RED OCHRE AND ITS USE BY THE ABORIGINES OF TASMANIA.

(PLATE IV.)

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There is hardly an account of the Aborigines of Tasmania in which the use of red ochre is not mentioned. Captain Cook, in the description of his third voyage, already states that the Aborigines smeared their hair and beard with a mixture of grease and red ochre. Later observers who came in contact with the Aborigines noticed the same. The old oil paintings in our Museum represent the male Aborigines as wearing a kind of red wig, composed of long corkscrew-like ringlets (1). We may therefore take it as granted that it was a favourite custom with the Aborigines to rub a mixture of grease and red ochre into the hair; and further, that this custom was strictly limited to the males. Nowhere is it mentioned that the females followed the same habit, though they frequently painted their face black with charcoal. The hair clotted with red ochre was strictly a male adornment, and it is very probable that the custom of the females wearing their hair closely cropped resulted from the desire to prevent them following the example of their masters.

When examining the camping grounds my attention was soon drawn to pieces of red iron ore lying about, and, after collecting a number, I noticed that several exhibited intensive signs of being used. The first specimens I found on the camping ground, Old Beach; others I found near Melton-Mowbray, Devonport, etc.; but the largest number and the largest piece I found near Baskerville and Winton, on the Macquarie River.

(1) This is most conspicuous in the painting representing a group of Aborigines now in the Launceston Museum. All the males have the hair clotted with red ochre, while the females wear it closely cropped and in its natural colour.
Specimens of red ochre are by no means common. This is rather remarkable considering its frequent use. For instance, so far I have found only a single piece near Mona Vale, though to judge from the number of tronattas left this must have been a much-used camping-ground. Altogether I found 17 pieces, which cannot be considered a large number.

I have not been able to examine the specimens chemically, but the macroscopical examination is sufficient to prove that the red ochre must be a ferruginous substance. All specimens are strongly adhesive to the tongue; in other words, they absorb water readily, and are therefore hygroscopic. When broken they show an inner core of black colour, covered by a crust of intensely red colour. The thickness of the red crust varies, but so far I have not found any specimens in which it exceeds ¼ inch of thickness. These observations prove that the red ochre represents an iron ore, probably limonite (2 Fe₂O₃+3H₂O), but also that the natural mineral has undergone a certain change, by which some of the water was removed. The dark brown natural colour of the limonite is superficially changed into a blood-red colour. The naturally non-hygroscopic limonite has been turned into a hygroscopic substance. The only way of producing such a change is by exposing the mineral to heat—in other words, by roasting it. That this view is correct is conclusively proved by the examinations of the specimens, all of which are more or less fire cracked.

We have therefore ascertained the important fact that the red ochre as used by the Aborigines is not a natural, but an artificial produce, being the result of roasting certain suitable iron ores in the fire.

The Aborigines had therefore already made an invention, which indicates a certain amount of logical reasoning. They discovered that when a certain heavy stone of dark colour is intensely heated, its surface changes into a red earthy substance. This invention may have been made accidentally, but it certainly shows a certain amount of observation, resulting in the subsequent extensive use of this red earthy substance instead of the material originally used for ornamental purposes.
Now, all the specimens show that the red oxide of iron resulting from roasting was subsequently removed, but not as we would suppose by either crushing the whole specimen or by grinding, but by scraping the roasted pieces. The red crust was scraped off by means of a tronatta, and the traces left behind by this operation are most characteristic. They consist in a number of parallel, short scratches, which might almost be compared to the scratches of ice-worn boulders. The appearance of the specimens, the curved scratched surface, sometimes exhibiting faces like a crystal, conclusively proves that the red crust cannot have been removed by grinding, but must have been taken off by scraping.

The question how the red ochre was removed from the roasted piece of iron ore is of some importance. It has generally been assumed that the so-called "mortiers" of Europe were nothing else but a kind of palette for grinding colours, in particular red ochre. Similar "mortiers" have been found in Tasmania, and I possess two typical specimens from Melton-Mowbray. The appearance of all the pieces of red ochre conclusively proves that the colour was removed by scraping, and not by grinding; the hypothesis that this peculiar kind of stones served as palettes is no longer tenable.

We may therefore assume that the Aborigines first roasted a suitable piece of iron ore, and afterwards scraped off the roasted crust, mixing the powder with grease, and then rubbed the whole mixture well into the hair, where it eventually dried, forming the peculiar ringlets which were the chief adornment of the "puggana" (1).

And what may be the origin of this peculiar custom? Strzelecki assumes that it was done to prevent the generation of vermin; but if this is correct, why did only the men and not the women resort to it? I think Ling Roth is quite justified in refuting this somewhat illogical theory, but he offers no other explanation. Perhaps the following hypothesis may be nearer the mark:—

The Tasmanian word for red ochre is ba-la-wine, which literally translated means "blood." The Tasmanian smeared "blood" on his hair, though this blood

(1) Adult Aborigine.
was no longer actual blood, but a powder resembling in colour to blood. We have here probably a kind of in colour to blood. We have here probably a kind of symbolical act, the last remains of a custom going the blood of the vanquished enemy on his own head. It would lead us away from the subject of this paper to discuss the various, sometimes uncanny, rites in which the blood of the vanquished enemy plays an important role. But if this view be correct, the primitive Tasmanian civilisation must already represent a type higher than that when actual blood was used instead of red ochre. Observations like this, which now and then lift the thick veil which covers the early history of the human race, make us shudder to think what miserable wretches those human beings must have been, compared to which the primitive Tasmanian represented a high state of civilisation.

The following words are given in the vocabularies of the Tasmanian language for "hair clotted with red ochre:—

(a) Ringlets (Corkscrews, with Red Ochre).
Eastern Tribes—Pow-ing-arooteleebana.
Southern Tribes—Poeena.
West and North-West Tribes—Poenghana.

(b) Hair (Matted with Ochre).
Eastern Tribes—Poinghana.
Southern Tribes—Poeena.

All these words are practically the same, particularly if we consider that the suffix, "arooteleebana," means nothing but the enhancement of the good qualities of the first word (i). We may therefore take it that

Poi-ngha-na or
Poi-na
means hair matted with red ochre.

Now we find under the heading Shave to (with flint), in Milligan's vocabulary, the following words:—
Eastern Tribes—Poyngha runn yale.
Southern Tribes—Poynhate rana yale.

(1) Without going into further details I cannot explain this, but in another paper I will give sufficient proof for this view.
The operation of shaving by means of a flint is here unquestionably expressed by two words, and it rather seems a puzzle to find an explanation for this. If we, however, write the second expression in the following way—

Poyngha-terana-yale,
this problem takes at once a different shape. Terana is undoubtedly the word teroona-trona-trowa, which we know stands for stone implement (flint).

The verbal translation is therefore

Poyngha—Hair, matted with red ochre.
Terana—Flint.
Yale—(?).

That is to say, the hair matted with red ochre (is removed by means of a) flint. It would be very simple if the still doubtful word "yale" would represent the verb, and simply mean "cut" or "removed," but this interpretation is more than doubtful, because yale occurs rather in a peculiar way in connection with other words, which make such a conjecture untenable. In conjunction with the words "noan," "loan," "stone," it must represent a particular kind of stone, and the question is, will we be able to fix on its meaning?

We know that the Northern and North-western tribes called the freestone ponin-galee; we have therefore

Loan-yale,
Ponin-galee,
Terana-yale,

and this seems to indicate that the "poingha" was shaved with a particular kind of flint, the "terana-yale," and if we were able to translate the word "yale," not only would we have explained the meaning of the words in question, but we would have ascertained a further most important point, namely, that the shaving the matted hair was done with a special kind of flint.

We find that under the heading freestone the following words occur:—

Eastern Tribes—Boatta or potha malleetye.
Southern Tribes—Potta mallya.
North and Western Tribes—Ponin galee.
I do not think that there can be the slightest doubt that the words used by the Eastern and Southern tribes are practically the same, and that freestone was called Potta-malle(ea)—(mali).

In going through the vocabulary, we find under the heading "White,"
Eastern Tribes—Malleetye.
Southern Tribes—Mallee or Malluah.

North and Western Tribes—Mugyanghgarrah.
It is therefore unquestionable that
Potta malec(tye)
means a white or whitish rock. This fully agrees with the appearance of the freestone, which is a sandstone of light yellowish, frequently almost whitish, colour (1). There is not the slightest reason to assume that the "freestone" of the Western and North-Western tribes was different from that which occurs in the Southern and Eastern parts of the island. Though somewhat different in spelling, I have no doubt that
Ponin galee and potta malee
are exactly the same; in other words, that "galee" of the Western and North-Western tribes is the
Mallee(tye)
of the Eastern and Southern tribes, and means "white."

I do not think that there can be much doubt as to the identity of the words
Galee and yale(e),
and if this be so
"Terana yale"
would mean "white flint."

The complete verbal translations would therefore be—
Poyngha—Hair, matted with red ochre.
Terana—Flint.
Yale—White.

and the operation which Milligan freely translated as "to shave with a flint" would be expressed by the above three words.

(1) For instance, in the quarries near Austin’s Ferry.
Now, it will at once be seen that, according to the position of the word "white," two quite different interpretations of the above words are possible.

If we assume that "yale" was the attribute of "terana," the translation would be—

(The) hair matted with red ochre (is cut with a) white flint,

and this would prove that the important, and probably also painful, operation of removing (cutting or shaving) the hair thickly clotted with red ochre was carried out by means of a special kind of flint—a white flint to whit.

Another interpretation is, however, possible if the word "yale" is not an attribute of "terana." We may then read it as follows:—

(The) hair matted with red ochre (with a) flint (was made) white.

Now, it is hardly surprising that in the Tasmanian language the same word is used to denote "white" and "clean." What is white is clean, and what is clean is white. The primitive Tasmanian language knew not the fine distinctions of our highly-developed one, and we may therefore read the above as follows:—

(The) hair matted with red ochre (with a) flint (was made) clean (i).

Though we succeeded in giving a literal translation of the words which Milligan presumed to mean "to shave with a flint," the true meaning of these words is by no means certain, and open to two widely different interpretations, and it has to be examined which is the more probable one.

At the end of his vocabulary Milligan gives a number of short sentences, which are of the utmost value. Among these we find—

He cuts his hair with flint—Tuggana pugheranymee trautta.

(i) Of course we may also substitute the word "clean" for "white" in the first translation; but here the alteration does not produce such a change in the meaning. I suppose it mattered little whether the flint used was clean or dirty, though it would matter considerably whether it was "black" or "white."
Ling Roth has already remarked, and nobody can fail to note this, that Milligan's translations are somewhat free, and it is almost certain that this applies with some force to the above sentence.

Notwithstanding the different spelling, we recognise in the first word—

Tugga-na—
the Tasmanian word for a grown-up (adult) man, and the last word represents our well-known trowatta, the stone implement. We have therefore

Pagga-na—the adult man (black)
Pugheranymee—(?)
Trautta—flint.

Of course, the use of the impersonal, "the adult black man," instead of the personal pronoun, "he," signifies nothing. But what did he do with the trautta? If Milligan's translation were correct

"Pugheranymee"
must mean "to cut the hair," considering that we have accounted for the first and last word. This conjecture is, perhaps, rather hazardous. Whether clotted with red ochre or not, "hair" is represented by the words—

Eastern Tribes—Poing-lyenna,
Southern Tribes—Poiete-longwinne,

but it is impossible to recognise this word in the above. It rather seems as if "pugheranymee," if divested of the unnecessary suffix, is a kind of plural of the singular pugga-na. However that may be, it is certain that Milligan's translation cannot be correct. The adult black man does something with a flint, but he certainly does not cut his own hair (1). The second word rather seems to suggest that the "black man" does something with his flint for his brethren. Could it be accepted that this something was "hair cutting," the first view, namely, that "yale" was an attribute of "terana," and that a

(1) It may be remarked here that, if analysed, Milligan's sentence seems to be somewhat hazy. Is it probable that an Aborigine would have cut his own hair with his own hands with a flint? It is more than probable that somebody else performed the operation for him than he himself.
"white" flint was essential, seems untenable, because in this sentence a "trautta" plain and simple is used, and not a "terana yale."

There is another consideration: all authors agree that the Aborigines thought the hair clotted with ochre as a great ornament—in fact, that it was the usual, exclusive male adornment. According to Bonwick, a rebellion nearly burst out on Flinders Island, whence the remnant of the Tasmanians had been removed, when orders were once issued forbidding the use of ochre and grease. Now, is it possible that, considering the great value an Aborigine placed on his head ornament, that he would have voluntarily removed it by shaving? The women had the hair of their head closely cropped, but the men never followed this custom, at least there is no record that they ever did it. It is therefore very probable that Milligan's sentence, "He cuts his hair with a flint," is intrinsically wrong, because there is every probability that the pagga-na, the adult Aborigine, never did such a thing either to himself or to his friends.

It further follows that the translation "to shave with a flint" is also not quite correct, because the word "poingha" applies to hair clotted with red ochre, therefore to a male, and not to a female, whose hair was habitually cropped.

We must therefore assume that the words

Poyngha—hair, clotted with red ochre,
Terana—flint,
Yale—white,

really mean to clean (make white) the hair clotted with red ochre with a flint. No doubt that such an operation became necessary now and then, in order to give a fresh application of the valued mixture. There is equally no doubt that a good deal of the hair was involuntarily removed during this probably painful operation, and the Europeans who witnessed it thought this to be the object, and not the removal of the red ochre, and in want of a better word they described it as "shaving with a flint."
RED OCHRE FROM BASKERVILLE, MACQUARIE RIVER.