SOME CONCLUSIONS AND SUGGESTIONS REGARDING THE POLYNESIAN PROBLEM

By EDWARD S. HANDY

IN view of the organized attack on Polynesian problems, anthropological and otherwise, which is on the eve of being launched at this time, it is perhaps the duty of those who feel that they have conclusions and theories which may possibly be useful or stimulating to others who are working or thinking in the same field, to put before their co-workers these suggestions, even though the conclusions are necessarily of a tentative nature. The conclusions stated below are based on literary research into certain phases of Polynesian culture in which the writer has been engaged for several years. While it is felt that the information derived from these sources is sufficient to warrant the drawing of such conclusions, it is hoped that these will be clearly understood to be tentative suggestions based on the limited data now available. The information now at hand will probably dwindle into insignificance before the more plentiful and accurate data which it is hoped that the next few years' work in the area will place before the scientific world.

Unfortunately lack of time and space makes impossible the presentation of the evidence which it is believed supports the conclusions which follow. These conclusions are the outgrowth of a somewhat exhaustive study of the literary sources of information with regard to the area, in the course of which was accumulated a considerable amount of material which cannot even be referred to in an article of this kind. In most cases also it has been impossible to go into explanations of the lines of reasoning which have led to the conclusions. A few references chosen from a considerable number may aid those who are interested in judging for themselves as to whether the conclusions are justified.

In the Society group there were early platform, and later pyramidal types of maraes; the pyramid growing out of the superposition of a number of platforms. In Hawaii were found early platform and pyramidal types, and later walled heiaus with inner compartments. In the Marquesas there developed the platform ma'ae, sometimes consisting of several terraces running up a hillside. And in Easter island there were the stone platforms on which the great images stood, the platforms being stepped on the landward side.1

The variation in form of the tomb-temple in the several groups may be explained for the most part by local environment and political development. Thus, the influence of environment is to be seen best in the Marquesas where the necessity of accommodating the temples to the abrupt slopes of the valleys produced the terrace forms. The effect of political development may be seen in Hawaii, where the organization of state and cult had attained its greatest development. This led to the exclusion of commoners from temple ceremonial and to the development of the great walled heiaus.

The use of large stone construction in tombs and temples seems scarcely to have touched the Cook group, and not to have influenced New Zealand at all. Thus, large stone construction was found to have been confined to the northern and central part of the area.

Certain important features connected with tomb-temples occurred pretty generally over the whole area, including New Zealand. The first of these was the association of the places of worship and places of burial which was discussed above. Other features of importance were the following.

---

Society Group: Duff's *Voyage*, p. 304.
Tonga: Duff's *Voyage*, pp. 218-20.
See also Taylor, loc. cit.
2 Tonga: Cook, op. cit., p. 410.
Marquesas: Melville, op. cit., p. 147.
Stoneslab seats associated with sacred places, sacred chiefhood, and the ancestral cult, were found in New Zealand, on Raotoronga. There was definite orientation in the Cook group and New Zealand, temples or sacred buildings facing the east. In Hawaii temple enclosures seem to have been orientated to different cardinal points in those instances in which we have information regarding this.

There was too much variation with regard to houses, altars, images, drums, ovens, certain boards erected in memory of chiefs, and some other features associated with places of worship, to allow of a discussion of these here. The oracle tower in Hawaii appears to have had no correspondence elsewhere in the area. The mere mention of these as features which were associated with places of worship in various parts of Polynesia may, however, be suggestive.

II

Stone slab seats associated with sacred places, sacred chiefhood, and the ancestral cult, were found in New Zealand, on Raotoronga.

1 Cook, op. cit., p. 716.
2 Smith, op. cit., p. 88, note.
3 Gill, *Historical Sketches, etc.*, p. 32.
5 Maio, op. cit., p. 814.
8 Ellis, op. cit., vol. IV, pp. 97, 116.
10 It will be of importance to determine whether these stone slabs used as seats were identified with the slabs which lined the graves of chiefs in Tonga and Samoa. Dr. Toszer has made the interesting suggestion that the platform which it has been supposed was the prototype of the temple forms may itself have been in origin an elaborated seat of sacred chiefs. There is evidence to support this suggestion. This is a very important point: the proof of the identity of the slab seats and the platform would, as it easily to be seen necessitate a total abandonment of most of the conclusions stated in the second part of this paper.
Aumakua, the term used for ancestral deities of the private cult; the apparent use of flexed burial by the lower classes only; the use of the kuahu shrine and employment of shamanistic workers exclusively, and the use of the oven largely, in private ceremonial; evidences of former cannibalism; and so on.

To sum up, therefore, the hypothesis is presented that the cultural stratum, of which the use of stone slab seats was characteristic and which was represented by the chiefs in New Zealand and elsewhere in the southern and central part of the area, was submerged in Hawaii, being represented there by commoners; and that another cultural stratum, of which the use of large stone construction was characteristic, was spread over the central region and Hawaii but influenced the Cook group and New Zealand only to a very slight extent.

III

An analysis of the elements constituting the religion of Polynesia and a study of these with regard to their distribution led to the following grouping of these in association with the use of stone slab seats and large stone construction. Unfortunately time and space do not allow me to give my reasons for this classification, to present my evidence, or even to give adequate references. How much of this classification will stand, how much of it will be found erroneous in the light of future information, is unknown. It is offered at this time, however, in the hope that it may be suggestive and perhaps stimulating to others interested in the Polynesian problem, and in the problems of the other related areas to the westward where lie the routes by which the Polynesians must have migrated.

Simply for the sake of having some designation for the peoples to whom belonged these several cultural strata, those who brought the use of stone slab seats have been called Slab Users, and those who utilized stone construction, the Stone Builders. The Slab User elements are to be found most clearly defined in New Zealand, while the Stone Builder elements are dominant in Hawaii. In the central region they are combined in various ways.

It may be pointed out that certain important elements stand out in very distinct contrast as characteristic of the religions of the northern and southern extremes of the Polynesian area. Around these as nuclei were grouped other elements which seemed to be associated. Thus we find:

In Hawaii: stone construction, seasonal ceremonial in which a sacred king takes a priestly part, the ceremonial taboo, in general a thoroughly organized and ordered worship. These are totally lacking in New Zealand.

In New Zealand: stone slab seats, sacred groves, the veneration of skulls, shamans, the use of coercive spells in connection with public enterprise, planting and harvest a ritual performance, the Hawaiki belief. These are totally lacking or entirely secondary in Hawaii.

Elements typical of the Slab Users are the following:

1. The veneration of slabs associated with ancestors and sacred chiefs, these slabs being generally used as seats by chiefs.
2. Sacred groves.
4. Ancestral deities, both public and private. The veneration of skulls and other ancestral relics.
5. Methods of disposal of the dead: exposure, flexed inhumation in a sitting posture, use of canoe coffins, secondary disposal of skeletal remains in caves. The placing of offerings of food and weapons with dead bodies.
6. Funerary feasts.
7. Survival of head hunting in the preservation of enemy skulls and heads.
8. The belief in incarnation of ancestral spirits in animate and inanimate objects.
9. Omens from animal movements.
10. Divination by gazing into liquids, by possession, and in trance.
12. The use of genealogies as religious formulae.
13. The belief in the similarity of spirits of natural objects to man's spirit.
(14) A more primitive form and use of the dance: war dances, paddle dances, spear dances, dances by widows of warriors.

(15) The work of planting and harvest a ritual performance.

(16) Those types of taboo which are particularly associated with the ancestral cult.

(17) Rahui, prohibition or restriction by means of badges or signs.

(18) The use of water in purification ceremonies.

(19) The use of the oven in public and private rites.

(20) The belief in Hawaiki, an origin-land to which the spirits of men returned.

(21) Stratified heavens of myth.

(22) Tattooing.

(23) Cannibalism.

Elements typical of the Stone Builders:
(a) The use of large stone in the construction of tombs and temples. (See No. 1 above.)

(b) Embalming. (?) The use of tombs. (See No. 5 above.)

(c) Violent mourning, dissipation after a sacred king's or chief's death, hired weepers, the singing of eulogies. (See No. 6 above.)

(d) Special rites for deifying great men.

(e) General or ceremonial taboo. (See No. 16 and No. 17 above.)

(f) The worship of the great gods of myth in the public cult. (See No. 4 above.)

(g) Divining by breaking objects and observing the scattering of fragments. (See No. 9 above.)

(h) Haruspication. (See No. 10 above.)

(i) An organized priesthood, the temple priests or directors of ceremonial being allied to the chiefs or kings. Inspirational diviners, necromancers, and magic workers relegated to a secondary position. (See No. 11 above.)

(j) Craftsmanship: the development of trades in the hands of master-craftsmen who were priests of the rituals of their trades.

(k) True prayers, supplications, associated with the offering of sacrifices. Human sacrifice. (See No. 11 and 12 above.)

(l) The belief in man's possessing a soul peculiar to himself, and in nature's being animated by nature spirits differing from men's souls. (See No. 13 above.)

(m) A generation or fertilization cult expressed in seasonal ceremonial; dancing in which sexual abandon played a part; the functioning of sacred chiefs or kings in a priestly capacity in first fruits rites, and a belief in the intimate connection between the sacred chief or king and the growth of things and prosperity. (See No. 15 above.)

(n) Organized dancing and singing as part of public ceremonial. (See No. 14 above.)

(e) The belief in a lower hades for the unfortunate, and an upper paradise for the fortunate. (See No. 20 above.)

(p) In general this stratum was represented by a better organized and higher type of worship.

It may be remarked in connection with recent discussion of the occurrence of sun worship in Polynesia that no evidence was found which would, in the opinion of the writer, warrant the assumption that a sun cult was ever a basic element in Polynesian worship.

We must leave untouched for the present the questions as to whether the Slab Users or Stone Builders were the first to colonize the area; whence they came, and when; and with which of the waves of colonization outlined by other students of the area they would probably be identified. It may be found as our store of accurate knowledge increases that many of the elements mentioned above are wrongly classified. But it is my belief that the work of the next few years will prove at least the general conclusions which underlie this tentative grouping of elements; that the greater part of the culture of Polynesia was made up of the combination of the elements of two great cultural infusions; that it will be possible to resolve the cultural complexes of the various island groups into constituent elements which will be found to have been originally characteristic of these two strata; and that these groups of elements will be capable of being traced back through the regions to the west-

---

ward to the cultural sources whence they were derived. Mention should be made in connection with this statement that there is evidence in Tonga and Samoa of the presence of a later infusion, and that there occur here and there in the area sporadic intrusive elements.

It is felt that all these questions must be left more or less in the balance until the promised harvest of facts is reaped and garnered. Until then, when theory and discussion will be on firmer ground, may the gathering of the harvest prosper!

CAMBRIDGE, MASS.

THE FOSSA PHARYNGEA IN AMERICAN INDIAN CRANIA

By LOUIS R. SULLIVAN

THE fossa pharyngea, fovea bursae, or medio-basial fossa is a small oval depression in the ventral surface of the basilar part of the occipital bone. The major axis lies in the antero-posterior direction in the median line. It varies in depth from 2 millimeters to 7 millimeters. The width is approximately 4 millimeters on the average while the length varies from 5 to 11 millimeters.

The function or purpose of the fossa is not altogether clear. Anatomical text-books dismiss it with a sentence. Thompson writing in Cunningham says: “An oval pit, the fovea bursae or pharyngeal fossa, is sometimes seen in front of the tuberculum pharyngeum. This marks the site of the bursa pharyngea... The origin and morphological significance of this pouch are not yet solved.” Romiti and Agostino claim that the fossa pharyngea is produced by a pharyngeal diverticulum either abnormal or accessory. This is in agreement with the opinion stated above. Perna concludes that the fossa pharyngea can be explained as a survival of that part of the median basilar canal which passes below the perichondrium on the ventral surface of the basilar portion of the occipital bone. The basilar part of the occipital bone ossifies like a vertebra and the fossa is the result of the non-ossification of the hypochondral bow element due to the position of the notochordal element in this region. I am not in a position to state the relative merits of the two opinions nor am I altogether certain that they are necessarily contradictory.


2 Romiti, 1891.

3 Agostino, 1901.

4 Perna, 1906.