

“The Transparent Figures” – History, Materials, Production and Active Conservation

Maria Loerzel

HfBK Dresden and Deutsches Hygiene-Museum Dresden

Loerzel@hfbk-dresden.de

Between 1925 and 2000 about 130 “Transparent Figures” were produced by the workshops of the German Hygiene-Museum in Dresden. With a transparent skin and illuminated organs made from cellulose acetate, a skeleton, and blood vessels, the models displayed a life-sized image of men, women and animals. They were sold and exhibited all over the world in different contexts. Their main intend, however, was to help educate the public in health and hygiene issues.

They were created in the Weimar Republic and were produced during the Third Reich as well as in the socialist GDR and later in the reunited Germany. The different socio-economic conditions and political expectations during those periods influenced not only the German Hygiene-Museum, but also the use and production of the “Transparent Figures”.

Quite a wide range of materials and parts were used to make the “Transparent Figures”, e. g. cellulose acetate and later cellulose acetate butyrate; PVC plates and cables; aluminum; copper wire; diverse kinds of paint; light bulbs; and other materials for pedestals and accessories. This variety of materials lead to a complex production process and now causes difficulties for the conservation. The aging processes are influenced by other materials can lead to further consequential damages on other parts. A high number of different conditions and damages have been found. Those had to be handled in an objective and clear manner. The methods of risk assessment have been customized to fit the need of evaluating a catalogue of damages.

For the research project “The Transparent Figures” several models of various times and designs were examined. Due to their age and how they were stored, they are in different stages of aging. Noticeably, a lot of damages and changes in the materials are linked to the aging process of cellulose acetate. That includes the migration of plasticizer out of the plastic onto other parts, corrosion of metals, deformations and breakages.

All those problems in the conservation of the “Transparent Figures” are aggravated through the construction: a mostly closed environment with very limited access to the inside. To take action – not only through passive measures but active intervention – we have to find suitable and applicable methods. The costs and possibilities of those must be evaluated with ethic guidelines and an assessment of the different levels of importance and value.

Since 2016 an interdisciplinary team is researching the Transparent Figures at the German Hygiene-Museum Dresden regarding their history, production, material composition, condition and age process to find suitable ways to actively and passively conserve them. The project is funded by the Volkswagen Foundation.

Keywords: cellulose acetate; cellulose acetate butyrate; production; educational model; material history; age process; condition; damages; conservation ethics; active conservation; restoration; Deutsches Hygiene-Museum Dresden; Transparent Figures; Glass Figures; Gläserne Figuren; Transparent Man; Transparent Woman;