

# JAIC

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Book Review



## BOOK REVIEW

*COMPENDIUM OF IMAGE ERRORS IN ANALOGUE VIDEO*. Johannes Gfeller, Agathe Jarczyk, Joanna Phillips. Zurich: Swiss Institute for Art Research, 2013. 272 pages, 171 color and 34 b/w illustrations, 1 DVD, hardcover, EUR 105.00. Available from Scheidegger & Speiss <http://www.scheidegger-spiess.ch>, ISBN 9783858813817.

Connoisseurship of video – what videotape is supposed to look like and what can be considered defective in playback – is a critical skill set for conservators of videotapes, especially in video art collections. With the advent of digital television storage and transmission, engineering experts from organizations like the Society of Motion Picture and Television Engineers (SMPTE) have aged away from analog television technologies, so conservators have fewer first-hand descriptions of analog videotape playback. Certainly some of the pioneering video artists of the 20<sup>th</sup> century are not available to critique playback and reformatting, and of course only a fraction of tapes created in that era are even playable. Learning to be a connoisseur of tape effects and defects requires complex guidance that is hard to find.

The American Institute for Conservation's Electronic Media Group addressed videotape connoisseurship issues in its first technology and conservation symposium *TechFocus I: Caring for Video Art*, held at the Guggenheim Museum in 2010. With that meeting, the electronic media conservation community began to address the need to capture the range of image types that video signals can produce before videotapes, experts that created the technology, and artists that created the content are no longer available as a resource. The field recognized that common descriptive standards are essential to accurate description of the video media and to documentation. Organizations such as the Bay Area Video Coalition, Stanford University, and New York University sponsored the development of the "Artifact Atlas" in 2011 ([http://preservation.bavc.org/artifactatlas/index.php/Why\\_AVAA](http://preservation.bavc.org/artifactatlas/index.php/Why_AVAA)) as a beginning effort to identify image errors. Now comes the *Compendium of Image Errors In Analogue Video*, aimed especially at an art museum audience – but certainly of tremendous value to archives, libraries, and other collections of video – that addresses a range of concerns that occur in the documentation of a video's condition. Authored by conservators Johannes Gfeller, Agathe Jarczyk, and Joanna Phillips, at last the field of conservation has a fundamental textbook on analog videotape preservation.

After purchasing this essential handbook, the reader should set up a viewing station consisting of a cathode

ray tube (CRT) monitor connected to a good quality DVD player. The act of attaching a monitor to a playback device will provide the reader with a series of choices and information points that are rudimentary to understanding video technology; and it is a key element to playback of the DVD that comes with the book. The *Compendium* DVD provides a comprehensive catalog of video clips that show different types of damage that can be encountered when playing back analog videotapes. While one could pop the DVD into a desktop computer, the entire point of the *Compendium* is to understand what video is supposed to look like on the traditional playback monitor of the cathode ray tube, not on a desktop computer monitor. Note, the book itself does not describe how to do this work, and the suggestion of setting up the CRT and DVD player is embedded on the DVD itself. If assistance is needed in setting up the monitor and player, the *Compendium* has an excellent but brief "Further Reading" section that lists historic television engineering books written for an amateur – or video artist – audience, and could be useful for basic television monitor set up. As an aside, these "how to" books usually also give insight into the video culture of the time, which provides additional context to the discerning conservator.

The main section of the book is the directory of commonly identified image errors. For each image error there is a comprehensive list of aliases for its name; for instance, the notorious sticky tape syndrome is also known as "sticky tape, squeal, sticky shed syndrome (SSS), blocking, dry squeal, loss of lubricant (LOL)." Then there is a diagnostic section on the symptoms of the error, the possible causes, and a "what to do next" section. The symptoms and the causes are by far the most accessible and fascinating descriptions of videotape technology and the multiple ways in which a videotape signal can be damaged. Even if you never encounter a "tape misalignment" in your collection, the description of the physiognomy of the tape machine that causes this problem is enlightening to a conservator of video. Within these sections, careful readers will learn that there are real hazards of poor quality storage and handling of videotape collections that will lead to lasting damage. The "what to do next" section is usually a

short stepwise series of tools such as to use a test tape to ensure that the source of the problem is machine error versus videotape damage. My one complaint is that “consult a videotape conservator” is a frequently mentioned step, and not particularly helpful; this is a problem with much conservation literature that may have a diverse audience beyond conservators. Nonetheless, the common sense steps to resolve problems also point to one unfortunate fact with videotape; sometimes the damage cannot be undone.

One approach to the *Compendium* is to use it as a scheduled professional development activity with colleagues in audiovisual preservation. I sat down with the Smithsonian Institution Archives digital imaging specialist, Kira Cherrix, to review the book. I wanted to see if it could be a starting point for conversations about the observations we make when we handle and reformat videotapes. It is a compact book with easily digestible sections, so we had two 90-minute meetings looking at the book and reviewing the DVD. As we browsed the book and the DVD, we had a fruitful discussion about the Archives’ workflow for reformatting and preserving video. When we reached the section on “Vertical Synchronization Error,” Ms. Cherrix observed that a recent preservation reformatting project of Conservation Scientist Robert Organ’s video science lectures “Organic Chemistry for Conservators” (a series of U-matic NTSC videotapes, written and produced by the Conservation Analytical Laboratory of the Smithsonian Institution in the early 1980s) had demonstrated the same symptoms described in the *Compendium*. The video has infrequent and unpredictable bursts of vertical rolling picture, sometimes followed by vertical blanking error, and video noise (all three of these terms are well-defined in the glossary). The audio track is not disturbed however, and the U-matic playback deck is properly calibrated and maintained. After discussion we decided that there were multiple factors at play with the distorted image, including some tape damage, but also perhaps poor quality production values used by the videographers.

The issue of production value leads to another extremely useful and important aspect of the *Compendium*. In archives and libraries videotapes are typically straight recordings – meaning that the picture signal conforms to SMPTE standards for recording and playback – and reviewers of the tapes should have a high expectation that image errors are not intentional. In contrast, video art may be highly manipulated by the artists that produce it. How is a conservator able to tell whether the image is intentional or corrupted? The *Compendium* addresses this issue in three ways. First, the Symptoms and Causes section of the directory describe possible manipulations that could imitate an error to an inexperienced eye. Second, the DVD and

the corresponding written chapter on “Index of Video Sequences and Stills” is an overview of how a variety of artists’ works look and feel (aside from the image errors), ranging from early 1970s materials to work made during the 2000s, and includes work by Vito Acconci, Bill Viola, Nam June Paik, and Joan Jonas, to name only a few. Finally, there is a remarkable chapter on “The Artistic Use of Analogue Image Errors” that explicitly provides the context for manipulation of the video signal for expression in art. This chapter, by art historian Irene Schubiger, offers in concise text what some video art essays have been incompetent to address in hundreds of pages. The figures that accompany the text are beautifully produced.

The *Compendium* has multiple other useful attributes. First, the publication is in German and English, which will automatically prove it to be a veritable Rosetta stone of television technology in a few years. Given the international flavor of video art, this in itself is important. The tutorials on the difference between European Television Standards PAL and SECAM and North American Television Standards NTSC embedded throughout the book are invaluable. The authors are native German speakers and the publication is from the Swiss Institute for Art Research and Bern University of the Arts. The layout that separates the German text from the English text (or combines it for illustrations) is artfully done. The videotape format outlines on the flyleaves are attractive and helpful; I actually found a videotape format unfamiliar to me in the European VCR and VCR long play! The book provides a thorough glossary that is easy to understand, taking technically difficult or tedious concepts and providing straightforward definitions. An entire section is devoted to basic examination of a videotape, and another section provides a practical condition report form. Not least is the elegantly written essay on “Basic Principles of Video Technology,” complete with illustrations and figures. Video conservators might already have *The Complete Handbook of Magnetic Recording*, weighing in at 800 pages, but they might find it better to refer to this chapter in the *Compendium* for the overview that explains the history of television.

The bookshelf for video conservators is fairly thin, and is usually populated by publications intended for engineers, artists, or art historians. This is a book written by and for conservators and their colleagues in a field that can only see more growth.

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