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Inherent Vice

Inherent Vice is "the quality of a material or an object to self-destruct or to be unusually difficult to maintain." Examples include nitrocellulose films and wood pulps. *Conservation Resources for Art and Antiques*, Washington Conservation Guild, 2001

Inherent Vice occurs when, for example,

- two materials, used in combination, react to each other

Leather and metal are two materials often used in combination that will react to each other and over time cause corrosion on the metal. This was found to be a problem with the Museum's mailbag collection. A year-long project was performed by the Museum's Preservation Office to alleviate the problem in that collection.

- two materials, used in combination, are mixed in improper quantities or ratios

Improperly combined mixtures of pigment and binding media can result in paint that flakes, peels or changes color.

- the material has a high acidic content

Some paper is highly acidic or turns acidic through exposure to adverse environmental conditions and rapidly deteriorates. This deterioration will cause the paper to turn yellow or brown and become brittle. With this break down of the cellulose fibers, the paper literally falls apart.

The incompatibility of combinations of different materials, such as wood and metal, can create a challenge for the care and preservation of the piece. Wood inherently prefers a relatively humid environment while the metal components require a low humidity. Though it may seem as if you are doomed to watch these types of pieces self-destruct before your eyes, there are ways to slow this process down.

Let's look at philatelic albums as a sample group to see what we can do to control inherent vice.

PHILATELIC MATERIAL AND INHERENT VICE

When considering the best presentation and storage conditions for paper artifacts (like stamps) and photographs, I advise against applying any type of adhesive to collection pieces. The adhesive often turns brown over time and can "bleed" through to the front surface. It can also lose its adhesive quality, releasing the piece it was meant to secure. Paper and adhesive also react differently to environmental changes causing surface distortions to the paper.

So how is it that stamps manage to maintain their pristine appearance for so many years? We have the U.S. Postal Service to thank for that. Their scientists have ensured that the highest quality paper and adhesives are used in a combination designed to last.

So then why do you need to be concerned with the conditions in which you store or display your stamp material? Each year I receive a number of desperate calls from collectors who have a collection of stamp panes that were stored in the basement or near water pipes. Stamps are made to adhere to a surface once moistened—that surface, in the above cases, were the panes themselves. It is their *inherent vice* as well as their purpose.

How can we address this inherent vice? Never store your collections in areas of high humidity—not on the floor of a basement (avoid basements if at all possible) and not beneath water pipes. Even self-adhesive stamps are damaged over time by exposure to excessive moisture.

Collections of philatelic materials are obviously not just stored in boxes. Most often these collections are displayed in albums in combination with other materials—especially other papers. The album page should be considered a part of the collection and its quality should be carefully selected.

The Museum has numerous collections in albums. Those that were mounted on pages of poor quality paper, especially those containing covers, have experienced the effects of acid burn. This is the yellowing/browning of the surface caused by contact with a page whose molecule structure is slowly becoming increasingly acidic. This staining from acid burn is essentially irreversible. To counteract this, we replace deteriorating pages and remount objects on archival pages. However, when the original pages also contain valuable handwritten information by the original collectors, we insert buffered, interweaving sheets.

Purchase high-quality archival paper—a paper free of high levels of wood pulp and buffered to a pH of 8.5—for your albums. You will ensure that the inherent vice of paper (to react to the naturally acidic environment we live in) will be arrested. Also consider using a slipcase to protect the album from dust, light and exposure to changes in the environment.

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NATIONAL PARK SERVICE: CONSERVE 'O GRAM

How to Care for Bound Archival Materials

Or contact the National Park Service, Curatorial Services Division, Harpers Ferry, WV 25425; phone: (304) 535-6410

