1. Objective. The conservator should be aware of the final purpose of the conservation assessment: Is it part of a restoration project, a digitization, a duplication, or the evaluation of an entire collection?

2. General data. By looking at the film and identifying technical and production data, the following information should be obtained:

   • Nitrate: Used from early 1895 until 1951. It can be identified by the word “Nitrate” printed on the edges.
   • Acetate: Used from 1909 until now. “Safeguard” or “S” is written on the edges. Nitrate and acetate can be distinguished from each other by the manifestations of their chemical decomposition and spot testing.
   • Polyester (PET): Used from mid-1950s until now. It may show print codes or the word ESTAR printed on the edges. When examined through polarizing filters, it may show iridescence.

3. Description. Of the object: This takes into consideration the technical data gathered as well as the information obtained from the can or container, which does not always correspond to the film inside.

   Of the content: This is grasped during the film inspection by looking at the photo frames. It is advisable to make a photographic record of the most representative images and to make a list of the different scenes.

4. Historical context and values of the film. This involves researching the film content, its context, historical data and production information in order to describe its value as a cultural artifact.

5. Component materials. It is necessary to identify the component materials of the film, to understand their long-term behavior and processes of decay.

   • Film base or support: Identifying the type of film support is crucial, as the chemical stability of film types is very different.
   • Nitrate: Used from early 1895 until 1951. It can be identified by the word “Nitrate” printed on the edges.
   • Acetate: Used from 1909 until now. “Safeguard” or “S” is written on the edges. Nitrate and acetate can be distinguished from each other by the manifestations of their chemical decomposition and spot testing.
   • Polyester (PET): Used from mid-1950s until now. It may show print codes or the word ESTAR printed on the edges. When examined through polarizing filters, it may show iridescence.

6. Condition assessment. Deterioration can be differentiated in various types:

   • Chemical decay of the film base (the speed of chemical decay depends on temperature and relative humidity)
   • Cellulose Nitrate: Film support is chemically unstable and highly flammable. Its manifestations of decay are image fading, brownish discoloration, noxious odor, emulsion stickiness and softness, and disintegration of the entire film into brownish powder.
   • Cellulose Acetate: The most important manifestation of decay is the acetic acid odor due to the release of this acid by the film support. This is called the “Vinegar Syndrome”. The film base shrinks and deforms irregularly. The film loses flexibility and the emulsion cracks and flakes off, white powder may appear along the edges and surface of the film.
   • Polyester: This is the most chemically stable base, but prone to physical damage.

7. Final evaluation. Helps to assess the condition of the film, underlining the effects of deterioration and how the values of the film diminished. This allows the proposal of a properly informed intervention.

References

4 Ibid, 16
4 Ibid

Acknowledgments

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Important Note. Film conservators also face other important challenges that have not been addressed in this abbreviated guide, such as misleading information for identification, fragmented survival of cinematographic works, advanced levels of decay that make the inspection and handling difficult, copyright issues, among others like the contemporary transition to digital.

Beatriz Torres Insúa
beatrixtorresinsua@gmail.com
Escuela Nacional de Conservación, Restauración y Museografía, Mexico City