STRIKE ON!

The term "Cold Type" was first applied to the three devices that used typewriters for typographic composition: the Varityper, the Justowriter, and the IBM Composer.

The Varityper was based on the Hammond Typewriter, one of the first to have proportional type. Based in New Jersey, the company was taken over by Ralph Coxhead, who introduced a companion headline-setting machine with a plastic "Gramaphone record" as its font. It was called the Coxheadliner, and later, just Headliner.

In the 1950s Friden Corp. adapted their paper tape-based office machines for typesetting and the Justowriters were born. Friden was later taken over by Singer Corp.

In the 1960s, IBM advanced their "golf ball" technology to encompass a 9-unit type system. The IBM Composer had two versions, one that was manual and one that was automated—the MT/SC, or the Magnetic Tape/Selectric Composer.

The Justowriters helped to convert weekly newspapers to photo-offset, and the Varityper helped to create the forms industry. The IBM Composers helped to establish the "cold type" composition industry. Many of its users were among the first to make the leap to phototypesetting.

The term "strike-on" com - position was also used, mostly by newspapers. This technology was replaced by phototypesetting in the 1970s and only a few direhards held on to it in the 1980s. When laser printing became mainstream after 1982, the cold type world faded away.

We should note that when cold type and phototype left us, so did paste-ups and rubber cement and wax and Rubylith and all of the photomechanical skills we had developed over a period of 25-plus years. "Desktop Publishing" was introduced in 1985 and suddenly everything we did was historic.

NEW AT TMOP
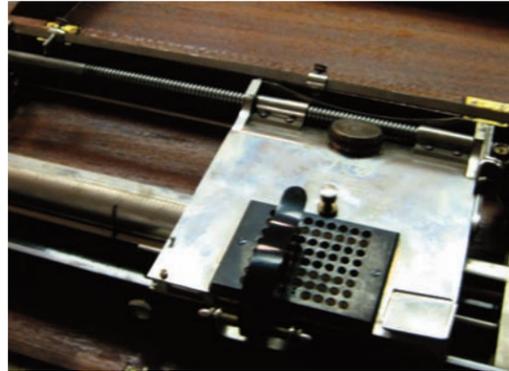
Index typewriters do not have keyboards and the user operates a pointer that selects a letter from an index while depressesing a lever that moves the type to the paper. The first index typewriters were introduced several years after the first Sholes' keyboard typewriter. The first index typewriter was the Hall, in 1881 (patent date). Production continued until the end of the 19th Century. The Hall was designed by Thomas Hall, a Brooklyn engineer. The Hall was built into an oblong mahogany or walnut case and paper was fed from behind, under the platen to the front and again to the back, over a metal impression strip. Letters were selected from a square index card under a frame with holes. The Hall Type Writer is now in the Museum's collection.

NEWS

Spring 2008

The History of Non-Metal Typesetting

DEAR FRIENDS

This is another special edition of our newsletter that provides a window into the Museum's collections.

It is fair to say that the Museum of Printing has one of the broadest and deepest collections of unique graphic arts machines and artifacts, backed up by extensive printed matter—all specifically related to printing. What you see in this newsletter involves photographic typesetting, and it is only a fraction of the Museum's collections.

The ongoing success of the Museum is related to the growth of our membership and your support. Please visit our website where you can contribute and join us. No donation is too small.

As a part of our mission, we host visitors from far and wide. We are especially proud that hundreds of students visit the Museum every year as a part of their curriculum and they get a glimpse into the printing industry's past.

WHEN T. A. EDISON MET A. B. DICK

The Museum of Printing has two of the original Edison-Dick Mimeograph machines.

In 1876, Edison had been selling his Electric Pencil stencil duplicating process for several years. Experimenting with waxed wrapping paper, Dick developed a process called the mimeograph. Edison agreed to sell Dick his patents for stencil duplicating and to help Dick market his invention as the "Edison Mimeograph." In 1887, the company subsidized Edison's experiments on an improved ink, typewriter, and stencil. The invention began the era of modern printed communication, at a time when documents were reproduced by hand. In 1887 the company released the Model "0" Flatbed Duplicator, which sold for $12. Later that year, the Edison Mimeograph No. 4 had a nameplate bearing the Edison patent from August 8, 1876. In 1894, the Edison Mimeograph Typewriter #3; in 1895, the Edison Mimeograph No. 51 "New Automatic;" in 1896, the Planetary Pencil Pointer; and, in 1900, the Edison Diaphragm Mimeograph No. 61 (Rotary). A.B. Dick Company was founded in 1884 in Chicago, Illinois, by a young lumberman named Albert Blake Dick. Thomas Edison's ideas and his "electric pen" were key in creating the world's first duplicator. This simple device created an industry.

The History of Photographic Typesetting is at the Museum of Printing

1950s	1960s	1970s	1980s
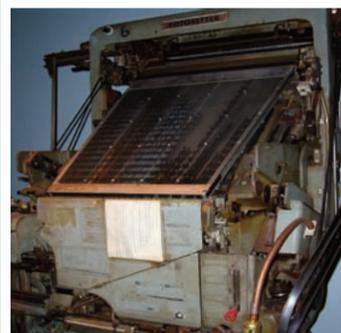
The Intertype Fotosetter
This was the first photographic typesetter and was a modified hot metal linecaster. Called the First Generation of phototypesetting, it was still in use through the 1970s. It was based on the Fotomat, a linecasting matrix with a piece of film mounted in its belly. Each was photographed as it circulated from the magazine.

The Photon
Donated by its co-inventor Louis Moyroud, this was the very first Second Generation photographic typesetter. Actually, what you see is the input/control unit; there was also the exposure unit. You literally sat inside the Photon Model 200B. It was later replaced by tape-operated systems and numerous competitors. Photon was acquired by Dymo in 1972, merged into Unitex in 1980, and then gone forever.
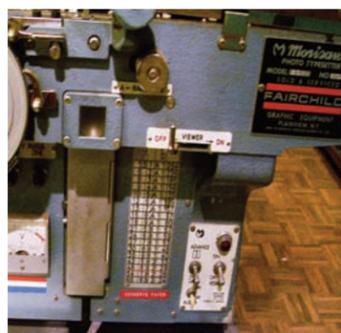
The Morisawa
It made a quick splash in the mid-1960s and then disappeared. This is the film font. The metal pins protruding below were the width values for each of the characters in the font.
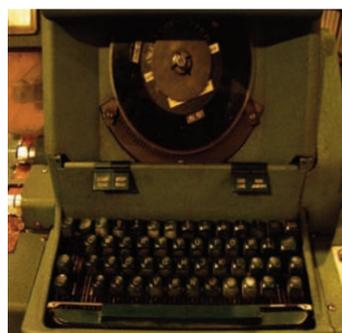
The ATF B8
It was rudimentary in its capability but it had the American Type Founders behind it. The system consisted of two units: a keyboard perforator and a photo exposure unit. Even though ATF tried to re-position itself during the 1960s and 1970s, it was still seen as a metal type company, and thus did not suceed in many of its attempts to compete with new technology. The B8 is quite rare because so few were sold.
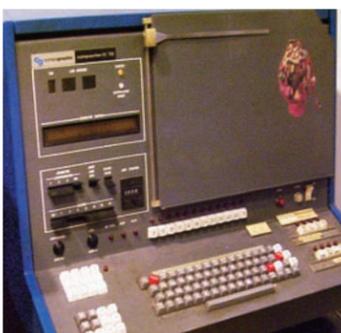
The Compugraphic CompuWriter
It became the most successful entry-level phototypesetter ever. The first machine had two typefaces in one size. It spawned many versions with more faces and more sizes, but this one was the most popular. It even came in one iteration with an ETAOIN linecasting keyboard for hot metal operators who could not deal with the QWERTY keyboard. The first ad said "CompuWriter: A whole new way to set type."

The Mergenthaler V-I-P
The typesetting market beat a path to the Variable Input Phototypesetter. It mixed faces and sizes in the same job. The film segment created a multi-million dollar business with other font suppliers and the first user group based on the VIPPY newsletter.

The Linotype Linotron 202
The Third Generation of phototypesetting applied CRTs (Cathode Ray Tubes). The 202 was part of a family of devices that began with the Linotron 1010 and 505 in the late Sixties, through the 303 and 606 in the late Seventies. But the 202 was the most successful, from its launch in 1978 until it ceased manufacture in 1980. It was used by printers, typesetters, newspapers, and inplant operations around the world.

The Agfa SelectSet
The laser era began in 1978 with the Monotype Lasercomp, and within a few years, there was only laser phototypesetting. By this time Compugraphic had been taken over by Agfa and a steady stream of Agfa and other "imagesetters" that could set type and images were replacing phototypesetters. By the Nineties, the laser was applied in Computer-To-Plate systems, and the typesetting era, as we knew it, was over.

The Museum of Printing has a very large collection of the the film strips, glass disks, plastic disks, film segments, plastic and metal segments, and other master fonts used for most of the Second Generation phototypesetting machines.

In addition, you will also find the many peripheral and related devices that supported the phototypesetting era—computers, disk drives, paper tape keyboards.

Below, there is a sheet of transfer type. This non-technological approach was used for some heads and many design comps.
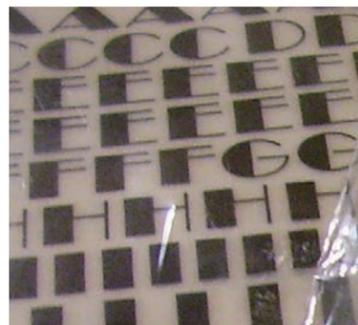
For headlines, the German-made Staromat was available, but it and all other headliners paled next to the venerable VGC Photo-Typositor. Its 2-inch film strip contained all the glyphs for one typeface. After loading on reels, you turned two wheels to position the character you wanted and viewed it in a small window.

You thenfocused and exposed the character to 2-inch photo paper in a chemical developer, thus leaving and exposed image as a reference for positioning the next character.

As a result, inter-character spacing could be as tight or loose as you wished. This gave rise to an entire school of fitted headline typography that flourished in the 1960s through the 1990s. No other headline device provided the beauty and quality of Typositor type. It is mostly forgotten today.

The Museum of Printing has one of the few Linotype CRTronic CRT phototypesetters, circa 1981. Phototypesetters were either direct input or tape-input during this period.

The floppy disk replaced paper tape starting in the mid-Eighties and the laser printer entered the market at about the same time. At first, the industry applied the laser printed as a proofing device, but as resolution advanced from 300 to 600 dpi, thse plain paper printers were used as defacto typesetters.

The Museum of Printing also has a very large collection of type specimen books from both suppliers and users. They represent both the hot metal and the phototypesetting eras.

The MOP phototypesetting collection is augmented by "cold type" typesetting systems (see back page) and one of the most extensive collections of mechanical and hand typesetting available anywhere in the world. No other Museum has preserved as much of this technology.