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An Archaeologists' Guide to the Maori Dwelling

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ABSTRACT

Traditional dwellings are conservative in form and possess important symbolic and behavioural parameters. In New Zealand, the rectangular Maori dwelling known as the *wharepuni* can be shown to relate to aspects of symbolism and behaviour typical of vernacular architecture. It is argued therefore that dwellings of the *wharepuni* form have had a long history in New Zealand. It is also argued that because conservatism of form is dependent upon conservatism in social behaviour and symbolism, historical evidence can be fairly used in the interpretation of such dwellings when they appear in archaeological excavations. The archaeologist thus has a powerful tool in both identification and interpretation.

Keywords: NEW ZEALAND, MAORI, HOUSES, WHAREPUNI, SYMBOLISM, BEHAVIOUR, PROXEMICS, ETHNOGRAPHY, CONTINUITY.

INTRODUCTION

Important work by Groube (1964, 1965) in the mid-1960s resulted in a radical change in the generally accepted view of traditional forms of Maori settlement pattern. It is likely, however, that this has involved an over-reaction to the classical descriptions of Best (1924), Firth (1959) and Buck (1950), and that a flexible view is required. The highly structured permanent village or *pa*, with its formal elements such as *marae* and meeting house, for long the accepted model of traditional Maori settlement, and the impermanent seasonal settlement suggested by Groube as being closer to the norm, are likely to represent two ends of a spectrum which are not necessarily exclusive.

Groube suggested that the impact of European intrusion was such that very rapid culture change made much of the 19th century observation of settlement pattern suspect as a means of insight into the prehistoric period. One of the most important elements in the settlement pattern was the house: Groube (1965:6) writes, "... houses and settlements are not culture items which can be expected to have retained their prehistoric character after European contact". It was therefore argued that only the earliest explorers could provide observations reliable for the description of prehistoric settlement pattern or the interpretation of archaeological data, and that 19th century records on which the traditional view was based could not be safely used.

It is indeed likely that patterns of settlement underwent a number of changes in the early historical period in New Zealand. The advent of gun warfare, the need to trade flax, timber, pork and potatoes, to acquire weapons and other goods, and the growing influence of a new outreaching society in its mercantile, missionary and other aspects all involved some modification to traditional ways of living together. Nevertheless, while many changes in settlement pattern are recorded for the period, those aspects of settlement essential for the maintenance of traditional social structures tended to remain the same or change along with the changing social system in ways which have not yet been fully explored. So when Groube writes concerning the earliest period of contact that, "the communal meeting house, so important in late Nineteenth century Maori life does not appear to have been common" (1965:55), and so rejects, in part at least, the traditional view of the meeting house as the focus

of community life, a re-examination of the ethnographic evidence for precursors of the 19th century meeting house seems called for. The aim here is to examine historical evidence on the form and functions of the important *wharepuni* form of Maori building — be it “dwelling” or “meeting house” — and to suggest ways in which the role of this building may have changed. This re-examination should assist archaeologists in the identification of Maori buildings and in their functional interpretation.

House forms are essentially conservative. Forms are not simply the result of a casual or even a well thought out attempt to escape the weather, but incorporate a wide variety of symbolic and behavioural parameters. It is the symbolic and behavioural aspects which determine the continuity of house forms. To provide a basis for looking at ethnographic records of Maori dwellings for these symbolic and behavioural elements, it is useful first to explore elsewhere what might be expected of these aspects of vernacular architecture.

BEHAVIOURAL AND SYMBOLIC ASPECTS OF HOUSES

With regard to behavioural aspects, forms may be viewed as stages for activities from the most formal to the most commonplace (Denton 1970). The house, by its internal shapes and distances, promotes and reinforces culturally correct social interactions. Thus, the dwelling can be seen not only as a physical means of bringing people together, but also as a means of keeping certain people apart or excluded from certain activities. Different societies structure space within houses in such a way that individuals are reassured and are not involved in tensions which result from the breakdown of mechanisms designed to define roles and statuses.

In Lewis Morgan's *Houses and House-Life of the American Aborigines*, published in 1881, the author relates house architecture of native peoples of North and Central America to the tradition of communal living and to what he calls the “law of hospitality”. Despite Morgan's lead, however, the relation of house form to social behaviour has been a neglected area of study; “the theoretical point is only today beginning to be taken up by the specialist study of proxemics which is Edward Hall's word for the study of the relationship between social structures and space” (Bohannon 1965:X).

Proxemics has its roots in “individual distance” studies of animals (Hediger 1940, Conder 1949). It is probably best known for the kind of situations which Hall relates of mis-translations between people of different cultures concerning degrees of intimacy expressed by physical closeness, eye contact or level of voice (Hall 1963, 1966). Of interest here is the framework proxemics presents in explanation of some aspects of house form. House forms tend to be conservative because of the relation of the physical organisation of space to culturally prescribed social and psychological constraints. House plans may be seen as complex behavioural maps.

Firth comments that, “despite its simple appearance an analysis of the interior arrangements of a Tikopia house will lead us immediately to some of the most complex features of the native social organization” (Firth 1957:75). Unfortunately, however, for New Zealand and elsewhere in the Pacific information on the ways houses operate as “behavioural maps” is sketchy, confusing or lacking. It is not useful to be told by Charles Darwin, for example, that in New Zealand, “the hovels of the natives are so diminutive and paltry, that they can scarcely be perceived from a distance” (Darwin 1959:402).

An example of what can be achieved is given by Cunningham (1964). In his discussion of the Atoni house (Timor), emphasis is on the way in which fixed-feature space (walls, platforms, hearths, etc.) orders social relations and reinforces roles. It is,

moreover, the subjective social space rather than the objectively defined space in which lies the complexity of the Atoni dwelling. Buttimer defines objective social space as, "the spatial framework in which groups live", and subjective social space as, "space as perceived by members of particular groups" (Buttimer 1969:420). To the casual observer, the "inner section" of the Atoni house is simply an open area in the centre of the house floor. In terms of Atoni perception, however, it is much more:

The *nanan*, or inner section, is reserved for agnates of the householder, while the *ume nanan*, house centre — the whole area under the roof — is for agnates, affines and guests. Guests should not enter the inner section . . . though they may enter freely the outer section (*si'u*) through the enclosed entrance. Guests are not entertained in the inner section, though wife-giving affines may be received there on occasion. A wife has free access to the inner section of her husband's house (or the house of his parents) only after her initiation to his descent group ritual. Affines or guests may not sleep in the inner section, but a married daughter may do so if she returns alone to visit her parents. If her husband comes too, they sleep together on a platform in the outer section. Unmarried sons and daughters sleep in the inner section, but a boy on reaching his late teens may sleep in the outer section (Cunningham 1964:39).

This perceived complexity of space is very apparent in the Tikopia house as well (Firth 1957:75-81).

Reynolds' (1966) suggestion that the effect of the development of hierarchical social systems is to control the frequency and intensity of face-to-face contacts in an essentially over-crowded situation has an important spatial corollary: behaviour prescribed to cope with face-to-face situations is reinforced by perceived complexity in the cultural environment. The increasing popularity — or necessity — of the modern western multi-roomed dwelling can be viewed in conjunction with the break-up of family life and the popularity of individualist ideology. Aries (1962:390-398) points out that only in the 18th century did rooms in European houses begin to take on specialist functions. Lowenthal would add that:

Prior to the 18th century, ladies and maids not only travelled in the same coaches but shared the same table, even the same bed and chamber-pot, a degree of propinquity comfortable because status between them was as clear as peck-order in a hen coop.

He also says, "Hierarchical organization in animal species permits closer packing than an egalitarian system" (Lowenthal 1971:313, 314). This general observation certainly holds true for many non-western societies for which, unlike the Tikopia and Atoni, we have little information on the spatial mechanics of the "closer packing".

The differentiation of public and private space which is such a comparatively recent phenomenon in Europe has accompanied the expansion of European power and ideas throughout the world. "Close packing" is simply not on when the former subordinate or slave imagines, or is told, he is as good as the chief. Egalitarian principles demand a measure of distance to reassure the actors of their equality. When Redfield revisited Chan Kom, he noted, in addition to the increasing differentiation of public and private space, that old dominance-subordinance relations (such as that between husband and wife) were being rapidly eroded by new social ideals (Redfield 1950). An example of this process might be seen in New Zealand where in the early 19th century the position of the chief was endangered by erosion of the old principles of *tapu* and *mana*. The chief was no longer able to maintain his social position in the close physical proximity of traditional village and *wharepuni* life, and he therefore abandoned the communal assembly house which had been his dwelling as well, and retired to a private family dwelling — in a sense maintaining social distance by a newly required demonstration of physical apartness. The confusion over roles and statuses helped break up the older more corporate Maori life.

So far, interest has been focused on the house as a setting for social action. It is suggested that since the enactment of social relations carries a necessary spatial dimension, the house, as the most important single setting for social behaviour, tends to reinforce by its shapes and distances the roles and interactions of its inhabitants. There is a second dimension, however, which operates to preserve particular house forms, and that is the symbolic element.

Whatever the dwelling may appear to be to the outsider — hut, or status symbol, or an interesting specimen of "natural" architecture — to its inhabitants it is a precinct. The folklore of the house everywhere emphasizes the autonomy, the sanctity, not of the structure as such, but of the *inner space*. To cross a threshold, to pass through the door of a house or compound is a rite, an initiation into another realm. The frequent likening of the dwelling (regardless of its outer form) to the human body, to a grave, to a heavenly mansion, to a womb, implies the presence within the dwelling of a life distinct from the one outside (Jackson 1961:29).

In some anticipation of discussion to follow, these remarks can be echoed from New Zealand.

The act of entering a house was a secondary sort of *rite de passage* which frequently involved a change of social position, as it were, for the person who crawled through the narrow doorway beneath the lintel into the body of the house. The act of entering the *wharepuni* was an act pregnant with significance on many occasions (Jackson 1972:50).

Houses operated as symbols in a variety of ways. Those of the Yakutat Tlingit, "symbolized for the inhabitant the whole social order, his place in lineage and sib, and his family ties with those of the opposite moiety" (de Laguna 1972(1):294). The frequent naming of Maori houses after ancestors is reflected in the likening of parts of the house to parts of the human body (see, for example, Phillipps 1952:207-208; Barrow 1972:38). The Atoni house, already discussed in regard to the careful way in which it orders social relations, involves a very complex symbolism (Cunningham 1964:46-47). The entire building is a model of the universe as the Atoni see it. It serves to reassure the inhabitants and to secure them in the world of their perception. The Atoni world has natural and cultural elements and, as in many societies, these are integrated or subsumed under a few basic concepts or metaphors. "In one sense, therefore, the Atoni house is a model of the cosmos. However, it is more than simply analogous to the universe; it is integrated within it" (Cunningham 1964:50).

While the Maori do not seem to have conceptualised their dwellings as images of the universe, the *whare*, as we shall see, was certainly integrated within the Maori's perception of his world. Maori cosmology which related the natural world to man, provided the imagery by which man related to his dwellings. 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.

An example of the integration of an indigenous Pacific dwelling with the perceived universe comes from the Gilbert Islands (Anderson 1963). Gilbertese houses are built with the ridge pole north-south. This is in order that these navigating people can have the roof above their heads reflect the night sky. The imagery runs both ways:

The Gilbertese navigator regards the night sky as vast roof. It is never called KARAWA, the usual term for the heavens, but by the special name UMA NI BORAU which means literally "Roof by Voyaging". The whole terminology of the skies follows consistently upon this fundamental idea. The Eastern horizon is called TE TATANGA NI MAINIKU, or "roof plate of the East", the Meridian is TE TABUKI — the ridge pole and so on (Anderson 1963: Appendix 3).

The way in which people's dwellings demonstrate conceptualisation of the wider world is a difficult area of enquiry. "The line between insight, which is controlled

and susceptible of validation, and speculation, which is not, is very thin, and opinions can differ about the validity of the evidence" (Firth 1969:66). The useful exchange between Eyde (1969) and Firth (1969) demonstrates the difficulty nicely. Firth does not add in his criticism of Eyde that structural analysis of the kind undertaken by the latter — using Firth's own Tikopia data — is peculiarly vulnerable to a position which allows the subject's ideology no internal contradictions. In New Zealand, Salmond (1978) has shown that the operation of Maori *tapu* defies simple analysis. Similarly, Jackson, where his discussion impinges on the relation of men and houses, is prepared to let contradictions stand: thus, for example, "the crossing of the threshold [of the *whare*], in certain circumstances, symbolised for the Maori a death and birth at one and the same time . . ." (Jackson 1972:50-51).

Houses of many societies are designed as images of the world, or they are designed to be integrated within the perceived world. There are many different levels at which this operated. As an example, the casual observer might note that most Maori dwellings faced north and conclude that this is in order to benefit from the sun; the earnest enquirer, after pressing for the "real" reason, might, on the other hand, be told that if the house does not face north, then the spirits of the dead making their way to *Reinga* might cross the ridge pole and bring evil to the house and its occupants. This area of the rationalisation of people's fears and beliefs is extremely complex, however, and it may be naive to conclude that any one of a number of "explanations" for the *whare* facing north is necessarily correct.

Nor need it be argued that the symbolism of the house was understood by all the inhabitants. Cunningham notes that important constructional features of the Atoni house very often could not be explained by the inhabitants, or they were quite unknown; nevertheless, they were carefully adhered to as part of the overall model (Cunningham 1964:42). The symbolism of the house has an informal as well as an explicit role. There are some elements that are invariably known and can be explained, and there are some which are invariably adhered to, but cannot be explained — at any rate by the greater part of the population. In this is the essence of vernacular architecture: the model is followed, not because of constant explicit conceptualisation, but because, as the Atoni say, "*Atoran es ia*. (This is the *atoran*, the order or arrangement)" (Cunningham 1964:34).

The price paid for not building one's house properly was akin to what the Maori called *aitua*. The Maori house had to be constructed correctly, departure from certain rules of form, and of behaviour while construction was under way, were regarded as ill omens that could bring disaster.

It is *aitua* if the *kaho-tuanui* (batten nearest ridge pole), is not properly fixed, that batten being one of the *tapu* parts of the house. In adzing timbers for a house, the chips formed must be left *in situ*, not burned or taken away, or the work will never be completed. If we level and prepare a site for a house, and then desert the place without building — that is an *aitua* for us; we have cut and wounded Papa, our Mother Earth, without just cause (Best 1898:130).

The house as a symbol and as a setting for social action affirms order and reassures the individual. An unfamiliar setting disorients the individual and causes psychological and social chaos. It may be generally concluded, therefore, that where vernacular architecture prevails, house forms are conservative. Cunningham writes, "the house may be an effective means to communicate ideas from generation to generation in a preliterate society" (Cunningham 1964:34); although it is difficult to reverse the argument and suggest that it is a basic conservatism of the perceptual and social world which allows, and insists on, the persistence of form, it is clear that house form and human behaviour are closely linked. The ethnographer who only has historical accounts as source material must probe behind the references to

"mean native huts" or "the usual kind of native houses" to establish form and gain insight into symbolic and behavioural dimensions.

MAORI BUILDINGS

Ethnographic evidence indicates a number of forms of buildings in New Zealand. These include temporary lean-tos, dwellings and sheds (round and rectangular), cooking sheds, food stores (pits, elevated platforms or sheds) and rectangular buildings made of poles and thatch or carefully fashioned timbers. Table 1 is an attempt to arrive at a consensus out of the various descriptive classifications that have been adopted.

For present purposes the structures listed in Table 1 may be divided into two groups: those which are built for shelter or "living in", and those which are not. In the first group are "superior houses" and rectangular dwelling huts, temporary huts (round, rectangular or lean-to), and houses with and without walls; in the second are cookhouses and storage structures.

Cooking shelters and storage buildings need not be discussed in this context (but see Prickett 1974:40-44). They were sometimes used as living space by inferior members of society, but they did not incorporate the symbolic and behavioural dimensions of particular interest here.

TABLE 1
SOME DESCRIPTIVE CLASSIFICATIONS OF MAORI BUILDINGS

Buck (1950:113-136)	Best (1924(II):559-561)	Firth (1959:92-94)
Lean-to shelters		
Common houses including cooking houses and round huts	Houses constructed of poles and thatch including cooking sheds	Cooking sheds
Houses without walls	and small dwelling huts	Rectangular dwelling huts including poles and thatch construction
Walled houses		
Superior houses	"carefully fitted houses constructed of wrought timbers with or without embellishment" including <i>wharepuni</i> and <i>whare whakairo</i>	and <i>wharepuni</i>
Storehouses on piles		<i>Whare whakairo</i> Storage pits, platforms and sheds

Similarly, temporary dwellings need not be examined closely. In form they included lean-tos and enclosed buildings of round and rectangular floor plan (see Fig. 1). There has been some interest in round houses in New Zealand (Skinner 1921; Phillipps 1952:56-78; Taylor 1968). Ethnographic records, however, show these to have been "... makeshift structures of little importance" (Buck 1950:120), and problematic archaeological evidence needs care (Teviotdale 1939:174; Teviotdale and Skinner 1947:345; Phillipps 1952:63; Taylor 1968; and for a reply to Taylor, see Bellwood 1968; Coutts 1972:206-207). Cook gives an excellent account of their construction in February 1777 in Queen Charlotte Sound (Cook 1967:60-61) and it is these shelters which are pictured by Webber (*ibid.*:P1. 13). For present interest, their

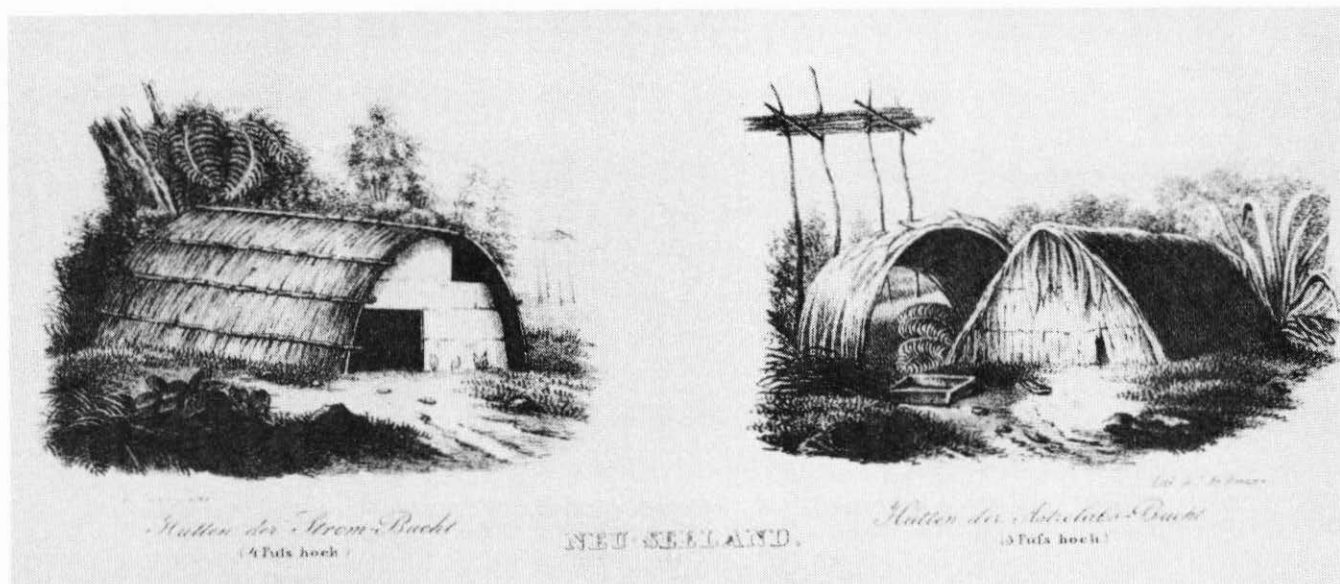


Figure 1: Temporary huts at Tasman Bay, January 1827, pictured by de Sainson (Dumont D'Urville n.d.:Plate 37).

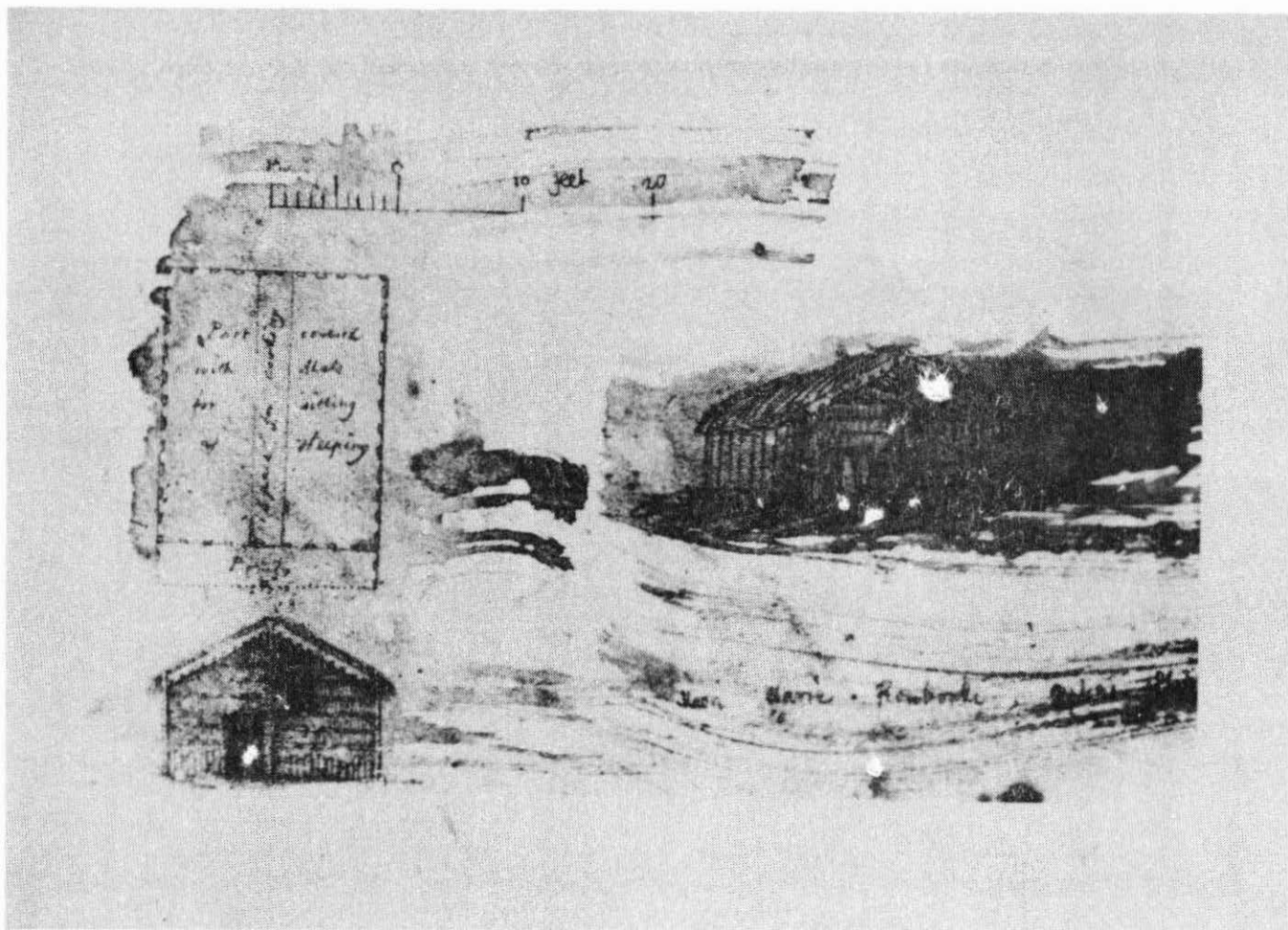


Figure 2: “Maori Warrè — Roubouki, Apl 31 [sic] 1844”, sketch by John Wallis Barnicoat (reproduced by courtesy of the Alexander Turnbull Library, original in a private collection).

most important characteristics were that they could be built quickly and without ceremony and that they could be lived in carelessly. There were other forms of temporary shelter, but it might be suggested that the round floor plan was preferred for this kind of casual occupancy since by its very plan it did not emphasise the spatial arrangement of social relations, nor would the operation of *tapu* inhibit the hurried activity of the camp. Erections for temporary shelter, whatever their form, would have included few or none of the symbolic and behavioural aspects of permanent dwellings.

Following the classifications of Best, Firth and Buck in Table 1, there remains the class of rectangular buildings ranging from "small dwelling huts" to "superior houses" or "carefully fitted houses constructed of wrought timbers with or without embellishment". From the wealth of documentation a great deal is known about this building. It is described from the northern tip of the North Island by Lieutenant Roux of *Le Mascarin* (McNab 1914:363-365; Kennedy 1969:219-221), and it is pictured by J. W. Barnicoat on Ruapuke Island, Foveaux Strait in April or May 1844 (Barnicoat ms; see Fig. 2). It fulfils an important characteristic of dwelling houses, being resistant to change, by surviving more than 150 years after Cook's first landfall: the best account of its construction comes from the Urewera in the 1920s (Firth 1926). Firth uses the term "*wharepuni*"; Best, however, uses the term "*whare*" as ". . . the common generic term for a house or hut" (Best 1924(II):561), and it is in this sense that the term will be used here — without prejudging the question of function.

The rectangular *whare* can be characterised as having a very small door, an extension of roof and walls at the door end to form a porch, an internal plan of hearth or hearths down the centre and sleeping places or platforms down the sides, and a proportion of length to breadth of about 1.5 or 2 to 1. This kind of building has important symbolic dimensions, it marshals and emphasises social interaction and, from what we know, there is only minor variation in form. We should expect such a building to have had a long history in New Zealand.

Traditional stories emphasise the importance of houses: as symbols of actors and of action in the stories, and as settings for action. A house might be built to serve as an invitation to kinsmen or allies (see, for example, Colenso 1880:46-48), or to serve as an enticement for enemies who, thinking themselves honoured, would come unwarily (*ibid.*). The return of a lost son might be signalled by the stranger's blatant disrespect for his father's house (see, for example, Best 1925(I):103, 259, 294). As with Maui the trickster, it is the ultimate success of the disrespect that wins approval, the initial act is shocking. Peart records a story in which wild vegetables were gathered from the site of a chief's house in a year of great hardship.

In consequence of this violation of the sacredness of the *tapu* of chiefs, they were seized with a severe form of colic. From this complaint there could be no escape; they had broken a sacred rule, and death, so the story tells, claimed all this section of the tribe. (Peart 1937:11)

The *tapu* of the house was indistinguishable from the *tapu* of the owner; disrespect towards one was disrespect towards the other.

By Maori cosmology all living and non-living things were related to men through the union of Rangi and Papa. A complexity is added by the ability of individuals to reserve a tree, or an area of forest or other resource, or a man-made object such as a house or canoe, for personal use by declaring that it is part of his body (see, for example, Best 1924(I):400). If an individual has the status or power to support his possession, then no one would dare violate this notice of ownership, since a tree, for example, which was declared to be a man's backbone was just that, until the *tapu* was removed. Similarly an image of an ancestor carved on a plank in a house was

not just an image, it was the man. The relatedness or identity was inescapable because of the operation of *tapu*. Hochstetter found himself in a common bother — to Europeans — at Tokaanu; he wished to purchase a carved figure from the famous *wharepuni* there which was, by April 1859, falling into disrepair. “The chief of the place . . . however, was much astonished on hearing my demand, and informed me, that the figure in question represented his grand-father, and that it was utterly impossible for him to sell his grand-father to the pakeha” (Hochstetter 1867:370).

In addition to the carved representations of ancestors, mythical and real, the whole house might be personified. Thus, the *tekoteko* is the head, the *maihi*, the arms, the rafters, the ribs, and so on (Phillipps 1952:207-208; Barrow 1972:38). The whole would then be an integrated symbol of person and power. “The sign of chieftainship is a well-built, superior house situated within a stockaded village, while the token of the commoner is a house situated in the open, which sooner or later will be destroyed by enemies” (Best 1924(I):355).

Important houses were usually named, this alone demonstrating their significance in the cultural landscape. Frequently they were named after an ancestor, or they were named after (or in allusion to) an event.

When the Taupo chief Te Heuheu wished to bring to a conclusion an old quarrel with another chief, he built a new house, named it Te Riri ka wareware (The Forgotten Quarrel), and then invited his opponent to visit him. The guest was entertained in the new house. (Best 1924(II):578)

The scene of such traditional stories can be visualised following general historical knowledge. Early European visitors to New Zealand have left many excellent descriptions of rectangular dwelling houses and of much of the social action for which these buildings provided the essential stage. One of the best descriptions is from Lieutenant Roux at Spirits Bay, April 1772.

Among other things, their houses excited our admiration, so neatly were they built. They are rectangular, of a size fitted for their purpose. The sides were of stakes a short distance apart, strengthened by sticks interlacing with them crosswise. They were covered on the outside with a layer of moss thick enough to keep out wind and rain, and this layer was supported by neatly made lattice-work. The inside was hung with matting made of water-flags, over which were placed at intervals, for decoration and to support the roofing, small posts, or to be exact, planks two or three inches thick, quite well carved. In the middle of the house there was also a large carved post supporting the ridge of the roof, and there were two others at the ends; what surprised us most is that the whole construction was mortised, and very well bound with their water-flag cords. On the centre post was a hideous representation of a sort of sea-devil; as we have found this figure in all their houses in this same position, which seems to be consecrated to it, there is every reason for presuming that it is their divinity that they represent in this form.

The door of each house ran in a groove, and was so low that it was necessary to lie down, so to speak, to go in. Above it were two small windows and some very fine lattice-work. Outside a small trench ran right round to drain away water; these houses are thatched with rushes; in some there was a roughly-made bed with some well-dried hay on which they sleep.

In front of each door were seen three stones forming a sort of hearth where they make fires. (Kennedy 1969:219-220)

Among other early accounts are those of L’Horme in Doubtless Bay, December 1769 (McNab 1914:325), Crozet in the Bay of Islands, May to July 1772 (Roth 1891:34-35), Monkhouse in Poverty Bay and Anaura Bay, October 1769 (Cook 1955:565, 584), Parkinson in Tolaga Bay, October 1769 (Parkinson 1773:98-99), and Anderson and Furneaux in Queen Charlotte Sound during Cook’s third voyage (Cook 1967:810-811; 739).

Perhaps the best 19th century description of a *whare* comes from the diary of Lieutenant Roquemaurel of the *Astrolabe*, who visited the Bay of Islands with D’Urville in April 1840. It is a “chief’s house”.

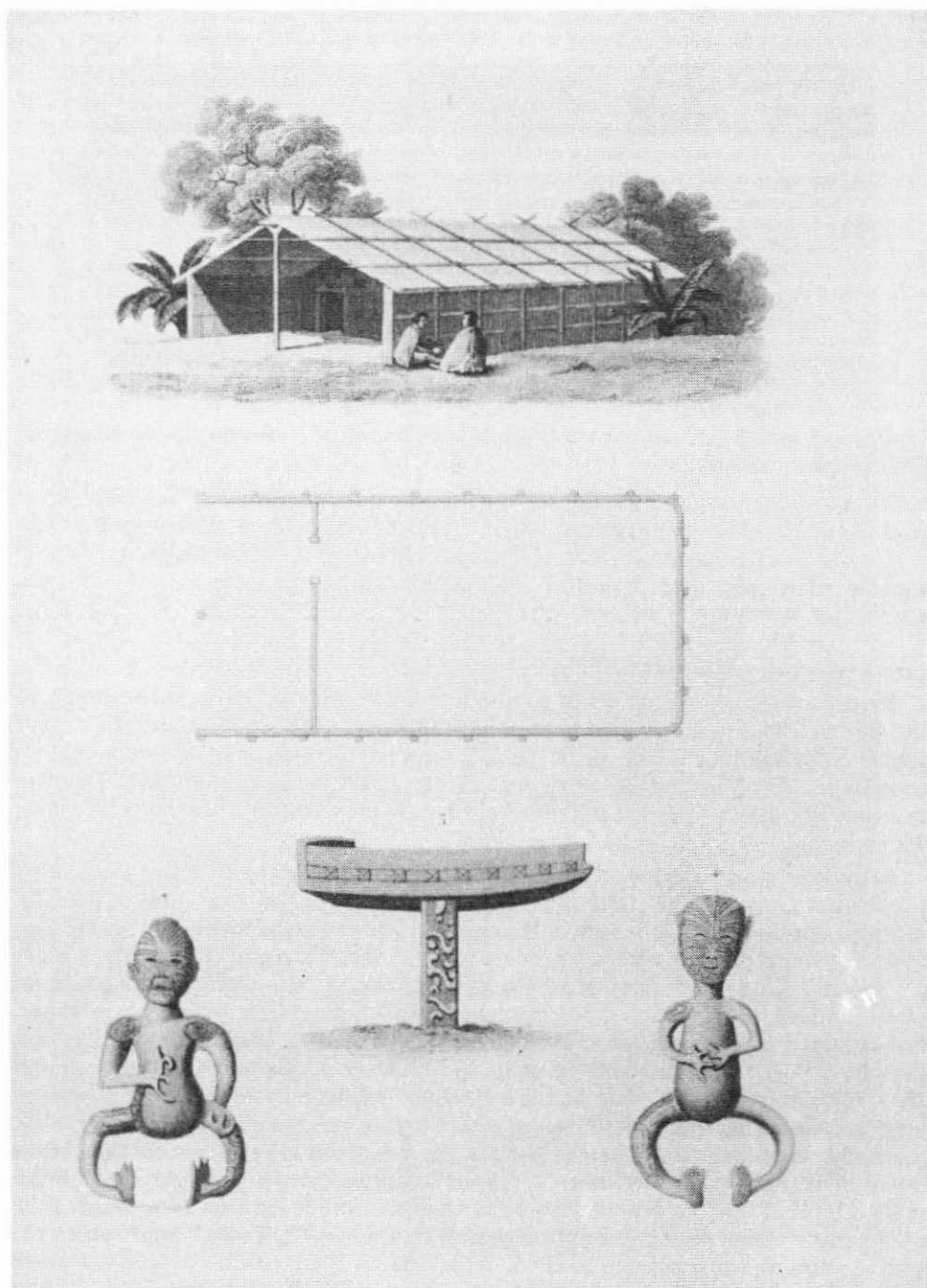


Figure 3: *Wharepuni*, Bay of Islands, April 1824, pictured by Duperrey and Chazal (Duperrey 1826: Plate 41).

As there was no room in the hut, where the only free space was the passage two feet wide between the two beds of bracken, I had to find shelter under the porch outside. This porch runs along the full width of the house, that is for four or five yards and is about a yard and a half deep. It is covered by the extension of the roof of the hut and, like the hut, is divided into two sleeping places, by means of two planks leaving a passage way in the middle. The partitions and the roof of the porch are made of little sticks or reeds carefully arranged in parallel bundles, painted black and red, so as to form a check design. The woodwork round the door, which is rather less than three feet high, and round a little window, both of which open on to the porch, is adorned with curious carvings painted red. The cornice which finishes off the roof over the porch is carved in the same style. The interior of the hut has nothing special in its construction, only differing from the porch by its greater simplicity and the absence of any ornament. The roof is formed by a thick layer of thatch, arranged in bundles tied together by means of a little plait. This roof extends about a yard beyond the walls of the hut. On the sides most exposed to the rain, towards the west and south, it comes almost down to the ground and is supported by a row of stakes. The upper part of the roof is covered with a rope net with large meshes, kept taut by means of stones that hang down at the sides. The object of this net is to hold the straw in place against the violence of the wind. Inside the hut measures about 13 feet in width and 19½ feet in length. The roof rises about 6½ feet above the ground in its highest part. The side walls are about three feet high. (Wright 1955:70-71)

Figures 1-3 and 5-7 show a variety of Maori *whare* of the kind described in the ethnographic record.

Formal, symbolic and behavioural dimensions of the Maori *whare* can only be regarded as making up an integrated whole. Nevertheless, in discussion of the building it is useful to examine major formal areas in turn along with associated non-formal aspects. Discussion here, therefore, will centre on plan proportions and size, the porch, the door and the interior, all of which are open to discovery by archaeology.

SIZE AND PLAN PROPORTION

There are several plan drawings of *whare*: by Chazal, who accompanied Duperrey to the Bay of Islands in April 1824 (Duperrey 1826:P1. 41; see Fig. 3), by Barnicoat, whose 1844 Ruapuke Island sketch includes a scale showing the "Maori warrè" to be about 25 feet long and 18 broad (Fig. 2), and, later, by Firth (1959:24). The plan drawings all show a rectangular building about twice as long as broad, or a little less, which includes a porch and an inner room.

There is frequent agreement in historical accounts of there being two size ranges for houses. Crozet, in his description of small huts in the Bay of Islands in the 18th century, concludes, "the houses of the chiefs are larger" (Roth 1891:34). Cook also notes the size difference and puts it down to ". . . the largeness of the Family they are to contain" (Cook 1955:284). However, it is not always clear there were two sizes of *whare*, indeed, early observers sometimes contradict each other in specific instances. For example, at Kahou Wera in the Bay of Islands in April 1824, Lesson writes that the chief Toui, "was as badly housed as the least of his subordinates" (Sharp 1971:74). Cruise, on the other hand, had visited the pa only four years previously, and he states that the chief's house was larger than the rest (Cruise 1957:47). Similarly, there are contradictory statements about the relative size of the chief's house at Hongi's pa at Keri Keri — from Blossville (Sharp 1971:113) and Clarke (1903:11-12). There are other instances of chief's *whare* being seen as no larger than others in a settlement: for example, Parore's dwelling at "Waipoa" was "much the same in size and appearance to those inhabited by the common people" (Polack 1838(I):91), as was Taiaroa's hut at Otago, April 1840 (Wright 1955:23).

Much the greater number of observers, however, report that the chief's house is larger than the rest. At the village of "Kai-Monga", Whangaroa, in March 1834, Dr Marshall writes,

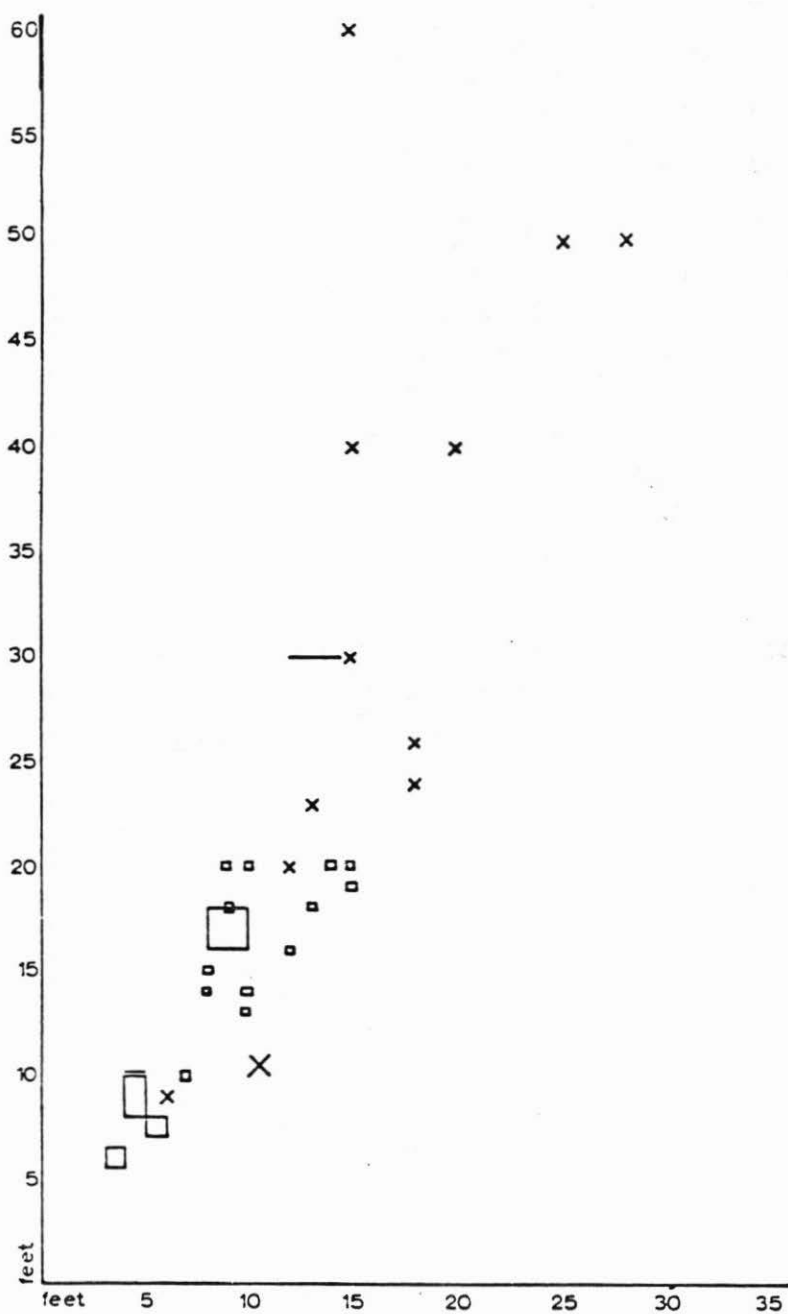


Figure 4: Historical records of plan dimensions of Maori dwellings. Crosses indicate records of "chiefs' " houses, and rectangles and lines, the dimensions of "small" or "common" dwellings. Note that the large cross and larger rectangles and lines show where a range of dimensions is given in the original record.

The house originally built for the chief, whose name is Epuna, was tapu, or rendered sacred to his service alone, and about three times as large as any of the others. Three grotesque figures, rudely carved, ornamented the porch, which projects sufficiently to admit of a dozen persons sitting under its shelter. (Marshall 1836:139)

In September the same year, Marshall is at Te Namu, south Taranaki,

The chief's house was readily distinguished by its size, ornaments and situation. It was twice as large as any other; five grotesque figures, rudely but elaborately carved, adorned its front. (Marshall 1836:172)

Nicholas describes Tuatara's residence at Rangihoua,

The hut of this chief, (or if this mean epithet must be discarded for the grandest that can be used, his palace,) differed but little from those of his subjects, and was distinguished only by its being built on a larger scale, and having more ground enclosed around it. It measured about twenty feet long, fifteen broad, and eight feet in height. (Nicholas 1817(I):175)

Other specific references to two sizes of *whare* include those of Crozet (Roth 1891:34), Cook (Cook 1955:284), Anderson (Cook 1967:811), Nicholas, again at the Bay of Islands, 1815 (Nicholas 1817(I):251, 271), Cruise, also at the Bay of Islands, February and March 1820 (Cruise 1957:34-35, 47), Morrell at Molyneux's Harbour, South Otago, January 1830 (Morrell 1832:366) and Martin at Kauaeranga on the Thames in 1839 or 1840 (Martin 1845:70).

There is general agreement, then, that "larger" houses belong to chiefs. Even Cook's remark attributing size to the "largeness of the family" fits, since chiefs would indeed have had larger households — seen by Cook as "family". However, when available plan dimensions are listed, it can be seen that there is no clear cut division between "large" and "small" houses, or chiefly dwellings and the rest. In Table 2, a number of plan dimensions of rectangular *whare* spanning 150 years are brought together. The dimensions are plotted in Figure 4.

Several sets of dimensions given in Table 2 (and Fig. 4) require discussion. Three of the early French records from the far north, those of L'Horme (3), Monneron (4) and Crozet (8) indicate very small buildings indeed.¹ All three sets of dimensions, however, present difficulties. L'Horme's includes a height of seven or eight feet which makes for a curiously shaped building. Even Monneron's heights (five or six feet) are a little odd on a Maori hut only four or five feet wide. Crozet's description, in addition to the dimensions given in the table, gives ". . . one door about three feet high and two feet broad . . . and above the door there is a small window about two feet square" (Roth 1891:34). Again, a very odd *whare* results.

It is possible L'Horme and Monneron have confused heights and breadths; or perhaps it was McNab, whose French journals are said to be "so faulty sometimes both transcript and translation as to possess no meaning" (Milligan 1958:184). Fortunately, however, we have other *whare* dimensions from both early French voyages to show that the very small buildings of Monneron, L'Horme and Crozet do not give the whole picture. A sketch of ethnographic items by an unknown observer on board the *St Jean-Baptiste* — possibly Charenton (Milligan 1958:195) — includes a house. The inscription reads, "Maison de 12 a 20 Pieds de long, sur 8 a 12 de large, et de 6 a 7 Pieds d'elevation couverte en Paille et Roseau" (ibid.:P1.2). Kelly (1967) has published what appears to be the original sketch. Again, in Crozet's account where he is talking about "magazines", it is possible these are also chief's dwellings. From notes accompanying the sketch of Paeroa Pa (Kennedy 1969:229), a centrally placed building is described as, "chief's house, also store for weapons" (ibid.:228). Crozet gives the size of "magazines" as, ". . . generally about 20 to 25 feet long to 10 to 12 broad" (Roth 1891:33).

In addition to the early French records, there are two other pieces of evidence for very small buildings from the far north. Both are from Kahou Wera in the Bay of

TABLE 2
AN ETHNOGRAPHIC SAMPLE OF WHARE DIMENSIONS
Measurements in Feet

	Length	Breadth	Height	Location	Date	Chiefly (- +)
1. Monkhouse	24	18		Poverty Bay	1769	
2. Banks (a)	30			Tolaga Bay	1769	
(b)	30	15	12	Tolaga Bay	1769	
3. L'Horme	8-10	4-5	7-8	Doubtless Bay	1769	
4. Monneron	10	4-5	5-6	Doubtless Bay	1769	
5. Charenton?	12-20	8-12	6-7	Doubtless Bay	1769	
6. Banks	16-18	8-12	6-7	unlocalised	1769-70	
7. Cook	20-30			unlocalised	1769-70	
	" . . . others not above half as long"					
8. Crozet	7-8	5-6		Bay of Islands	1772	
9. Crozet	20-25	10-12		Bay of Islands	1772	
10. Anderson	30	15	6	Queen Charlotte Sd	1777	
	" . . . the greatest part of them are not half the size and seldom exceed four feet in heighth [sic]"					
11. Nicholas	14	8	4	Cavalli Islands	1814	
12. Nicholas	20	15	8	Bay of Islands	1814	+
13. Nicholas	27	18	9	Bay of Islands	1815	+
14. Cruise	9	6	4	Bay of Islands	1820	+
15. Edwardsen	13	10	(16?)	Foveaux Strait	1823	
16. Lesson	6-7	3-4	3-4	Bay of Islands	1824	
17. D'Urville	10-12	10-12		Bay of Islands	1827	+
18. Morrell	30	12-15	10	Molyneux's Harbour	1830	+
19. Polack	12	8(internal)		Kaipara Harbour	1832	+
20. Polack	40	20	12	unlocalised	1830s	+
21. Yate	16	10	4-5	Bay of Islands	1830s	
22. Wilkes	20	12	8	Bay of Islands	1840	+
23. Coupvent-Desbois	15	8	6	Otago Harbour	1840	
24. Roquemaurel	24	13	6½	Bay of Islands	1840	+
25. Wakefield	50	28		Wanganui	1840	
26. Wakefield	40	15		Lake Taupo	1841-42	+
27. Servant	60	15		Hokianga	1838-42	
28. Moore	30	16	10	Motueka (Riwaka)	1841	
29. Barnicoat	25	18		Ruapuke Island	1844	
30. Williams	10	8-10	4-6	Bay of Islands	1844	
31. Cooper	50	25	20	Lake Taupo	1850	
32. Thomson	18	13	3-4	unlocalised	1840s-50s	
33. Collinson	20	10		Bay of Islands	1840s	
34. Smith	20	10		Ongaruhe (central North Island)	1858	
35. Smith	8	6(internal)		Lake Taupo	1858	
36. Scherzer	20	14	15	Waikato	1858-59	
37. Meade	16	8(internal)		Bay of Plenty	1864	
38. Meade	10	10(internal?)		Bay of Plenty	1864	
39. Tinne	18	8(internal?)		Lake Tarawera	1870s	
40. Meredith	16	14(internal?)		Wairarapa	1870s	
41. Firth	14	10		Urewera	1920s	
42. Firth	20	15		Urewera	1920s	
43. Firth	13	10		Urewera	1920s	
44. Firth	16	12		Urewera	1920s	

Notes: 1) Cook 1955:565; 2a) Banks 1862(I):421; 2b) Hawkesworth 1773(III):458, Hawkesworth had access to Banks' journal and notes, and Banks looked over Hawkesworth's manuscript (Beaglehole, in Cook 1955:ccxlv). There is no need to suspect Hawkesworth of inventing the missing figures in Banks' published journals; 3) McNab 1914:325; 4) *ibid.*:285; 5) Milligan 1958:195; 6) Banks 1962(II):17; 7) Cook 1955:284; 8) Roth 1891:34; 9) Kennedy 1969:229; 10) Cook 1967:810-811; 11) Nicholas 1817(II):109; 12) *ibid.*:175; 13) *ibid.*:251; 14) Cruise 1957:47; 15) McNab 1907:215; 16) Sharp 1971:73; 17) Wright 1950:197; 18) Morrell 1832:366; 19) Polack 1838(I):186; 20) *ibid.*(II):31; 21) Yate 1835:153; 22) Wilkes 1845(II):386; 23) Wright 1955:34; 24) *ibid.*:70-71; 25) Wakefield 1845(I):380-381; 26) *ibid.*(II):105; 27) Simmons 1973:8; 28) Moore 24/11/1888; 29) Barnicoat ms; 30) Kenny 1956:77; 31) Cooper 1851:292; 32) Thomson 1859(I):208; 33) Collinson 1853:11; 34) Taylor 1959:362; 35) *ibid.*:370; 36) Scherzer 1863(III):161, the accompanying description is unsatisfactory but may involve mistranslation; 37) Taylor 1959:431; 38) *ibid.*:437; 39) Tinne 1873:17; 40) Meredith 1935:89; 41) Firth 1926:54; 42) *ibid.*:55; 43) *ibid.*:56; 44) *ibid.*:57.

Islands — from Cruise and Lesson. Cruise visited Kahou Wera in March 1820.

The gentlemen then ascended nearly to the top of the pah where the house of the chief [Koro Koro] stood: it was about nine feet long, six feet wide, and four feet high, with a small sliding door, through which he could creep with some difficulty. The huts of his people were smaller. (Cruise 1957:47)

However, we may note that the chief's house described by Cruise was apparently not Koro Koro's only dwelling, at least for some time during this period. D'Urville, who was with Duperrey in the Bay of Islands in 1824, returned to Kahou Wera in 1827 after it had been abandoned. Also abandoned, at the foot of the hill below the pa was,

. . . Koro Koro's country home. It was nicely constructed, forming a square with sides measuring at least ten to twelve feet and I could walk about in it quite easily; which constitutes luxury among these people, whose huts are seldom more than five or six feet high. (Wright 1950:197)

Lesson visited Kahou Wera in April 1824.

The huts looked like Lilliputian dwellings, they were so low; at the most scarcely three or four feet high and about as wide, they were about six or seven feet long. They are rectangular in shape, having side walls supported by supple peeled branches, and a roof made of a layer of close-packed rushes. At the front there is a kind of alcove where they come to sniff the air when it rains. The partition which separates this part from the other in which two people sleep on the straw which serves as a bed, can be passed only by crawling, and is closed by a little door. (Sharp 1971:73)

The records of Lesson and Cruise have some confirmation from D'Urville's artist, de Sainson, who pictured the deserted pa in 1827 (Wright 1950:176).

The predominance of small undecorated huts, "chiefly" and "common", might be explained by the political instability in the north at the time. The need for muskets dominated the energies of the people of the Bay of Islands. The unrepresentative nature of the Bay of Islands settlement pattern has already been proposed (Kennedy 1969); it is likely, too, that community and individual values concerning dwellings were in some disarray. The point will be returned to later, but it is unlikely to be simply the size of the sample from the north which has thrown up all these very small dwellings. The only comparable dimensions are recorded much later by Smith, who spent a "dreary" day in a *whare* at a settlement (variously named "Hamaria", "Orona" or "Totara") close to Motutere on Lake Taupo (Taylor 1959:370). The internal measurements are given as six by eight feet; it might have been ten by seven feet overall.

Servant's record from the Hokianga presents a puzzle: it appears to be the wrong shape and, at 60 x 15 feet, much too large (see Simmons 1973:8). Apart from the unusual dimensions, however, he seems to be describing a very typical kind of building. Perhaps the measurements are accurate; if so, then something unusual took place quite suddenly at the end of the 1830s in the Hokianga district. Polack, Earle, Markham and Maning were all in the district about this time, or before, and they give no hint of houses this size.

The very small measurements given by Polack and others are possibly the result of an enclosed viewpoint and a desire to exaggerate discomfort. Polack describes what may be a chief's house at Maungakahia on the Kaipara Harbour, 1832.

The chief and his intimates entered the house, into which I also crept, with the labent movement of a snake, on all fours. The space within side might have been about eight feet by twelve, with a temperature not unlike a baker's oven; a fierce fire burnt in the centre, and there was sufficient smoke to have choked any person of less accommodating habits than I possessed. (Polack 1838(I):186)

Figure 4 shows clearly the relative sizes of "large" or "chiefs'" houses and "small" or "common" houses. The relative status of the houses listed in Table 2 is

not always clear, so not all are included in the Figure. For functional categories, such as "chiefly" and "common" houses, we should not expect size distributions to be perfectly separate and, as the diagram shows, they are not. Despite the unusual situation in the Bay of Islands in the early years of last century, it is useful to consider that a building only nine feet by six may serve at least some of the functions of a chief's dwelling.

The difference in function of "large" and "small" houses is clearly a crucial point. A discussion of the point might be initiated by a look at recent changes in the attribution of the term "*wharepuni*". Today there appears to be an understood difference between *wharepuni* and *whare whakairo* (Best 1924(II):561; Firth 1926:54; Buck 1950:121; Groube 1965:43). "The superior houses form two classes: the *whare puni*, or family sleeping houses, and the *whare whakairo*, or carved houses, which were subtribal or tribal community houses" (Buck 1950:121). This difference, however, was not always so. *Wharepuni* means literally "house or hut", "stopped up or blocked" (Williams 1971:310), "sealed" (Buck 1950:122), or "close house" (Angas 1847b(II):123); *whare whakairo* may be translated as "carved house", although Best would add, "The word *whakairo*, so commonly used to denote carvings, does not carry that sense, but simply means a design" (Best 1924(II):559). Williams' dictionary gives *wharepuni* as "guest house, principal house of a *kainga*" (Williams 1971:310). It is clear that if the *wharepuni* is the principal house in a village, then that may also be a *whare whakairo*.

The term "*whare whakairo*" seems to have had the same kind of status as "*whare rununga*" or "*whare hui*", it describes an aspect of the use or construction of what was essentially a *wharepuni*. The large house at Tokaanu, built about 1848 (Cooper 1851:292) is called a *wharepuni* (Hochstetter 1867:369-370). Phillipps notes that, "the *whare rununga* (assembly house) of most villages appears also to have been a *wharepuni*, which may explain why relatively few Maoris whom I have met refer to their meeting-house as *whare rununga*, but keep to the old term *wharepuni*" (Phillipps 1952:16).

In ethnographic sources the function of *wharepuni* is variously given as: "communal sleeping house" (Beattie ms.a:1), a "sleeping-house . . . for visitors or residents" (Beattie ms.b:23), a "conversation and sleeping room" (Hochstetter 1867:351), "assembly house" (Kerry-Nicholls 1884:113), and a "'hot-house' for strangers to sleep in" (Angas 1847b(II):21). When Kerry-Nicholls arrives at Ngatokurua, west of Ruapehu in May 1883, he is ". . . given comfortable quarters in the *whare-puni* in which the chief's family dwelt" (Kerry-Nicholls 1884:288). Taylor writes, "the principal houses are called *whare-puni*, or warm houses; this name may be given either from the number of persons generally residing in them or from their being so built as to exclude the external air" (Taylor 1870:500). Clarke, writing about Hongi's pa at Keri Keri in the 1820s, says, "in the centre of the stockade was the *wharepuni*, the Chief's state house. It was a wonderful specimen of Maori art" (Clarke 1903:11). The functions of *wharepuni*, then, include assembly house, communal and visitors' sleeping house, "principal house" of a village and chief's dwelling.

The two size ranges of houses observed historically has already been discussed. The larger one is, where we have explicit information, almost always described as the chief's house. Other functions of the chief's *wharepuni*, however, are now becoming clear. Indeed, the role seems very like that of the modern meeting house except that the old *wharepuni* also served as the chief's dwelling. The suggestion that large buildings were first put up to accommodate European missionaries and traders (see Cruise 1957:116) may be nothing more than pakeha conceit (for a discussion of

this point, see Groube 1965:65-67; 1969:7). The chief's house, reflecting the chief's status and wider group pride, was occupied, as well as by the chief, by a large and changing group of people, including members of his *whanau* or descent-based, face-to-face kin group, other individuals, including slaves, and visitors. It was also the focus for group assemblies, the reception of visitors, laying out of the dead and other activities involving not just the chief's *whanau*, but the wider community as well. The change in functions which occurred during the 19th century, and which is reflected by the separation in meaning of "*wharepuni*" and "*whare whakairo*", was that the chief moved out of the old *wharepuni* and left it to the visitor and to special occasions of group sociability and hospitality. The changing functions of *wharepuni* are shown in Table 3.

TABLE 3
CHANGING FUNCTIONS OF MAORI DWELLINGS IN THE NINETEENTH CENTURY

Rectangular <i>whare</i>	Functions taken over by:
1. Large (<i>wharepuni</i>)	
a. demonstration of status	} " <i>whare whakairo</i> " (meeting house)
b. focus for group activities	
— reception of visitors	
— laying out of dead	
— internal (and external <i>marae</i>) space for group assembly	
c. accommodation of visitors	} " <i>wharepuni</i> " (dwellings of nuclear or extended families)
d. dwelling of senior chief, some members of <i>whanau</i> and others including slaves	
e. and sometimes dwellings of junior chiefs, some members of <i>whanau</i> and others including slaves	
2. Small (<i>whare/wharepuni</i>)	
a. to a variable but minor extent, the roles described above in 1a, b and c	
b. sometimes dwellings of junior chiefs, some members of <i>whanau</i> and others including slaves	
c. dwellings of junior families (nuclear or extended), non-familial groups and individuals	

It is not suggested that there was an invariable difference between "large" and "small" dwellings. In some observations the "small" buildings were probably only huts or sheds; in others, the "small", as well as the "large", were *wharepuni*. Many factors would contribute to the status of dwellings in a particular settlement: the state of security, how many high status individuals were present and for what part of the season the settlement was occupied, among others. There are also likely to have been geographic differences and changes through time.

It can be seen as well that this argument renders irrelevant any search for "prototype" meeting houses. The problem of the missing "meeting house" in the late 18th and early 19th century ethnographic record is the result of an incomplete and simplistic functional argument which rejects the traditional settlement pattern view of Best, Firth and Buck, while retaining the clear cut functional divisions which the old view maintained.

We have seen (Table 1) that Best makes a fundamental distinction between houses made with carefully adzed timber frames and houses made of poles and thatch.

Broadly speaking, Maori houses and huts may be divided into two forms — A, carefully fitted houses constructed of wrought timbers, with or without embellishment; B, huts constructed of poles and thatch. The first of these classes may be subdivided again into two forms, the superior *whare whakairo* or house embellished with various decorative designs, and the *whare puni* class, carefully built houses but unadorned or with but few evidences of decorative art; plain side posts instead of carved ones. Of the B type we have to note small dwelling huts and cooking sheds . . . (Best 1924(II):559-561)

Firth (1959:92) also makes this distinction, but without Best's functional emphasis. It is possible that this distinction may coincide with that between chiefly and common dwellings. It was important people who commanded the resources necessary for the erection of carved dwellings, and it was they, too, who enjoyed ancestors and the memory of deeds, in a sense the property of the whole tribe, which might be commemorated by these carvings. From earlier ethnographic records there is more agreement that "larger" houses have squared posts (Dieffenbach 1843(II):69; Colenso 1868:349; Banks 1962(I):421), than that "smaller" houses are of poles and thatch (but see Nicholas 1817(I):109). The difference between these two forms of construction can be seen in Figure 5.

Deliberate irregularities were sometimes introduced in the plan of *wharepuni*.

The front wall was, in at least some districts, made slightly wider than the rear wall, this discrepancy being denoted by the terms *koha* and *hau*. The rear wall site was first marked off and the same measure used for the front wall, to which was added the *koha* of four or five inches. The *koha* or *hau* was measured by finger breadths, termed *tuma* in this instance. Thus one might say: "*Kia rima tuma te hau o to whare.*" (Let the discrepancy in width of the house be five fingers.) (Best 1924(II):562)

Other deliberate plan discrepancies are mentioned by Williams (1896:146) and Ngata (1897:86).

A similar formal expression of a symbolic dimension is indicated by the disgust of the master-carver, Hori Pukehika, at the Auckland Museum authorities leaving only an even number of posts and rafters in the reconstructed Hotunui house (Buck 1950:124-125). Buck writes concerning meeting houses,

The rafters corresponding with the front wall, and the wall posts on which they rested, were split as it were by the wall so that half was in the interior and the other half in the porch. The full rafters in the interior and in the porch with their corresponding wall posts were odd in number for an even number was regarded as an ill omen that would bring disaster. (Buck 1950:124)

Williams, however, writes that, "the intervals were, as a rule, a little wider than the *poupou*, and were invariably of an odd number inside the *whare*, and an odd number also — generally three — in the *whakamahau* [porch]" (Williams 1896:147). But posts and intervals cannot both be an odd number. Nevertheless, interest in the point does indicate that, odd or even, the number of wall posts was generally prescribed.

THE PORCH

"A true native house is always built with a gable roof and a portico or verandah, where the occupants generally sit" (Angas 1847b(I):333). The porch of the *wharepuni* is a most important formal characteristic. In many ethnographic descriptions mention of the porch is omitted, but even in these instances we are never able to infer that it was not present.

The porch is usually said to have faced the sun (Colenso 1868:349; Taylor 1870:500; Firth 1926:55; Furneaux, in Cook 1961:739). L'Horme has a variation on this: the door, and so too the porch, ". . . always faces the opposite way to the prevailing bad wind" (McNab 1914:325). There is also, as usual in examining ethnographic literature, a direct contradiction: Dr Karl Scherzer, who spent two weeks in

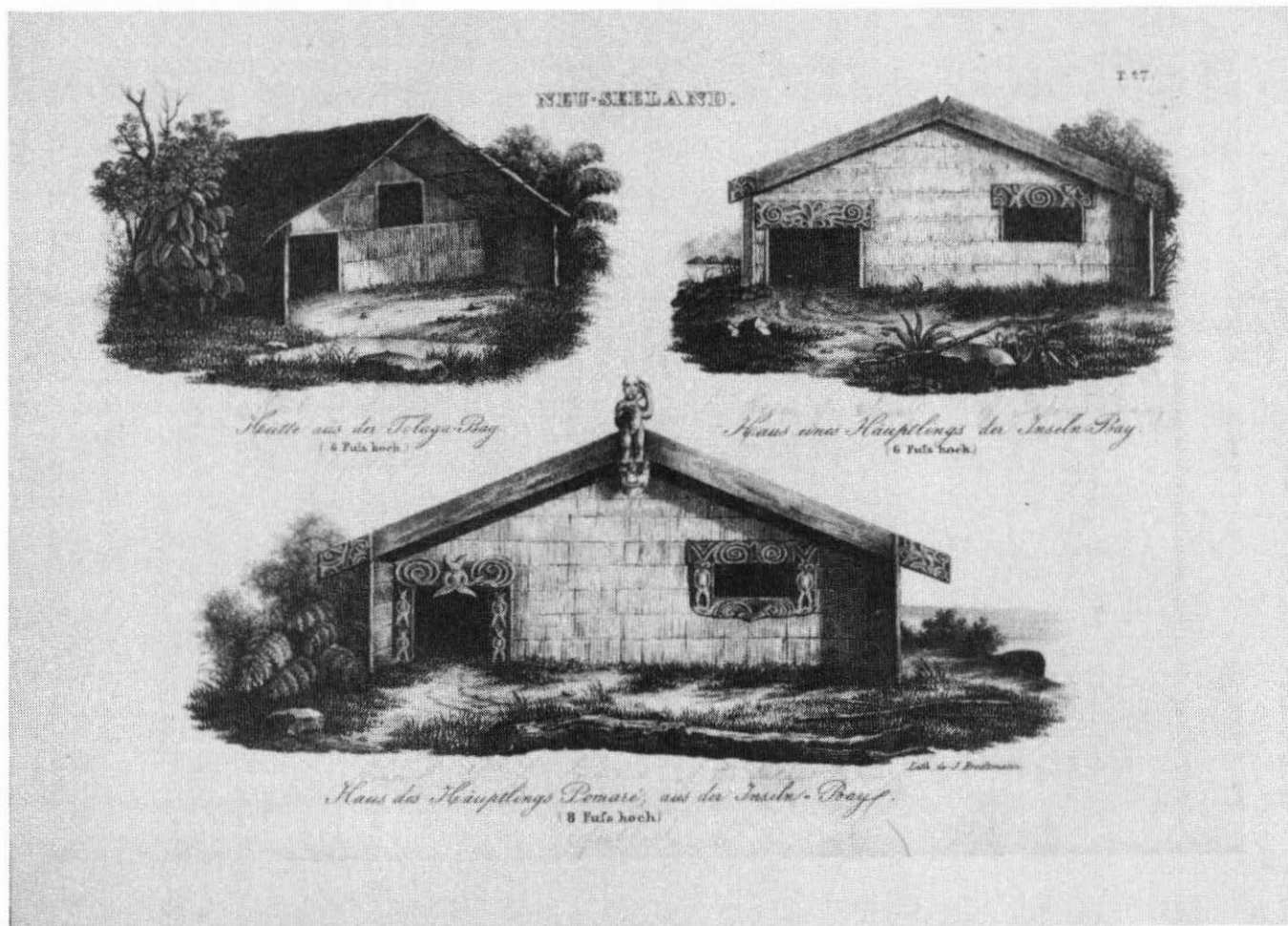


Figure 5: Wharepuni of Tolaga Bay and Bay of Islands, 1826-27, pictured by de Sainson (Dumont D'Urville n.d.:Plate 27).

New Zealand with the Austrian *Novara* expedition in December 1858 and January 1859, spent New Year's Eve in a *whare* in the Waikato district, of which "... the door as in most Maori huts, faced the south" (Scherzer 1863:167). This may simply be carelessness by one whose experience was almost entirely of the northern hemisphere.

Also of interest on the orientation of Maori dwellings is information from another kind of source.

An important house was always erected so as to lie with its greatest length north and south, in order that the spirits of the dead flying northwards to Te Reinga (Hades) might not cross the ridge-pole and so destroy the inmates. (Tregear 1904:281)

"Every Maori building, said the principal informant, faced east or north, not west nor south, so that the souls of dead en route to Reinga wd not enter them" (Beattie ms.a:5). There might be a confusion here with the preferred orientation of kumara stores (White 1861:10; Best 1916:4), nevertheless there is a suggestion of a Maori reason for having the porch face north. Such an argument may be a rationalisation of the desirability of having the porch end face the sun, but it is possible that there is a Maori ideal in the cultural landscape which would hardly have attracted the attention of European observers without quite specific questioning. The comments of Europeans about Maori *whare* facing the sun are, after all, little more than rationalisations for their observations.

Occasionally in ethnographic accounts we are given figures on the size of a porch. For example, Monkhouse, at Poverty Bay, October 1769, records,

... one tolerable house about eight yards by six, the end wall of which where the door, and a window to answer the double purpose of admitting light and giving passage to the smook, were situated, was placed about two feet within the roof and side walls. (Cook 1955:565)

In Roquemaurel's account in the Bay of Islands in April 1840, the porch is given as, "... about a yard and a half deep" (Wright 1955:70). In his general description of Maori dwellings, Banks states: "At the same end where this door and window are placed the side walls and roof project, generally 18 inches or 2 feet beyond the end wall, making a kind of Porch in which are benches where the people of the house often set" (Banks 1962(II):18). The dwellings are described as 16 or 18 feet long and 8 or 10 feet broad. Two buildings from the central and southern North Island in the 1840s have porches 10 or 12 feet deep (Angas 1847b(I):265; Cooper 1851:292). From

TABLE 4
PROPORTION OF PORCH DEPTH TO TOTAL HOUSE LENGTH
(measurements in feet)

	House length	Porch depth	Percent porch to house length	Location	Date
1. Monkhouse	24	2	8.3	Poverty Bay	1769
2. Banks	16-18	1½-2	10.3	unlocalised	1769-70
3. Bellingshausen	30?	6	20	Queen Charlotte Sd	1820
4. Duperrey	—	—	25	Bay of Islands	1824
5. Roquemaurel	24	4½	18.7	Bay of Islands	1840
6. Servant	60	6	10	Hokianga	1838-42
7. Barnicoat	25	3	12	Ruapuke Island	1844
8. Cooper	50	10-12	22	Tokaanu	1850
9. Thomson	18	3	16.3	unlocalised	1850s

Notes:

- 1) Cook 1955:565; 2) Banks 1962(II):17-18; 3) Barratt 1979:36; 4) Duperrey 1826:P1.41; 5) Wright 1955:70; 6) Simmons 1973:8; 7) Barnicoat ms; 8) Cooper 1851:292; 9) Thomson 1859(I):208.

Bellingshausen's visit to Queen Charlotte Sound in May 1820 is a description of a chief's house in a bay north of Cannibal Cove. The porch was 6 feet deep and the dwelling interior apparently 24 feet in length (Barratt 1979:36).

Proportions of porch depth to house length given in the ethnographic literature can be seen in Table 4. The range is between about 8 percent and 24 percent of the total house length.

The porch often appears to have been distinguished or set apart from the area outside by a plank or slab laid across the front. Taylor (1870:502) mentions this and it is sometimes confirmed by the artists (see, for example, Angas 1847a:P1.21; Earle, in Murray-Oliver 1968:57, 69; and see Fig. 6).

The porch provided important and unique space for social activity. It is more than just a transition area between the inside and the outside of the building since many activities are focused on the porch. It provides some of the practical benefits of shelter and confined social space, while it is beyond the circumscription of *tapu* which makes the interior so potentially dangerous. Some time in 1841 Dr John Johnson had reason to be grateful for this distinction at least: there was, at Onehunga,

... a somewhat superior *ware*, occupied by the great chief Te Wero Wero, on his occasional visits to this part of the country . . . I remember to have spent a cold comfortless night under its porch, after a very meagre meal, the interior being *tapu*, so as not to be desecrated by a pakeha. (Taylor 1959:118)

Early European travellers soon discovered that despite some fears about the proximity of food to the *tapu* interior, one could eat in the porch. At "Bennee's" village in the Bay of Islands in January 1815, Marsden and Nicholas ate in the porch of the chief's house.

I have already informed my readers, that these people make it a rule never to take their meals in the huts appropriated for their residence, and this they not only religiously observe themselves, but enjoin strangers to do the same whenever they partake of their hospitality. Unwilling as we were to provoke their resentment, by any violation of their customs, however absurd and ridiculous, we should either have gone without the potatoes, which were now very acceptable to us, or eaten them at the expense of a good wetting, (there being no shed for that purpose); if very fortunately, a projection from the roof of the house, of about three feet, had not afforded us a shelter, where we were enabled to take our repast. However, this indulgence was not suffered without many anxious scruples on the part of our friends, as they considered our proximity on such an occasion to the tabooed place, was highly impious. They watched us the whole time with the greatest care, lest we should be guilty of any egregious profanation; (Nicholas 1817(I):271-272)

The use of the porch simply as an extension of the social space within the *whare-puni* can be seen in its use as a sleeping place and as a casual conversation or activity area. The porch might be used, for example, for shaving — or rather, plucking. Angas writes, "it is a frequent sight to see a chief sitting for hours in the verandah or court before his dwelling, busily employed for hours at a time in eradicating all traces of his beard" (Angas 1847b(I):328). Banks writes, "the porch seems to be the place for work, and those who have not room there must set upon a stone or the ground in its neighbourhood" (Banks 1962(II):18).

The porch could, however, provide the preferred focus for important activities which could not take place inside the dwelling. These activities include the reception of visitors, the laying out of the dead, and emphasis of chiefly strength and group loyalty and pride (cf. Firth 1959:94-96, on the functions of *marae*).

It is frequently observed that anything which might endanger the *tapu* of a house or its occupants had to be kept away; hence the prohibition on food, and hence the practice of removing ill or dying people and women in childbirth to temporary shelters beyond the settlement (see, for example, Edwardsen, in McNab 1907:215;

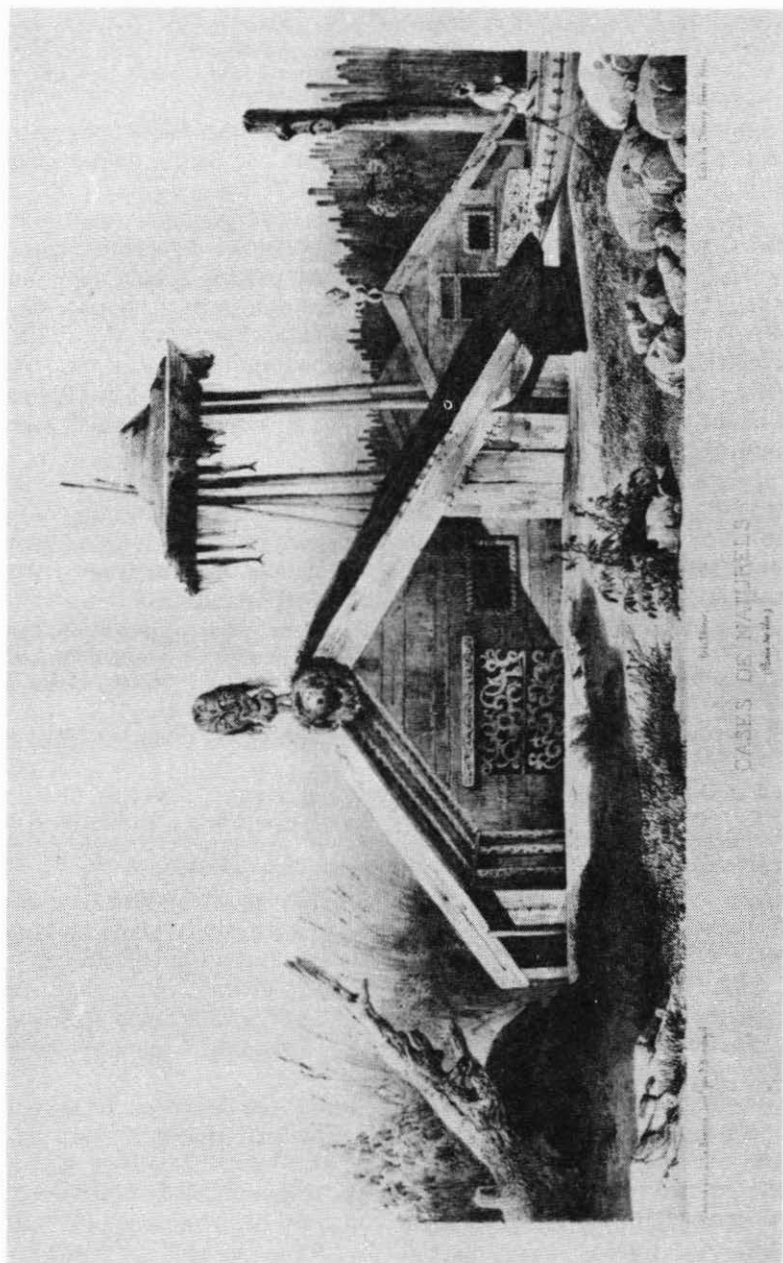


Figure 6: *Wharepuni* in the Bay of Islands, 1840, pictured by Le Breton (Dumont D'Urville 1846 II:Plate 184).

Marsden, in Elder 1932:116-117; Servant, in Simmons 1973:35). On the death of a senior person his dwelling was often abandoned (see, for example, Dubouzet, in Wright 1955:23). The porch could provide a setting for the showing of final respects to a dead person. On 17 October 1844 Angas visited a settlement close to the Mokau River, north Taranaki:

On arriving at the small *pah* of Whakatutumutumu we heard a loud *tangi*; and, on entering the stile, found the natives all crying and lamenting over the body of an old woman, which was wrapped in a blanket, and laid out beneath the verandah of a small *wari pune*, or sleeping house. (Angas 1847b(II):34; pictured in Angas 1847a:P1.45)

Only a few days later Angas visits the deserted *pa*, Pari Pari. The reason for its desertion is soon clear: "Within a small railing, in one corner of the verandah of the largest house, is a *wahi tapu*, where the head of Te Kawaw (fowl), with his feathers, *hani*, and mat, were deposited" (Angas 1847b(II):88; pictured in Angas 1972:P1.41). Occasionally the dead might be left inside the *whare*, protected by such a powerful *tapu* that only the unscrupulous pakeha would dare interfere (for example, Reischek 1952:65). The porch, or the interior of the house, was not always used for laying out the dead, or indeed as a final repository, since this almost certainly left the building and perhaps the settlement uninhabitable. Best observes for a later, less scrupulous, period: "The body was then placed in a sitting position in the porch of the principal house of the village, which would be intensely *tapu* so long as the body remained there" (Best 1924(II):54).

A recurring scene in the writing of early travellers in New Zealand is the formal reception of visitors by the inhabitants of a village (or group of huts, or even a single hut) in which the hosts receive their guests sitting in the porch of their *whare*, or in the courtyard in front. In March 1827, D'Urville was received at the village of "Mata-Ouii", close to Kororareka in the Bay of Islands.

An armed band came to meet us at the entrance to the *pa* and conducted us to the chief's dwelling. Wetoï, clad in his finest garments, received us solemnly, sitting at the door of his hut, with his double-barrelled gun close by. Round him were his wife, Ehana, Pako's brother, Moudi-Panga's son and his chief men. (Wright 1950:191)

Polack gives a similar description from a reception at Waipoa, a village on the coast south of Hokianga, in 1832.

On my entering the *pa*, a lane was formed by [the] retainers of the chief, who sat at the head, surrounded by a circle of venerable sages, attended by a few of his wives and his mother, a venerable old lady, and other relatives, who all sat in a recumbent position against the house, devoted to the use of the chief. (Polack 1838(II):76-77)

Essentially similar receptions are described by Banks, at Anaura Bay, October 1769 (Banks 1962(I):415-416), Forster, at "Tringo-Boohee's" village in Tory Channel, November 1774 (Forster 1777(II):471), Marsden, at the village "Kaupa" some miles up the river Thames, June 1820 (Elder 1932:255), Edward Jerningham Wakefield at Putikiwaranui, Wanganui, 1839 (Wakefield 1845(I):239), Best at Otawhao, April 1842 (Taylor 1966:349-350), Cooper at Tokaanu, January 1850 (Cooper 1851:292-294) and elsewhere.

The porch of a chief's *wharepuni* might have been the focus for these receptions, but it was the courtyard or *marae*, the "enclosed space in front of a house" (Williams 1971:180) which was the setting (see Firth 1959:94-96). Because of this, the enclosed area in front of the house of the senior chief was the largest courtyard in a settlement. Dr Martin visited Kauaeranga on the Thames in 1839 or 1840, and he writes,

The interior of the *Pah* is divided into various compartments, which are slightly fenced in, and occupied by the houses and storehouses of the various petty chiefs, their families, slaves and pigs. Various narrow lanes afford the means of communication from one part to another. The division of the head chief is the largest; and before his house, which is the best

and most ornamented in the settlement, there is an extensive yard, where all the inhabitants assemble on solemn days and great occasions. (Martin 1845:69-70)

A similar description comes from Nicholas at Rangihoua (Nicholas 1817(I):175). Sometimes the chief's dwelling is said to have occupied the highest point in the settlement, this too serving to focus community activities (see, for example, Marshall 1836:135; Cruise 1957:47), or it is in a central or commanding position (Marshall 1836:172; Kennedy 1969:229). By an interesting confusion, one of Beattie's Canterbury informants shows the close functional identity of the porch and the courtyard in front of a large *whare*: "The back of the *whare* like the sides was earthed up too but there was a sort of verandah in front which he thought was called a *marae*" (Beattie ms.a:1).

THE DOOR

The *wharepuni* has a very small door. This characteristic is commented upon in almost every description of the building: mostly with disfavour (see, for example, Nicholas 1817(I):339-340; Polack 1838(I):186; Colenso 1868:349; Monkhouse, in Cook 1955:584), but occasionally with some appreciation (see, for example, Marshall 1836:173; Lesson, in Sharp 1971:73). Marsden describes a door he crawled through at Waikati in the Bay of Islands, 16 February 1815, as, ". . . about two feet ten inches in height" (Elder 1932:115). Between eighteen inches and two feet square seems to have been normal. To Europeans a door this size is a curious error: Marshall describes how sailors from H.M.S. *Alligator* made themselves comfortable at Te Namu on the south Taranaki coast in September 1834, "every half dozen persons chose a separate habitation, the door of which admitted of being easily enlarged by the aid of an adze and hatchet" (Marshall 1836:173).

The door typically slid in a groove (Anon. 1830:650; Cruise 1957:35; Roux, in Kennedy 1969:220), although Marshall (1836:173-174) records hinges made of dog or pig hide. The door, once pulled into place, might be fastened by a personal, or at least difficult, knot (Taylor 1870:501; L'Horme, in McNab 1914:325), or with a latch (Crozet, in Roth 1891:34). On better houses the door side posts and the lintel were carved (Monneron, in McNab 1914:285; Monkhouse, in Cook 1955:584; and see Figs. 5, 6 and 7). The door itself could be made of a wooden plank (L'Horme, in McNab 1914:325), or of reeds (Anon. 1830:650) or "mats" (Wilkes 1845(II):385). The door is almost always described and illustrated as being on the right side of the house looking out (see Firth 1926:55); although illustrations can be found showing a door on the left side (for example, by Earle, in Murray-Oliver 1968:87 and 109).

The door is of crucial symbolic importance. It represents precisely the transition between the outside world and the inside. In Maori dwellings of the sort under discussion here this transition required a personal symbolic alteration and an acute social awareness. In his study of symbolism in Maori art, Jackson (1972) includes a discussion of the role of door lintels. Typically a carved lintel would have as a focus and a centre a female figure with vulva prominent. The passage from the world outside into the house demanded some care lest the *tapu* of the house and the individual suffer.

Women were considered *noa* (without *tapu*) while the man was considered *tapu*. The role of the female figure on the *pare* has been suggested to mean that the house would be *de-tapued* by the effect of her 'common' influence. (Jackson 1972:52)

The important relation, however, is between the female figure and the person passing beneath, and not between the female figure and the house. The house would indeed be *tapu* (more or less — depending on the status of its inhabitants), but it is the entering individual who is "de-tapued" by the lintel (see Barrow 1969:19).

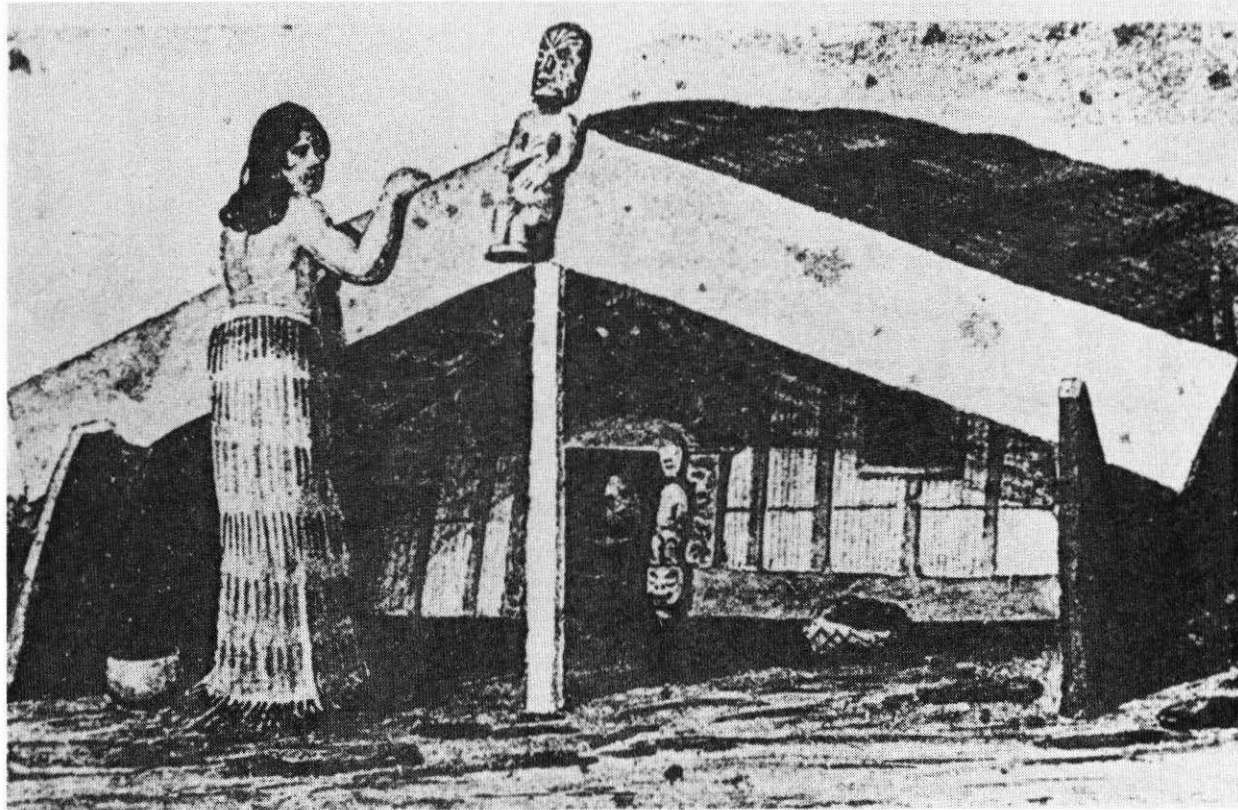


Figure 7: "Residence of a New Zealand chief", Bay of Islands, 1827-28, pictured by Earle (Murray-Oliver 1968:46; Rex Nan Kivell Collection, National Library of Australia).

Important houses were often named after an ancestor, or possibly an event which demanded respect. Removal of *tapu* from entering individuals assured no disrespect to the ancestor or danger to his living descendants. It also acted as a leveller of persons, so that neither building nor individuals would suffer from physical proximity (Wingert 1962:325).

The ceremony at the opening of an important house is reminiscent of the function of the carved *pare*. Before the house could be occupied the dangerous *tapu* which pertained during its construction was lifted or removed by the application of negative female power, the antithesis of *tapu*. "In opening a chief's or gentleman's dwelling when everything was ready a *tohunga* w^d creep thro' the window & open the door when three women of rank w^d cross the threshold thus rendering the house fit for entry & occupation" (Beattie ms.b:24).

THE INTERIOR

The most important social and behavioural aspects of *wharepuni* are defined by the shape of the space within. The internal floor plan, above all, emphasises the interdependence of form, symbolism and social behaviour.

The dwelling represents not only an attempt to create a special psychological environment — one of security and order; it represents also an attempt to create a special artificial *physical* environment . . . Early travellers and explorers gave us vivid descriptions of the micro-environments they encountered: the stench, the smoke, the gloom, the bodily heat, the feel of an incomprehensible system at work in the disposition of objects, in the occupations of the inhabitants, in the sudden shifts in mood and rhythm. (Jackson 1961:29)

The interior of a Maori dwelling was alien and incomprehensible to early European travellers. Nicholas crawls into "Duaterra's" residence, Rangihoua, Bay of Islands, in December 1814:

The interior presented nothing to compensate the trouble of getting in, and a few stones thrown together to serve for a fire-place, were the only domestic articles I could possibly discover. Furniture there was none, and the smoke finding no egress through the door-way, which was the only aperture to be seen, the dismal edifice teemed with suffocating vapour, and formed with the wretched inmates, a complete picture of cheerless barbarism. (Nicholas 1817(I):175-176)

Seventy years later in the King Country, Kerry-Nicholls is enveloped by the same kind of "micro-environment".

Following strictly the natives' habits, when camping with the tribes, we would at sundown turn into the *wharepunis*, or assembly-houses, in which the members of the *hapu* meet to eat and sleep, when the small door would be closed, the solitary window scrupulously fastened up, the charcoal fire lit, and when the dismal slush lamp would give forth its flickering light, as if struggling for existence amidst the clouds of smoke which mingled with the stifling air of the apartment; then men, women, and children would squat down in their blankets, and, lighting their pipes, conversation would begin. (Kerry-Nicholls 1884:133)

In order to comprehend symbolic and behavioural aspects of the "incomprehensible system at work" in a Maori dwelling, it is first necessary to define the internal shape. The most tangible material division of the space within the *whare* was the distinction between the centre, with passage-way and hearth, and the sides, slightly raised or laid with mats for sitting and sleeping. Dieffenbach travelled widely through New Zealand in the early 1840s and he writes, "the house is not divided into apartments: the sleeping-places are ranged on both sides along the walls; from the door to the side opposite is a passage, shut in by boards" (Dieffenbach 1843(II):68-69). "In the middle of the house there is always a small fire to drive out the dampness" (Crozet, in Roth 1891:34). There might sometimes be two hearths (for example, see Hochstetter 1867:351; Kerry-Nicholls 1884:289). The fire was usually contained within a stone-lined hearth (Marshall 1836:212; Polack

1838(II):29). Occasionally a slightly different arrangement might operate; Monkhouse writes of a house he entered at Poverty Bay, "the fireplace, that is, some burnt sticks lay nigh the farther end of the house" (Cook 1955:565).

The *wharepuni* may or may not have additional centre posts holding up the ridge pole. Firth (1926:54) did not see centre posts in the buildings he described from the Urewera; Dieffenbach, on the other hand, includes mention of one or two centre posts in his general description of the *whare* he observed in New Zealand (Dieffenbach 1843(II):69).

"On either side of the door a narrow board confines the loose fern or raupo, which, covered with a few mats, takes the place of a bed and bedrooms" (Meade, in Taylor 1959:432). The hearth or hearths and centre posts were set in a central passage-way. Fern or mats were kept off this area by poles or boards (Best 1924(II):57) set lengthways, and sometimes pegged in position (Buck 1950:122). The central passage-way may or may not extend to the back wall (Firth 1959:105).

In addition to physical divisions there are more subtle, sociological divisions and distances inside the *wharepuni*. The interior acts strongly as sociopetal space, that is, it encourages social involvement in a physically direct and psychologically encouraging fashion (Hall 1966). Such inescapable face-to-face contact was difficult for Europeans to handle (socially or psychologically) and hence, in part, the opposition to the *wharepuni* by the highly ethnocentric missionaries of the 19th century (Hochstetter 1867:351; Wilson 1894:31). In societies in which practical or lip-service social equality is the norm, individuals require equal and separated living space to reassure them of the operation of the belief they hold about the nature of their world and their position in it.

In the Maori dwelling, confined social space was possible because of the hierarchical nature of society. In New Zealand, Europeans were frequently astonished at the ease with which an apparently friendly master-slave relationship could be terminated casually to resolve an unintended insult — or even a food shortage. Because social order and hierarchy were understood by all, the position of the most senior individuals or families was not endangered by the presence in their house of distant relatives or slaves (see, for example, Darwin 1959:407). In this respect any idea that nuclear or even extended families occupied separate dwellings may benefit from a re-examination of the evidence: it has probably been regarded, after all, as axiomatic by most European observers. As an historical problem this issue is made difficult by the tendency of Europeans — at least in the early years of last century — to travel in some company and by their very presence in a community to disrupt normal patterns. Without in any way suggesting that it represents the only solution to the problem, an account by Kerry-Nicholls, at Ngatokurua, west of Ruapehu, May 1883, is of some interest since it is perhaps the best of rare instances of the inhabitants of a *whare* being named, and their relatedness stated, however imperfectly.

We found Pehi's family to consist of Ngaruma, his wife, a pleasant woman with an almost Grecian cast of countenance, although a pure Maori; Te Wao, the chief's henchman, and his wife Ngawini; Turongoiti, with his wife Rauia; Rene, another native; and Hinekura, Rora, and Pureti the chief's three daughters. (Kerry-Nicholls 1884:288)

Another such description is from Monkhouse at Anaura Bay, 1769. "Up the hills on the South side of the Bay we met with a single house pleasantly situated. Here was a man, his wife, two Sons; an old Woman and a younger who acted as servants" (Cook 1955:584). When Dieffenbach writes that, "inferior persons and slaves range themselves around the fire in the kitchen, but more frequently they all sleep in the same house" (Dieffenbach 1843(II):70), he is describing a degree of physical

proximity which not surprisingly confused 19th century European observers who were used to well-defined separation of "family" and servants.

One aspect of Maori "house life" was inescapable for the visitor, and that was the sheer physical closeness of other people. Mention has already been made of the "micro-environment" within the *whare*; it was one with which Europeans found it very difficult to cope. Edward Jerneingham Wakefield, who was ready to try anything once, writes concerning *wharepuni*, "they are all, however, built on the same principle, of keeping in the animal heat; and are therefore most repulsive to a European" (Wakefield 1845(I):228). Similar comments abound in the literature.

Indications of the number of people to floor space are occasionally given. Markham complains about "close packing": ". . . Oh! such a Night to pass; Men, Women and Children to the amount of Twenty five people, four dogs besides Venus in a room" (Markham 1963:62). A later traveller, Ernest Tinne, at Kariri, Lake Tarawera, early in the 1870s, writes of 20 women and children in a hut 18 x 8 feet (Tinne 1873:17). Even if these were internal measurements, then this was indeed "close packing" (5-7 square feet to each individual); and there was ". . . a hundred-weight of green tobacco steaming on the walls".

It is unfortunate that Firth's description and analysis of the spatial organisation of the Tikopia house (1957:75-81) is unique in Polynesian ethnography. For the Maori dwelling such information is scattered and difficult. Richard Taylor, who travelled widely in New Zealand in the middle years of last century, gives us one account of this crucial question:

On entering, there is a low slab of wood on either side, to partition off the sleeping places, leaving a path down the middle, that nearest the door being about eighteen inches high, in which the inmates lay in rows, each with his feet towards the fire, and his head to the wall; the chief, or owner of the house, invariably takes the right side next the window, the place of honor; the next in point of rank occupy those nearest to him whilst the slaves, and persons of no consequence, go to the furthest end. (Taylor 1870:501-502)

Seniority is generally ascribed to the left side of the house, looking out (see, for example, Williams 1896:151; Best 1924(II):570), and the place directly within the door is the most honoured position. Visitors took this position (Firth 1959:99, 105). When Hochstetter arrived late at night at the village of Katiaho, west of Lake Taupo, April 1859, he and his party were welcomed and, "the right side, according to Maori custom was assigned to the guests" (Hochstetter 1867:351). Senior members of the household would vacate their "place of honour" upon arrival of visitors.

That the left front of the *wharepuni*, looking out, is the senior position has widespread confirmation. When Angas sketched the chief Te Taepa at the small settlement of Koruakokopu on the Waikato River, the chief sat in the place of honour next to the window (Angas 1972:P1.25). In contrast, the women pictured inside the *whare* at Te Rangihaeata's pa at Porirua (Angas 1847a:P1.69) are depicted at the rear of the house engaged in making flax garments.

The question of rank and position in the *whare* is exceedingly complex. A record by Marsden in the Bay of Islands, February 1815, may serve to illustrate this. "A tree was laid in the centre of the hut, which ran the whole length, being about thirty feet, and the natives lay on each side of the tree with their heads reclined upon it" (Elder 1932:116). Contradictions to Taylor's remarks are immediately obvious; and yet, leaving aside the apparent lack of a centre passage-way in Marsden's account, it is of interest that the only occupants of the building were "women and children and a few servants . . ." (ibid.:115). It was men's hair and head which was the most *tapu* part of the body (Buck 1950:502-503), and potentially dangerous situations within the house might be forestalled by the feet and not the heads being closest to the

passage-way. In the case of women and "servants" (slaves perhaps) the danger would not arise. We cannot take such statements, few as they are, as indicative of general practice.

It may be guessed that "close packing" would require a strictly defined spatial hierarchy, and there is some general agreement on the organisation of social space within the Maori dwelling, as we have seen. Some reasons for this are now becoming clear. The uncleanness of women and the grave effects of a woman stepping over a

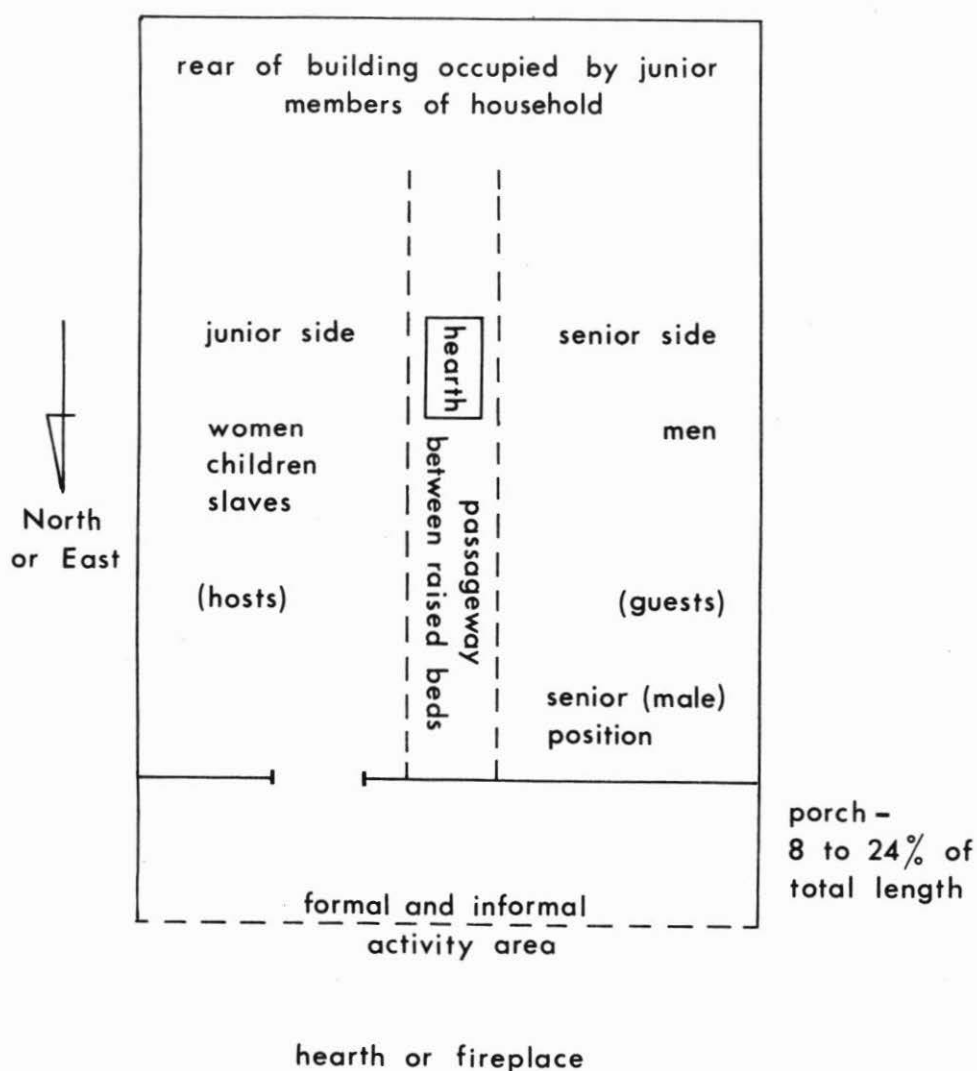


Figure 8: The social organisation of space within a *wharepuni* (see also Salmond 1978:6).

man might be expected to play a role in the division of space within the building (Best 1924(I):406).

When sleeping in a native house should a person sleep at another's feet — it is an *aitua* for him. Men must lie with their heads back against the wall, only women may sleep in the space between the men's feet and the passage down the middle of the house. Neither is it allowable to rest in the *ihonui* or that part of the central passage between the door and the fireplace. (Best 1898:126)

Important people seem to have had personal sleeping places in the *whare*, no doubt based on principles of rank discussed above. As an instance of this, when Rangi-te-oa-rere sat in his father's sleeping place it was only his identification as son which saved him (Best 1925(I):259-260).

Figure 8 gives some idea of the organisation of social space within the *wharepuni*. It can be seen that with the door situated as it is, the likelihood would be averted of junior members of the household coming into dangerous contact with senior, *tapu*, men on entering or leaving.² The front of the building was generally more senior than the rear, the rear on both sides being occupied by low status individuals apparently beyond the range of prohibitions operating elsewhere.

There are many aspects of the interaction of people and houses which are not mentioned here. Of some the knowledge will have gone unrecorded, but an indication of the many levelled nature of the interaction is given in the following quotation from Shortland.

It is a curious fact, which often struck me as remarkable, before I learnt to account for it, that a New Zealander will never lean his back against the wall of a house. The company assembled within a house, however numerous, always leave a little space between themselves and the wall. The cause of this strong objection to sit close to the wall, is their dread of the mysterious influence of certain *tapu* objects, which have been thrust into the rush walls of dwelling-houses for concealment.

When a foreigner enters the house of a New Zealander, feeling the want of the convenience of a chair, to which he is accustomed, he is very apt to lean his back against the nearest wall for support. By doing so, however, he exposes himself to sly jokes and various remarks, which to a New Zealander would be highly offensive. (Shortland 1854:92-93)

To do things correctly in a Maori dwelling required an acute awareness which would be part of the being of every Maori, but which the pakeha, not brought up knowing these interrelated aspects of belief, behaviour and being, could be excused, with a little laugh at his expense.

CONCLUSIONS: ARCHAEOLOGICAL EXPECTATIONS AND THE MAORI DWELLING

One of the arguments in this paper is that we should be wary of discarding in its entirety the classical model of Maori settlement pattern as proposed by writers such as Best, Firth and Buck. It is argued, in respect of houses at least, that the old view may indeed be architecturally sound, if functionally simplistic: that the large and decorated *wharepuni* was present in pre-contact Maori settlement, but fulfilling a variety of communal roles including residence of the chief, rather than being erected solely for the narrower purpose of the later meeting house. It is argued that only in the 19th century did the residence and community roles of the *wharepuni* become fixed in separate buildings.

Following this argument, and based upon a discussion of conservatism in house form elsewhere, it is further argued that in New Zealand the *wharepuni* should prove to have had a long history. Symbolic and behavioural dimensions ensure that house form is not just an expression of certain formal ideals, but is inextricably interwoven with a people's view of how they relate to each other and the external world. Archaeological identification of Maori dwellings, at least of the most important

wharepuni form, should therefore be much simpler than it has tended to be in the past when almost any form was regarded as possible. The model, tightly adhered to by the Maori, may be used with authority by the archaeologist.

Since it is in the strength and continuity of symbolic and behavioural parameters that the argument lies for formal continuity, we can therefore use the historical record to interpret these aspects of archaeological dwellings. This I have done for a 12th century *wharepuni* in the Moikau valley, Palliser Bay (Prickett 1979), where the difference between concentrations of stone flake debris on the right and left sides of the house, for example, indicates different roles for the people who occupied these opposite sides. Suggestions as to just who the occupants of the two sides were are made following the historical evidence. Behavioural and symbolic dimensions render the *wharepuni* an artefact of singular interpretative potential.

The division between large and small houses is a historical one, and was relative within each settlement. After comparing accounts of form, function and size, it is apparent that size was not correlated throughout New Zealand with function, whereas shape and relationship of other formal elements were.

All the elements of the *wharepuni* — overall size and plan proportions, porch, door and interior shapes and distances — have undoubtedly had a long history in New Zealand. Just how long and how varied in detail is a subject for archaeology to explore.

Notes

1. Note that the French "pied" and English "foot" are not strictly comparable. French "feet" are variously given as 330 mm (Larousse 1969(II):421) and 324.8 mm (Larousse 1963(VIII):475); the English foot is 304.8 mm.

2. An interesting contradiction arises over the association of right and left with male/female, *tapu/inoa* distinctions in regard to the *wharepuni*. If the building is personified, with the *tekoteko* or carved figure on the front gable summit representing the head and the building the body, then the senior side is, in fact, the left side (see Salmond 1978).

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