The estate of Hermann Ebbinghaus

The psychologist Hermann Ebbinghaus liked things to be neat and tidy: Since he knew, thanks to his famous forgetting curve, how much a person forgets in a certain amount of time, he very conscientiously organized his excerpts, notes, studies, offprints, newspaper articles and technical literature in dozens of upright collectors (standing files), which he neatly labeled.

Anyone who wants to know what is hidden in them can take a look at the Ebbinghaus Finder: These 30 stand-up collectors tell with their design from the beginning of the 20th century and are available in three different design forms/types.

They are now over a hundred years old and belong to one of the most important bequests of the Center for the History of Psychology at the University of Würzburg. This was motivation enough for the Center's conservators, Esther Gildemann and Franziska Fierdag, to take a closer look at Ebbinghaus's upright collectors.



Fig. 1: Part of the convolute before restoration/preservation



Fig. 2: Back view oft he upright collector 23

Conservation and restoration

What is actually the difference between restoration and conservation? Conservation is primarily about securing and maintaining the condition an object is in at the moment. There are only very small interventions in the substance of the object, whereas in restoration the goal is to repair, perhaps reconstruct, past damage, usually associated with larger interventions.

Documentation of the previous state

Before the upright collectors are treated conservationally and restoratively, the preliminary condition was documented photographically and in writing.

Implementation of the conservation and restoration measures

After the documentation, the two experts divided the Ebbinghaus classification system into three damage categories:

no restoration necessary, minimal restoration necessary (e.g. retouching or minor gluing) or - the worst and at the same time probably most demanding category - *restoration with higher effort necessary* (e.g. puttings or additions).

Category $1 \rightarrow 17$ upright collectors Category $2 \rightarrow 7$ upright collectors

Category 3 \rightarrow 6 upright collectors

As a first conservation step, the contents of the upright collector had to be partially stabilized. The contents, consisting of many booklets and papers, had collapsed in some collectors due to lack of support. By inserting museum cardboard, the contents are now supported and further collapse and thus damage to the paper due to deformation is prevented.





Fig. 3: upright collector Nr. 2 (previous state)

Fig. 4: upright collector Nr. 2 (post state)

Afterwards, all dust deposits were removed by so-called dry cleaning using brushes and latex cleaning sponges made of vulcanized natural rubber.

Some of the upright collectors have a folding mechanism to protect literature and paper from dust. Due to years of use and fatigue of the material, some of this connection has broken and was only improperly secured by previous repair measures.

Using various solvents, the two restorers were able to remove these old adhesive strips again, as well as the associated adhesive residues, without damaging the beautiful marbled binding paper. It was also possible to remove transparent repair tapes that had been applied to the spines of the stand-up binders and numbered in red pencil when the Ebbinghaus estate was catalogued.

The removal of adhesive tapes that are not suitable for archival use is an important conservation measure, as the adhesive decomposes through the aging process and can lead to irreversible damage to the object.

After the implementation of the conservation measures, the upright collectors of category 2 and 3 have now been restored.

Thus, the hinged joints on all category 3 upright collectors now had to be restored. After the removal of the repair tape and due to the brittleness of the original textile tape, the flaps were partially or completely detached from the upright collectors.

In order to be able to open and close the book collectors properly again, new book cover fabric was used. which was glued to the book collectors with hide glue.





Fig. 5: upright collector Nr. 8 during gluing

Fig. 6: upright collector 18 during restoration

A major restoration measure had to be carried out on the upright collector No. 23. Here, only one side of the original flap was still present. This was supplemented with archival cardboard to form a complete back flap, in order to restore a closed overall appearance to the upright file.



Fig. 7: upright collector Nr. 23 (previous state)



Fig. 8: upright collector Nr. 23 with supplemented back flap (post state)

Some upright collectors have a copper alloy hook for opening and closing the back flaps. Over the years, some hooks and eyelets have been lost. With a saw and file work, Esther Gildemann supplemented the missing parts from brass.





Fig. 9: upright collector with missing locking hook

Fig. 10: upright collector with supplemented hooks

Particularly time-consuming was the putty and retouching of missing parts of the binding paper. The defects were brought to the same height level as the surrounding area by means of putty. Only then could the retouching take place.

Retouching is understood to mean the color tinting of the imperfections so that a cohesive overall impression is created. The retouching was carried out by Franziska Fierdag with many brush strokes and various watercolors.





Fig. 11: Retouching after the putty of a defect

Fig. 12: finished retouching of a defect

Which materials were used?

If you look at the after picture, you might think you could pull out the upright collector on Ebbinghaus' shelf around 1900 to leaf through a few offprints.

A lot of materials were needed to achieve this effect: brushes, sponges, book cover fabric, handmade paper, hide and sturgeon glue, isopropanol, watercolors, white earth pigment, and museum board.

A look into the future

The first step towards ensuring that the upright collectors can still be admired in a hundred years' time has already been taken. Now all that remains is to prevent damage to the collectors. To this end, the restorers constructed shoes made of black museum cardboard with a pull loop, in order to protect the bases of the upright collectors, which are covered with binding paper, from mechanical use. Since the removed numbering was not to be reattached to the spines of the upright collectors, it was now placed on the pull loops of the cardboard shoes.

Furthermore, attention is paid to optimal climatic conditions, UV-protected storage and correct handling - keyword in restoration circles: preventive conservation. Ebbinghaus would certainly be delighted.



Fig. 13: upright collector No. 4 (previous state)



Fig. 14: upright collector No. 4 (previous state)



Fig. 15: upright collector No. 4 after gluing



Fig. 16: upright collector No. 4 during putty and retouching



Fig. 17: upright collector No. 4 after retouching



Fig. 18: upright collector (post state)