesia, or the smaller islands of Polynesia.

Politically Melanesia is organised into a large number of small groups, normally numbering a few hundred people and only rarely rising to over a thousand. A number of political groups operate within one cultural linguistic area and although neighbouring political
units compete, often through warfare, victory does not lead to the creation of a more permanent, complex, political organisation (ibid:21).

Theories which try to account for this wide diversity in Melanesia often fall back on isolation, terrain and time. Some linguists have suggested that "the languages of small communities cut off from their neighbours, for thousands of years, simply went on diverging at a normal rate, with no possibility of convergence" (Laycock nd). Archaeologists have adopted similar theories. Terrell (1977), for instance, notes the correlation between linguistic diversity and the area of islands, suggesting that this relationship might be extended to account for human diversity generally. Kaplan (1976) analysed a surface collection of pottery from Nissan, a small island to the southeast of New Ireland. She was able to demonstrate that pottery from Nissan bore a close resemblance to an archaeologically excavated assemblage from Buka in the Solomons, dating back to 500 B.C. This led her to pose an important question, "If trade between Buka and New Ireland has so great an antiquity, why are the peoples of the Solomons and Bismark Archipelago not more similar to one another culturally and linguistically" (ibid.:85).
Kaplan proposes a variation on the geographic isolation theory noting that small islands off the coast of New Ireland acted as a series of 'stepping stones'. Ethnographic information showed that trade goods were moved between nearest neighbour islands, or the nearest mainland area. She suggested that this system might serve to regulate or filter the impact of culture contact between the Solomon and Bismark Archipelagoes and hence account for the marked cultural and linguistic differences between the two areas. Because the trade between Nissan and Buka may have a considerable antiquity, she tentatively suggests that the 'stepping stone' pattern, and therefore diversity, may have a similar antiquity.

While the theory of stepping stone islands is interesting, particularly the proposed antiquity of the trade, the theory fails to explain the lack of diversity in Polynesia. If diversity was really due to geographic isolation, then one would expect Polynesia to be one of the most diverse areas of the world, considering the distances involved. Clearly this is not so, and has not been so in the past.

An alternative theory is provided by the linguist Laycock (nd). He suggests that the cause for linguistic diversity in Melanesia may lie in the social organisation and attitudes to language. Linguistic diversity may be actively sought after as a badge of identification. It is notable, for instance, that even
though some speakers of languages with a very small distribution are bilingual, their languages show no sign of dying out. It is interesting to reflect upon the fact that this Melanesian need to be different has developed in an environment where the potential for contact between groups is very great. The Melanesian archipelagoes form a string of geographically proximal islands. The large water gaps, common especially in marginal Polynesia, are not present until one reaches Vanuatu. This proximity has led to different patterns of exchange in Melanesia when compared to Polynesia. Although most Melanesian societies are self-sufficient in the production of food they are often specialised in the collection of certain raw materials and the production of selected artefact types. This has led to the development of widespread and elaborate exchange systems generally dealing with utilitarian items (although there are some systems with an important ceremonial aspect, see for instance Malinowski's description of the Kula) (Chowning 1973:43-44).

As Bellwood (1978:102) notes, the Melanesian trade system differs significantly from that found in Polynesia. Whereas the Polynesian system serves to redistribute goods, often with a tendency toward tribute and chiefly advantage in the more highly stratified societies (like Hawaii and Tahiti), in Melanesia trade is on a more personal level, frequently between trade partners. Even under the influence of
big men, the ideas of inflow and outflow from a central position are not much developed. The Melanesian system is adapted for exchange across borders, both linguistic and cultural; a system that can exchange goods but still maintain the independence of the participating parties.

This concern with maintaining boundaries is also reflected in warfare. The extent of Melanesian warfare is well known but rather than characterize the people as warlike, it is perhaps more realistic to note that Melanesians see more people as enemies, the so-called 'paranoid thesis', reflecting a very real threat from outsiders (Chowning 1973:22). This, combined with the evidence for trade and deliberate language diversity suggests that it is geographical proximity, rather than isolation which produces diversity. This in turn suggests that the geographical isolation of Polynesia may in some way account for those conservative aspects of culture discussed above. The significance of geographic proximity was recognised by the anthropologist Evans-Pritchard as early as 1940 in his book "The Nuer". He concludes of the political structure of the Nuer "that the more multiple and frequent the contacts between members of a segment the more intense the opposition between its parts" (1940:150).
In terms of the model outlined above for cultural continuity one may suggest that the noise level in island Melanesia developed to such a level that a series of new equilibrium states were created, each with their own cultural aesthetic. It seems possible to test this idea archaeologically by comparing material between adjacent islands which had some form of trade contact during the protohistoric period. The time depth of exchange could then be investigated as well as the point at which other items of material culture diverged in form.

For Polynesia, the theory that geographic spread may lead to continuity rather than diversity has particular significance for theories of island settlement. The so-called founder effect is an idea drawn from population genetics and describes the fact that the founders of a new group, having split off from the parent population, are unlikely to mirror the original genetic pool (Bellwood 1978:35). In Polynesian prehistory it has been used to describe the loss of particular culture traits by the settlement of small populations on isolated islands. Although it is now accepted that this loss did not include a number of artefact types characteristic of early East Polynesian culture generally, the founder effect has been used to explain changes in Maori religious practices and artefacts when compared to the rest of Eastern Polynesia (see below). The studies of cultural
continuity noted here coupled with the significance of geographic isolation outlined above combine to suggest that the founder effect has very little relevance to culture change as a result of island settlement. Rather it seems that small founding populations retain many aspects of their parent culture in the face of a new environment.

To summarise, there is now a considerable body of evidence to show that a number of aspects of culture, besides language, have been conservatively maintained in Polynesia. This contrasts to the situation in Melanesia where the cultures socially, materially and linguistically are very diverse. It is suggested here that rather than geographic isolation causing diversity, the reverse is the case. In Melanesia the great potential for interaction due to the the proximity of the islands has led to deliberate acts of separation, including regulated down-the-line exchange and language differentiation. In Polynesia the great distances involved, and consequently the lack of interaction between cultures has led to great conservatism of culture traits and language, and an exchange system based on redistribution and social verification. The contrast between the two groups calls into question theories of change based on the founder effect which is felt to be of very limited applicability.
Apart from Prickett's study of house types and H. Leach's investigations into horticultural practices at European contact, prehistorians in New Zealand have been little concerned with cultural continuity. From its earliest beginnings the discipline has been concerned with temporal change and has tended to split New Zealand prehistory into variously defined segments. We have progressed from the two period schemes of Haast, Duff and Golson, through the five period sequence of Green to the three stage division of Anderson (1983a) and Davidson (nd). In addition to temporal divisions there has been an increasing tendency to divide New Zealand prehistory geographically into a number of distinct regions (see Prickett 1982a). While it cannot be disputed that certain aspects of prehistoric culture did change through time and between regions, notably economy and some artefact types, this thesis has demonstrated that certain important ideological aspects did not. There has been a tendency in the past when writing prehistory to concentrate on those aspects of culture which show the most dramatic change. In my view this can lead to a false view of prehistoric Maori culture.
Margret Orbell (n.d.) concludes the MacMillan Brown Lectures for 1933 by stating,

In this country we have not concerned ourselves with the examination of ideas, and for this reason we have on the whole neglected the study of ancient Maori thought, religion and poetry. As a consequence we have tended to assume that the only facts of significance to be discovered about the Maori past are those that concern their origins, economic and political activities, social organisation and material culture (n.d.:43).

In fairness to archaeologists these are really the subjects for which we can gain the best information. This thesis, however, has tackled problems outside the traditional sphere of archaeology, attempting to understand aspects of social and ideological conservatism and change and so goes some way to countering Orbell’s criticism. The results are not entirely theoretical. By far the bulk of this thesis concerns the reconstruction of the symbolic associations for the colour red, and how they might be applied to interpret the prehistoric record. This I hope defers a charge of being a ‘child of the eighties’ (cf.Flannery 1982).
More specifically I believe that this analysis has provided some important insights into the study of prehistoric Maori ideology. Janet Davidson comments in her new book "New Zealand Prehistory", that "New Zealand society differed significantly from the rest of East Polynesia in its approach to religious observance" (n.d.:7.39). She notes that New Zealand lacked the stone statues and raised platforms of other island cultures in Eastern Polynesia. The lack of physical evidence for the structures characteristic of East Polynesian religion cannot be disputed, however I am loathe to use this to make judgements on the "approach to religious observance". A feature of the study of red colour symbolism outlined in Chapter Two was the facility with which the colour and its symbolic associations were transferred from one medium to another. Thus in Hawaii and Tahiti red feathers were by far the most important source of the colour whereas in New Zealand red ochre took over this position. The type of artefact to which the colour was applied varied greatly; from red feather cloaks to godsticks. The significance of this is that the form of an artefact may not have been as important to the prehistoric Maori as archaeologists have supposed. This might call into question the heuristic value of archaeologically derived stylistic analysis.
A related point concerns the nature of 'sacred artefacts'. In the discussion of Maori godsticks (Chapter Three) it was noted that the stick itself had no inherent value unless decorated with red feathers and ochre, and occupied by an atua. This is not as unusual as one might imagine. Consider for instance the wine given at communion. In a church the wine has a symbolic significance as the blood of Christ, yet in a pub similar wine has a quite different set of associations. The form of the artefact itself is not sacred, it is sacred only by association. In this thesis artefacts were deemed to be of symbolic importance through their common association of colour. For other artefacts the only indication that they are special may come from their provenance in association with other artefacts (wine in a church). One such association between a red argillite lure point and two hog-backed adzes was described in Chapter Three. Only through careful excavation will such association become apparent. Archaeologists must maintain an open mind when interpreting their results; if form is unimportant, artefacts with symbolic functions need not differ significantly from the norm.

This point brings us back to Davidson's comment that approaches to New Zealand religious observances differed significantly from other cultures in East Polynesia. Her statement is based on a lack of correspondence on form which she extends to function.
Such an extension is perhaps dangerous if form and function need not be constant. Future studies which deal with features of prehistoric ideology will have to bear this in mind, and follow the method adopted in this thesis of investigating all the variations apparent in Eastern Polynesia. Perhaps in the study of ideology, more than in any other feature of prehistoric Maori culture, it is the link with Polynesia which provides the key.
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