

Examination and Analysis of a Mesoamerican Deerskin Map

ABSTRACT

Princeton University Library's very rare mid-16th century Aztec deerskin map is a distinct and dramatic reflection of the Early Colonial Period of Mesoamerica, when the Spanish conquest of the region forever altered the culture. Aztec and Spanish influences compose the map's imagery with glyphs and glosses, and depict a traumatic change in an indigenous way of life.

A thorough examination and analysis of the ca. 1550 map was conducted to help ascertain its authenticity. Pigments, dyes, and the deerskin support were analyzed through various microscopic, spectrographic, and observational means, such as Fourier-transform infrared spectroscopy, ultraviolet-visible spectroscopy, light microscopy, and ultraviolet-induced visible fluorescence to help determine the authenticity of the map and its constituents.

The analysis strongly suggested that the support was indeed deerskin by microscopically comparing its surface characteristics with those of a known deerskin sample. Spectroscopy and microscopy results indicated the presence of dyes and pigments including cochineal, bone black, and Maya blue, a dye-pigment complex of indigo and palygorskite that has a well-documented association with Aztec culture. Two substances were found that had very scant documentation associating them with the Aztec culture. These were gamboge, a dark mustard-yellow resin usually associated with Southeast Asia, and Maya Green, which appeared spectroscopically to be a version of Maya Blue. The object appeared to be authentic after extensive research and evaluation of the analysis.

TED STANLEY

Special Collections Paper Conservator
Princeton University Library
Princeton, NJ
tedstan@princeton.edu