



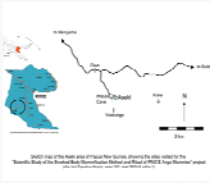
Facial Reconstruction of an Anga Mummy



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Introduction

The Anga are an indigenous group of about 70,000 people who live on the fringe of the Eastern Highlands in the Gulf, Morobe and Eastern Highland provinces of Papua New Guinea. They have been the object of several ethnographic and biological studies. Particularly notable studies include Blackwood's ethnographic work from the 1930s (Blackwood 1978) and Gajdusek's Nobel Prize winning work on Kuru in the 1950s and 1960s (eg. Gajdusek 1962).



The Anga (formerly known as the Kukukuku) were first encountered in 1907, when the Australians took over the administration of the colony of New Guinea (Simpson 1953). This group was characterized as being quite fierce, as having a fairly basic material culture based on lithics, and as having a subsistence economy based on the forest pig and the sweet potato. Perhaps the most striking feature of this group was the fact that they practiced an elaborate mortuary ritual in which they mummified their dead by smoking the bodies over a period of weeks and months. This mummification ritual was practiced until the missionaries stopped it in the 1950s. Thus, this is one of the few places in the world where the dead were mummified within living memory, giving scientists a unique opportunity to shed new light on this practice.

This poster presents some of the results of a recent scientific and ethnographic expedition to seek to better understand Anga mummification. The specific objectives were to gain a more detailed understanding of the Anga mummification process, to undertake a bioarchaeological analysis of the mummies and to engage in an ethnographic study of the modern Anga in order to record what they recall of the practice and how the mummies are viewed in their culture today.

The chief explanation for the practice of mummification offered by the modern Anga was that it was done in order to "preserve the face of the ancestors". The ancestor's mummy, in particular their face, then embodied the traditions of the group and the group's ties to their land.

Unfortunately however, while the smoking process has preserved most of the body, taphonomic changes to the skin covering the skull means that the face of many of the mummies is no longer preserved. The goal of the specific study presented here is to reconstruct the face of one of the most important mummies – Moimango. Moimango was a great leader, a warrior and a shaman, and his mummy still plays an important role in the lives of the modern Anga of the village of Koke.

Moimango and the Koke Mummies

Moimango is one of 23 mummies currently residing in the gallery on Koke Mountain, some 300m above the modern village of Koke in Morobe Province of Papua New Guinea.

These mummies demonstrate a range of states of preservation, from skeletonization with minimal remaining soft tissue, to extremely well preserved mummies. Moimango is 1 of at least 2 individuals in the gallery who are known by name. Four generations of individuals in the village of Koke can trace their ancestry back to Moimango.



The Koke Mountain Mummy Gallery (photo AN)

Moimango died in the early 1950s, shortly after the first missionaries arrived in the area. The missionaries tried to halt this mortuary tradition, but it continued for at least a decade.

The forensic analysis of Moimango was undertaken by AN and RB. Moimango was about 68 years of age at death. Metric analysis is ongoing, but he appears to have been fairly tall for this group. Despite his age he appeared to have been in good overall bony and dental health (although he did experience some periodontal disease). He apparently died upon return from a hunt or battle, complaining of having "short wind" (possibly malaria, anthracosis, emphysema or pneumonia). Changes detected with the endoscope are consistent with emphysematic changes.

Anga mummies were prepared by smoking them in a specially prepared hut. The dehydration of the corpse was assisted by means of the introduction of an anal spigot and by poking the skin and manually expressing fluids. The entire process took several months. Specific details of the process will be presented elsewhere.

Moimango was mummified in a seated position. Deep indentations in his skin demonstrate how the mummy was held in position during the mummification process (his "chair" has been changed several times since he was first placed in the mummy gallery). Once his mummy was suitably smoked, he was dressed in a grass skirt, given "bush rope" leggings. A coating of ochre mud completed the preparation.



Ron Beckett, Moimango and Gemdasu (Moimango's eldest son) (photo AN)

Moimango's Facial Reconstruction - 1

The forensic artist (VL) was presented with scaled frontal and lateral photographs and measurements of Moimango's skull. The chin was obscured by the mummy's arms on the lateral views. The full profile at mention was reconstructed from several photo views and confirmed by measurements.



(photos AN)

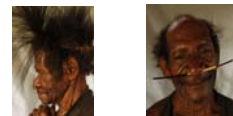
Cadaver tissue dept measurements from a male Papuan (Fischer 1903) were drawn on visible craniofacial landmarks in the lateral view and were projected to the drawing in the frontal view. The nasal profile was depicted using Rynn et al.'s (2009) technique, which is a statistical regression method combined with Gerasimov's (1971) 2 tangent method. The final form of the nose was modified to reflect the deviated septum and the slight droop to the nasal spine (likely the product of a lifetime of wearing a cassuary bone nose ornament). Standard aging factors for a male over 60 years of age include, lowering eyebrows, thinning lips, sagging skin under the chin (Taylor 2001).



(sketch VL)

Moimango's Facial Reconstruction - 2

In order to provide the forensic artist with an overview of the Anga physiognomy and specific details of age creases and wrinkles, a series of portraits were taken of tribal members by photographer Ulla Lohmann. The artist was not given information regarding the relationships of the tribal members to Moimango. One of the subjects had a head dress and another a cassuary nasal ornament of the sort that Moimango was said to have worn.



photos by Ulla Lohmann

The final reconstruction of Moimango is a striking portrait of a great man who led his people during a time of great transition. It is our hope that this reconstruction will allow his ancestors to look once again upon his face, helping to ground them in the traditions of their people.



portrait by VL

background image is the view from the Koke Gallery to Koke Village (photo AN)

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Abstract:

The Anga People of Papua New Guinea are known to have practiced an elaborate mortuary ritual that consisted of smoking the body of their loved ones in a special hut for a period of weeks. The mummified individuals were then placed on cliff faces overlooking their lineage's territory. The practice was halted by missionaries 40 to 50 years ago.

The work reported on here arises from a 2010 expedition to study Anga mummies and to undertake an ethnographic study of the modern Anga people. The main rationale the modern people offer for the practice is that their ancestors wished to look on the faces of their people, so keeping their memory alive. Unfortunately, the ravages of time have led to the deterioration the mummy's faces. The project described here demonstrates the use of forensic techniques to reconstruct the face of one mummy.

The mummy shown here is Moimango, a leader, warrior and shaman, whose descendants still live in the village of Koke. Standard anatomical photos and measurements were taken of Moimango's skull. Tissue thickness depths, available from a 1903 study, and the photos and measurements were used to create lateral and frontal sketches of Moimango's head. The headdress and nose ornament were included as per family memories. Photos were taken of the Koke villagers for additional reference.

This reconstruction will bring Moimango's face alive for his descendants, and represents an important development of the repertoire of techniques available for facial reconstruction.

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All the people of Koke Village.

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Ulla Lohmann – official expedition photographer – www.ullalohmann.com

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