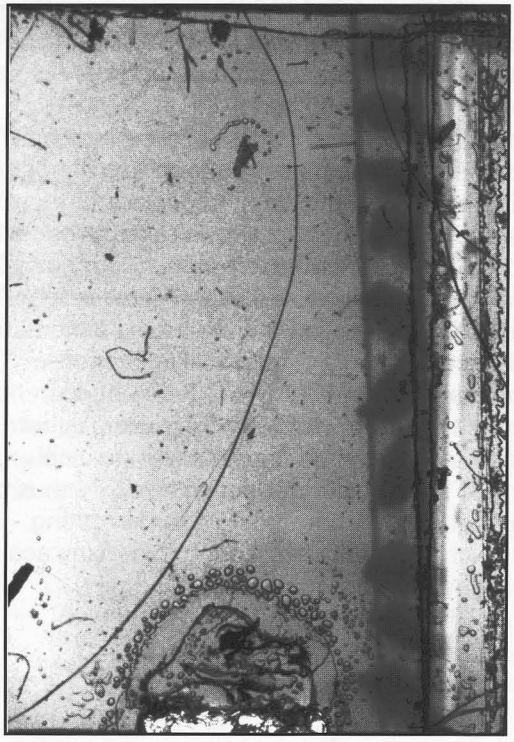
Technical Aesthetics in the Preservation of Film Art

with particular reference to the small-format experimental film

Ross Lipman

The following discussion seeks to define principles for the successful preservation of film art in a context of changing modes of production. While individual works arise inseparably from the techniques with which they were made, their subsequent reproduction can lead to a Cartesian cleaving of content and form: their entire substance may in fact be materially transformed. To help understand the nature of this problem, Walter Benjamin's notions of artistic authenticity provide an invaluable starting point. Expanding on his basic arguments, I will describe some practical dilemmas in the preservation of small-format experimental films as well as some possible solutions to those problems. Moving from specific examples to their theoretical implications, we can begin to develop a working modelof film preservation which more fully integrates technical and aesthetic concerns.



frame from unidentified film by Luther Price

Portions of this essay are excerpted from the longer article, "Problems of Independent Film Preservation," published in the *Journal of Film Preservation,* Vol. XXV, No. 53, 1996.

Duplication and Authenticity

In his profound and deeply ambivalent essay, "The Work of Art in the Age of Mechanical Reproduction," Walter Benjamin suggests that the technology which enables us to duplicate artworks, while in one sense preserving and disseminating them, in a very fundamental way also disables them. Stressing precisely those elements of a painting which are not duplicable—the art object's physical character and unique historical testimony to time and place, or "aura," as the essential elements of its power—Benjamin posits the mass-reproduced duplicate as a hollow shell of the original item, a disembodied ghost of a once-alive entity. Tracing the act of reproduction from the woodcut through engraving to the modern era, he identifies the advent of lithography, photography, and film as the point at which the trajectory of reproduction takes its plummet, by means of the speed and volume with which these media can be duplicated and made available. What our era has gained in access and multiplicity, it has lost in authenticity and spirituality.

In a fundamental way, I believe Benjamin is correct. An abundance of inferior duplicates injures or confuses the aesthetic value of an original work and helps contribute to a general milieu of cheapness. It is also quite interesting to note—at a very general level—the increasing emphasis on the graphic and iconic elements in contemporary visual imagery. Subtleties of light, color, expression and tone, which are less easily reproducible, often fall by the wayside, to say nothing of the use of a specific medium's individual properties. But Benjamin stumbles over an essential aesthetic point in his essay, which is concerned primarily with broad movements and social implications.[1] The woodcut, engraving, and for that matter, the scripted play or scored musical work—as well as the motion picture (in most instances)—are intended to be viewed in duplication, not their "original" rendering. He states that the woodcut "may be said to have struck at the root of the quality of authenticity"[2] thereby grounding his definition of the concept in a singular physical presence. But it would be folly to consider all these forms intrinsically inauthentic, and I suspect Benjamin himself would not have wished to go that far.[3]

This issue demands a precise analysis, especially insofar as Benjamin's evaluation of *diminished* authenticity and spiritual substance is so convincing. As technology develops quickly and our perceptual skills seem to regress accordingly, it's all too tempting to let such questions fall into obscurity. I would like to suggest, however, that our notions of authenticity need not be extinguished in the age of mechanical—or even electronic— reproduction. Rather, our notions of it must be substantially transformed.

Some Issues of Printing Fidelity

The small-format artist's film would not seem an ideal vehicle with which to discuss these concerns, in that small-gauge works are often intended to be viewed in their camera-original form. I will argue, however, that the first item of consideration in preserving any film is the nature of the individual work at hand, and that the "original-specific" work is a special instance, with its own considerations. In other regards, the small-format film, because of its non-industrial intent, is an ideal vehicle for discussing the duplication and preservation of film art.

Problems of film preservation, already heightened in experimental work, demand unique considerations in the case of the small-format piece. Foremost among these, surprisingly, is the fact that most small-format works exist only in "reversal" form, with a positive image. One would think that there would be a film printing stock intended to make high-quality copies from a positive, as opposed to negative image, but this is sadly not the case. Kodak's current "internegative" stock, 7272, from which positive viewing copies can be struck, is a historical relic which actually greatly increases the final image contrast of the film it is intended to reproduce. 7385, a low-contrast positive stock intended for "TV prints" is sometimes used in conjunction with it, but this produces a desaturated look inappropriate for many subjects. And 7399, the reversal printing stock

intended for this purpose, can no longer be printed with a high-quality soundtrack.[4] To even begin considering the printing and/or preservation of a small-format film (or any film which exists only as a positive image copy), one must first address this question. But wound up within this are the unique aspects of the individual work itself.

Early in the planning of the New York Museum of Modern Art/San Francisco Cinematheque's small-format preservation project, we conducted a short series of tests to find possible printing methods. While the tests were ultimately separate from the actual project, they nonetheless provide a convenient focus point for analyzing issues and techniques. Using the Canadian firm Optimage, which employs several methods of contrast reduction, we printed outtakes from the works of Joe Gibbons, Ellen Gaine, and Scott Stark. Each piece raised different aesthetic considerations, and hence suggested different printing paths.

Gaine's films, all black-and-white Super 8, feature delicate tones and spectacular swirling grain fields. The delineations of gray were lost entirely and the granularity increased to a state of blotchiness in the first test, which consisted of a traditional blow-up to 16mm internegative and a positive print. As there is no low-contrast stock for black-and-white material, we requested that Optimage run a new test, in which they decreased the developing time/temperature combination, and increased exposure. This technique of over-exposing and "pull" processing is somewhat accepted with color internegatives, where it does not entirely eliminate the contrast boost, but rather gives it a good nudge in the right direction. With Gaine's work, it did just the trick, adding some fine detail in the grays, while reducing the clotting of grain.

Stark's original was made by respooling Regular 8mm Kodachrome into a 35mm still camera, and exposing still images of his garden across the film strip without regard to its perforations. Again Optimage's standard blow-up—which included a low-con 7385 print—did not do justice to the rich detail of the images. While their method did reduce contrast, the attendant decrease in saturation diminished both the color intensity of the Kodachrome and the flickering effect caused by the irregular frame line.[5] While a conventional 16mm optical internegative would have too much contrast, we found that we could thread the needle by using the special diffusion within Optimage's printer, and striking a standard 7386 positive release print.

It is worth observing that Stark's method of making this film renders notions of a standard 24 (or 18 or 16) frames-per-second projection speed somewhat meaningless. In fact, Stark would often present the piece as a projection performance on a variable speed projector, varying the playback rate from 24 fps all the way down to 6 fps. While this effect could be simulated by step-printing, it should be pointed out that the perceptual effect of watching a single frame repeated is different than that of watching that same frame once[6] with an extended shutter-time.

This also points out the inherent flaw in step-printing an 18 fps original to 24 fps for 16mm viewing: a subtle stutter is created every sixth second. One may mask this by varying which frame is repeated, so that the stutter is less rhythmic, but complicated sequencing or manual adjustment of this is not always a practical option, and the skill with which it is done can vary widely. Ideally, if a blow-up of an 18 fps original is attempted, it will be done frame-for-frame, and projected at the 18 fps rate. But as 18 fps 16mm projectors are no longer standard, many small-format film artists forsake blow-up entirely.

Gibbons' *Punching Flowers* raised other considerations. Here the low-con 7385 stock's desaturation effectively rendered the muted tones in Gibbons' original work. While this stock, intended for video-transfer prints, has too little density and richness for most purposes, in this case the subject matter demanded exactly these qualities. In fact, however, this led to another question. A companion test on regular 7386 print stock, while boosting contrast, showed such an improvement in saturation that both project coordinator Steve Anker of the Cinematheque

and I agreed it looked *better* than the original. The issue then became whether in fact our aims as preservationists were best served by faithfully rendering the qualities of the original work, or in fact enhancing them. Steve preferred the more saturated ("enhanced") version for its wonderful vibrancy and dynamism, while I found the muted 7385 more in keeping with the work's wry meditations on nature and beauty. This is not to say that I would always opt for "preservation" over enhancement, but simply that I preferred it in this case. Of course neither interpretation is right or wrong in absolute—they remain judgments. And it is just this sort of precise judgment which is demanded of the preserving archivist.

These two approaches highlight an intriguing dilemma in film preservation. In her essay "Principles of Film Restoration,"[7] Eileen Bowser distinguishes between restoration efforts which come as close as possible to simulating an existing original, to the point of including imperfections, and those which attempt to best approximate the aesthetic effect *intended* by an original work (she also details several other types). When a scenario arises wherein both these conditions cannot be met, the former approach is usually considered preferable from an archival perspective.

Punching Flowers also brought out an issue of great relevance to the small-format film, suggested briefly earlier. Shot in handheld Super 8, it is in many ways an archetypal amateur film. The physical conditions of screening in 16mm, as well as a variety of social constructs, create more of a sense of professionalism in 16mm work than in the small-format underground or basement-screening genres. While some home movies or "actualities" footage, viewed primarily for image content, may benefit from blow-up, it is quite conceivable that other works would actually *suffer* in blow-up.[8] In fact, one quickly runs into a philosophical impasse when pondering the preservation of works whose strengths lay in their rejection of traditional notions of the permanence of art, or as Benjamin suggests, were grounded in their unique physical form and/or temporality. Both Steve Anker and I felt that this film would ideally be viewed in an intimate, less formal small-format projection, which led us to consider instead striking a Super 8 contact print—or even reducing from a 16mm internegative. Yet as preservationists, we ultimately opted to use the more stable medium of 16mm for the entire procedure. This compromise should be seen as a subjective call, in which the losses of blow-up were outweighed by the attendant advantages. Others may fairly challenge that call.

Toward an Aesthetics of Authentic Reproduction

I hope these brief examples have provided an indication of the types of issues that may arise in preserving the small-format artist's film. My intent has not been to provide a comprehensive overview of the topic, but rather to illustrate how technical considerations in film printing are inseparable from the specific work being printed. Motion picture film is a medium which allows mass duplication, but the methods of duplication are variable, and should be adapted to specific projects. As a principle, the direction of effort must stem from the original work, and move towards a technical solution.

With this in mind, we may begin developing our transformed notions of authenticity within the world of mechanical reproduction. Our concept may apply to those media which inherently assume duplication, as does the motion picture. For a preservation to be considered authentic, the *method of duplication* should accurately reflect the nature of the work being duplicated. At a coarse level, a process which transforms the material nature of the work would inherently be inappropriate for the preservation of art. At a finer level, the material process should consider the properties of the piece being reproduced. For the film, these properties may include color, tone, granularity, contrast, light dispersion, aspect ratio, or hundreds of other components—each weighed in relation to the form, thematics, and content of the work itself.

Benjamin's notions of "unique testimony" and "aura" may thus be interpreted as the expressive and powerful aspects of a work present in its original physical viewing form. Any material transformation of a work which does not preserve those qualities may be considered a transposition to another medium. If an established film printing method is appropriate, solutions may be more easily implemented. But it may also be necessary to stretch the limits of existing tools. Experimental artists in particular have treated the medium in a non-industrial manner, and it is not reasonable to assume that industrial standards of reproduction will do them justice.

No doubt as new technologies develop and others fade, some works will be stripped of their power the way a painting is inherently stripped in the act of reproduction itself. Borderlines of authenticity may become gray. In cases when completely authentic reproduction is impossible, the principles outlined here may serve as a guide for developing the best reproduction methods available under existing conditions. To conserve the heritage of film art, we can ask for no less than such a careful consideration of methodology, however elusive it may prove. It is the task of a film's preservers to put themselves at the service of these nebulous phantoms.

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1 While Benjamin's oeuvre lies precisely in his bold linkage of aesthetic nuance to the sociological theater in which such nuances operate, it is arguable that within this context, the social analysis of particular artistic function is the essay's primary direction of emphasis. As a Marxist, Benjamin exalts the film's ability to celebrate and politicize social dynamics, to democratize the elite arts, and to depict the detail of physical reality. He suggests that these qualities can have a distancing effect—a very nearly Brechtian one—in that they deny a meditative relationship between viewer and film. This distance becomes manifest in an ability to receive artworks in the "state of distraction" so symptomatic of our times. Benjamin sees this state as hopeful insomuch as he finds it anathematic to fascism. But his discomfort at the attendant spiritual loss is unmistakable. Therein lies the heart of the essay's ambivalence.

2 Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," reprinted in *Illuminations*, New York, Schocken Books, 1985, p. 243.

3 Benjamin was aware of the limitations of his definition. In particular he acknowledges the capabilities of the photographic form when he writes that "for the last time the aura emanates from the early photographs in the fleeting expression of a human face." (Ibid. p. 226) His subsequent argument, that later photographs function in a more literal manner and often demand specific explication, helps to illustrate again that his concerns lay primarily in a historical social critique and less with the medium's inherent formal properties.

4 One can find an analysis of the technical aspects of this problem in my essay, "Problems of Independent Film Preservation" from which the present work is in part adapted.

5 Kodachrome's unique color palette poses a problem in duplication, in that no printing method available can do justice to its richness. The 7399 reversal stock designed to print from all color projection-contrast materials, including Kodachrome, is a VNF-process film, whereas Kodachrome utilizes a singular 14-step process. This becomes especially problematic in small-format work, where one may encounter an abundance of Kodachrome originals.

6 Super 8 projector shutters are cut to show a frame three times. A single frame step-printed twice would therefore flash six times upon projection.

7 In *Griffithiana*, Anno XIII - n.38/39, October 1990.

8 From a purely visual standpoint, the crucial issues are reproduction method and projected-image size. If 16mm and 8mm copies of an 8mm original are projected to the same dimensions, the 16mm will often be superior, depending on the optics of the blow-up system. When the 16mm print fills a larger screen, as is often the case, the effectively greater image dispersion can increase perceived graininess.

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