Title: The conservation of Paul Hermann's 17th century Sri Lankan Drawings: A unique volume with many challenges.

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ABSTRACT

Introduction

The focus of this paper is on the conservation work carried out on Paul Hermann's Sri Lankan Drawings. We will refer to the collection's fifth volume and the decision to disbind it and re-bind it in its 'original' cover. The collection itself comprises four bound volumes containing pressed plants and a single volume of drawings, the latter apparently executed by several different unnamed Sri Lankan artists. The volumes are not bound in their original bindings. What is thought to be their original covers are kept separately by the Museum. The condition of the fifth volume required immediate attention and intervention. Before rebinding, the volume was also digitized to enable future use. Why was this intervention necessary? How is it justified and would thus some of the volume's history be 'erased'? This paper will attempt to give answers to those questions. It will also discuss some of the methods used such as: use of gels to release attached folios and putting vellum's sensitivity to environmental conditions into service.

Historical background

Paul Hermann (1646–1695), a German physician and botanist, made one of the earliest scientific collections of pressed, dried plant specimens and drawings from Sri Lanka (then Ceylon), where he was Medical Officer to the Dutch East India Company between 1672 and 1677. Collections of Hermann's specimens can be found in a number of different places (including Paris, Leiden, Oxford and Erfurt) but the most significant of these, on account of its connection with Carl Linnaeus (the Swede who introduced the modern binomial system of scientific naming), is at the Natural History Museum in London (NHM). Following Hermann's death, the collection was in the possession of the Danish Apothecary-Royal, August Günther, who loaned the five volumes to Linnaeus, who set about describing and identifying the specimens and drawings of the many new plants they contained, and the result was his Flora Zeylanica (1747). When, in 1753, Linnaeus introduced binomial names in his Species Plantarum, most of the Sri Lankan species he described were based on Hermann's specimens and drawings, which therefore serve as important 'type specimens' (permanent reference points for scientific names, allowing the species to which a name is applied to be clear).

Description of condition

The 5 volumes have been re- bound as spring-back structures in half-leather, sewn on five tapes. Decorating features included the title in gold tooling on the spine and marbled endpapers. The cover was, overall, in stable condition. In the library there were also previous parchment, over stiff board, covers. There was planar distortion of the vellum but the boards were still flat. Some covers have broken joints but the cover of the 5th volume was intact. It still had remains of leather foredge ties and the title has been written in manuscript ink at the head and tail of the spine. The text-block of the 5th volume was constructed of 51 quires. The majority was guarded with a 20th C machine made paper, which was much stiffer than the text-block paper and adhered with animal glue. The guards held together bifolia, which had been separated. Some loose sheets were glued directly to the adjacent page, probably to minimize the swell the guards were causing. There was an indication of water damage that caused discolouration. In some folios a distinct stains were noted identified to be oxidized lead. The edges and the foredge, in particular, were extremely fragile and susceptible to further tears. The paper of the 5th volume appeared to be in a more deteriorated condition than the paper of the other 4 volumes. The guards, in this volume, caused creases and weak areas to a paper that was already in poor condition. One of a spring-back binding's main features is the high "throw up". This feature in combination with the paper guards and the original paper's poor condition, was leading to tears, losses and generally weak areas next to the guards. The drawings were susceptible to severe damage every time the volume was being handled. As a result, the item was considered to be too fragile for digitization.

Diagnosis/Treatment

For the reasons mentioned above, after collation the 5th volume was dis-bound. The sections were repaired. Guards, more sympathetic to the paper were used. The sections re-sewn. The original vellum cover, although in relatively good condition, had shrunk over the years. The dimensions of the cover were manipulated by using the humidity present in the environment of the conservation workshop. Gentle stretching/moulding of the vellum cover to the text-block size was achieved by using felt roll, and surgical bandages. The diameter of the rolled felt was increased gradually over a period of months. The removal of the existing guards was challenging as they were stuck on the paper and occasionally part of the drawing was obscured. As a result of the water damage the paper covered by the guards was very soft. Tests using, poultice, agarose gels and emulsions were necessary to determine which was best to use to activate the adhesive and release the guards. Some adhesive staining remained. Silica solvents were used to avoid the creation of 'tide-lines'.

Consequences of treatment

The removal of the stiff guards has released drawings that were previously obscured. The binding of the volume in its previous and most likely, original, parchment binding has enabled a better opening and handling of the item.

Digitization of the drawings was also achieved whilst the volume was still in its dis-bound state.

Conclusion

The fragile condition of the drawings, caused to an extent by the previous binding, required immediate attention. The rebinding of the volume in its original cover has provided adequate protection of the textblock and has enabled handling. It has thus allowed the Museum to display the item and make it available to the public in digital format. The previous intervention has been recorded and the covers were kept. The other four volumes containing the plants are still bound as the spring-back binding. The dried specimens, unlike the drawings, are better protected between rigid heavy boards while dispending would have endangered the physical stability of the specimen.

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