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PIONEERS OF THE DAGUERRETYPE IN AUSTRIA: OBSERVATIONS ON THE TECHNOLOGY AND CONSERVATION ISSUES

Andreas Gruber and Taiyoung Ha

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Abstract

From September 22 to November 19 the Albertina Museum in Vienna, Austria, is exhibiting some of the earliest and finest examples of Austrian daguerreotypes. The Albertina Museum has one of the biggest and most important holdings of early Austrian photography, respective daguerreotypes, by acquiring the photographic collection of the Graphische Lehr- und Versuchsanstalt as a permanent loan, including the photography collection of the Austrian Photographic Society. This collection, together with extraordinary new acquisitions in recent years and loans from other museums, make it possible to give an overview of the first years of photography in Austria.

The technique of the daguerreotype was announced to the public in 1839 in Paris and received vast international attention. The Austrian chemist and physicist *Andreas von Ettingshausen* was on location when this memorable announcement was made. He also received private lessons from the inventor of the process, *Louis Jacques Mandé Daguerre*. It was Ettingshausen, who used and introduced this new media in Austria.

The Austrian scientific community took up the new invention with enthusiasm. Some individuals were able to make important contributions to the improvement of the Daguerreotype process. The mathematician *Josef Petzval* calculated a new lens in 1840, which was built by the optician *Peter Friedrich Voigtländer*. This lens, known as the Petzval portrait lens, was sixteen times more-light sensitive than the French Chevalier lens, thus marking the starting point for portraiture. *Franz Kratochwila* found in September 1840 that a sensitising solution containing iodine, bromine and chlorine would increase the light sensitivity of the plates. The Natterer brothers were able to take pictures in less than a second in 1841 with a similar sensitising solution. This technique, of increased light sensitivity together with the use of the Petzval lens was referred to in many German publications on daguerreotypes at that time as the “Viennese method”.

In the collection of the Graphische Lehr- und Versuchsanstalt most of those exciting, early pieces of photography in Austria have survived: For example, a series of test shots taken with an experimental cardboard camera and the Petzval lens. Many of them were taken by *Anton Martin*, who is also known as the author of one of the earliest textbooks on photography in the German language. Beside images that have a strong experimental and scientific character, the exhibition also displays examples of outstanding image quality from both professional and amateur photographers.

From a photographic-conservation point of view the exhibition pieces are of interest. In the course of preparing Albertina's first photo exhibition in 2003 ("The Eye and the Camera"), it became evident that most of the daguerreotypes were varnished. A survey of the collection and scientific examination were undertaken to identify both the materials used in previous treatments, and the current condition of photographs. Upon examination of the daguerreotype collection it became clear that they were coated with Zapon lacquer, a cellulose nitrate coating, about four decades ago. This was the first time observation of that rather unusual conservation technique. However, the study of source writings on daguerreotype restoration in the 20th century in German language revealed that the application of cellulose nitrate coatings was often a recommended protective procedure undertaken after a chemical treatment. Since the Zapon lacquer coatings greatly marred the images visually, by weakening their contrast and giving them a yellow/brown stain, it was decided to remove the coatings. The removal could be successfully performed and revealed that the plates underneath were well protected from the environment.

The history of Zapon lacquer, as well as the use as a protective coating on daguerreotypes is described in full detail in "Coatings on Photographs" (Andreas Gruber and Taiyoung Ha: *The History of Zapon Lacquer Coatings and its Use as a Protective Coating on Daguerreotypes in the Albertina Photo Collection*. AIC/PMG Coatings on Photographs edited by McCabe. 2005). In addition, an exhibition catalog written by the exhibition curators, Monika Faber and Maren Gröning, is available in the German language (Monika Faber and Maren Gröning "Inkunabeln einer neuen Zeit. Pioniere der Daguerreotypie in Österreich". 2006).

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