

The Tattooings of the Qilakitsoq Eskimo Mummies

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The bodies of eight mummies were examined with infrared photography to reveal tattooings. No tattooings were found in the two children nor in a young woman aged 18–20 years. The remaining five women were all tattooed in the face. No such decorations were found elsewhere on the bodies.

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It was presumed that the adult mummies had been tattooed, since historical sources mention tattooing in Greenland as described by Kjellström in his comprehensive work (1979). When the facial skin of the mummies was examined prior to cleaning, no tattoos could be seen. But after cleaning, faint traces of tattoos appeared on the faces. These tattoos must have been distinct when their bearers were alive, but mummification had made the skin very dark and – more important – the translucency of dry skin is slight compared with that of live skin, which has a high moisture content. It was therefore necessary to find a method which could reveal deposits of colour not visible to the naked eye. In the tattooing process, pigment is deposited in the dermis beneath the epidermis.

It was learned that a special photographic technique using infrared light (heat rays) had already been used to reveal the tattoos of a frozen, mummified Eskimo body in Alaska (Smith & Zimmermann 1975). With this method, infrared rays penetrate the skin to a very slight depth. Thus the pigment immediately below the surface of the skin is included in the picture. The exact details of the photographic procedure had not been described earlier; however, in the course of the mummy studies a reliable method has been developed. The technical details are described in the caption of Fig. 1.

As the skin might be damaged by cleaning and conservation processes, all exposed areas of skin were photographed beforehand. Several facial tattoos were thus distinguished wholly or in part. After cleaning, a new set of photographs was made, and facial tattoos were clearly distinguished in five out of the six adult women. The exception was the youngest woman (mummy 7).

No tattoos were found on the bodies or limbs. In particular, none were found at the joints; but it must be

noted that several areas were only examined before cleaning. Other areas were covered by clothing. The backs of hands and wrists, where tattoos might be anticipated, were examined with particular care.

The tattoos consisted of elegantly formed, usually



Figure 1. The set-up used during examination for tattooings with infrared photography. Light source: two Osram Theratarm infrared lamps, 220–230 Volt, 250 Watt. Distance from lamps to the subject: approximately 50 centimetres. Film: Kodak High Speed Infrared black and white negative film. Filter: Kodak Wratten Gelatine Filter No. 87 c. Exposure: 1/15 second, focus 11.

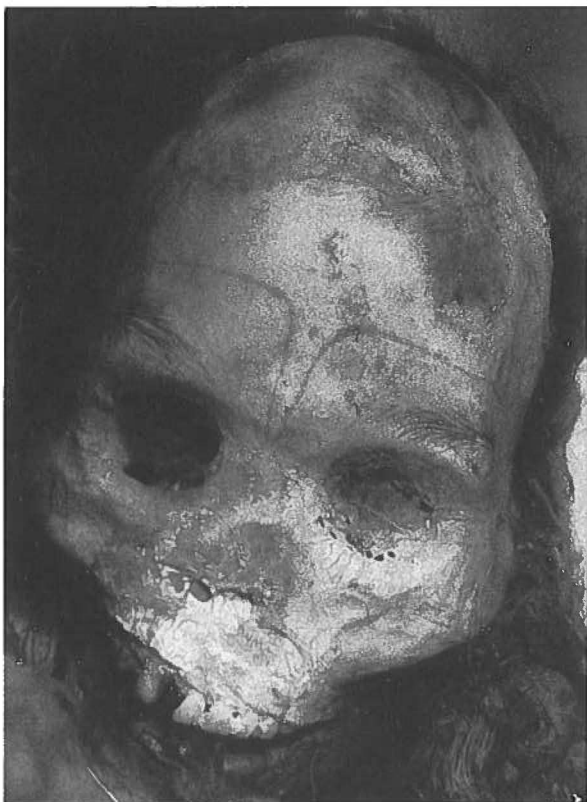


Figure 2. Mummy No. 3. Left: The front tattooing, including the dot in the middle, is clearly visible. Right: In the left side of the face the line by the corner of the eye and a few lines on the chin are seen.



Figure 3. Mummy No. 4. Left: The front figure and the lines of the chin are readily visible. The dot of the midfront is very delicate and more uncertain. The oblique line of the cheek is seen with difficulty on the left side. Right: On the right side view the lateral part of the cheek line is seen with a Y-figure at the end.



Figure 4. Mummy No. 5. The tattooed figures are very strong.



Figure 5. Mummy No. 6. On the right cheek the lateral part of the tattooing is preserved, on the left side the medial part. On the left cheek a dot is seen on each side of the line. On the right side of the chin, there are a few remaining parallel lines.

fully-drawn lines with no irregularities. In one case, however, there were dotted lines. The width and clarity of the lines was consistent in each individual, and there was in all cases symmetry around the centre line of the face. The colour was black or dark blue. Besides these linear figures there were indistinct dots down the forehead of one, possibly two, of the mummies.

All of the tattooed mummies had lines tattooed in their foreheads. One of them had lines at the outer corner of the eyes, and four were tattooed on their cheeks. Three of them had lines tattooed on the chin. Mummy 8 lacked skin here. The tattoos are depicted diagrammatically in Fig. 7.

The tattooings of the front were similar in design, with small variations. The basic feature was a symmetrical figure with a line on both sides from the temple almost parallel to and one inch above the eyebrow. Near the midline the tattoos bend downward to meet in the area just above the nose (*glabella*). The dot found in the midline of the front of at least one of the women was located about one inch above the bottom of the V-figure (No. 3). In the temples the front tattooing had a Y-shaped split in two cases (Nos. 5 and 8). In one person the front figure included an extra detail, a small T-shaped figure on top of the arch of each side (No. 6). The horizontal line by the outer eye corner was only found in one person (No. 3).

The tattooings of the cheek were very similar in the four women, where they were present (Nos. 4, 5, 6 and 8). The line goes from the nose wing obliquely upwards

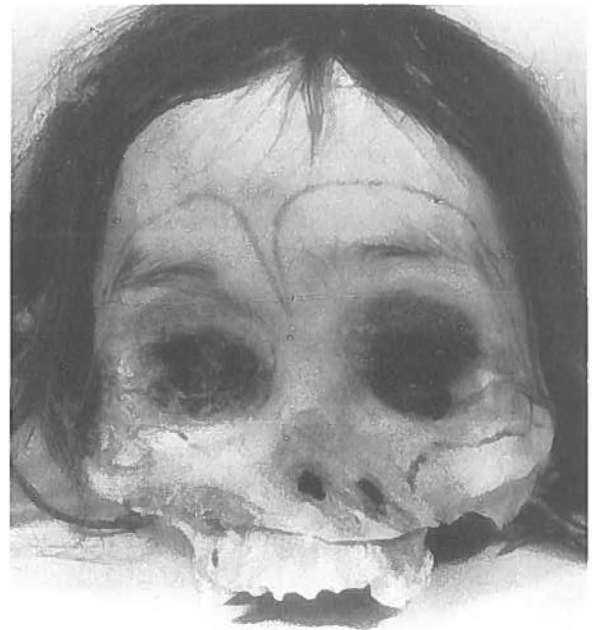
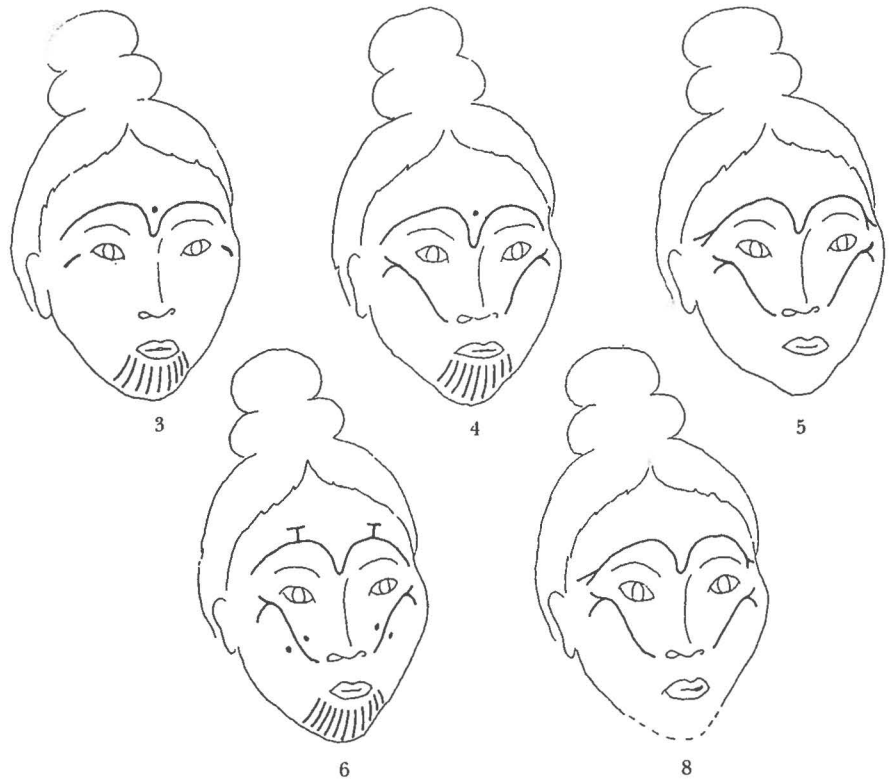


Figure 6. Mummy No. 8. The lack of symmetry in the front figure is most probably due to mechanical action on the skin after the burial.

Figure 7. The tattooings depicted diagrammatically. Drawing by H. C. Gulløv.



towards the outer corner of the eye, where it ends in the same Y-shaped figure as some of the front tattooings. In mummy No. 6 only, there was a small dot over and under the capital line of the cheeks. Vertical lines on the chin were found in three of the five tattooed women (Nos. 3, 4 and 6), but in mummy No. 8 no skin was preserved on the lower jaw. If it can be presupposed that No. 8 had been tattooed on the chin, all the five women had different combinations of tattooings in the face.

Remarks on the tattooings of the individual bodies

No. 3: This woman was the only one with the eye corner tattoo and a distinct frontal dot. She was also the only one without the cheek figures. If she had these too they would have interfered with the horizontal line in the temple near the eye.

No. 4: This woman had tattooings in the front and on the cheeks and chin. The oblique line on the cheeks was

difficult to see on the infrared photographs, because of the wrinkling of the skin (Fig. 3). There are six distinct lines on the right side of the lower jaw. The lines could not be counted in any of the other mummies.

No. 5: The lines were broader and more distinct in the face of this woman than in the others. She had no striation on the chin.

No. 6: The tattooings of this woman were atypical in several respects. The lines were broken, not fully-drawn as in the others. No other of the five women had the T-figure at the top of the front arches or dots on the cheeks.

No. 8: The figures on both the front and the cheeks were similar to these of No. 5. However, as mentioned above, No. 8 had no skin preserved on the chin.

References

- Kjellström, R. 1979. Eskimäiske och ostsiberiska tatueringar. – *By och Bygd* 27: 193–224.
 Smith, G. S. & Zimmermann, M. R. 1975. Tattooing found in a 1600 year old frozen, mummified body from St. Lawrence Island, Alaska. – *American Antiquity* 40: 433–437.