

# DEFORMITIES AND MUTILATIONS OF THE FACE AS DEPICTED IN THE CHIMU POTTERY OF PERU

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*With Plates IV—VIII*

## INTRODUCTION

IN any considerable collection of Chimu pottery, there will be found amongst the anthropomorphic pots examples in which some peculiar deformity of mouth, nose, or both, occur. The meaning to be attributed to such mutilations has been the subject of much speculation in the past, and several different explanations have been put forward.

That no single explanation holds good has been shown (Salaman 1937) when treating of the facial mutilations associated with the potato. In this communication reasons will be given for the view that the pre-Inca artist may have employed the same symbolism to represent several distinct ideas. Whilst collecting material for the investigation of the problem raised by those anthropomorphic pots which are obviously related to the propagation of the potato, 150 photographs of pots which showed any kind of abnormality affecting the face or nose, or any mutilation of limbs, were collected. All these were Chimu pots, a study of which follows.

In proceeding to an analysis of the material, certain distinct and easily recognised groups may be differentiated, viz., those which depict abnormal localised obesity, those in which the face is distorted as a result of facial paralysis, and those in which the mutilation is induced and associated with some representation, however conventionalised, of the potato. It is with the residue that the present communication is in the main concerned.

## I. CONGENITAL DEFORMITIES OF THE FACE AND NOSE

The pots in this class all represent some form of congenital hare-lip. The following types may be distinguished :

- (1) A double hare-lip, with nose unaffected (Plate IV, A).
- (2) A single hare-lip, with nose unaffected.
- (3) A single hare-lip, with an extension into the nasal cavity (Plate IV, B). Dietschy (1938) is almost certainly wrong in describing this pot as one depicting *Leishmaniasis*.
- (4) A split in the upper lip only, which might in some cases be traumatic.
- (5) A deficiency in the development of the ala of the nose, which in some cases might be traumatic (Plate IV, D).

Both (1) and (2) are further distinguished by the most elaborate tattooing of the face.

We have very little knowledge to guide us in our attempt to elucidate the meaning attached to these representations.

It seems likely that a person with hare-lip was thought to possess supernatural powers ; according to Frazer (1911, Pt. I, Vol. I, p. 266), such persons were supposed to have a particular influence on the incidence of frosts. A curious statement is that of Prichard (1900), who says that in a Patagonian tribe hare-lip is hereditary. It is possible that he has mistaken a commonly induced and artificial deformity for a congenital one ; his photographs illustrating this condition are certainly suggestive of a traumatic rather than a congenital defect. If this be correct, it would indicate that the custom was common as late as the beginning of this century.

A mutilation allied to the above is described by Skinner (1805, p. 289), who, referring to the end of the eighteenth century, states that the Trulcalis, a Montana tribe, disfigure their own noses by dividing the skin over the bridge and inserting portions of the husk of palm, the number of such insertions depending on that of the enemies they have killed and decapitated.

Perhaps in a society where for one reason or another mutilation of the nose was common, a congenitally acquired deformity of a like kind would mark its owner as one possessed of special powers.

## II. ABNORMALITIES OF THE FACE DUE TO ADIPOSITY

Pots representing persons in whom the cheeks and lower parts of the face and neck are enormously fat (Plate IV, C) are common.

## III. ABNORMALITIES OF THE FACE DUE TO FACIAL PARALYSIS, LOSS OF ONE OR BOTH EYES, AND BLINDNESS

These are represented frequently, and in a very realistic manner. A perfect example of facial paresis is seen in Plate V, A, where paralysis of the left side of the face, with drooping of the left eye and the contraction of the facial muscles on the right, are shown in a masterly way.

## IV. MUTILATION OF THE FACE IN RELATION TO THE POTATO

The relation between facial mutilation and the potato has already been dealt with (Salaman 1937). Here this complex concerns us only in connection with pots whose character is outstandingly anthropomorphic, and is distinguished by the presence of a mutilation of the mouth and nose on the one hand, and the representation of the potato on the other. The potato may be so conventionalised as to be represented only by a few potato 'eyes', or it may be exhibited as highly realistic tubers ingeniously built into the structure of the human body. Examples are shown in Salaman (1937), and the explanation there offered for this symbolic treatment of the potato may be summarised as follows :

(1) The potato was regarded as being controlled by a spirit responsible for the behaviour of the plant and the reproduction of its crop.

(2) The potato spirit, often referred to as Axomama or 'Potato-Mother', needed help, i.e., strength and guidance, as opposed to worship, from man.

(3) The method of strengthening the spirit was the almost universal one of blood libations, effected by the act of mutilation. The guidance was effected by the character of the mutilation.

(4) The mutilation consisted in the abscission of the upper lip, and often the lower as well, and the removal of the soft parts of the nose up to, or partially involving, the cartilaginous septum.

(5) The effect of this mutilation was to present a startling display of teeth, set in a widely gaping, almost cavernous, mouth.

(6) The suggested explanation of this procedure is :

(a) The Chimu people regarded a potato 'eye' as a mouth, and indeed the 'eye' of many of the native Peruvian varieties is so large and deep as to resemble a mouth much more closely than an eye, a resemblance enhanced by the purple skin and flesh of many of the chief varieties grown. The buds would then be regarded as the equivalent of teeth.

(b) To produce a vigorous plant, the grower naturally selected a bold 'eye' with well-formed buds, i.e., a tuber with large 'mouths' and prominent 'teeth'.

(c) The cultivator, by making clear in an unequivocal manner the most desirable characteristics of a seed potato, whilst at the same time imparting strength to the Potato Spirit, had done all that was possible to secure a good harvest.

Dr. S. Linné (1939), in a review of the paper in question, found himself unable to accept the theory there developed as to the relation between the potato and certain facial mutilations. He writes : " It certainly seems very improbable that the coastal population should have made sacrifices to the potato-spirit operating in the highland districts, with which they had nothing to do but to purchase his products " (p. 16). It is true, of course, that we do not know what were the actual relations between the coastal and highland people at this period, but it is certain that the former were a rich and powerful people living in great city groups, whilst the latter were a scattered, struggling peasantry. We have not far to search, whether in the records of the past or in those of our own day, for examples where rich urbanised communities have exercised a dominating influence over their peasant neighbours whenever the latter's raw material or agricultural products were a prime necessity to the former. The maintenance of the highland peasantry being of immediate moment, and their survival resting, as it did, on the basis of the successful cultivation of the potato, the interest of the coastal city dweller in the fertility of this plant is obvious.

Although the evidence already adduced for the relationship between the potato and certain mutilations was thought to be sufficient, there has recently come to hand knowledge of a pot which offers the strongest possible support for the writer's views. This pot is of the Proto-Chimu period, from Chimbote, and is illustrated in the magnificent Catalogue of B. J. Wassermann's (1938) great collection in Buenos Aires (reproduced in

Plate V, B). The pot depicts a human figure built up from a single large potato tuber ; the end of the nose and the central portion of the upper lip are removed. On the body are displayed potato 'eyes', from each of which are growing several slender sprouts ; in the left hand the figure holds a digging-stick. In this pot we have the symbolism complete : the obviously vigorous and active potato 'seed', the individual who by a suitably expressed mutilation has endowed it with the desired vigour, and, finally, the tool by which the seed is to be planted in the soil. This latter lends additional strength to the view that it is the tuber in its capacity as 'seed' which dominates the whole representation.

Dr. Linné further objects that "There are, moreover, numerous vessels portraying mutilated faces which have nothing whatever to do with the potato, and which medical specialists have presumed to represent morbid changes, *inter-alia*, syphilis" (p. 16). Nowhere has the writer asserted otherwise ; indeed, at a lecture (Salaman 1938) this point was duly emphasised. What is of interest is that there is some evidence that the potato motif and that dealing with disease may occasionally be united in one representation, as is shown in Plate VIII, D.

#### V. MUTILATIONS OF THE FACE, REPRESENTING CERTAIN MORBID CONDITIONS

That a large number of the anthropomorphic pots of Chimu funereal ware exhibiting facial deformity might be illustrative of some disease process has been pointed out by several authorities. Tamayo (1908) identified them with the well-known scourge known as *uta* or *espundia*, and in so doing confirmed the view expressed earlier by R. Virchow (quoted by Tamayo 1908) that they were intended to represent a pathological phenomenon. In the Report of the Harvard School of Tropical Medicine's First Expedition to South America (Harvard University 1915), the discovery of the cause of this disease, viz., a protozoan of the *Leishmania* type, was announced. In the Report on work in the Amazon district during 1924-25 (Harvard University 1928), the *uta* disease and its pathology are further discussed, and proof is afforded that the lesions are due to an infection with the protozoan *Leishmania braziliensis*. Reason is given for believing that the white-fly is the vector by which the disease is spread. A full and up-to-date account of the disease is given by Escomel (1929).

The name *uta*, derived from the Quechuan word *hutu*, meaning 'gnawing' or 'rotting', was not used by the early chroniclers, but *Ussu* is found in Bertonio (1612), where it is described as a disease of the nose and face, similar to cancer, which is common in the Andes. To-day the term *uta* is employed for the clinical condition in which ulceration is confined to the skin, and *espundia* for that condition in which the ulceration involves the mucous membranes of the mouth.

The milder type of the disease, i.e., *uta*, is found most frequently in the Sierra, whilst the destructive ulcerative type, *espundia*, is more common in the Montana and Amazonian regions. Actually *uta* has a very wide distribution, though it is not usually found in valleys lower than 3,500 feet. The northern limit of its incidence is uncertain ;

its southern limit is Arequipa. In some parts, such as Mollepata (lat. 8° S.), in the Province of Libertad, 25 per cent. of the population are said to be affected, whilst scarcely any are free from the scars of minor lesions of the disease. In Huanaco, the town of Utao is so called because of the frequency of the disease. Certain valley districts are noted, some for a milder, others for a more severe form. An especially severe type of the disease is observed in various parts of the Amazonas Province, especially in the eastern valleys and on the river Nepero.

*Uta* begins as a nodular swelling on the skin, especially on the cheeks of children (Plate V, C), and thence may spread to the mouth, where the damage varies very considerably. Usually the mucous membrane is not severely attacked, but when it is the damage may be very great, leading to the destruction of the lips, the mucous membrane of the palate, the soft palate, and the soft parts of the nose (Plate V, D). The cartilaginous septum and bone are not attacked. Lesions frequently occur on the arms, but involvement of the lower limbs is rare; in the southern valleys the ears and eyelids may be involved.

There is no evidence, nor indeed reason to believe, that the disease is hereditary.

Spontaneous healing and varying degrees of regression of symptoms are common; in both cases the process is followed by serious scarring, which brings in its train a constriction of the natural orifices affected, nose, mouth, ear, or eye.

Both *uta* and *espundia* are now readily cured by a series of injections of antimony compounds, with or without local treatment; the question of prevention and immunity cannot be considered here, but amongst the Peruvian native Indians themselves it is generally held that a small local lesion once healed is a sure protection against subsequent attack.

Escomel (1929) has shown that there is a disease which is clinically indistinguishable from the severe form of *espundia*, but which is neither due to a *Leishmaniasis* nor responds to treatment with antimony. He has satisfied himself that this ulcerative condition is due to a fungus, viz., a *Blastomycete*. The disease is intractable and progresses steadily till exhaustion and death relieve the sufferer.

A correct diagnosis of cases in which destruction is very advanced is, in the absence of the finding of the specific organism, a matter of difficulty and indeed uncertainty (Harvard University 1928). A similar clinical picture can be produced by the *gangosa* form of yaws, whilst in some parts of the world a like condition has been ascribed to syphilis. In other cases leprosy has been suspected, but in such the American workers failed to find the bacilli. The account of the disease as given by Manson-Bahr (1935, p. 175) leaves no doubt that lesions as gross as those shown in Plate V, D do, in fact, result from infection by *Leishmania*.

The identification of the lesions depicted on the Chimu pots with the *Leishmaniasis* known as *uta* and *espundia* has not always been accepted, and even now does not go unchallenged. These ceramic reliefs have been thought by some to represent syphilis or yaws, by others leprosy, and, by a few, cancer, whilst writers with medical knowledge

have considered and rejected the possibility of tubercular lupus. As regards these alternative identifications, it may be said that the existence in South America of syphilis in pre-Columbian days is very doubtful, and authorities such as Hrdlička (1918, p. 191) have failed to find syphilitic lesions in any of the Peruvian skeletal remains. The lesions, moreover, are by no means typical of syphilis, and in no case are such characteristically syphilitic lesions as gummata of the bones represented. The disease known as yaws or *Framboesia tropica*, which has certain affinities with syphilis, is known in the Amazonian district, where, according to the Harvard investigators, it does not attack the mucous membranes. Manson-Bahr (1935) is of the opinion that this disease was a late introduction from Africa.

The lesions cannot represent the ravages of leprosy, because this was unknown in South America until the advent of the negro slaves imported by the Spaniards. The suggestion that the disease represented is cancer is an extremely unlikely one, for such extreme destruction of nose and lip is so unusual as to be practically unknown. Moreover the fact that enlarged glands are not depicted, with certain possible but rare exceptions, no less than the frequent representation of healed lesions with atresia of the parts, militates against such a diagnosis.

*Uta* and *espundia* are common to-day, and there is no reason to believe that they were less so in pre-Columbian days. Indeed when one realises how devastating the results have been till recent specific treatment became available, it is easy to appreciate the horror with which the pre-Inca and Inca people must have regarded it.

Examination of early Chimú pots allows us to establish a complete series, representing the various stages of the disease. Pots portraying the swelling of the lips in the neighbourhood of an early lesion have not been observed, but such swelling in relation to advanced ulcerated conditions is to be seen in many of them. In Plate VI, A a very pronounced swelling of the lips is shown, and no ulceration. It seems almost certain that in this case it was not *uta* that was intended, but the rarer condition of *acromegaly* or gigantism, depicted with as much fidelity as the type of dwarfism known as *achondroplasy*, a favourite theme of the Chimú potter artist. In Plate VI, B we see an early case of *uta*, with involvement of the nose alone. In another pot, the disease is seen to have spread from the nose to the upper lip. On the figure illustrated in Plate VI, C, the right half of both lips, and both sides of the nose, are shown as destroyed. The pot reproduced in Plate VI, D, itself a remarkable work of art, illustrates a more advanced condition, in which the soft parts of the nose are gone, the cartilaginous septum remains, and the upper lip is ulcerated in its centre portion. In Plate VI, E we have a very interesting example of a mother, in whom both lips and soft parts of the nose are missing, carrying an infant, whose nose is similarly affected and whose lips are swollen and probably ulcerated. This pot has been held by some to demonstrate that the disease is congenital; but that the evidence is not conclusive is clear from the fact that the author has photographs of three versions of the same design, from different collections, and that, while in two the child's face is as described, in the third it is normal.

## VI. REPRESENTATIONS OF THE NATURAL HEALING, AND AFTER-EFFECTS, OF 'UTA'

It is well known that spontaneous healing of all or part of the areas infected with *Leishmaniasis* may occur, and, in consequence, a shrinkage of the fibrous tissues in the affected areas, bringing about contractions of the mouth and other orifices involved. In the Chimu pottery all these stages are depicted, but most attention has been devoted to the secondary deformities and atresias, many varied examples of which are found.

The early stages of healing may be seen in the accompanying reproductions. Plate VI, F shows the upper lip healed but contracted; the external nares are asymmetrical though not themselves attacked, following the contractions on the right side of the upper lip. These secondary contractions, especially the most disfiguring ones, are so frequently portrayed that one can only suppose that they had some special attraction for the Chimu artists. Thus in Plate VII, A the mouth is seen reduced to a circular hole from which scar tissue radiates in all directions, and in Plate VII, B the contracted aperture of the mouth is shown dragged to one side, the nares are almost occluded, and the palpebral fissures somewhat constricted. Perhaps the most realistic effect is shown in Plate VII, C, where the asymmetrical character of the original lesions and the subsequent contraction of scar tissue have combined to produce a devastating effect, to which, however, it is not difficult to find parallels amongst the photographs of living sufferers taken by the Harvard Expedition.

## VII. REPRESENTATIONS OF SURGICAL TREATMENT OF 'UTA'

Both Tamayo (1908) and Tello (1922) have suggested that certain of the Chimu pots represent intentional mutilation of limb or face, or, alternatively, remedial surgical treatment of the diseased parts. Dietschy (1938) has collected evidence demonstrating both the high degree of skill, and the existence of a variety of bronze instruments, which the pre-Inca and Inca people employed in their surgical manipulations.

With the evidence at our disposal to-day, I think we may say that both of the views adumbrated above are true. Whilst in many cases it may be difficult or impossible to decide to which category the lesions depicted belong, the study of a long series of such pots enables one to establish with practical certainty several notable adherents to either of the two main groups. Thus we find a small group of pots representing heads only, all of which exhibit lesions of the kind under discussion. They are further peculiar in that all the individuals are males wearing an elaborate head-dress, frequently decorated with puma head and claws, and that from their ears hang large and elaborately decorated ear-rings. It is obvious that the subjects of these portraits are chieftains or persons of importance. The oral and nasal lesions of these individuals are peculiar in that the boundaries of the mutilated parts are clean-cut and sharp-edged, as if straight from the surgeon's knife (Plate VII, D).

Corresponding to these portraits are pots representing similar heads, showing the regular and symmetrical scarring which might be expected to follow surgical interference of the type displayed (Plate VII, E). These two series of pots, of which there are a

large number of examples, constitute strong evidence for the suggestion that surgical treatment of the face was actually in practice in the early Chimu period, though whether we may presume that this treatment was directed towards the cure of *uta*, or was intended as a sign of disgrace, must remain doubtful. Whilst basing our argument on the evidence of surgical treatment derived from the pottery portraits described, which show operated and post-operative conditions, it should be recognised that there exist many other pots of the kind which probably represent similar treatment of less exalted personages; an example is seen in Plate VII, F.

The practice of surgical remedial treatment in the Chimu period is also established by other evidence. Trephining of the skull was a widespread practice amongst all the Peruvian peoples, and it is safe to conclude from the condition of the skulls that many of the patients survived treatment for long periods. The Chimu potters frequently represented individuals with either arms or legs amputated. Some, or perhaps most, of these operations may have been in the nature of punishments, but it is of interest to note that occasionally the amputated stumps above the ankle, and some of those of the lower arm, are protected by wooden caps, actual examples of which have been found in the graves. Dietschy (1938) mentions a mummy in which a wooden stump, showing definite evidence of wear from use in walking, was attached to the bone. The existence of these appliances in aid of the maimed suggests that whatever the nature and cause of the original amputation, the method of procedure was no vulgar butchery, but had already developed much of the technique of a true art.

The possibility that these particular pots might be intended to represent prisoners of war who have been mutilated cannot be denied; these personages, however, are still wearing the insignia of rank when shown healed from their wounds, which could not have been much less than a year after their assumed disgrace and punishment. Individuals who are almost certainly prisoners of war are shown with but few exceptions in a sitting posture, with both hands lashed behind the back, a rope about the neck, and generally stark naked. They are invariably males. Similar figures occur in wood and stone, but in no case is any mutilation of the face shown. We shall return to this problem a little later.

#### VIII. REPRESENTATIONS OF 'UTA' AFTER DEATH

In Chimu pottery representations of the dead, often in erotic postures, are by no means uncommon; it need therefore occasion no surprise to find pots in which the sufferer from *uta* is shown as a living corpse. Two pots of the kind have come to the writer's notice, but in neither can the diagnosis be made with assurance, as the lesions might equally well represent natural decay. In both the corpse is sitting up and playing on a pan-pipe.

#### IX. REPRESENTATION OF INTENTIONAL MUTILATION OF MOUTH AND NOSE

This last group of pots, depicting mutilation of the face, creates a peculiarly difficult problem. In the first place, how are we to distinguish between intentional mutilation



and remedial surgical treatment, and, secondly, what class of persons were so treated, and for what reason? Whilst we may be able to do no more than grope our way to a partial solution, we can at least establish certain distinct classes of subjects who were so treated. Thus we find pots depicting men in a sitting posture, whose legs are amputated at the thigh or in the neighbourhood of the ankle. Related to these is another group, in which the limbs are mutilated as before, but where, in addition, facial lesions are found. These latter appear to be of two kinds: one may possibly represent the pathological depredations of *uta* (Plate VIII, A), the other almost certainly intentional mutilations (Plate VIII, B).

In this section must be considered a group of closely related pots, which may be divided into two sub-groups. In the first, a woman fully clothed is seen sitting with her legs crossed, and her head covered with a cap surrounded by a shawl, which wraps round the shoulders. The end of the nose and upper lip have been removed with a clean incision, causing the teeth to show prominently, but in every case one of the incisors is missing, leaving a large gap (Plate VIII, C). The writer owns copies of five such pots, three variants from one mould and two from a slightly different one. In the second sub-group, a female figure is modelled in a sitting posture, her head inclined to the left, and a drum in the left hand, which she is striking with her right. Here once more the end of the nose and upper lip are wanting. It would seem likely that all of these represent intentional mutilation rather than disease. Some support to this view is derived from the missing tooth referred to above, for it is recorded that Inca Huayna Capac ordained that the inhabitants of the Isle of Puna in the Gulf of Guayaquil should, as a perpetual punishment and sign of disgrace, have four teeth removed in addition to the two which the people had, according to tradition, always removed. In these portrait vases we are perhaps witnessing a record of a similar custom.

In addition, there exists a distinct group of pots in which the figure of a woman is prone, both feet are amputated, and the lips and soft parts of the nose have been removed, leaving what appears to be a clean-cut edge (Plate VIII, D). It seems highly improbable that these figures could have been intended to represent persons suffering from disease so extensive as to necessitate at the same time amputation of both feet and excision of the lips and soft parts of the nose. Moreover, *uta* rarely attacks the lower extremities. It is difficult to avoid the conclusion that these pots represent individuals whose faces and feet have for some reason been intentionally mutilated.

The example of this type illustrated in Plate VIII, D is of further interest inasmuch as two large independent swellings are shown, one on each side of the neck. What exactly these represent is uncertain: they are clearly not enlarged glands; it is more probable that they represent the ends of the hair, rolled up and covered by a cloak. The writer has photographs of six different examples of this type, in two of which there is no trace of such swellings; in two more there are swellings of much smaller size, which emerge from under the kerchief covering the head. Finally, there are two with swellings similar to those shown in Plate VIII, D, which suggest potato tubers. In a further pot

in which a female figure is seen squatting, and in which the nose and mouth exhibit lesions of the type shown in the prone figures, lesions again almost certainly traumatic in origin, similar great swellings in the neck are shown.

Although the weight of evidence at present is in favour of these peculiar swellings being regarded as part of the victim's *coiffure*, the possibility that these large swellings may correspond to a fusion in the artist's mind of two different symbols, viz., the one which relates the potato to lesions of mouth and nose, and another which relates similar lesions to a dreaded plague, cannot be dismissed out of hand.

In this connection mention must be made of an interesting group of figures in which the subjects, males, are represented as standing upright with well developed figures, richly clothed and generally with handsome head-gear and large ear-rings, yet with both arms missing from the level of the deltoid insertion. In some cases the forearm ends with a square cut ; in others it is constricted to a short and pointed stump. These figures are pictured and described in Wassermann (1938) as displaying rudimentary arms. This ascription could only be correct for the last two of the examples illustrated, and even so it would be very remarkable to find individuals both of whose arms had been amputated in foetal life at the same level. Rather would one regard these pots as depicting intentional mutilations, notwithstanding the obviously high rank of the individuals ; in that event these pots would represent yet another group of artificial mutilations.

#### X. POSSIBLE MOTIVES FOR MUTILATION

When we come to consider the motive or motives underlying these mutilations, we must inevitably adventure on uncharted seas. There is no common tradition between these people and our own European or Near Eastern immediate ancestors which would justify inferences otherwise justifiable on the basis of a common pattern of behaviour. The civilisations of pre-Inca man developed independently of Old World influence, and evolved an attitude to life, and more particularly to after-life, which was characteristic. The study by Karsten (1926) of the customs and psychology of the South American depicts him as a convinced animist, who peopled the living and non-living world around him with spirits possessed of such reality and strength that they dominated his whole existence. No less real, and perhaps even more insistent, was his faith in a continuity of life after death.

To interpret the scenes which the Chimú artist has bequeathed to us in terms of our own mentality must almost certainly lead us into error ; nor is it likely that any one explanation will account for all the facts. But we can at least attempt to establish certain simple deductions from well-authenticated data. Thus we are probably on safe ground in assuming that some of the pots are intended to represent surgical treatment and the subsequent healing of sufferers from *uta*. Why such pots should be buried with the dead is less clear ; the people's faith in an after-life seems to have resulted in a highly realistic conception of that existence, which demanded that all that was

essential in the one world should be faithfully reproduced in the other. Equally we may suppose that persons suffering from the active disease represented a typical, and indeed essential, element of the ordinary environment, and hence demanded spiritual counterparts in the after-life.

The mutilations associated with the potato have been given an entirely different explanation by the writer; it is held that they are to be regarded as a fertility rite, conceived in a spirit differing from that which inspires such rites in the Old World.

The most puzzling groups are those which exhibit simultaneously the mutilation of mouth, nose, and limb. That they do not portray ordinary prisoners of war seems almost certain. Are they perhaps representations of common criminals? We know that many Andean tribes mutilated their wrongdoers, as well as others. Thus de Morua (1590, Ch.XL) tells how the keepers of the Inca women's quarters were castrated, and their noses and lips cut off. Joyce (1912, p. 22), quoting from the Code of Nompanom, mentions the mutilation of hands, ears, and nose as a form of punishment in the district of Bogotá. The same is stated by Herrera (1601, p. 179), who also relates that the exiled Inca Manco cut off the hands and noses of any Indians of the Spanish auxiliary force whom he captured; indeed, the Spaniards themselves adopted similar tactics, especially in Chile. It is probable therefore that some of the mutilated figures, especially those in which the limbs are affected as well as the face, represent malefactors of some kind, and that they had their place in the after-life, with the chief and his family.

Another explanation applicable to some of the mutilated figures, but for which there is no direct evidence, is the possibility that certain individuals were purposely mutilated about the mouth and nose in imitation of the ravages of *espundia*, and at the same time were permanently immobilised by amputation of the feet. The object of such a procedure may have been the satisfaction of the demon of disease, and at the same time the creation of a permanent and potent protection against his malignity. The idea suggested would be comparable to that which induced the Israelites to set up the brazen serpent in the wilderness, or leads a Catholic to place an *ex voto* wax limb on a Church altar.

The frequency of the reproductions by the Chimu artists of their diseased or mutilated fellow-men might lead to the inference that they were guided by a spirit of sadism. It is true that there are abundant examples in the Chimu pottery illustrating scenes of horror: men in the act of being beheaded, of being attacked by jaguars, or bound as prisoners, besides frankly erotic and generally perverse sexual scenes. Such a view would therefore be difficult to controvert. On the other hand, an insensitiveness to human suffering and a curious submissiveness to fate, which all modern observers record of the Peruvian natives, would go far towards explaining the choice of the artist's material. We may be sure that the Chimu potter, like all great artists, reflected the philosophy and customs of his day.

It is but a few hundred years ago that in Europe the mentally abnormal, the dwarf, and the cripple, were regarded with a certain awe and granted a corresponding licence. The achondroplastic dwarfs whom Velasquez immortalised were to the artists and writers

of the sixteenth century an essential feature of the court scene, whom it was fair game to bait. Our Victorian forbears looked on the poor and the sick as inevitable, if unfortunate, actors on the same stage as that on which they themselves played so self-satisfying a role. If to-day we regard such persons as those towards whom society has a special responsibility, it is not that we are better men than our ancestors, or less sadistic, but rather that our philosophy of life has altered with our social and economic development. If we but knew the particular outlook on life which characterised the Chimú people, we should possess the key to their amazing civilisation, of which the Chimú potter has left us so elusive and fascinating a record.

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#### Description of Plates

The author's thanks are due to the Trustees of the British Museum; the Directors of the Museum für Völkerkunde, Berlin; the National Museum, Copenhagen; the Gothenburg Museum, Sweden; the Rijks Museum, Leiden; the Museo de Arqueologia, Lima; the Musée d'Ethnographie, Paris; and to Dr. H. Dietschy, Professor Tello, Mr. B. J. Wassermann, and the late Mr. A. W. Bangham, as well as to the Editors of the Reports of the Harvard Institute for Tropical Biology and Medicine, for permission to make use of photographs here reproduced.

- Plate IV. A. Chimu period. Height 8.5 cm. Yellow. Museum für Völkerkunde, Berlin. Man with double congenital hare-lip and elaborate tattooing.
- B. Proto-Chimu period. Chimbote. Height 22 cm. Grey and red. Museum für Völkerkunde, Berlin. Sitting male figure with single left-sided congenital hare-lip extending into the nasal cavity.
- C. Proto-Chimu period. Height 27 cm. Red and white. In author's possession. Sitting male figure with abnormal fatty development of face and neck.
- D. Proto-Chimu period. Moche. Height 13 cm. Brown. Museo de Arqueologia, Lima. Male head with deficient *ala nasi* on left side, probably congenital. Two fox-like animals are tattooed on the upper lip.
- Plate V. A. Proto-Chimu period. Chimbote. Museum für Völkerkunde, Berlin. Reproduced from plate in paper by Dietschy (1938). Male head afflicted with Bells palsy, causing paresis of the facial muscles on the left side, with some drooping of the lower lid and over-contraction of the facial muscles on the right side.
- B. Proto-Chimu period. Chimbote. Height 26 cm. White and rose. Reproduced from Wassermann (1938). The pot is in the shape of a potato tuber, of which the head is a secondary outgrowth; the figure, possibly a woman, is suffering from excision of the end of the nose and the central portion of the upper lip. The body is covered with potato 'eyes' from which buds are sprouting. In the left hand is carried a digging-stick.
- C. Photograph of mother and child. Reproduced from Harvard University (1915). Both mother and child are suffering from an early attack of *uta* on hands and face.
- D. Photograph of man. Reproduced from Harvard University (1915). Shows very advanced lesions of *espundia*.
- Plate VI. A. Proto-Chimu period. Trujillo. Height 16.5 cm. Red and white. Museum für Völkerkunde, Berlin. A male with the typical facies of *acromegaly*: thickening of the lips and soft parts generally, and enlargement of the lower jaw.
- B. Proto-Chimu period. Height 21 cm. Red and white. Museum für Völkerkunde, Berlin. A male figure sitting, with an ulcerative lesion destroying the extremity of the nose.
- C. Proto-Chimu period. Height 17 cm. Red and white. Rijks Museum, Leiden. A male figure squatting, showing advanced ulcerative lesions which have destroyed both lips on the right side and the end of the nose, which shows some further deformity through scarring.
- D. Proto-Chimu period. Chicama. Cream and red. Gothenburg Museum, Sweden. Male figure squatting, showing destruction and some scarring of part of the upper lip and the end of the nose; the left hand is broken off.
- E. Chimu period. Chimbote. Height 21 cm. Black. Reproduced from Wassermann (1938). A mother and child; both show ulcerative lesions of mouth and nose.
- F. Proto-Chimu. Height 22 cm. British Museum. Male figure sitting, showing the scarring consequent on the ulceration of the upper lip and, to a lesser extent, of the nose.
- Plate VII. A. Proto-Chimu period. Chimbote. Height 21 cm. Red and white. Museum für Völkerkunde, Berlin. Male figure sitting, showing extreme atresia of mouth and nose, with scarring and contraction of the facial tissues following a severe ulceration.
- B. Proto-Chimu period. Chicama. Brown and white. Gothenburg Museum, Sweden. Male figure squatting, showing severe cicatricial contraction of mouth, nose and palpebral fissure following extensive ulceration.
- C. Proto-Chimu period. Marquez. Height 26 cm. Red and white. Museum für Völkerkunde, Berlin. Female figure, sitting, showing extreme deformity of face due to cicatricial contraction following extensive ulceration of mouth and nose.
- D. Proto-Chimu period. Chicama. Height 26 cm. Cream and red. British Museum. The head of an important personage, from which the end of the nose and upper lip have been removed, presumably, by excision with a sharp instrument.

- E. Proto-Chimu period. Height 33 cm. Cream and brown. Bangham collection, Margate. The head of a chieftain, in which the mouth is evenly constricted to a small circular orifice and the nose sharply cut off and constricted, results which might be expected to ensue from a clean surgical operation, such as is shown in Plate VII, D.
  - F. Proto-Chimu period. Moche. Height 10 cm. Red. Museo de Arqueologia, Lima. The head of a man, in which the end of the nose and upper lip have been removed, presumably by some sharp instrument.
- Plate VIII. A. Proto-Chimu period. Height 27 cm. Red and cream. British Museum. A man kneeling ; both feet have been amputated ; the upper lip is in part removed and distorted by contractions, the end of the nose has been lost, and contractions have set in. The picture presented suggests the result of an ulcerative process rather than a surgical excision.
- B. Proto-Chimu period. Moche. Height 18 cm. Cream and reddish-brown. Professor Tello, Lima. A male figure sitting, with both feet amputated. The upper jaw has been broken and much of the upper lip removed, as well as the end of the nose. The whole condition is traumatic. Despite the extent of the damage, note the absence of serious facial contractions as compared with Plate VII, C and Plate VIII, A.
  - C. Proto-Chimu period. Chimbote. Height 24.5 cm. Yellow and red. National Museum, Copenhagen. A woman sitting, showing a clean-cut excision of the upper lip and end of the nose ; the gap in the incisor teeth is characteristic of this type of pot.
  - D. Proto-Chimu period. Moche. Height 22.5 cm. Red and white. Musée d'Ethnographie, Paris. The figure of a woman, prone, both of whose feet have been amputated and whose nose and upper lip have been excised by some sharp instrument. Note the peculiar, and apparently independent, tuber-like swellings on either side of the neck.

#### NOTE

I am indebted to Mr. Adrian Digby, of the British Museum, for the following observations on some of the photographs of the pots here reproduced. In his opinion Pl. IV, A, IV, C, and V, B are probably all Late Chimú, and Pl. VI, A probably Middle or Late Chimú.

*Salaman, Deformities and Mutilations of the Face  
as depicted in the Chimu Pottery of Peru*



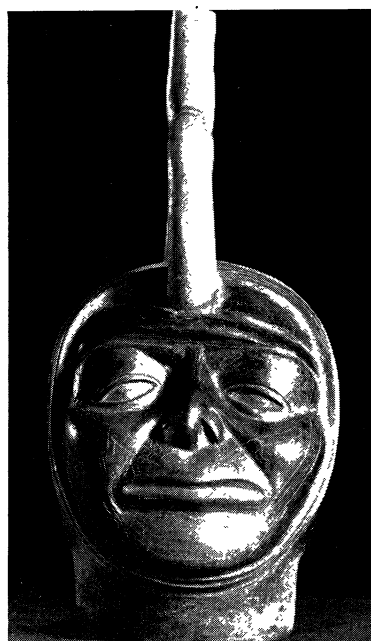
A



B



C

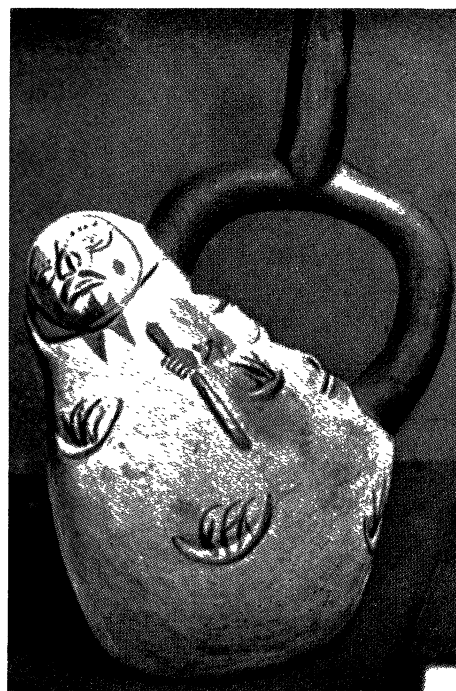


D

Salaman, *Deformities and Mutilations of the Face*  
*as depicted in the Chimú Pottery of Peru*



A



B



C



D



Salaman, *Deformities and Mutilations of the Face*  
*as depicted in the Chimú Pottery of Peru*



A



B



C



D



E



F

Salaman, *Deformities and Mutilations of the Face*  
*as depicted in the Chimu Pottery of Peru*



A



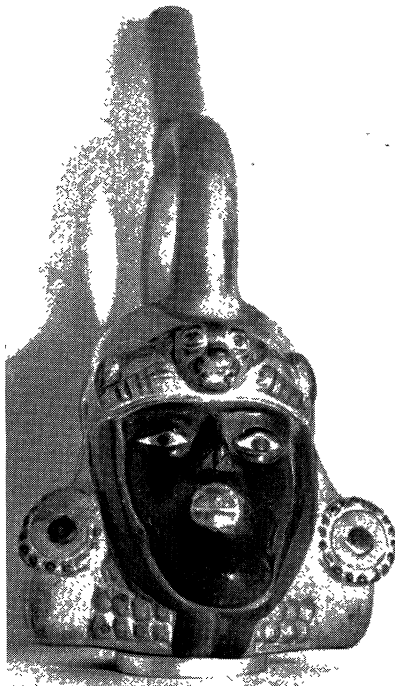
B



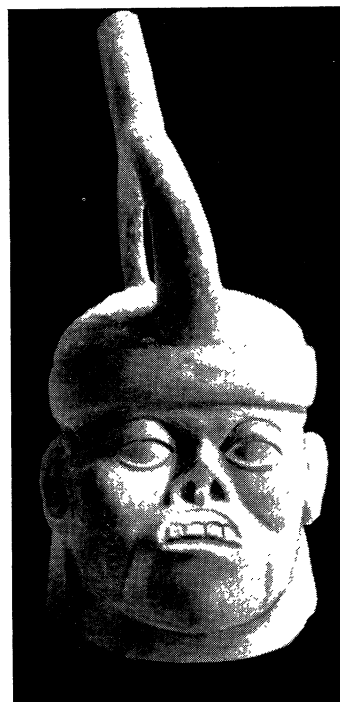
C



D



E



F

Salaman, *Deformities and Mutilations of the Face*  
*as depicted in the Chimú Pottery of Peru*



A



B



C



D