The Restoration Business Part Two: Conservation Counts

Grant Lobban

Films – a valuable asset

Today, films with any kind of entertainment value are now a sought after asset. In 1986 The Turner Entertainment Co. of Atlanta, Georgia, paid $1.5 billion dollars for the M.G.M./UA Studio. It was just to get hold of its library of films, with the other assets of the company soon sold on. The collection of 2,200 features, which also included pre-1950 Warner Bros. films, were needed to help fill the programme hours of Ted Turner's many cable and satellite stations plus possible future films-on-demand channels. At the time of the purchase, the expected cash flow, produced by the library from the films' showings on TV networks around the world, plus their release on video cassettes and laser discs, was expected to top $100 million a year. The films included such classics as *Gone With the Wind, Casablanca, The Wizard of Oz, 2001: A Space Odyssey* and *Ben Hur.* Since then, the number of films has grown to 3,300, with the acquisition of the domestic U.S. rights to the old R.K.O. library. The TV rights outside America were purchased outright some years earlier by the BBC. The deal was criticised at the time by some critics, who thought that colour TV licence payers would not like to hear that the Corporation had spent a rumoured sum of over 2 million pounds for a load of old, mostly black and white movies, even if they did include *King Kong* (1933), *Top Hat* and *Citizen Kane.* It has since proved to have been a fantastic bargain, providing many "no-cost" transmission hours on the BBC's own channels, plus the income from showings on rival networks and satellite channels. Other major collections are now in the hands of international broadcasters. The Fox library is operated by Rupert Murdoch's News International, and Warner Bros. by Time Warner Inc., the largest entertainment company in the world.

Caring for your assets

It has at last been realized that, considering the earning power of these libraries and the millions of dollars spent making and marketing new major features, the actual films themselves have not in the past been properly cared for. In the last five years, new state of the art storage facilities have been built, which provide conditions that match or even better those found in the best national archives. In 1992, Warner Bros. spent $9 million dollars (still only one-tenth the cost of making and launching some new major features) on a new high-security vault at its studios in Burbank, California. It has an advanced fire detection system, with halon gas fire suppression, just in case. The latest temperature and humidity control, includes cold storage areas for keeping colour negatives. All the rolls of film are kept in vented containers to allow any vinegar syndrome accelerating vapours to be removed using a charcoal filtration system. Samples of air within the vault are systematically drawn off and fed to an automatic gas analysis unit, which warns of any build up of harmful substances.

Paramount's new vault

Another recent example of new vault construction, is Paramount's new facility, built in 1990 to house its own vast library of 270,000 rolls of film. It is situated on its Hollywood lot and cleverly disguised as a New York City street and has been used as a backdrop for many of its movies. Like most of today's archives and libraries, the move to computer records has helped to prevent past "losses", due to vulnerable card index systems and the reliance on the long memories of staff, who often retire taking their secrets with them. To prevent any possible risk of a catastrophic loss of a complete collection, back-up material is always stored at different locations. As well as its main collection held at its H.Q. in Los Angeles, Turner Entertainment Co. also uses rented space, along with others like Disney, at the Kansas Record Center, deep underground in an old limestone mine. Paramount uses another underground vault in Pennsylvania. Disused mine shafts, caves, and redundant nuclear bomb shelters, are popular locations for archives. Here in Britain, one interesting site, is the one operated by Security Archives in a network of underground tunnels, forty metres below London's Tottenham Court Road. It was originally built in secret during the second world war as the wartime H.Q. of General Eisenhower.

Due to stricter nitrate rules introduced during the 1970s, most of the Hollywood studios, with the exception of Disney, donated their nitrate holdings to national archives, museums or universities. The UCLA film archive has the second largest collection of entertainment films in America. It was started in 1971, when Twentieth Century Fox and Paramount Studios gave all their material on nitrate stock to the University. Most of Britain's nitrate films have ended up at The National Film Archive. A small amount (up to 12 tons!) is kept at the J. Paul Getty Jr. Conservation Centre at Berkhamsted. The main nitrate store, holding another 160 million feet, is at Gaydon in Warwickshire, on an isolated site once used to keep spare parts for Britain's nuclear arsenal. The film is stored in 216 well separated vaults, laid out like a firework factory, to limit any losses due to a fire or explosion.

The (Film) Library of Congress

The largest collection of release prints in the United States is held by The U.S. Library of Congress in

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Washington D.C. They were obtained, without cost, as part of their copyright registration. The library also looks after the American Film Institute collection. There is no such copyright requirement to help swell our own national collection. The National Film Archive relies on the goodwill of the commercial film companies to give them copies. Some, like the Rank Organisation, supply duplicate master material for making new prints, while others only hand over a "good" used print, left over after the film's release.

Even so, the Archive has about 50% of Hollywood's total output, and 75% from British studios. Generosity in the past, has saved the day for many film companies, who later needed to replace footage that had been lost or damaged. The NFA also has a budget to purchase prints, enabling them to add important films to their collection. Almost all of the old British features shown on Channel 4 are taped from NFA prints.

Rights & responsibilities

The rights to most of our favourite British classics are still in British hands. Ealing Studios' films, along with those from ABC and EMI are cared for and exploited by Lumiere Pictures, the principal collection kept in the vaults at Pinewood Studios. Alexander Korda's, London Films, is still very much alive and still controls the use of its films, including *Things to Come, The Four Feathers* and *The Thief of Baghdad.*

Sometimes the theatrical, TV and video rights for a particular film belong to different organisations. Rank Film Distributors, together with its library of films, has recently been sold to Carlton for £65 million. Many independent films belong to smaller companies and even individuals. Tracing copyright holders and obtaining clearance is a responsible and important job in any TV production company or broadcaster.

The public domain

Not all films in the U.S. are protected by copyright, many of the lesser known are in what is known as "the public domain", which means they can be owned and exploited for profit by anybody. Over 20,000 U.S. film copyrights were never renewed after the initial 28-year period, either because the holder had gone out of business or didn't think it was worth the time and expense to renew it for the remaining 28 year period. Some important features have lost their protection in America simply because someone forgot to file the application. Some British features like *Evergreen* (Gaumont-Brit. 1934) and *Pygmalion* (1938), which are still copyrighted here, where the time period (50 years) and rules are different, are now in the public domain over in America. In the past, most film companies didn't bother to register for copyright their cinema trailers. In some cases, these can now be used without payment, rather than clips from the actual films, which can cost hundreds of pounds per minute.

Private sources

An important "alternative" source of supply, and often used to replace films "lost" from official collections, is the network of private collectors and enthusiasts around the world. Once considered by many in the industry as a bunch of strange obsessive fanatics dealing in stolen property, they are now recognised for their work in saving many films from destruction. Such is today's change of attitude, that many collectors now co-operate with archives and film companies in the search for complete copies or missing parts of films. Indeed, in appreciation, the film companies are prepared to give back the originals, or make new copies of the films, which are returned to the collector, providing they are not commercially exploited. Film prints have always escaped from the system, old stand-by prints being found abandoned in the ruins of derelict cinemas, or priceless classics ending up in Wardour Street skips. Large numbers have also come to light in the estates of former studio bosses, producers and film stars, who started out by keeping copies of their own films, but then went on to catch the collecting bug. Jack L. Warner and stars like John Wayne and Peter Sellers were found to have large and valuable collections. Many of today's collectors have extensive holdings of 16mm, 35mm and even 70mm features, many larger than some of the smaller national archives. Although well known to each other, with a lot of wheeling and dealing in prints going on, they had to keep a low profile officially, with doubts about their rights of ownership and the constant fear of repossession by the copyright holder. Also the keeping of nitrate prints at home would not be approved of by insurance companies.

Film storage at the National Film Board of Canada Library in Ottawa, pictured during the 1940s. The combination of the unheated vault and the country's cool climate provided ideal conditions for film storage.

Celebrity cares

One high-profile example of action taken against a collector was back in 1970, when Bob Monkhouse had to defend the right to keep some of his films. Bob is not only a well known performer, but also an expert film historian, particularly in the field of film comedy, and over the years built up a

huge collection of films. With the help of supporters, like the National Film Archive, he eventually won the case, but admits that the legal action took the heart out of his collecting activities.

Even so, he still has the fourth largest private collection in the world, with over forty-thousand individual subjects on various gauges, including hundreds of features. The current largest private collection belongs to a German collector. Some of the major collectors and dealers in films now use computers to monitor the ownership and copyright status of thousands of films. Some private collections have been fully, or partly commercialised. One of the first in America, belonged to the late Raymond Rohauer who, from his college days, found and collected many rare silent and early sound films. Although his methods didn't always endear him to the film establishment, often upsetting laboratories and many official archives around the world, he must be given credit, with others, like our own Philip Jenkinson, for trying to save and popularise silent films, at a time when few others were interested. One well known collection over here belongs to film historian John Huntley, who has often come up with fascinating clips, adding interest to many a TV documentary.

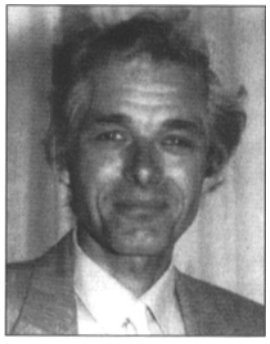
Where are they now?

Sometimes the rights to a company's back catalogue of films is purchased, but not all the actual prints can be found on the shelves. A recent example has been the BBC's acquisition of Butchers Films, a provider in the past of British "B" movies. The deal didn't include all the actual prints, so they are currently circulating an appeal for copies to fill the gaps, including 35mm or 16mm prints borrowed from private collectors (no questions asked!). In the end, it will probably mean a lot of restoration work to come.

For the future

In future issues of *Cinema Technology*, we will look at the work of restorers, and the various types and condition of original material they have to work with. Also featured, will be the restoration of colour films, including recreating the look of old Technicolor and other early colour processes. Other topics, will be the problem of colour fading, digital restoration, and the often contentious issue of what is the "correct" aspect ratio for re-issues of many widescreen films.

THE AUTHOR



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Grant is an enthusiastic "technical" historian of the cinema, and is well known for his major contributions to to the BKSTS Wallcharts. He has also written many articles for *Image Technology* and *Cinema Technology* over the years. His recent series on drive-in movies led to correspondence from all parts of the world.

Laboratory Grading

Jack Houshold

Grading has changed

Like most film laboratory work, grading has changed dramatically over the past 100 years, from manually grading a black and white negative winding over a light box built into a work bench, to the use of extremely sophisticated electronic equipment linked with computers, cueing systems, etc.

The major impact which changed the graders "artistic" working practices came with the introduction of the colour negative in the early 1950s. Experienced graders are extremely skilful in visually assessing the printing levels required for black and white negative, but colour negative is very difficult to judge in this way, hence the introduction of the electronic analyser.

Needless to say, over the past forty years or so the complexity of these analysers has also changed out of all recognition, and the grader him/herself has also had to change in order to absorb and operate the new technology.

Producing the rushes

Immediately after the colour negative is processed in the laboratory each night, the first requirement involving the grader is to evaluate, on the analyser, the necessary exposure level in order to produce either a film rush print or a video rush tape. In addition, the grader must notify the cameraman as early as possible on how his previous day's studio or location work looks, and inform him about his exposure levels, etc.

In some laboratories the production of a video rush tape will not preclude the grader using an analyser, but the negative would go direct to a telecine transfer machine, where the operator becomes effectively "the grader" and would evaluate and record the settings used to produce a good looking image presentation on his monitor. The scene to scene settings and footage cues are all logged into his computer on a first

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