from the ARCHIVES



hile becoming acquainted with the collections of the C. Elizabeth Boyd '33 Archives, I came across two shoebox-size, tan containers that had "A-V Reel-to-Reel" written on the front. What was different about these boxes was their smell. As I opened the boxes and removed film canister lids, the unmistakable smell of vinegar became overpowering. Even with proper conditions and storage, all materials within an archive are subject to decay. Newspaper pages yellow, leather-bound books rot and acetate film suffers from vinegar syndrome.

Introduced in the early 20th century, acetate film was promoted as a safe replacement for nitrate film, which was prevalent at the time. Nitrate film is highly unstable and dangerously flammable. In contrast, acetate film is considered safe for home use.

While more stable, acetate film will break down because of its chemical makeup, and vinegar syndrome is the result of that deterioration. The central symptom of vinegar syndrome is the release of acetic acid, which causes the signature vinegar odor. The deterioration process is autocatalytic, which means that it cannot be stopped or reversed because it feeds off itself and accelerates over time. The more advanced the deterioration, the more problems may emerge. The film may become brittle and crack, twist or even shrink, and color film may fade. Perhaps worst of all, vinegar syndrome is contagious. If one film in a box is contaminated, it will spread to the surrounding films.

If film deteriorates too far, the content is gone for good. When it becomes too damaged, it cannot be projected or digitized.

I tested the films by placing an acid-detection strip in each film canister and left them overnight. The strips change color based on the amount of acidic vapor present in the air of the closed canister. In the morning, Hankey Center work-study student Ashlee Yealy '14 and I checked each strip's color and compared it to a color chart indicating the severity of deterioration detected on a scale of 0-3.

Four films rated a level 2 ("actively degrading") and seven rated a level 3 ("critical–shrinkage and warping imminent; possible handling hazard.)"

The immediate dilemma was whether or not these films were worth saving. What insights into Wilson's history could they provide? Among the sparse notes in the canisters were labels for "May Day," "President Havens Inauguration" and "Sports." While the notes may not have been particularly informative, saving any piece of Wilson history from these forgotten films is worth the cost.

I gathered up all 13 films and sent them to an experienced digitization company to try and save the contents. Experienced film engineers inspected each reel, repaired cracks and cleaned each film as best they could. Then they created digital files for each film reel and stabilized the film by reducing noise for improved viewing. All but one film could be digitized.

So what records of Wilson history did these films contain? Visit the Hankey Center and Boyd Archives Facebook page and website, or visit the archives to learn more.