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THE FIRST THOUSAND YEARS

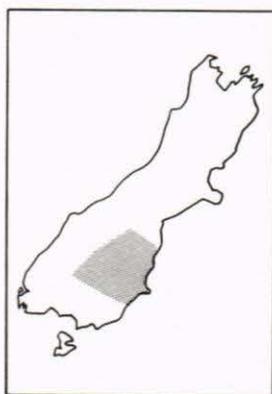
Regional Perspectives in New Zealand Archaeology

Edited by Nigel Prickett



NORTH AND CENTRAL OTAGO

Atholl Anderson



The region defined as North and Central Otago (Fig. 7.1) comprises a block of high ground stretching eastward through the ranges and basins of the interior to the rolling eastern hills. These back onto narrow coastal lowlands which become increasingly restricted to the south as the coast rises towards Otago Peninsula. The coastal areas are temperate and cloudy but of equable climate, while the interior is hot and dry in the summer and unusually cold in the winter (see Figs 7.2 and 7.3).

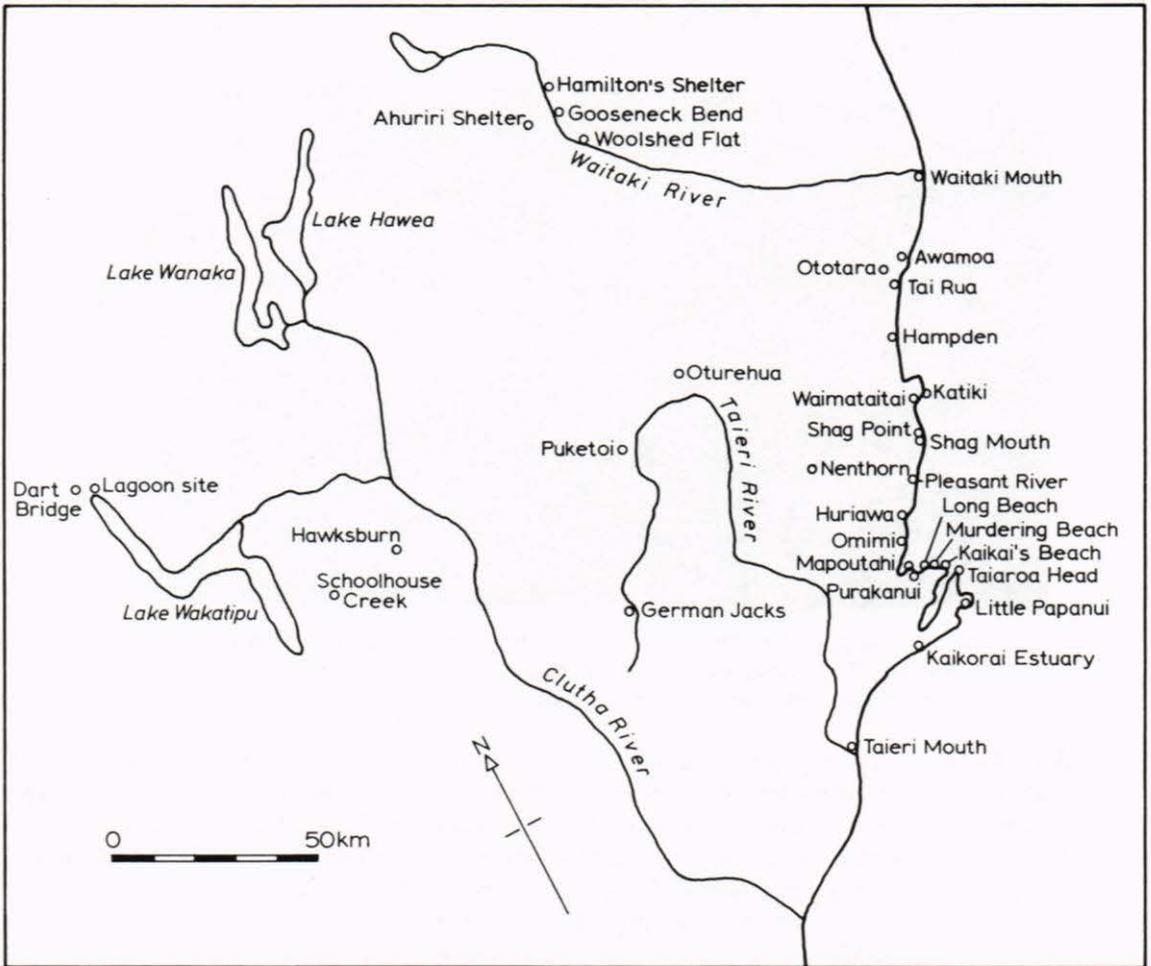
Archaeology, of a kind, may be said to have begun here with Mantell's discovery of the moa hunting camp at Awamoia in 1848, and moas and their hunting have been a locally important theme

ever since. Controversy surrounding the antiquity of the moa and the role of man in its demise, attracted such scientists as von Haast, Hamilton and Hector to the abandoned settlements of Otago. Their discoveries, in turn, opened up a long and rapacious period of curio-hunting in which nearly all the major coastal sites of the Archaic and Classic phases were severely damaged, often without benefit of any but the briefest record.¹

It was only in the 1950s with the work of Lockerbie and Trotter, and later by the Otago Anthropological Society and Anthropology Department of the University of Otago, that systematic archaeological research which paid due attention to the crucial principles of stratigraphy — a phenomenon denied in Pacific archaeology generally until then — was conducted. Unfortunately the promise of this period was not fully realised in publication, and even field research had ebbed by the late 1960s.

Some additional difficulties in the reconstruction of a prehistory of Otago are raised by problems of chronology. Records of stratigraphy and the provenancing of artefacts are sketchy at best for most of the major sites, and Trotter has argued that radiocarbon dates, especially on charcoal, may overestimate the actual age of sites by several centuries.² In the discussion which follows, therefore, the general terms 'Archaic' and 'Classic' are used to denote the culture which defines them,³ but also have the approximate age ranges for North Otago, of A.D. 1000-1550 and A.D. 1650-1850. The gap in the middle is a perennial problem of New Zealand archaeology.

Yet despite such doubts and inadequacies in the record, the basic outlines of a prehistory of North and Central Otago are not too difficult to distinguish, and if they raise rather more questions than they answer then that, at least, is a spur to further research.



7.1 Archaeological sites of North and Central Otago.



7.2 At Purakanui the remains of a 14th century fishing camp are exposed in dunes across the channel. The climate of coastal Otago is mild and moist, and a wide range of sea and land resources are readily available (A. Anderson).



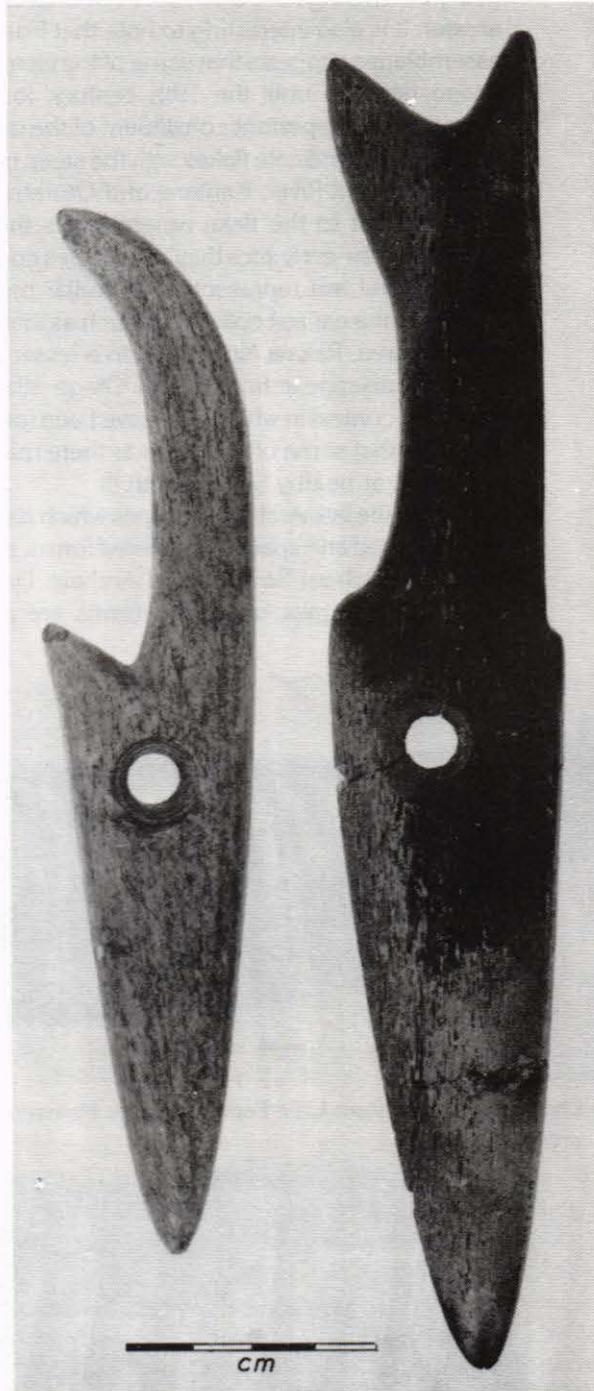
7.3 Hawksburn valley — the site is located in the centre of the picture where tents can just be made out. The environment in central Otago is harsh, with the climate hot and dry in summer and cold in winter (A. Anderson).

Aspects of material culture

The study of material culture in Otago archaeology has concentrated upon portable artefacts; a reflection both of the remarkable number of these in Otago sites and of the paucity of structural evidence.⁴ Many of the artefacts are of types known elsewhere in New Zealand and they have been discussed and illustrated in several general works.⁵ In addition there are Archaic types which, if not exclusively confined to Otago, appear to be distinctly concentrated in this region. These include large blades, sometimes tanged, the slate knife (*ulu*), harpoons (Fig. 7.4), finned lure hook shanks and lure hook points with basal projections. The Classic phase assemblage is similar to that elsewhere in New Zealand, except that nephrite artefacts are present in unusually large quantities and a few of the minor types are missing: the *kotiate patu*, *kahawai* lure, perforated sinker and *mako* tooth pendant.⁶

Ornaments, including the remarkable chevroned amulet (see Fig. 7.5), have been comprehensively studied by Skinner,⁷ largely from a stylistic point of view, and have attracted little attention since then. Likewise, comparatively little is known of the chronological and cultural status of the North Otago rock shelter paintings.⁸ The fish hooks and stone tools, however, have been a continuing source of archaeological interest because of their potential role as markers of cultural affinities and change and they merit consideration from this point of view.

Stone tool assemblages of the Archaic phase in Otago are particularly distinguished by their inclusion of a striking quantity and variety of blade artefacts. These are most commonly made of silcrete and may reach 25 cm in length (see Figs 7.6 and 7.7). Little systematic attention has been directed at their forms or functions but the origin of the blade-making techniques themselves are a lively issue. The two principal hypotheses are that blade-making is an ancient technological tradition found, *inter alia*, in western Melanesia and spread directly or through the Oceanic islands to New Zealand;⁹ or that it is simply an adaptation of East Polynesian adze-making techniques to an undefined need for robust flake tools in southern New Zealand.¹⁰ The former argument, vulnerable from the point of view of a demonstrable trans-Oceanic succes-



7.4 Harpoons from Warrington (left) and Tai Rua (right) (Otago Museum).

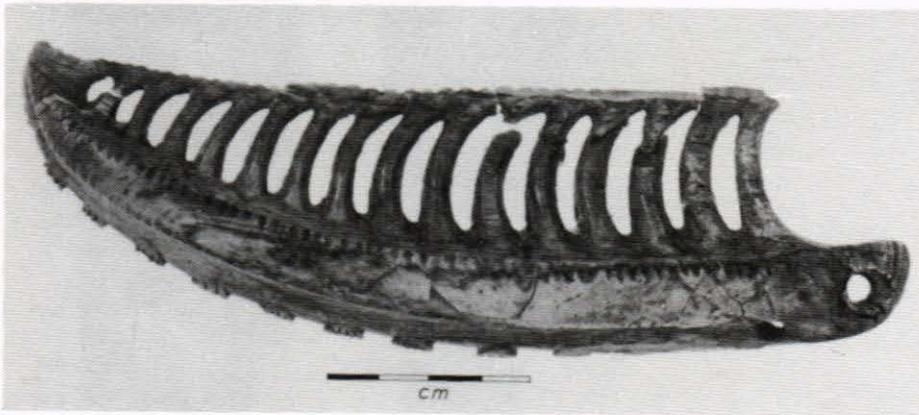
sion, has received some recent support from the discovery of blades on the Marquesas,¹¹ Easter¹² and Rauoul¹³ Islands, while the latter has been validated by the reconstructive techniques of Helen Leach. Here study revealed that the manufacture of argillite adzes at the Archaic Riverton site (Southland) encompassed the same prepared core and blade striking techniques which had been inferred from the silcrete blade quarry at Oturehua.¹⁴

Neither hypothesis, however, offers an explanation for the exclusively southern distribution of blade-making in New Zealand. It may have been connected to the local needs of moa and sea mammal butchery,¹⁵ but the common existence of

heavy butchering in Archaic sites elsewhere indicates that this cannot be the only answer. It is also interesting to note that Foss Leach's analysis of southern flake assemblages suggests that some of the elements of blade technology survived in Otago right up until the 19th century, long after moas were extinct or sea mammals an important constituent of the diet. For example, high lateral margin angles, which indicate flakes with the steep edges typical of blades, are common to the Pleasant River, Karitane and Oturehua assemblages.

In contrast to the flake assemblages the Otago adzes are not particularly unusual. In the early sites they are of types common to the South Island Archaic in general, and are represented in similar proportions. Duff¹⁶ types 4A and 1A dominate the earliest collections such as that from Waitaki Mouth, as they do also at Pounaweia, Rakaia Mouth and to a lesser degree at Wairau Bar.¹⁷ Both types seem to disappear from North Otago sites by about the 16th century. The youngest context in which they have been found is the Shag Point site, but Trotter suggests that some of the artefacts there may have been gathered by prehistoric collecting at nearby Shag Mouth.¹⁸

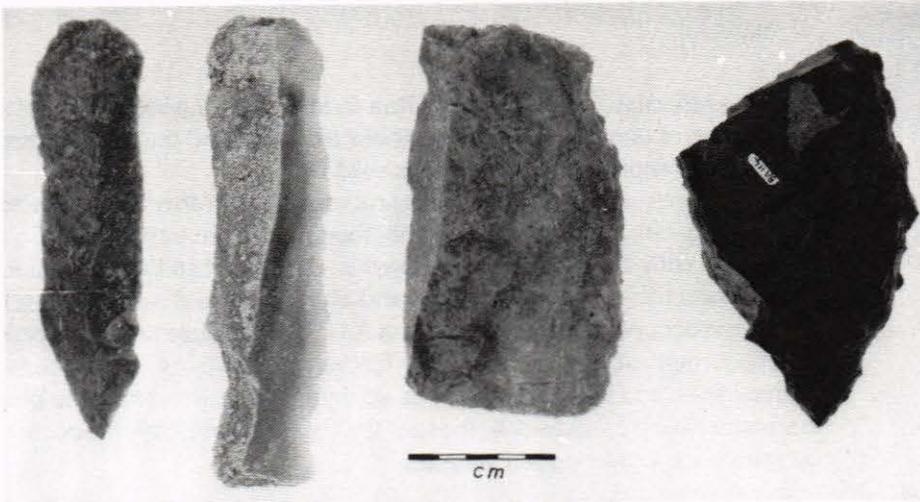
During the late Archaic the types which rise to prominence are the quadrangular ungripped and spade-shouldered forms; the latter more typical of the southern than the northern South Island Archaic. During the Classic phase the 2A and other quadrangular ungripped forms are predominant and often made from nephrite.¹⁹



7.5 Chevroned amulet from Little Papanui (Otago Museum).



7.6 Silcrete core from Oturehua, Central Otago, with the blades struck from it shown re-attached (Otago Museum).



7.7 Blade and flake tools from the Hawksburn site. Left to right are: two silcrete knives, a silcrete cleaver, and a porcellanite cleaver or scraper (A. Anderson).

There has been little research, as yet, on the typological origins and raw materials of North Otago adzes, but the evidence presented by Simmons²⁰ suggests some interesting possibilities. The early assemblages not only bear a strong typological similarity to others of the east coast (South Island) Archaic, they sometimes contain a significant proportion of exotic raw materials; at Waitaki Mouth about 45% of the adzes are in argillites. Thus, although most adzes were probably made in Otago using local materials,²¹ many appear to have been obtained from the active adze manufactories of Nelson-Marlborough and Foveaux Strait. There is also a suggestion amongst the chronological distribution of types that the former area exerted the stronger influence in the early Archaic and the latter in the adze assemblages of the later Archaic. Whatever the case, Otago does not seem to have been one of the innovative centres of Archaic adze making. By the Classic period, however, a vigorous local industry using nephrites had been developed.

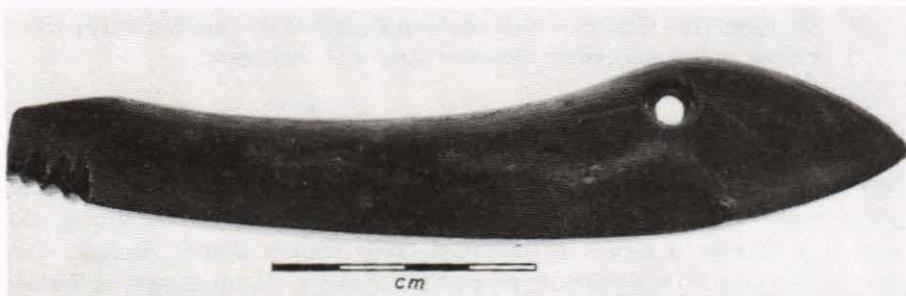
The rich variety of forms displayed by Otago fish hooks has long attracted interest in them as potential markers of cultural change. The principal attribute upon which such consideration has turned has been the barb, and more specifically, its existence on composite hook points in Archaic sites. Teviotdale expressed a tacit opinion upon the subject by declining to mention the barbed points from Shag Mouth in his discussion of moa hunter material culture,²² and the suggestion that barbs, except basal barbs on one-piece hooks, were not known in the early period, was maintained as late as 1956 by Duff.²³ Skinner,²⁴ however, had accepted barbed points as a moa hunter trait, although an uncommon one, and the question had been stratigraphically affirmed by Lockerbie²⁵ at Kings Rock in South Otago. More conclusive evidence was presented by Trotter, who showed that barbed composite-hook points were to be found in a number of North Otago Archaic sites.²⁶ His demonstration of a rise to prominence for this form between the 14th and 16th centuries may now need to be modified, however, in the light of the radiocarbon dates for the sites concerned. Waimataitai now appears to have been first occupied in the 13th century and Tai Rua²⁷ in the 15th century. If this is the case then the neat complementary rise in barbed points at the expense of one-piece hooks is called into question. On the other hand, the trend would remain unimpaired if the 12th century charcoal date was the more



7.8 A large one piece fishhook from the Otago Peninsula site of Little Papanui (Otago Museum).

accurate reflection of the age of Tai Rua. In any event, the broad facts of an early dominance of unbarbed one-piece hooks (Fig.7.8), and their later replacement by barbed composite hooks remains valid.²⁸

Fishing lures also display chronological variations in form. Stone and bone lure shanks (Fig.7.9), accompanied by unbarbed points, are a characteristic Archaic form. How early they ceased to be used is uncertain, but they are not found at such coastal fishing sites as Tai Rua and Shag Point, both of which are likely to have been occupied no later than about A.D. 1550. Simple unbarbed points with no attachment devices — probably for barracouta lures — are common in Archaic sites, and they continue to be so right up until the end of the prehistoric era. In the later sites, especially those of the Classic phase, they are accompanied by serrated and dog-legged varieties.²⁹



7.9 A finned lure hook shank made of argillite, from Shag River mouth (Otago Museum).

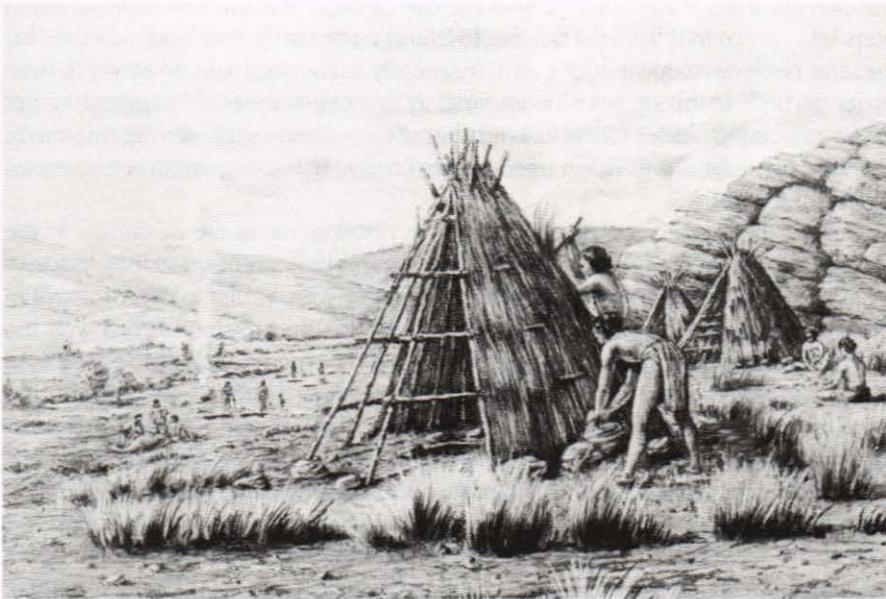
Economy and settlement patterns in the Archaic phase

When Maoris first reached the coast of North Otago, a millennium or more ago, most of the eastern hill country was covered in a dense podocarp forest, large tracts of which remained until the advent of Europeans.³⁰ Westward, in the presently dry and desolate interior of Central Otago, totara (*Podocarpus hallii*) and mountain beech (*Nothofagus solandri*) clung to the mountain slopes, while the open valleys and basins were a patchwork of tussock and scrub.³¹ It was landscape which the sparse evidence would suggest was admirably suited to the moa, for it provided a variety of forest foods, a wide range of shrubs for browsing, and sufficient open ground to ensure optimal breeding conditions for the chicks.³²

Thus, despite a general lack of comparative data concerning the contribution of various resources to the Archaic diet, it seems highly likely that moas provided the greater part of the food. Teviotdale's belief that hundreds of moas had been dug up at Shag Mouth³³ is supported by the recollection that some half-dozen railway trucks of moa bone were once sent from there to the Dunedin bone mills,³⁴ and his excavations at Waitaki Mouth produced, from one bone midden, no less than 68 pairs of moa tibiae which he thought represented only a small fraction of the moa bone discarded there.³⁵ At Tai Rua, Trotter³⁶ calculated that moa bone fragments outnumbered those of dog or seal by a ratio of at least 10:1, and moa bones are overwhelmingly the dominant faunal remains at Hawksburn (Figs 7.10 and 7.11),³⁷ Woolshed Flat³⁸ and Hampden Beach.³⁹ Moas seem also to have been the most important of the large meat-providing species at Ahuriri



7.10 The Hawksburn moa-hunter site during excavation in early 1979 (A. Anderson).



7.11 A reconstruction of activity at the Hawksburn site based on the archaeological evidence. In the foreground men are building circular huts, to the right others are manufacturing stone tools, while to the left rear moas are being cut up and cooked (drawing by M. Webb).

Shelter,⁴⁰ Schoolhouse Creek,⁴¹ Waimataitai,⁴² Awamo⁴³ and Omimi.⁴⁴ In fact, of the Archaic sites for which there is faunal evidence, there are only four possibly anomalous cases. At Pleasant River⁴⁵ and in the bottom layers of Little Papanui⁴⁶ sea mammals may have had primacy over moas in the diet, and at Gooseneck Bend⁴⁷ and Ototara Glen⁴⁸ a variety of small birds may have filled a similar role.

Nevertheless it is clear that moa hunting was a principal subsistence pursuit of the early period, and remained a common activity until about the 16th century. To what extent this meant that economic systems and settlement patterns were built around the seasonal distribution and abundance of moas is quite impossible to

say, because those aspects of moa ecology are still insufficiently known. The distribution of moa species from North Otago sites⁴⁹ indicates only that a wider range of species was hunted at the time of earliest settlement, and that the middle-sized moas, especially *Euryapteryx gravis*, were most commonly killed throughout the Archaic. However, the fact that moas are almost ubiquitous in Archaic sites — only a few of the small rockshelters are exceptions — might suggest that the hunting of them was an all-year-round occupation, even if any particular site was occupied only temporarily.

How moas were hunted has long been a matter of speculation. Early writers tended to be overly impressed with the sheer size of the birds, regarding them, in Teviotdale's phrase as 'a species of feathered tiger'.⁵⁰ Teviotdale himself, and most of his contemporaries, thought that the large river mouth sites were probably convenient cul de sacs into which small flocks of moas could have been driven from the surrounding countryside and dispatched beside the ovens.⁵¹ This argument, however, tends to assume that the hinterland of the sites was more or less open country and while that might eventually have been the case through the agency of forest fires, it was not the original situation faced by the first settlers of North Otago, and probably was never the case in some other areas where moas were commonly hunted, such as the Catlins district of South Otago. On the whole, it seems more likely that moas were hunted individually in the forest (similarly to the introduced pig) with the use of dogs. Recent research on Maori dogs has shown that those of the South Island particularly, had been selected for massive neck development of a kind frequently associated with an ability to hold larger game.⁵² In this respect it is interesting to recall Skinner's⁵³ suggestion that the large pointed blades found in a number of early Otago sites were spear points; perhaps of a jabbing weapon used to administer the *coup de grace* to moas bailed up by dogs.

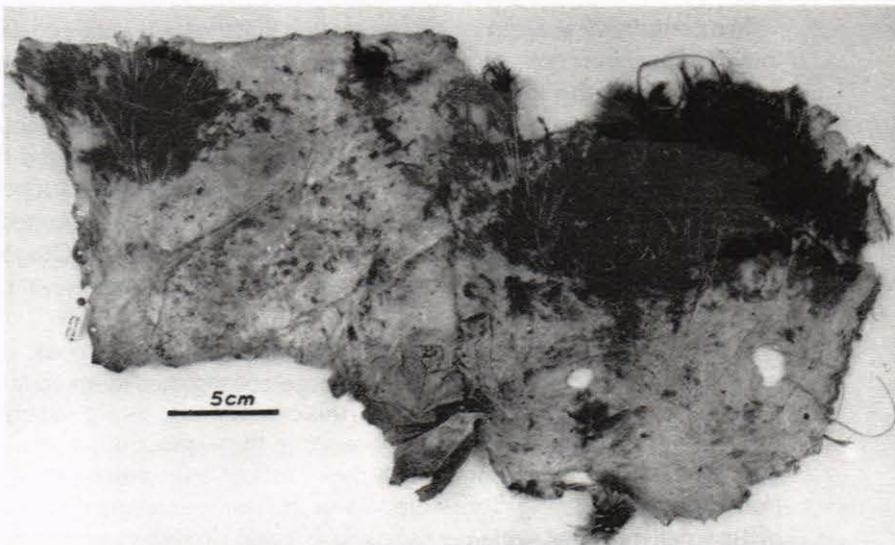
Of the other resources, dog and sea mammal remains are common in the Archaic sites of North Otago. It is difficult to assess the contribution they made to the diet, but it seems that sea mammals, at least, were much less prominent in North Otago than in areas further south, and this impression agrees with the historical evidence that fur seal breeding colonies were not established north of Otago Peninsula⁵⁴ (a distribution pattern which may not have been valid for the more remote past, however⁵⁵). Evidence of the extinct avifauna, apart from moas, is slim: species of extinct duck, hawk, coot and crow at Tai Rua; goose and swan at Ototara Glen and giant rail at Waimataitai.⁵⁶ Amongst the other small birds, penguins and shags are common in the coastal sites and ducks, quails and wekas in those of the interior. Few of the earlier excavators deigned to notice fish bone, but where it has been mentioned, barracouta is prominent. Of the vegetable foods, almost nothing is known. Only the rare finds of stone beaters, as at Shag Mouth,⁵⁷ may be an indication of the consumption of fern or ti root.

From the faunal evidence alone it is difficult to conclude very much about the Archaic economy. It appears that the early settlers of North Otago, who must soon have discovered the impossibility of gardening so far south, rapidly assumed the role of broad-spectrum hunters and gatherers, but with a decided emphasis upon the hunting of moas. The exploitation of other avifauna seems to have been incidental to this activity, and neither sea mammals nor fish, on the information available, seem to have greatly deflected them from the pursuit of their primary game until the latter part of the Archaic phase.

If our presently deficient understanding of the early subsistence patterns provides few clues to the nature of the economy during the Archaic phase, rather more substantial leads may be found by considering faunal remains together with the evidence of material culture. Of the latter, the structural remains are of fundamental importance since the conjunction of large, dense middens and evidence

of houses suggests that a few of the sites were long or frequently occupied villages. At Waitaki Mouth⁵⁸ and Shag Mouth⁵⁹ the remains of groups of substantial houses containing stone built hearths immediately place these sites in a category of their own. The impression that they were villages is strengthened by considering the variety and quantities of finished and unbroken artefacts which have been recovered from them: at both Waitaki and Shag Mouth some 150-200 whole adzes have been recovered, many found in caches; and at Shag Mouth, numerous fish hooks and a wide range of other bone implements were found.⁶⁰ Further support may be found in the abundant evidence of many of the wide range of artefacts having been made on the site, and in the range of raw materials represented. In addition, these two sites occupy the most important locations along the North Otago coast in terms of access to the interior — Waitaki Mouth commanding the routeways to the McKenzie Basin and over the Lindis Pass to the Otago lakes, and Shag Mouth situated at the start of the easiest and most direct routeway into Central Otago.

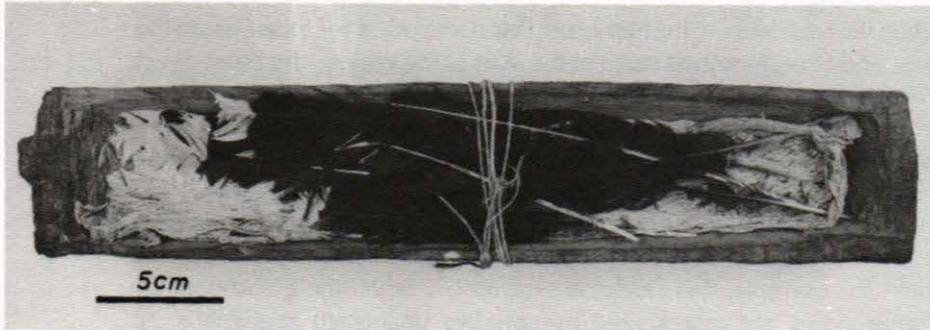
Another group of sites may be considered as having been restricted-function settlements. They are usually smaller than the sites above, contain little evidence of a planned layout of structures and sparse evidence of any dwellings at all, often just scoop hearths. Adzes are rare and usually broken and the artefact assemblage is restricted in range and frequently specialised on one or a few types. At Tai Rua⁶¹ for example, fish hooks are common, both whole and partially finished, while adzes are represented by only five unfinished specimens. At Waimataitai the assemblage is similarly dominated by fish hooks and implements used in their manufacture, and it contains no adzes.⁶² Ototara Glen contained four adzes, all broken, four hooks, several bird spears and a small range of butchery and maintenance tools,⁶³ and a similar assemblage, except for the bird spears, was found at Omimi.⁶⁴ These sites, along with Hampden Beach, Waianakarua Mouth,⁶⁵ Hawksburn and probably also Dart Bridge,⁶⁶ Puketoj,⁶⁷ German Jacks⁶⁸ and Schoolhouse Creek, give the impression of having been temporary, but sometimes re-occupied, camps.⁶⁹ The activities represented there are usually specialised towards the operations required by a single economic pursuit — generally either fishing or fowling — and other activities seem to have been carried out perfunctorily (e.g. housing construction).



7.12 Fragment of a weka skin garment from central Otago. Originally the central seam was oversown with a strip of moa skin (Otago Museum).

A third group of sites are those to which a single function only can be ascribed. These include quarry sites such as Oturehua and Nenthorn,⁷⁰ burial sites such as Outram,⁷¹ painted rockshelters and, although these may not be of the Archaic phase, the sites at which kits of artefacts, fibres and other raw materials have been cached (see Figs 7.12 and 7.13).⁷² Such sites contain no evidence of dwelling's and little, if any, of food preparation.

Lastly, there are numerous sites where it seems occupation has lasted only a week or so; sufficient time to cook a few meals and make or repair several artefacts. These are probably transit sites in the main and they would include all the Upper Waitaki rockshelter and river flat sites and a large number of ovens known only from the New Zealand Archaeological Association site record forms.



7.13 A wakahuia from Talla Burn, central Otago (Otago Museum).

Two hypotheses have been advanced to explain Archaic settlement patterns in Otago. Teviotdale envisaged the large coastal sites as the seasonal hunting stations of people who otherwise lived in the warmer regions of the northern South Island.⁷³ This view may be favoured by the large amount of exotic raw material represented amongst the stone artefacts, although trade may have accounted for that, but against it is the evidence of substantial, multi-function settlement on a scale which is hardly matched in the northern South Island Archaic sites. It may also be noted that exploration of the interior seems to have been remarkably thorough at a very early stage, with silcrete quarrying having been established there by the 11th century.

In a contrary view, Simmons⁷⁴ has argued that the large early coastal sites were major population centres from which the hunting of sea mammals and moas was undertaken. As the forest retreated and these resources, especially the moa, declined, the human population also decreased or dispersed to occupy smaller settlements with more localised economies which were scattered throughout Otago and occupied on a seasonal basis.⁷⁵ His argument gains support from the chronological evidence that the smaller sites were mainly established late in the Archaic phase, with (quarry sites aside) no settlement of Central Otago before the 13th century — some 200 years after the establishment of several of the main coastal villages.

A third possibility is that the chronological data for the Archaic are insufficiently secure to support the removal of large coastal sites to an early period and smaller dispersed sites to a later one. In this case it would be argued that the settlement pattern remained essentially the same throughout the Archaic; always a concentration of settlement towards the coast but with settlement of the interior from the very beginning. Some support for this may be found in the fact that some of the smaller coastal settlements have produced 12-13th century dates (Tai Rua, Waimataitai, Awamoa and Kaikais Beach) along with certain of the interior rockshelters and quarries.⁷⁶ This hypothesis may therefore be preferred on the grounds that it places the least strain upon the radiocarbon dates, even if it implies

that major environmental changes, such as the decline of the forest and the moa, exerted little influence upon the broad pattern of settlement.

Palaeobotanical research makes clear the fact that the forest which once covered most of North Otago had substantially retreated in many areas and probably all but entirely disappeared in the central interior by the 14th or 15th century.⁷⁷ The main agency involved in deforestation seems to have been fire, although whether deliberate or accidental is still open to question. In any event, a major consequence must have been the severe decline of the moa populations. So little is known of Central Otago in the later Archaic period that it is impossible to say what effect this had upon settlement there, although greater exploitation of small birds such as weka, duck and quail seems likely on the evidence of the Upper Waitaki sites, and perhaps eels and freshwater crayfish were also exploited more heavily.⁷⁸ Such subsistence changes would entail a local shift of settlement locations away from the high country where the forests had been, and towards the rivers and lakes. The late Archaic sites of the Dart Bridge and Lagoon may reflect this change.⁷⁹

A period of change

On the coast, a decline in the availability of moa, and perhaps also in sea mammals as a result of over-exploitation, must have encouraged a heavier economic emphasis upon fishing and small fowling. Late Archaic sites such as Ototara Glen, Tai Rua, and the bottom layers of Little Papanui and Long Beach appear to reflect this trend to varying degrees, and by the time of Shag Point, a 16th century site which seems to represent a transitional stage between Archaic and Classic culture, fishing had become wholly dominant.⁸⁰ The subsistence changes are matched by an increasing representation of fishing implements in the late Archaic assemblages, and also by the trend towards composite hooks, which may reflect a growing scarcity of suitable raw materials like moa bone for large one-piece hooks.

Such changes in subsistence and settlement patterns as well as in some aspects of the technology, seem readily explicable in terms of socio-economic adaptations to an altering environment. But there are other changes which occur several centuries later and go to make up the cultural assemblage known as 'Classic', which cannot be easily explained in the same terms.

Explanation of the apparently sudden appearance of Classic culture in Otago has usually been sought by archaeologists in the belief that Maori traditions recorded the conquest of the South Island in the 17th and early 18th centuries by the North Island Ngai Tahu tribe. Recently certain aspects of this hypothesis have been questioned. Close examination of the traditions does not, in fact, support the idea of a single tribal unit, nor of a campaign of annihilation being mounted against the resident Ngati Mamoe. Rather, it seems, a number of hapu involving a comparatively small number of people, crossed into the South Island at various times and became embroiled in a complex of family and hapu feuds in which allegiances to any of the groups, including the Ngati Mamoe, might switch back and forth according to which affiliations of marriage or descent it was thought appropriate to emphasize in the circumstances.⁸¹ The Ngai Tahu certainly emerged as the most successful of the combatants, but there is little evidence to support the contention that they were a distinct ruling class in the sense that is implied by analogy to the Norman Conquest of England.⁸²

Settlement pattern and economy in the Classic phase

Nonetheless, the general thesis that Classic material culture arrived with the immigrant groups, which included the Ngai Tahu, appears to remain sound. Yet it is worth noting that the new material culture is only partly represented by new types, such as fortification, patu and a variety of nephrite ornaments. It is equally a case of new ideas being expressed upon older types, such as ornamental

notching and barbing upon composite-hook points and of the efflorescence of already established industries such as that in nephrite working. In addition, as noted above, some aspects of the technology of the Classic phase (for example, some of the patterns of flake manufacture) may be traceable to older indigenous traditions.

The Classic phase in Otago is known from the excavation records of eight sites. These are (from north to south): Katiki Point,⁸³ Huriawa (Fig. 7.14),⁸⁴ Mapoutahi,⁸⁵ Purakanui,⁸⁶ Long Beach (upper layers),⁸⁷ Murdering Beach,⁸⁸ Taiaroa Head⁸⁹ and Little Papanui (upper layers). Where faunal data exist from these, they indicate that the economic activities were mainly concerned with the exploitation of marine resources. Barracouta is the main species represented, but ling, red cod and groper remains are also commonly found. These fish are all open-water species and the density of their remains in Classic sites implies a specialised canoe-fishing strategy. In contrast the bird bone at each site suggests very local and rather casual fowling. Since most sites are on or near rocky headlands, the most common species are shags, penguins and *Diomedea* spp. Of the large mammals, dogs are especially prominent and the high proportion of them killed at an immature stage suggests the development of culling practices of a more intensive kind than are represented by the dogs of the Archaic sites. Seal bone is widely found in small amounts and so too is human bone, both in midden and artefactual contexts.⁹⁰

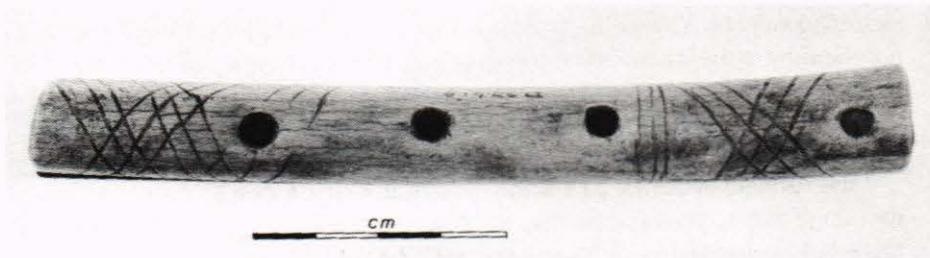


7.14 Excavations at Huriawa, 1964 (Anthropology Department, University of Auckland).

Whereas the coastal Archaic settlements are, with the exception of Omimi, all found in bay and river mouth locations, the Classic sites are frequently situated on exposed headlands where natural defences exist. This is the case at Katiki Point, Huriawa, Mapoutahi and Taiaroa Head. Earthworks however, are minimal and only unequivocally known at Huriawa and Mapoutahi. On the other hand, palisading may have been used, since it is known from the Classic site at Murdering Beach. Other structural remains include possible drying racks at Huriawa, and houses, often on terraces, at most sites, House number 2 at Katiki⁹¹ is typical of these dwellings: a rectangular structure 3.6 x 3.0 m in size, outlined by the butts of totara slabs and containing two rectangular stone hearths. Skinner suggests that

larger communal houses may also have existed at Murdering Beach and Purakanui.⁹²

The characteristic portable artefacts of the Classic sites reflect the emphasis upon fishing in the economy with barracouta and composite-hook points being especially common. In addition, the material culture of these sites is very similar from one place to another and thus reinforces the idea of a basically homogeneous cultural group. Nephrite adzes, chisels and pendants, flutes (Fig.7.15) and toggles of *Diomedea* bone and red ochre are, in addition to the fishing gear, the typical signs of Classic settlement in North Otago.



7.15 A bone flute from the Otago region (Otago Museum).

As to the settlement patterns, the main evidence still comes from early historical accounts.⁹³ These suggest that the coastal settlements were more or less permanently occupied but that the population was extraordinarily mobile, especially along the coast. This is hardly surprising, given that by the time the Europeans arrived all of North Otago was held by closely related people of the Ngai Tahu and their allies. Their social obligations, as much as subsistence needs, may have compelled continual visiting right along the east coast from Foveaux Strait to Banks Peninsula. While such movements were certainly facilitated by the introduction of the whaleboat,⁹⁴ and possibly also by a degree of economic security in the growing of the white potato, coastal travelling seems to have been common in the late prehistoric period as well, judging by the patterns of trade in indigenous resources like muttonbirds and the darker compulsion of warfare.

Most of the interior, during the Classic phase, was barely settled at all. There were well-travelled routes across it to the nephrite sources of West Otago and Westland and ethnographic accounts tell of seasonal visits to tap such resources as ti roots and weka, but the only settlements seem to have been along the lake shores: a possible pa and village at Wakatipu, two villages at Wanaka and one at Hawea.⁹⁵ Elsewhere, early European explorers noticed little beyond the occasional remains of round tussock-covered bivouacs,⁹⁶ a type of dwelling which may have some antiquity in Otago since it seems to be represented at the Archaic Hawksburn site (see Fig.7.11).

Settlement of North Otago began about 1000 years ago, probably by migration from northern New Zealand. The first settlers very rapidly explored the coast and interior and developed a hunting-fishing economy. The Archaic people of North Otago were moa hunters on a scale hardly known north of Banks Peninsula and their specialty in this, coupled with the vulnerability of the interior forests to fire, rapidly led to deforestation and the demise of the moa and other birds. During the decline of these resources, through the 14th to 16th centuries, the population became dispersed in small seasonal settlements across the whole of North and Central Otago, and fishing and small fowling became increasingly important subsistence pursuits. By the end of the 16th century the central interior had become virtually reduced to a transit zone between the coast with its rich marine resources

**Synthesis
and prospect**

and the western interior where the birds and eels of the large lakes and the nephrite sources there and beyond, proved a sufficient attraction for seasonal visits and settlement. Fishing (especially for barracouta) developed into the main coastal subsistence activity, although fern and ti root were probably also vital since the decline of the podocarp forest.

Technological and social changes occurred as well. The first settlers arrived with a fully Archaic material culture, but while retaining strong links to the north, they soon began to impress a local stamp upon their artefact assemblages with the development of a large-blade industry and the grinding of slate knives and large, finned lure shanks. By the later Archaic phase, regional raw materials, including nephrites, were increasingly being used and North Otago seems to have looked to the innovative stone working centres of Foveaux Strait rather than to the north. There was growing regionalism as well in the development of a distinctive Archaic fishing kit which incorporated numerous barracouta points, unperforated lure-hook points and barbed composite-hook points.

If the Archaic evidence as a whole suggests that, despite the ebb and flow of exchange and no doubt some migration as well, the population of Otago became increasingly isolated from more northerly regions, this was to change dramatically in the 17th and 18th centuries. During that time, whatever the complexity of the movements, an influx of people and ideas from the north integrated Otago with a wider Classic phase community.

It hardly needs saying that this summary of Otago archaeology is founded, at many points, upon evidence which is none too secure. It could hardly be otherwise, given the damage which has occurred to the crucial sites — Waitaki Mouth, Shag Mouth, Little Papanui and Murdering Beach. But there is no point in dwelling on this; archaeological interests and techniques are changing and some hopeful signs of progress in local archaeology are beginning to emerge. Recent research has concentrated upon the interior, with its vital lithic resources and record of environmental change, and upon the later coastal sites with their abundant faunal remains and record of cultural change. These growth points in North Otago archaeology give cause for optimism, I think, on several grounds: simply that archaeology is again being pursued systematically after a period of virtual neglect and also because the integration in recent research of subsistence, technology and material culture studies is likely to prove much more fruitful than older, compartmentalising approaches.

Notes

1. H. M. Leach, 1972.
2. Trotter, 1968; McCulloch and Trotter, 1975.
3. Golson, 1959.
4. Only 5 pa sites are known: Katiki, Huriawa, Mapoutahi, Purekura (Tairaroa Head) and Wakatipua. None appear to have been occupied earlier than the 17th century. Prehistoric storage pits are unknown.
5. Duff, 1956a; Golson, 1959; Skinner, 1974.
6. Golson, 1959.
7. Skinner, 1974.
8. Trotter and McCulloch, 1971.
9. B. F. Leach, 1969, p. 138.
10. Simmons, 1967, p. 41, and 1973, p. 34; B. F. Leach, 1969; H. M. Leach, n.d.
11. Gerard, 1976.
12. McCoy, 1976.
13. Anderson, 1980a, p. 132.
14. H. M. Leach, n.d.

15. Duff, 1956a; Simmons, 1967.
16. Duff, 1956a.
17. Simmons, 1973, p. 14.
18. Trotter, 1970a.
19. Simmons, 1973.
20. Simmons, 1967 and 1973.
21. Otago Museum notes on the Willets collections from Waitaki Mouth indicate that about 60% of the adzes are made of basalt.
22. Teviotdale, 1932.
23. Duff, 1956a.
24. Skinner, 1942, p. 257.
25. Lockerbie, 1940.
26. Trotter, 1965a.
27. Trotter, 1979.
28. Simmons, 1973, p. 43.
29. Simmons, 1967 and 1973.
30. Forrest, 1963.
31. Wells, 1972; Molloy *et al*, 1963; Mark, 1974; Simmons, 1968
32. Hamel, 1979.
33. Teviotdale, 1924, p. 4.
34. Skinner, 1924b.
35. Teviotdale, 1939.
36. Trotter, 1979.
37. Lockerbie, 1959; Anderson, 1979.
38. Trotter, 1970b.
39. Trotter, 1967a.
40. Ambrose, 1970.
41. George, 1937.
42. Trotter, 1955.
43. Buick, 1931.
44. Hamel, n.d.a.
45. Teal, 1975; Leach and Hamel, 1978.
46. Simmons, 1967.
47. Ambrose, 1970.
48. Trotter, 1965b.
49. Hamel, 1977a and n.d.b.; Gathercole, 1960; Trotter, 1970b.
50. Teviotdale, 1932, p. 93.
51. Teviotdale, 1932 and 1939; Skinner, 1924.
52. K. Gollan, research student, Australian National University.
53. Skinner, 1924b.
54. Wilson, 1974.
55. I. W. G. Smith, research student, University of Otago. Smith is accumulating archaeological evidence which indicates that several seal species ranged, and perhaps colonised areas much further north than they are found today.
56. Trotter, 1965c.
57. Skinner, 1924b.
58. Teviotdale, 1939.
59. Teviotdale, 1924.
60. Otago Museum Records; Simmons, 1973.
61. Trotter, 1979.
62. Trotter, 1955.
63. Trotter, 1965b.
64. Hamel, n.d.a.
65. Anderson, n.d.a.
66. Simmons, 1969.
67. Murison, 1871.
68. K. B. Gillies, research student, University of Otago. Gillies has recorded artefactual and faunal remains from this site and also carried out test excavations.
69. Several sites appear to fall between this and the first category. These are Little Papanui,

where the range of portable artefacts rivals that of Shag Mouth although there is sparse evidence of planned settlement in the Archaic layers, and possibly also Long Beach, where H. M. Leach (pers. comm.) feels the range and quantity of artefacts known from there, as well as the burials, may indicate a more permanent settlement.

70. B. F. Leach, 1969; Trotter, 1961.
71. Monheimer and Skinner, 1956.
72. Hamilton, 1896; Skinner, 1952.
73. Teviotdale, 1932, p. 91. See also Higham, 1976.
74. Simmons, 1969.
75. The assumption that inland sites represent a seasonal component of a coastal-inland settlement pattern remains to be tested.
76. Law, n.d.
77. See Note 31 above.
78. Clearance of the forest might also have encouraged the spread of ti and bracken fern.
79. Simmons, 1969, and New Zealand Archaeological Association site record forms.
80. Trotter, 1970a.
81. H. M. Leach, 1978.
82. Beattie, 1954; B. F. Leach, 1978.
83. Trotter, 1967a.
84. H. M. Leach, 1969; Leach and Hamel, 1978.
85. Anderson and Sutton, 1973.
86. Anderson, n.d.b.
87. Hamel and Leach, n.d.
88. Bell, 1956; Skinner, 1959.
89. Leach and Hamel, 1978.
90. Leach and Hamel, 1978.
91. Trotter, 1967a.
92. Skinner, 1959.
93. Bathgate, 1969a; H. M. Leach, 1969.
94. Bathgate, 1969b.
95. Simmons, 1969.
96. Phillipps, 1952, p. 64.