

NOTES ON OPTICAL PRINTER
TECHNIQUE

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March 1983

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An optical printer is a device for photographing the frames of one film so as to make another film.

It consists essentially of a camera (C) connected by a bellows (B) to a lens (L) aimed at a film in a gate (G) illuminated from behind by a lamp (I).

The camera and gate each have motorized intermittent film movements so that any frame of the "original" film can be conveniently photographed onto any frame of the "print" film.

The camera can be an ordinary cine camera, less its lens, and the gate can be an ordinary cine projector, less its lens. Ideally they have identical systems of film registration, as if one were the lens' image of the other. The lens can be any bellows mountable lens. Ideally it is specially corrected for the small and nearly equal sizes of this object and image.

The camera and the lens can elide independently to and fro the film gate. This adjusted the magnification and the focus of the photography.