## LINKING PORTRAITS AND PROCESS: AN EXPLORATION OF ABRAHAM LINCOLN PHOTOGRAPHS

	Тілтүре	SALT PRINT	ALBUMEN SILVER PRINT		PLATINUM PRINT	Crayon Enlargement
DATE OF USE	1853-1930	1840-1860	1860-1895		1880-1980	1860's-1920
	This tintype is the earliest use of a photograph on a campaign badge. It is just slightly larger than a Lincoln penny.	Abraham Lincoln posed for this rare, beardless, paper photograph in 1859 soon after losing the Senate race to Stephan Douglas.	This superb albumen portrait reveals intimate details of Lincoln—the texture of his hair, the sheen of his vest, and the distinct qualities of his face.	Mourning pins were worn by many after Lincoln's death as a tribute to the President. This gem-size albumen portrait in a brass preserver is attached to a black crepe ribbon.	The depth of the dark background in this portrait moves Lincoln forward and imbues an intimacy and importance to the portrait. The striking luminosity of this image gives the perception that you can reach out and touch Lincoln.	Crayon enlargements approach life-size and were meant to appear as a drawing or painting. They are frequently found in family collections, often on a convex mount with a decorative frame and convex glass.
Photographic Process	<ul> <li>Tintypes are based on the light sensitivity of silver halides (the light sensitive material) suspended in a collodion emulsion (cellulose nitrate in ether and alcohol) on a dark, lacquered iron (not tin) support.</li> <li>One-of-a-kind images; made directly in the camera</li> <li>Relatively inexpensive</li> </ul>	<ul> <li>•The paper was first immersed in salt water and then floated on silver nitrate. The negative (usually glass) was placed in contact with the sensitized paper and exposed to sunlight.</li> <li>•The negative acted as a mask over the photosensitive paper and the image was printed out solely by the action of light without the use of a chemical developer. Exposure to light turned the colorless silver chloride to dark metallic silver particles.</li> <li>•The earliest process to create a photographic print on paper.</li> </ul>	<ul> <li>•Instead of the silver particles residing directly on the paper surface, the silver in albumen photographs resides in a transparent emulsion layer of albumen (egg white) which suspends the silver above the paper surface and surrounds and protects the silver particles.</li> <li>•Good-quality, thin paper was floated on the surface of a mixture of raw egg white and a salt, such as sodium chloride, followed by floating on silver nitrate. The sensitized paper was printed-out in the sun to form the image in the same manner as salt prints.</li> <li>•Dominant photographic print process of the 19th century</li> <li>•Because of the thin paper used, albumen prints were almost always mounted on a secondary support. Some of these supports have specific format names, like carte-devisite, cabinet card, and imperial.</li> </ul>		<ul> <li>Good quality paper was brushed with an iron compound, oxalic acid, and potassium tetrachloroplatinate (III) – the source of platinum.</li> <li>The paper was contact printed with a negative under a strong light, preferably sunlight, and the image formed within the upper fibers of the paper.</li> </ul>	<ul> <li>•A type of enlargement made from a weak photographic image on a paper support that provided a base for extensive handworking with artist media, like charcoal, pastels, watercolors, and Conte crayon, to create a painterly effect.</li> <li>•The paper support, which had enough tooth to accept artist media, was mounted to a secondary paperboard support for rigidity.</li> </ul>
Characteristics	•Collodion emulsion •Meant to be directly handled •Often loose or only in simple housing •Came in a variety of sizes	<ul> <li>No emulsion layer</li> <li>Matte; the surface qualities of the paper are visible</li> <li>Highly susceptible to deterioration due to small size of the silver particles and lack of a protective emulsion.</li> </ul>	<ul> <li>Albumen emulsion layer</li> <li>Appears semi-glossy</li> <li>The small size of the silver particles and the toning of the albumen photographs with gold created the characteristic purple-brown image color.</li> </ul>	<ul> <li>Albumen emulsion layer</li> <li>Appears semi-glossy</li> <li>Highlights are the first to be lost because the small amount of silver in highlights is readily attacked.</li> </ul>	<ul> <li>No emulsion layer</li> <li>Matte; the surface qualities of the paper are visible</li> <li>Superb image stability</li> </ul>	•This portrait has been extensively hand worked with charcoal and graphite. The white shirt and highlights on the face are thickly applied gouache (opaque watercolor).
DETERIORATION	<ul> <li>The metal support (lacquered iron) of the tintype was easily damaged—dents, scratches and rust are common.</li> <li>This tintype shows some scratches through to the dark laquered iron support but still beautifully captures a young Abraham Lincoln.</li> </ul>	<ul> <li>Salt prints are readily damaged by pollutants (airborne and internal), high humidity and light.</li> <li>Salt prints typically show:         <ul> <li>Fading</li> <li>Loss of highlights</li> <li>Shift to yellow-brown</li> </ul> </li> </ul>	•Albumen photographs in <b>good condition</b> retain the purple-brown image color and are quite beautiful images.	<ul> <li>Albumen photographs can be readily damaged from atmospheric pollutants, light exposure, heat, and humidity</li> <li>Albumen photographs in poor condition show:         <ul> <li>Fading</li> <li>Loss of highlights</li> <li>Yellowing</li> <li>Cracking of the emulsion</li> </ul> </li> </ul>	<ul> <li>Richness, exquisite detail, and a velvety black color</li> <li>No fading or discoloration</li> <li>Platinum is one of the noble metals which are very stable in their metallic form and this characteristic carried over into the use of platinum in photography.</li> <li>The long tonal range of platinum, with many values of black to white, adds a depth not duplicated in other photographic processes.</li> </ul>	<ul> <li>The artist media aged well over time in contrast to the paper support.</li> <li>Paperboard mounts often were composed of unrefined wood pulp making these portraits extremely brittle and highly susceptive to damage.</li> <li>The poor-quality paperboard mount of our Lincoln portrait contributed to the darkening of the paper support which was accelerated by light exposure.</li> </ul>
Stabilization	The campaign badge is housed in a <b>custom</b> archival box to protect it during use.	This print was treated to reduce surface dirt and stabilize edge tears. A supportive, archival enclosure and storage in a stable environment will keep this portrait from deteriorating further.	This photograph was treated to reduce old adhesive residues and surface dirt. Storage in a polyester sleeve will allow it to be safely handled and viewed.	The mourning pin is housed in a <b>custom</b> archival box to protect it during use.	An <b>archival polyester sleeve</b> will protect the rich surface of the platinum print.	This photograph was treated to reduce surface dirt. Its original decorative mat was treated to reduce acidity and the photograph was surrounded in the mat with archival materials. The historic frame was reused.