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THE GANDHĀRA BATTLE,
TREATMENT OF A PHOTOGRAPHIC ALBUM

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Summary
In 1992, Prof. Van Kooij of the ‘Instituut Kern’ (the Netherlands) rediscovered a huge old album in one of the drawers of his new working place. This album showed around 250 photographic views of archaeological sites with objects in the Gandhāra region. The albumen photographs were made between 1870 and 1885. But the album was in a poor condition; the album pages and photographs showed deformations and nearly half of them, were covered with different coloured mould spots. The conservation studio was contacted for a conservation treatment, keeping in mind that the album or photographs would still be available for public access. After asking around for professional advice and several changes in the conservation proposal, an order was given to make a facsimile album for mounting the photographs in a look-alike album. But … there were still considerations to make; what about pasting the fragile deteriorated photographs, what kind of adhesive and under which conditions could they be used, and so on. Between 2000 and 2002 we had an opportunity for a student intern working on the issue of ‘mounting historical albumen photographs in an existing album’. Nathalie Minten, photographic conservation student, made her final master-study project on this item. At last, all the 250 photographs were removed from the original album pages and mounted in the newly made, look-alike album.

Professor Vogel and the ‘Instituut Kern’
Between 1899 and 1912, professor Vogel, the first known owner of the album, was active in the Gandhāra region, and Ms. Gerda Theuns, the curator of Instituut Kern, assumes during this period he most possibly acquired the album. In 1902, professor Vogel became a member of the Archaeological Survey of India (ASI) and the last years of his staying he was director of the ASI for the entire South-Asia region. In 1914, he returned to the Netherlands where, in 1924, he founded the Instituut Kern and donated his entire collection to the institute; the Gandhāra album was part of his collection. In 1960, Instituut Kern received a university status and the collection of the institute became available for research. In 1995, the collection was moved to a new location with a conditioned area for the most valuable items and photographs.

The Gandhāra region and style (1st-6th A.D.)
Gandhāra is an old name for a region situated in Northwest Pakistan and the border with Afghanistan. Between the 1st and 6th century A.D., Gandhāra was the centre of a flourishing school of sculpture and architecture. The style contains both Indian (Buddhist) and Greco-Roman elements.
The album shows photographic views of archaeological sites and objects found in the Gandhāra region. These photographs were made during archaeological excavations carried out in the Gandhāra region under the authority of the ‘Archaeological Survey of India’ (ASI). The subjects of the photographs could be divided into two groups: one group shows the different objects (statues, reliefs) some in wooden crates, ready for transport; the second group shows the archaeological sites and the environment wherein these objects were found; this is very important information for researchers, even today. How many objects are just known as object, without any information of the archaeological finding place, or only in a ‘restored’ state or condition?

**Origin of the album, photographers, binder**

It was possible to track down the photographers who made the Gandhāra photographs: Caddy, Beglar, Garrick and Cole. Most of the photographs were made by Major Henry Hardy COLE. Seventeen images of this album were used by J. Burgess in his publication: ‘The ancient monuments, temples and sculptures of India, Part 1, 1897.* In Burgess’ notes (page 5) he describes the use of 17 photographic prints made by Major Cole. Between 1880 and 1883, Major Cole was curator, and part of the archaeological team, for the ASI (Archaeological Survey of India).

Ms. Gerda Theuns (curator of Institutuut Kern) found a negative catalogue from 1900 with a list of the photographic negatives of the Indian Antiquities in the collection of the India Museum, Calcutta, with which is incorporated the list of similar negatives in the possession of the India Office, London. These catalogues together give an overview of the photographic records made for the ASI. The list contains 5198 numbers, including all these found in the Gandhāra album. Each negative has a negative number, name of the district, subject description, a letter for the negative box, size of the negative, name of the photographer and an area for remarks. Currently, there are only 2 existing albums known, this album is the most complete one. The second album is located in the British Library, London, but it is less complete (#952-990 and 991-1027). In the catalogue of the British Museum, p.28, note 14: Oriental and India Office collections, 2 albums, title: Indian Antiquities from Indian Museum negatives, the Punjab Photographs 952-990 and 991-1027.

The label on the front covering board of the album indicates the album was local made in Lahore by ‘The People’s Bookbinding Company’.

**Description of the album & photographs**

This oblong ‘Type 2-album’ (according to Horton’s classification of albums, joint published by the Book and Paper Group / PMG) with soft, green coloured leaves, is sewn on two leather supports. The flap acts as stub and is fold in the gutter edge of the leaf. The album size is 19,4” x 15,5” x 6,6”, note the thickness of the album. The album is built up with 21 sections of 9 leaves each, except the first and the last section, which were partially used as end-papers.
Ill. 1. Structure of the album and a cross-section of a section.

All photographs in the album are albumen prints and most of them were gold-toned. The photographs have 4 different sizes and were pasted down on one side of the album leaves; the larger ones on a single page, smaller ones with 2, 3 or 4 on a single page. Each photograph has a written number in pencil on the back, starting at number 959 till number 1201.

**Condition**
The album was in poor condition, the spine was loose from the front cover board, and the album leaves and albumen photographs showed cockling. The half-leather cover was in such poor condition, each manipulation would damage the album; the thickness of the album and the way of binding wouldn’t make things better. In the past, the album suffered from water damage, resulting in deformation of the album leaves and photographs, and also caused extensive mould growth in several colours, especially in the second half of the album.

On many pages, the minor margins around the photographs caused handling related damage. Most photographs also showed normal deterioration of albumen prints, yellowing, some foxing, bleaching and mirroring. This resulted in a non-access policy for this recently rediscovered treasure.

**Conservation proposal & treatment**
In April 1994, the Nationaal Fotorestauratie Atelier (NFrA) was contacted for advice on the conservation of the Gandhâra album. External experts were consulted which resulted in the writing of a conservation proposal. The album returned to the owner, without any treatment.

They started a funding campaign and after finding the financial support, in 1997 the album returned to the studio. The conservation proposal was modified and the photograph conservator decided to do some test removals (4) of photographs on different locations in the album. It became clear it would be impossible to save the album pages without damaging the photographs.

We finally decided to further disjoin the album structure, remove all photographs from the album leaves, and mount them in a new, similar made album. Before removing the photographs, each album page was documented with a photo and a form about the position, direction and general
condition of the albumen prints. Some pages in the original album were left empty, and had to stay empty, as it was noticed in the catalogues. Except one photograph that was absent. Later, during the removing of the photographs from the album leaves, we ‘discovered’ the missing photograph which was pasted down under another, larger one.

The albumen photographs were removed by using wheat starch and methyl cellulose poultices for a slow humidification on the back side. This took that time, nearly one day per print, so we decided to contact the previous photograph conservator, Lyzanne Gann, for advice. During 1998-99, Lyzanne made the test removals of 4 photographs. She advised the use of a humidification chamber or a Gore-tex application for more adequate working. In addition we applied local humidification on the back of the paper leaves with an ethanol – water mixture (30/70). The removed photographs were dried under weight, and stored in conservation folders.

But, there were still other decisions to make. The new album should be available for research and how should we mount the fragile albumen photographs in the new album without taking risks damaging the photographs during consulting?

Between 2000 and 2002 we had the opportunity of a student intern working in the studio, Nathalie Minten, photograph conservation student in Antwerp (Belgium) who made her final study project in the area of mounting albumen photographs in an existing album. At the end of this article you can find her article on the research of adhesives.

Digitisation
Meanwhile, digitisation became more into practice and changed our decision-making on the point of public access. Making the images available in a digital version would strongly drop the need for direct access of the album and photographs. During the research project of Nathalie Minten it was also decided that all photographs should be digitised. The digitization was done in our conservation studio, so we could keep the fragile photographs and control all handling, ensuring minimal risks. All photographs were digitised in high resolution.

Since the decision was made that the original photographs were not to be manipulated regularly for viewing, other mounting techniques became usable: the use of photo-mounting-corners, mounting only the corners of the prints, the use of ‘hinges’ etc.

Mounting the original photographs in the new album
The new album, a Type 3 album (Horton) with hard pages and cloth hinges, was made by a bookbinder; we supplied the Mirage Vellum Paper 310 g/m². The album leaves with Tyvek hinges were sewn on strips. The album was finished in a similar way the original was made. We were looking for a less visually disturbing mounting method and the use of as little moisture as possible. The use of polyester or paper folded mounting corners would be very visible and disturbing. The mounting techniques used in the paper conservation studios would fit our needs. We tried out a few kinds of Japanese paper and tissues in combination with a wheat starch glue (10%). The colour and texture of the paper were leading parameters in choosing the most fitting, read the less visible, paper. Once we found the right paper (20 g/m²) we made a bulk of strips on the desired size, (3,5 x 1 cm) and split them over length by using a wet brush.

Now it was just a question of optimising the work flow to finish the pasting job. First, the paper strips were pasted on the back of the albumen photograph, 2 paper strips on each corner, overlapping in the corner, and dried. Once dry, the mounted strips were trimmed on a length of approx 4 mm. The albumen prints were positioned on the new album pages and the
extended part of the paper strips were pasted down using wheat starch glue, and dried under weight. Using this method, there was no visible deformation of the paper support or the albumen photographs. After finishing all of the prints, the album was returned to the owner. One year later, during an ICOM-meeting in the Netherlands, the conservation studio was opened for a select visit and one of the items we presented was the new Gandhāra album. All the album pages and albumen photographs were still flat.

overlapping paper strips on photograph corner