Introduction

The exhibition ‘Origins of the Afro Comb, 6,000 Years of Culture, Politics and Identity’ was on show from 1st July to 3rd November 2013 at the Fitzwilliam Museum and the Museum of Archaeology and Anthropology (MAA), University of Cambridge, UK.

The exhibition consisted of over 200 combs from the late 19th and early 20th century CE from the collections of the MAA. This collection had never been examined from a technological point of view, assessed in terms of its conservation and preservation needs or even properly documented. Before the instigation of this project, there had been no major studies of this cultural phenomenon, and the literature on the subject was sparse. The Afro Comb Project is therefore the first time a study of African combs has ever been executed.

Metal, wood, bone, ivory, horn, bamboo, glass (beads), plant fibre, elephant hair, pigments and dyes have all been found in the construction of these examples. Many of the combs are composite. In addition there are residues and applications consisting of oil, fat, wax and resin. Other signs of use, such as, patination of surface, the wear of teeth and hair have also been documented.

Material Composition

The complex composition of objects complicates the care of such collections. Therefore to enable the collection of the maximum information about material composition, context and condition of objects, a multidisciplinary approach was adopted. Teams of researchers was assembled, including archaeologists, anthropologists, conservators, scientists, material specialists, sociologists, artists and specialists in African culture and tradition. A community of interest was formed whereby community members were also integral to the planning and investigation of the overall project.

The importance of consulting the curator about every aspect of the documentation, care and conservation of the combs could not be overstated.

In addition to published anthropological studies, material such as the MAA Annual Reports was very useful. These provided information about the context of the combs but also the recent history within the museum like old storage conditions.

Visual identification of wood and plant materials was made by archaeobotanist Dr Alan Clapham. Other materials were identified by a combination of visual examination and the use of analytical techniques.

As a university museum, we were able to draw on expertise from across the University of Cambridge. The Department of Zoology assisted with the identification of insect debris (eggs) located on a majority of the combs. These were believed to be from head lice, but were identified as coming from moth (see Fig. 2).

A extensive reference collection of material related to the combs was built up to aid in the material characterisation, here Cambridge University Botanic Garden provided material such as bamboo and palm leaf fibre/stem. Materials were also obtained from a research fellow based at the MAA, Dr. Oihomi I. Pogoson from the University of Ibadan, Nigeria. The collection consists of materials commonly used in West Africa such as woods, shea butter, coconut oil and shoe polish. This collection of materials is very important as at least 50% of the collection of combs originates from different cultures within Nigeria (see Fig. 3). Pogoson was also involved in a committee member of the Afro Comb Project.

The active conservation treatment executed on the collection was limited as it was essential not to remove any evidence of use. Cleaning was only executed where needed, as with a group of combs made of metal composite materials showing corrosion caused by so called metal soaps. These are formed as degradation products from a reaction between the copper alloy and the oil/fruit/wax deposited on the surface of combs. This was the case with comb 21242A (see Fig. 4). The deposits were analysed with XRD. Corrosion deposits were cleaned as far as possible while leaving oil/fruit/wax as its origin might very well be a result of original application and use.

On a beadwork comb, Z 45005C (see Fig. 5) the ‘waxy’, deposits were shown by the use of FTIR to be a mixture of beeswax and microcrystalline wax. Original application is a possibility but so is also application within a museum setting. Through the whole conservation process a cooperation between other conservators was vital in the decision making process.

Material compositions were investigated using a wide range of analytical techniques, including fibre optics reflectance spectroscopy (FORS), X-ray fluorescence spectroscopy (XRF), X-ray diffraction (XRD) and Fourier transform infrared spectroscopy (FT-IR). The characterisation of the materials of the combs has contributed to the study of technology, provenance and history of the use of the combs and has provided information on their state of preservation. This also helped inform decisions on display and future care and storage of this collection of objects.

Conclusions

Museum professionals and conservators have much to gain sharing knowledge and experience. Furthermore, teamwork and collaboration between different specialisms expands the field of knowledge further. Sharing information is the key a profession develops and advances. This extensive project revealed also that people are often very interested and willing to help. Do not be scared to ask! We should be looking for projects to cooperate, expand our knowledge and vision.

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REFERENCES


Additional resources:

The Afro Comb Project, website: http://www.originsoftheafrocomb.co.uk/