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THE CEREMONIAL BONE-FORK:  
A LITTLE-KNOWN ARTIFACT TYPE

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Abstract

Because examples of bone forks are rare they have consequently been omitted from lists of prehistoric or ethnologic cultural artifacts belonging to New Zealand's past Polynesian inhabitants. In this paper examples and records of these artifacts are presented and discussed. They serve to suggest that this artifact type had a wider ceremonial significance and distribution than previously thought.

INTRODUCTION

In an earlier paper (Keyes 1969) a four-pronged bone fork made from a human radius was described. This unique specimen, until then the only one of its type to be documented, was considered to be a rare example of a fork used for either the ritualistic feeding of persons of rank under the restriction of tapu or (as is more likely) for ceremonial feasting which included the eating of human flesh. Since this first paper, several other examples and references to this type of artifact have been located, and these are presented below. Although the search for further specimens of "ceremonial forks" has been extensive, the examples located are few. These, however, taken in conjunction with the literature references so far noted appear sufficient to suggest that carefully made forks (purau) for "ceremonial eating" were part of Maori material culture and their use was more widespread than the few remaining specimens would suggest.

EXAMPLES AND RECORDS

A. (Fig. 1).

Undoubtedly the first and most important ethnographic record of the existence and use of four-prong bone forks was that made by René Primavère Lesson (1838-9) in his account of the circumnavigation of the world (1822-1825) by the French naval vessel 'La Coquille',

commanded by Louis Isidor Duperrey. That portion of Lesson's account that concerns his New Zealand observations has been translated from the French by Diana Quarmby (in Sharp 1971, pp. 51-110). Using the translated version, Lesson makes the following statement based on his observations during his stay in the Bay of Islands in 1824 (Sharp 1971, p. 74); "Korokoro's son was less difficult; he presented me with a fork made from the forearm of a chief his father had eaten. This singular and frightful object was made from the bone, cut to sharp points at the cubital extremity, while the carpal extremity was embellished with mother-of-pearl and carvings" (i.e. pau shell inlays).

Duperrey figures a fork in his atlas of plates (Duperrey 1826, pl. 40, fig. 8 - "fourchette en os human"), which until now remained uncertain as to whether it was this specimen or the second one he referred to in his account (see "B" below). The specimen as published appeared as a minute figure, but "sheet No. 204" of the original watercolours by Antoine Chazal (made from sketches by Jules Le Juene on board 'La Coquille') from which Duperrey's plates were engraved and purchased by the Alexander Turnbull Library (Murray-Oliver 1973), shows a larger stylised figure (126 mm long) of the artifact. Fig. 1 in this paper has been copied from this original drawing. The size relationship of this drawing to the original specimen however cannot be assessed. The handwritten caption accompanying Chazal's original watercolour ("Nouvelle Zélande - fourchette faite avec un os humain, elle appartenait à Korokoro, chef de Kaouera") confirms that it was this specimen (A) presented by Korokoro's son that was illustrated (and not the artifact referred to in his second account).

B.

Lesson makes a second reference to a bone fork (Sharp 1971, p. 92), a different specimen - as the first was "presented" by Korokoro's son whereas this was "bought" from an unknown "warrior". "Their food is placed on the ground, and they break it with their fingers. The warriors sometimes use implements made of human bones, taken from enemies slain on the battlefield; thus we bought from one of them a four-pronged fork made from the radius bone of a right arm, painstakingly carved and decorated with various raised designs in mother-of-pearl."

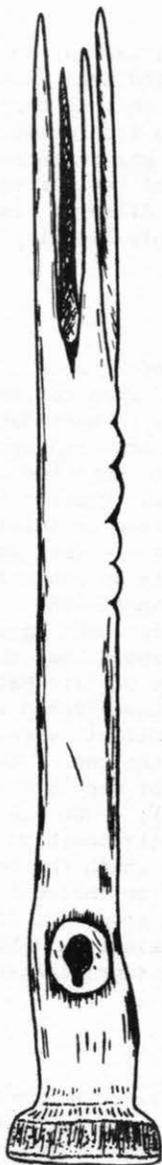
C. (Fig. 2)

This specimen in the National Museum was the subject of an earlier paper (Keyes 1969). Like the preceding specimens, it was made from the upper portion of a human radius, retaining the rounded head of the

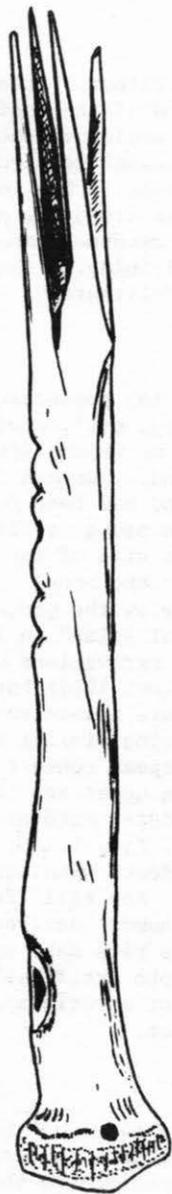
after  
Chazal



1



2



3



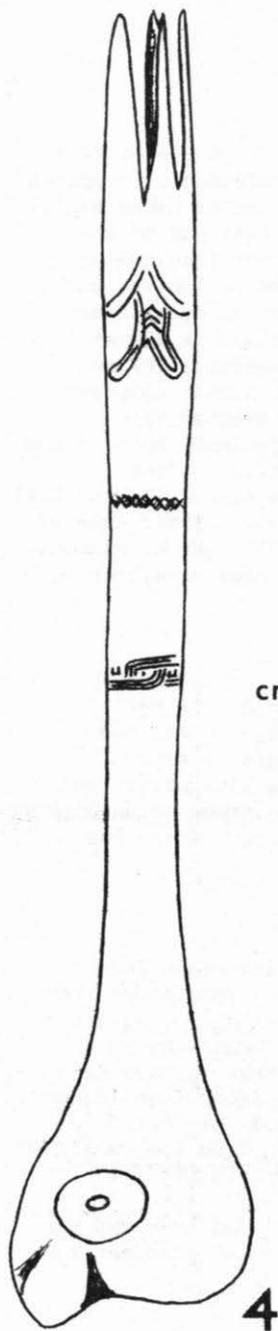
bone as part of the artifact. Length 153 mm; mid-section diameter 11 mm. The distal end of the shaft had been sawn with two longitudinal cuts at right angles to each other to form four fine prongs. Each prong had been further reduced on its inside margin to give it a taper towards the point. The fork was further ornamented by the cutting of five notches along the axial keel of the bone and by the cutting of a circular recess 11 mm in diameter near the head of the shaft to carry a shell inlay. The only locality information known is "Porirua Harbour, Wellington".

D. (Fig. 3)

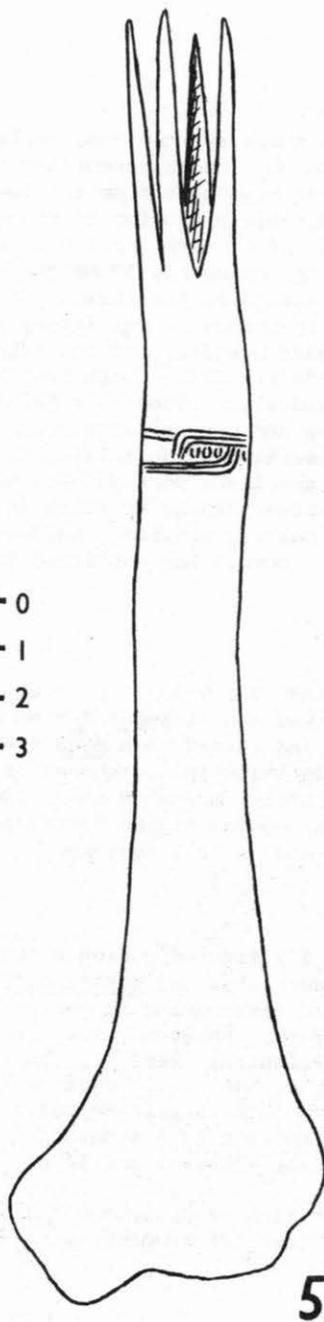
This specimen in the possession of Mr B. W. Thomas of Nelson is also made from the upper portion of a human radius but lacks the rounded head of the bone which appears to have decayed during its interment in the ground. Length 174 mm; mid-section shaft diameter 12 mm. The distal end has been cut to form two short tapering prongs 30 mm in length. One prong is slightly shorter through breakage of the tip. There is no sign of any carved or inlaid ornamentation having been applied to the bone. The specimen was recovered approximately 60 cm below the ground in an ash fill, on the Lake Ngaroto artificial island pa in April 1964. Artifacts recovered from later controlled excavations of the Lake Ngaroto archaeological site (N165/18 - Shawcross 1968) have shown that the building and occupancy of the feature relate to the Classic Maori with the material cultural assemblage being similar to those found in swamp pa of the Hauraki Plains. European contact artifacts were also present near the surface, giving an upper age for the use of the site, but the two youngest radiocarbon dates obtained for the site from charcoal (see Moore and Tiller 1975, Fig. 1, No. 30), < 200 years and 196 years B.P., give a good correspondence with age relationships of artifact types known from the site. Ash fill (from which the bone fork was obtained) and "compressed ashy humus" derived from charcoal and soil waste from cooking fires and fire pits make up a good deal of the 'fill' used for creating the Ngaroto artificial island pa (Shawcross 1968) and thus provides little of stratigraphic significance that can be applied to dating this artifact.

E.

The collector and owner of the previous specimen (Mr B. W. Thomas) reported to the writer that he recollected encountering many years ago an almost identical specimen to the present fork in his possession. It was made of cylindrical bone (? human radius) and was cut to produce two short prongs. It was in private hands and was believed to have been collected in the Hauraki-Coromandel area. Unfortunately it cannot be traced today.



cm  
0  
1  
2  
3



cm  
0  
1  
2  
3



F. G. (Fig. 4, 5)

In Auckland Museum there are two bone forks (Cat. No. 648, 649) each possessing four prongs. Both (according to information supplied by Mr D. R. Simmons) have been made from the lower end of human radii which thus gives considerable expansion to the proximal end of the artifacts. The distal end of each shaft has been cut longitudinally to produce four prongs approximately 50 mm and 60 mm in length, and they have been further worked on the insides to give an even taper terminating in fine sharp points. The larger specimen is 270 mm long by 20 mm in mid-shaft breadth, and the other measures 267 mm and is 15 mm in mid-shaft breadth. Both represent almost complete radii from mature individuals. They have been ornamented with incised carving patterns and one specimen bears a recessed hole in the proximal end for the insertion of an inlaid shell disc. From catalogue records, the specimens were made in North Wairoa (Hawke Bay) "by a native" and were presented by Mr Black in 1895. Their date of manufacture is unknown but was obviously before 1895. Mr D. Simmons (Auckland Museum - pers. comm.) has confirmed that they have been made with steel tools.

H. (Fig. 6)

Edge-Partington (1890-98, Vol. 1, p. 376, item No. 1) has figured a carefully carved and ornamented bone fork, 216 mm long possessing four prongs and inlaid with paua shell discs, from New Zealand. By its workmanship it is obviously a late steel-tool production and, by its style, may show an influence from, or an attempt to copy somewhat similar wooden Fijian "cannibal forks" which became well-known towards the end of last century.

I.

Guiart (1969, pl. 52) figured a highly ornamented bone fork embodying two carved human stylised tekoteko figures (one above the other) in the design and terminating in two short prongs. Guiart's caption read, "Ritual fork, whalebone, New Zealand, Musée National des Arts Africains et Océaniens, Paris". In his text (p. 89) he briefly refers to the specimen .... "such as the piece of whalebone carved as a fork to give food to priests under taboo (pl. 52)." This specimen has been redrawn in a simplified form from the published photograph (original scale unknown) and is presented in Fig. 7.

Carved from a flat slab of whalebone, this unusual specimen has all the suggestions of late 19th century work where the specimen has



after  
Guiart

7



after  
Phillipps

8

become a medium to portray elaborate carving design which has nearly overwhelmed the practical and functional purpose of the specimen. It is possible that the specimen may be regarded by some as not being of 'authentic' late traditional Maori style.

J.

Phillipps (1955, p. 125, fig. 3) illustrated a small rectangular bone fork in the British Museum in which the four prongs were arranged in line like teeth in a comb. The specimen is fully ornamented with a "rauponga" style and includes a stylised human head. It appears to have been made from a solid (? cetacean) flat piece of bone. A simplified sketch taken from the published photograph is presented in Fig. 8.

DISCUSSION

The examples discussed above can be divided into three groups based on material, style and form. A chronological development is inherent from the first to the third group based on material and stylistic change.

1. Early forms; based on human radii

Use of human bone by the Maori from a slain enemy was common. Serving a functional purpose, as a source of material, it provided fish-hooks, flutes, toggles, spear points, sconces for holding food baskets, poria kaka, needles, pins for securing dress mats, "pickers" and forks. Inherent in the obtaining of human bone is cannibalism, and equally important was that by its use it provided a longstanding demeaning and contemptuous insult to relatives of a vanquished foe, as well as serving to acclaim the victor's prowess. The choice of human radii for forks was undoubtedly based on the fact that this bone, being of lesser diameter than all the other long bones in the skeleton, provided the most suitable shaft for easy manipulation in the hand.

From amongst the forks made of human radii (examples A-G), it is possible to recognise (and erect) a developmental sequence related to an evolution in prong form and ornamentation; a change from plain unadorned examples (as the earliest) to more embellished forms in later years. The earliest specimen is taken to be the Ngaroto example (Specimen D, Fig. 3), a simple shaft with twin functional prongs, devoid of any applied ornamentation. This specimen by its recovery from the Ngaroto site can be reasonably assumed to be a

product of Classic Maori culture of the 18th century, and is the only specimen (apart from the unconfirmed report of Specimen E) likely to be of pre-European origin. In overall perspective, although the specimen is simple, its function may not have been any less significant than the later more carefully worked and ornamented specimens. The next fork is that from Porirua (Specimen C), the first of four finely pronged examples. This is the least ornamented of the later examples but bears ornamentation in the form of simple axial notching and a circular recess for the inlay of paua (presumably) shell. The finely made prongs, and the shouldered recess to seat the shell inlay appear to have been cut with metal tools. The bone has been sawn neatly and the prongs chamfered to fine tapering points. The workmanship in this and the other four-pronged specimens is distinct from that displayed by the Ngaroto specimen (D) and all appear to have been worked with steel tools. Specimen A, recorded by Lesson in 1824 from the Bay of Islands, is similar to Specimen C in that it appears to bear axial notching and an inlaid shell disc. However, the ornamentation takes a more elaborate form with the addition of small incised spiral patterns at the base of the prongs. Specimens F and G were possibly slightly later work and have used the distal ends of human radii, giving heavier specimens. They possess fine design patterns cut into the shafts as well as provision for shell inlays.

Groube (1964, p. 22) suggested that many artifacts assigned to the Classic Maori culture may in fact be actually of post-European origin. In the case of the bone forks it is postulated that the earliest specimens were of pre-European origin (based on the Ngaroto specimen). However, with the advent of steel tools, these forks probably became more elaborate in design and ornamentation, and with the increased warfare and associated cannibalism that the European heralded, probably more plentiful. Thus, in part, four-pronged bone forks were also a protohistoric and historic phenomenon. From the specimens an estimated time range would be c.1700-1830.

## 2. "Transitional form"

Although no particulars are known about Specimen H, it is placed in this category. It is undoubtedly a late (historic) steel-carved fork, and departs from "category 1" forks by the use of solid (? whale) bone, as the widely spaced prongs and narrow and deeply carved handle would suggest. Although its elaborate ornamentation would also place it with "category 3" forks (see below), it retains a link with "category 1" specimens through its possession of four opposed prongs; thus it is labelled here as a "transitional form".

In design this specimen has a suggestion of a Fijian "cannibal fork". Such a design could have been influenced by a few ornamented examples (or descriptions of) wooden four-pronged Fijian "cannibal forks" brought to New Zealand by European sailors. Steel tool carving would also support a late date along with the complex carving style, but such an outside influence can only be conjectured. Estimated age c. 1830.

### 3. Late forms; based on whalebone

Two examples of forks (Specimens I, J) represent a departure from early forms both in material used and in decorative artistic treatment. Both of these can be regarded as the most modern example of bone forks. They have lost the traditional arrangement pattern of four opposed prongs on a cylindrical shaft through the use of flat whalebone. Specimen J however, by possessing four prongs, may suggest a retained link with the earlier forms and their probably traditional purpose. Use of whalebone (which was more readily available during the time of European whaling) along with steel tools to cut and carve the material made this a more popular medium for art work. The decoration style and detail applied to these specimens (and Specimen H) supports late manufacture as such intricate ornamentation was more characteristic of late Maori carving after the introduction of metal tools (Simmons 1965). Estimated period c. 1830-1850

### ORIGIN AND PURPOSE

Artificially pointed bones or bone splinters (mainly from large sea birds) referred to as paoka and purau were used by the Maori as skewers for taking food and were the main eating implement. Often referred to as "pickers", they also facilitated the extraction of meat from gastropod shells. Best (1972, p. 1080) also refers to pointed sticks (tirou) being used for feeding persons under the restriction of tapu. Amongst a selection of bone skewers obtained from Oruarangi made from gannet and albatross bone, Fisher (1934, p. 282) recorded one "picker" made from a piece of human radius (specimen 19570.2), 192 mm long, 21 mm wide with a point length of 21 mm. This specimen, of human bone, had a simple point (similar to all the other skewers) and apparently was strictly utilitarian in purpose. The development of true forks with several prongs would be a natural evolution from such a single sharpened piece of bone, but because of the extra care needed in their production and the greater fragility of the prongs, such artifacts (particularly those that were carved and inlaid with paua shell) would be more likely reserved for ceremonial feasting rather than used as a common eating utensil. Although the design of the forks appears to have been modified in post-European times, their purpose would remain traditional and they

likely formed part of the original accoutrements associated with ritualistic feasting. Ceremonial banquets were a marked feature of religious and other important occasions (Best 1952). Special occasions also demanded a ceremonial human sacrifice followed by the eating of the flesh (kai-tangata) as part of the ritual; for example - to lift the tapu from a kumara crop, a newly completed house or canoe; to placate the gods; to enhance the importance and prestige of certain rites or functions, like chiefly marriage or tattooing; to ensure good fortune in battle; as part of a mortuary banquet or to provide food for a "death journey", or during the lifting of tapu from mourners (Best 1972, pp. 66-67, 1058-64; Buck 1949, p. 102). Although other meat (i.e., fish, cetaceans, dogs, birds, rats, pigs, etc.) was eaten and some ceremonially like lizards (Smith 1974, pp. 37-38), the extremely significant occasions demanded that only kai-tangata was the appropriate fare. The practice of kai-pirau or the eating of dead, often decaying human flesh from corpses often exhumed for the purpose (Best 1972, pp. 409, 425, 533) and cooked as also included in this ceremonial ritual but was a less widespread practice. On such auspicious occasions it is possible to envisage the use of carefully made and elaborately carved forks - made from man and being used to ceremoniously consume man (kai-tangata). At this point another artifact type can be appropriately mentioned that is likely to have had a functional connection with the bone fork in relating it to ceremonial cannibalism. This is the maripi (or korotini), an elaborately carved spatulate wooden artifact armed with an attached row of shark teeth used for cutting flesh (e.g. Phillipps 1955, p. 141, fig. 22; Barrow 1969, pp. 124-5, fig. 164-6 for examples). It can be suggested that the use of such highly carved artifacts was primarily in these ceremonial occasions for ritualistically dismembering and cutting the flesh (Barrow 1969, p. 124).

This type of organised ritual cannibalism is interpreted as being apart and distinct from the consuming of the flesh of a slain enemy after a battle as the "fruits of victory". These cannibalistic orgies were differently purposed. These practices effectively reduced an enemy, particularly the chiefs, to the status of "common food" and provided a stigma which survivors and their succeeding generations would inherit (Best 1902, p. 71; Buck 1949, p. 401). Lesson (in Sharp 1971, p. 103) recorded that such post-battle cannibalism was a traditional ritual by which victors also acquired "the courage of dead men" which increased their own mana and was also considered the proper reprisal for encroachments on land or similar provocations (Taylor 1966, p. 61). Human flesh also provided a handy means of sustenance for satisfying the victors' hunger (Buck 1949, p. 400) and for provisioning them for their return march (Vayda 1970, p. 70) either in the form of

prepared meat or as slaves for future consumption. To war parties travelling in a hostile territory, captured enemy often provided ready provisions for their journey (Vayda 1970, pp. 72, 80). Useful bones from victims of post-battle cannibalism were gathered for future use in manufacturing of artifacts. Lesson (Sharp 1971, pp. 74, 92) confirmed, for example, that implements were manufactured for use in the eating of food (i.e. skewers, forks) from human bones taken from enemies killed in battle. The important point to be made here is that bone forks (along with other artifacts) were produced from radii of enemies slain in battle after they had been eaten. These artifacts were produced at leisure upon return to the villages and their manufacture is equated with a settled existence. There is no evidence to suggest (nor any real likelihood) that they were carried into battle in the hope that they could be used in post-battle cannibalistic feasts. Rather, the production of ornate forks (as apart from simple skewers) from human bones probably became a commemorative tradition and their use was related to specially organised ceremonial feasting within a village existence. With the increase in warfare in proto-historic times (made more effective with muskets), the increase in the numbers of dead available for consumption likely led to an increase in cannibalism, providing greater availability of bones for artifacts. Thus the manufacture of four-pronged ornamented forks probably became more commonplace and fashionable and finally achieved the ranks of a prestigious 'art object' as late examples (I, J) would suggest.

The use of these forks for feeding chiefly persons who were under the restriction of tapu was suggested earlier (Keyes 1969) and also raised by Guiart (1969). Although this possibility cannot be denied, it is felt that all elaborately worked specimens would not be so used as such objects would more than likely have been required to have been destroyed after use as tapu would require. Simple bone skewers would have been more likely to have been used for such feeding and a close look at Lindauer's famous painting, "Tohunga under tapu" suggests this.

#### SUMMARY

The ceremonial bone fork is suggested to have evolved from a single pointed bone skewer (made from human radii) to a two-pronged form, through to an elaborate four-pronged highly ornamented fork. The fineness of the prongs and the high degree of ornamentation possessed by most specimens would suggest that they were examples made with steel tools. Their original purpose is considered to have been ritualistic - reserved for ceremonial feasting, particularly that involving a ritualistic human sacrifice and cannibalism. Increased warfare with the musket in European times may have led to an increased

supply of human radii available for working, and highly ornamented forks may have become fashionable feasting artifacts. In later periods whale bone replaced human radii and forks became decorative art objects.

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