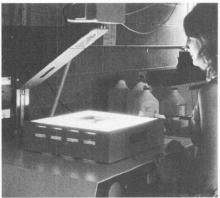
Notes and Communications

Microfilming Glass Negatives

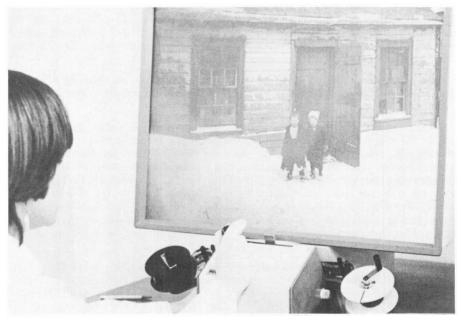
The City of Toronto Archives recently developed a reference tool based on the microfilming of glass negatives to provide researcher and archivist alike with improved access to the City's photographic resources while avoiding the regular handling of fragile glass plates. The City's extensive photograph collection includes approximately fifteen thousand five-by-seven-inch glass negatives produced ca. 1909-50 by the Works Department's Blue Printing and Photography Section. These negatives contain valuable information on a variety of municipal projects ranging from the construction of bridges to the investigation of slum conditions. They are arranged, as they were produced, chronologically in series (for example, Health, Parks, Bloor Viaduct). Inventories have been created showing the series title, number, date and subject of each photograph. While there are prints for many of these images, most exist only as negatives. Serious researchers have usually been granted direct access to these negatives, but the recent dramatic growth in the demand for historical photographs has pressed the staff to find an effective means of making these images readily and safely accessible. Having invested three years in the cleaning and rehousing of the negatives, it was clearly unacceptable to expose them to regular handling. The most obvious solution lay in contact-printing the entire collection, but this would have required a considerable expenditure of time, not to mention the trouble and expense of storing fifteen



The old method of reference to photographs by direct handling of the original negatives. (City of Toronto Archives)



Copying an original negative on 35mm AHU microfilm using a Kodak MRD-2 camera. (City of Toronto Archives)



The new method of reference to photographs using a microfilm reader. (City of Toronto Archives)

thousand prints in such a way as to allow their easy use while also securing them from deterioration, misplacement and theft. To reduce the size of the task through selection was considered unsatisfactory because the archivist would be placed in the unreasonable position of having to predict all future research interests and, in effect, consign some pictures to permanent oblivion.

During the past four years, the City's micrographics programme has developed the capacity for filming, processing, quality control and duplicating of 16mm and 35mm microfilm to archival standards. With such equipment and an increasingly skilful staff it is possible to experiment with novel applications. One of the earliest tests involved the filming of a number of glass negatives of varying density using a 35mm planetary camera with sub-surface illumination.

The benefits of having the negative collection on microfilm were obvious. A researcher could be offered the entire collection on twenty-five one-hundred-foot rolls of film using one image per frame on 35mm microfilm. The archives would face a relatively slight storage problem and only the photo-archivist would need to handle the original negatives. Furthermore, the film could serve as a security copy in case the glass plates were lost or destroyed.

The results of the first tests were unexpectedly successful. The enlarged images produced on the microfilm reader were clear and there appeared to be little, if any, loss in the grey scale. Cost of production was estimated at eleven cents a frame, comparing more than favourably with the expense of producing and storing contact prints. A pilot project was plainly warranted and the Health Department series of 932 images was chosen for the purpose.

The following equipment was employed: a Kodak MRD-2 camera, Recordak 35mm AHU microfilm, and a 3M-P74 processor using Kodak chemicals. Using a reduction

ratio of 5x, the negatives were filtered individually, allowing the operator to adjust the illumination according to the density of each plate. Each image was targeted with its series title and number, further detail being readily available to the researcher from the inventory. The camera operator was able to accommodate 660 images on each roll, filming approximately ninety frames per hour.

After processing, each roll was inspected for physical and photographic defects, content, resolution and density. Defective images were re-shot, spliced to the end of the roll and the box marked accordingly.

Two comments: first, microfilming negatives using negative film produces positive images. This is convenient for reference purposes but the production of a positive photographic print from the microfilm requires a negative. This can be made from the original film by a service company, or can be produced at the outset by filming the glass negatives with a non-reversing film of the type used for making slides. Second, while the reference tool was developed using 35mm roll film, the use of 16mm film, jackets and microfiche offers even greater advantages for certain applications. The 16mm film provides a less useful back-up negative, but is considerably cheaper than 35mm. Microfiche and jackets are easier to handle and the cost of readers is far less than for roll film.

The microfilm of the Health Department series is now available on one and a half rolls in the Archives reading room. Researchers using the film are shown how to obtain further information about each image from the relevant inventory volume and are provided with a "Photographic Print Request Form" should they wish to order copies.

Previously only a few scholars were given access to the fragile glass plates, and they could rarely spend the time to more than sample the collection. Now it is a simple matter for the archivist to put a roll of film on the reader and leave the researcher, whether serious or merely curious, to browse through hundreds of images. The response of both archivists and researchers to this new reference tool has been so positive that the entire glass negative collection is now being microfilmed.

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Film Archives in Scotland

The first film archive in Scotland was established in November 1976, under the sponsorship of the Scottish Film Council with staff provided by the government's Job Creation Scheme. The Council's Library at the time held approximately seven hundred cans of film, the contents of which were little known. A team of three persons, including an archivist, a technician and a clerk, first concentrated on the archival preservation of this material. Under guidelines directed by the Standing Committee on Archive Film in Scotland, the team began identifying and listing the collection as well as surveying for possible archival footage held in public areas. The general appeal for film more than fifty years old and contacts with proprietors and managers of cinemas soliciting locally made newsreels have been fruitful. Increased surveying and the necessary research into film and its sources has stretched the staff's capacity to the limit; indeed, research alone could be a full-time task were it not for the accumulated film material which still remains to be made available.

The research required to locate potential archival film footage has led to numerous interviews with persons formerly employed in the Scottish film industry. Their colourful accounts of the early days of filming have added another dimension to the history of the industry in Scotland. Even some of the vaguest references elicited have resulted in new acquisitions. For example, "A film made in the 1930s about some jute