Presented at *Hidden Typography* October 20–21, 2003 Friends of St. Bride Printing Library, London, UK

Display phototype in New York: folks, firms and fonts.

by Peter Bain

In the 20th century photo-typography fully displaced a 500 year-old tradition of metal type, only to be superseded itself shortly thereafter. Yet most appraisals of type technology and histories of proprietary typefounding still favor type for text instead of eye-catching display. One characteristic feature of 20th century typography was the great effort devoted to ephemera and advertising. This survey is a local view of a half-century, concentrating on display type in New York City. Since New Yorkers have been said to believe they are at the center of the planet, it is fascinating to find a time when it could appear nearly so, typographically.

Lettering and the New York typographic environment

The city in the first half of the 20th century was an established communications center for a burgeoning national market. There is ample evidence of local interest in unique letterforms. Sometime Queensborough resident and typeface designer Frederic Goudy received a commission from retailer Saks Fifth Avenue. The successful New York illustrator and letterer Fred G. Cooper had his distinctive forms included in the same publications that featured an unrelated Windy City designer, Oswald Cooper. Architect H. Van Buren Magonigle and industrial designer Walter Dorwin Teague had both skillfully rendered capitals for print, while their Manhattan offices pursued projects in three dimensions. One of the more curious examples of this fluency in letterforms was a 1943 booklet issued by the Brooklynbased Higgins Ink Co. The largest portion was a portfolio of thirty-two script alphabets and fictitious signatures by Charles Bluemlein, each accompanied by a handwriting expert's interpretation of the admittedly invented specimens.

The requirements of publicity and publishing helped drive the demand for handlettering. By 1955, one knowledgeable estimate placed over 300 professional lettering artists working in New York at both comprehensive (layout) and finished levels. It was in a landscape of album covers and bookjackets, magazine and newspaper advertising, trademarks and slogans, store signatures and letterheads, billboards and signs (created by sign artists, not usually graphic designers) that display phototype was emerging in sharp focus. This may have been the peak of market demand for lettering. Upon closer inspection however, the more enterprising typographers* and lettering designers had already realized each had something to offer the other.

A pioneer of display photocomposition

A Manhattan-published 1906 lettering manual, intended for draftsmen and engineers, specifically addressed creating original artwork for "photo-reproduction." By the 1930s display alphabets were

being duplicated from master artwork and manually assembled into words. The Rutherford photo-lettering machine, produced nearby in New Jersey and developed from 1928 to 1936 with the banknote industry in mind, featured master alphabets on glass plates. Only a mere handful of the Rutherford machines had been sold and put into use. The Electrographic Corporation, then owner of one of New York City's leading typographers, decided to launch a start-up proposed and staffed by departing Rutherford employees, notably Edward Rondthaler and Harold Horman. The new midtown firm of Photo-Lettering Inc., starting in 1936, took advantage of the under-utilized technology, and claimed an early commercialization of phototype. While not text photocomposition, Photo-Lettering was never handlettering as the name implied. Photography freed the typographic image from the historic constraints of metal, allowing flexibility in scale, dimension, and position, variations



Rutherford photo-lettering machine, c. 1935

which had previously required letter-drawing skills.

Photo-Lettering was a combination of aesthetic, technical and marketing efforts. Horman was a competent letter designer, Rondthaler an experienced typographer; both they and the other staff shared a keen interest in mechanical devices. Photo-Lettering's initial client, advertising agency J. Walter Thompson, was brought in by their corporate parent. It was the Rutherford's always freshly exposed characters, precision variability, and consistency that kept the agency as a client. The firm's initial stock of typefaces was built both by Horman and by photographing existing metal designs. During World War II the firm supplied headlines for

Haupt Casoni Italie 3 Haupt Casoni 8 Haupt Casoni Italie 32 Haupt Casoni Extra Condensed		
They set a mighty good table every day in REDBOOK, Pennsylvania! Naturally, Chase & Sanborn Coffee		
Two ways to PROTECTION against fraud	A John Hancock Advertisement on Americanism	Youill have BETTER TIMES
Association of American Railroads		

Photo-Lettering Inc. catalog, Haupt Casoni series, 1950

wartime posters. The full capabilities of the process became steadily realized. The ability to italicize, reproportion, outline, and add weight to type increased the attractiveness of Photo-Lettering's service.

The heyday of the lettering artist

In 1944 Tommy Thompson, perhaps the pre-eminent New York lettering designer of the day, approached Photo-Lettering. He had been asked by The Saturday Evening Post, a national weekly, to furnish handdrawn lettering in a consistent, distinctive style for their headlines and bylines. The volume made a compelling case, and a royalty agreement, the first with an outside artist, was made. From this beginning, the type library at Photo-Lettering tapped into a pool of lettering artists who ordinarily would not have had their work become type. The firm's 1946 catalog claimed 979 alphabets; of the original designs the vast majority were created by Horman. One extensive family was Photo-Futura Condensed. Based on the Bauer original, it was a gradated series of ten weights from thin to extrabold. Sixteen lettering designers participated in the royalty program, including J. Albert Cavanagh and M. M. (Dave) Davison. Davison's elegant Spencerian type was described twenty years later as the most popular design in Photo-Lettering's library.

Other lettering designers and firms were busy at the same time. In the early 40s, Camera Composition promoted display typefaces by Bluemlein, M. R. Kaufmann, and Warren Chappell. Rand Holub released

a script through the same firm; his alphabet for Macy's was another example of the demand for custom type. Frank Bartuska and Tony Bonagura issued a catalog for their photographic lettering studio, stating "Your suggestions for alphabets or decorations will be carefully considered and we are willing to discuss at any time the creation of faces for your exclusive use." Bartuska later designed faces for both Photo-Lettering and ATF. Techni-Process Lettering was opened by Sam Ardell in the late 1940s, taking its name from "process lettering," which meant paste-up composition from preprinted characters.



Techni-Process Lettering, New Caslon specimen, 1967

The Pete Dom series was presented in Photo-Lettering's 1950 catalog, in three weights named Twixt, Husky, and Darky (the last retaining a segregation-era flavor). Peter Dombrezian's highly skilled, informal brush-written type was furnished with numerous alternates. There were at least three versions of each capital and lowercase letter, and two sets of figures for the Twixt weight alone. The restricted number of alternates offered by metal typefounders, combined with the handmade competition, may well have encouraged early display phototype families to be as expansive as possible. In the case of ATF's Dom Casual, completed in 1952, the more reserved letters from the Twixt were chosen for metal type. Others among those listed in the royalty program were Alfred Bosco, Hollis Holland, Oscar Ogg and Tony Stan.

An important designer was Freeman Craw, creator of several faces for ATF, and responsible for the proprietary CBS Didot and CBS Sans. He also contributed to The Headliners, another major display lettering studio, as did Emil Klumpp and Harold Warshow. Headliners, founded in 1954, may have been the first to develop franchising or subscribing as a business model; thus becoming a true phototype foundry before International Typeface Corporation (ITC) was established. Headliners' 1959 catalog showed "casual" varieties in many of its type categories, indicating their popularity. Also notable was George Abrams, known for his calligraphic work, who later ran his own display type studio.



The Headliners, Florentine specimen, c. 1959

The lettering designer Sam Marsh was seen as a cagey competitor by Rondthaler. While Marsh's display captions were recognized alongside his peers, he never released any of his lettering in typographic form. He may have had at least one point on aesthetics. The catalogs of the major display type studios were filled with copy lines that had been obliqued or "italicized" by camera without any retouching. While brush-written styles emerged unscathed from moderate distortion, more regularized sans serif and serif types suffered noticeable damage. The popular expansion and condensation effects could equally be objectionable, depending on their degree. Over time, when the obliques were elevated to fixed forms, the optical corrections practiced by typefounders were finally applied. The exact same problems, and charges by critics, would reappear with CRT typesetting equipment, before the invention of PostScript.

New display phototypesetting machines

The potential market for cheap phototype, bypassing the investment and effort required by foundry metal, spurred further equipment development. The Filmotype of 1952, a simple manual phototypesetter from the Chicago area, was far more successful than the Protype venture by Photo-Lettering and Mergenthaler Linotype. The Filmotype employed master fonts in a new format: two-inch film reels. While the quality was not outstanding, a limited number of handlettered alphabets were supplied. It was something typographers, and others, wanted. A Filmotype



Two-inch film font on reel

was reported in use at the NBC television network in Rockefeller Center. Meanwhile, the display lettering studios were busy composing titles for broadcast commercials. They developed spacing charts, formalizing the open settings called "TV spacing", intended to counteract the bleeding or halation problems of video.

It took another new machine to fully obsolete foundry type. The Photo Typositor, invented by Miamibased Murray Friedel in 1959, followed a familiar start-up pattern. The owners of Rapid Typographers were impressed enough by Friedel's invention to organize the new Visual Graphics Corporation. Initially

the endeavor split its headquarters between the existing typographer's address in midtown Manhattan and sunny South Florida. The Photo Typositor allowed an operator to see composition letter-by-letter as it was exposed, unlike the Rutherford. It also offered many of Photo-Lettering's capabilities at a reduced price. The Typositor, as it became known, ingeniously used the same two-inch film font format as the Filmotype. It speeded fashionably tight letter and word spacing, achievable in metal only with a razor blade after proofing, and had none of the size limitations of foundry type. VGC and its backers proceeded to convert metal faces to film, and pursued licensing with typefounders.



VGC Photo-Typositor

The first field use of the Typositor was in 1961, in New York, at the advertising agency Doyle Dane Bernbach. The Composing Room, a typographer who sponsored the nationally recognized design showcase Gallery 303, and kept a service desk open until 2 AM, added the Typositor to its formidable resources. There were serious attempts by other manufacturers. In the early 1960s, Berthold offered the Staromat, an automated exposure, high-quality system. A full library of licensed typefaces was made available, however it was adopted by only a few typographers in the New York area.

The film studios make headlines

Aaron Burns was an expert typographer who associated himself with a succession of type shops. He set up a division at Rapid Typograpers, helped promote the Typositor, and guided type library development. The first new VGC design, Pistilli Roman, was released for the Typositor. John Pistilli, its designer, had previously worked for Herb Lubalin. It premiered in a 1964 poster by Lubalin announcing VGC's first typeface design competition. The judges included Arnold Bank, Lucian Bernhard, Will Burtin, Alvin Eisenman, Lubalin, Paul Rand, Klaus Schmidt, Bradbury Thompson, and Carl Zahn. A second international competition followed in 1966. Both yielded typefaces still in current use; notably Baker Signet, André Gürtler's Basel class project entitled Egyptian 505, and Friz Quadrata. Some winners had worked in New York, such as Arthur Baker; others were out-of-towners such as Ronald Arnholm.

During the 1960s, the display type studios undertook revivals and expansions of wood type, Art Nouveau, and 19th-century faces. They adopted the Typositor,

Pistilli Roman announces a Visual Graphics Corporation typeface competition

and converted their process lettering alphabets to the two-inch film format. The Morgan Press collection of wood faces was released by Headliners. Korinna (in three weights), Clearface, and Souvenir were all revived prior to their re-release by ITC. Custom typefaces included airline, pharmaceutical and soft drink alphabets. By the close of the 1960s, New York design firm Chermayeff & Geismar had completed proprietary typefaces for clients including Chase Manhattan Bank, Mobil Oil, Manufacturers Hanover Trust, and the Lincoln Center performing arts complex. A tally from Photo-Lettering's 1965 Alphabet Thesaurus Vol. 2 reveals 146 exclusive numbers within their total index. Unfortunately, this number cannot be interpreted accurately without more information. Given relatively few published records, it is impossible to accurately gauge how many new typefaces were commissioned by design firms, publishers, or advertisers. It does appear there was plenty of activity.

About 1969, designer Roger Ferriter and letterer Tom Carnase devised a wordmark for a line of hosiery to be called L'eggs. The same expressive quality in that mark appeared in Carnase's titling face Busorama, a spinoff from a bus advertising promotion. Both Carnase and fellow lettering designer Tony DiSpigna became known for their exuberant scripts. Their respective typefaces, Avant Garde Gothic



and Serif Gothic, each created with Herb Lubalin, launched a signature look that placed ligatures in a starring role. An early specimen for Avant Garde Gothic claimed it had more ligatures and alternates than standard characters. Lubalin, Burns & Co. was launched to combine a display type studio and highend typographer with the then-prominent Lubalin, Smith, Carnase.

ITC, which in 1970 united as co-founders Rondthaler (and Photo-Lettering), Burns, and Lubalin, was the logical outgrowth of this undertaking, mixing the talent and marketing of letters. Ed Benguiat, a longtime letterer and type designer at Photo-Lettering, became known for his renovation of The New York Times masthead, and for his typefaces released by ITC. The growing success of computerized composition offered stylistic and financial incentives for new typefaces that could be used for display as well as text. ITC was well positioned to exploit that opportunity worldwide.

Headliners, now in the suburbs, offered the "Neo" series; it was available in 1979 through 54 typographers in the U.S. and abroad. These faces, and ITC's early releases, shared the large lowercase x-height and modest serifs that made tightly set headlines comfortable, in keeping with the look of the day. The John Schaedler studio in the 1970s produced display faces, such as Ray Cruz's Swinger, handlettering and logotypes. Ursula Seuss, one of many women working in the city as lettering designers, released her Book Jacket Italic typeface through VGC. California-trained Gerard Huerta, first at CBS Records, created a custom Franklin Gothic in the late '70s as part of Walter Bernard's redesign of Time magazine. Reviewing these and other examples thirty years out reveals the mostly ephemeral nature of the commissions letter designers received.



ITC Serif Gothic specimen, c. 1974

Consequences and fixing a final image

The common two-inch film format had one major unintended consequence: it made typeface piracy easy. With film fonts, all a pirate needed was a released reel, or a complete setting of the font, and the thief could start duplicating or shooting negatives immediately. Some typographers, far too eager to make a few extra dollars, bypassed the original, licensed, royalty-paying releases and waited to buy the cheaper, pirated "knock-offs." The fake fonts had similar-sounding names and hopefully similar character shapes. As a result, original type producers struggled to disseminate their names and to be associated with their designs wherever possible. ITC and others trademarked typeface names and encouraged ethical type buyers to insist on the real item from their typographers.

When desktop technology replaced phototype in the late 1980s, typographic fashion had shifted again. But the new typefaces and revivals that accompanied that shift would be digital, and so properly lie outside this narrative. The numbers on typeface production below, by sheer volume alone, argue for the lasting impact of the display phototype era. Just as decorative typefaces exploded into existence in the 19th century, display phototype will always have a period flavor. Fred Smeijers has observed that signpainting and handlettering diverged long ago from the traditions of type intended for books. Custom lettering, once a primary inspiration for much display type, is infrequently commissioned in the digital environment. So it was an era of the kind most unlikely to return.

Display phototype faces at three firms

These tallies were made from printed catalogs to give some perspective on typeface production. See the notes below for detailed explanations, interpretation, and type library changes.

Headliners: 1959: 458 1984: 1,319 Photo-Lettering: 1950: 1,631

Techni-Process: 1957: 408

1965: 5,474

1967: 1,016

Notes:

Headliners: 1959 — camera italics not counted, no foundry faces shown; 1984 — includes foundry variants, outlines and drop shadows. At Headliners, faces were added from 1954 onwards until the library changeover, starting in 1972 the "Neo" series families were released; so the total in 1984 does not reflect cumulative production. Headliners had substantive releases shown in catalogs or printed specimens after the latest year given above. Surviving types and collection purchased in 1995 by Treacyfaces.

Photo-Lettering: 1950 — less estimated repeats in index, includes foundry variants and foundry faces; 1965 — based on typeface plate serial numbers, plus multiple styles sharing single plates, less plates with lowercase split from capitals; includes foundry variants, plus foundry faces. Photo-Lettering published an index to its non-exclusive designs in 1969, showing approximately 1,100 foundry and matrix-manufacturer typefaces in its collection; while relatively few (if any) proprietary or exclusive types were retired from their library while the firm was in operation. Photo-Lettering had substantive releases shown in catalogs or printed specimens after the latest year given above. Licensed designs to ITC, AGFA/Monotype and others; some dispersed alphabets; vast majority survived and purchased by House Industries in 2003.

Techni-Process: 1957 — camera italics not counted, no foundry faces shown; 1967 — camera italics not counted, includes foundry variants, outlines and drop shadows. Techni-Process had substantive releases shown in catalogs or printed specimens after the latest year given above. At the appearance of their

1984 catalog, Techni-Process had retired some of the typeface series shown in 1957 and 1967. Some dispersed alphabets, surviving typefaces purchased by author in 1994, now in the Incipit collection.

In addition to various catalogs and specimens from the firms above, the following works were consulted:

Ronald Arnholm. Athens, Georgia: Georgia Museum of Art, The University of Georgia, 1969.

Avant Garde Gothic. New York: Lubalin, Burns & Co., Inc., 1970.

Bank, Arnold. "The Craft of Lettering." The Penrose Annual, London: Lund Humphries, 1955, Volume 49.

Brown, Frank Chouteau. *Letters and Lettering: A Treatise with 200 Examples*. Boston: Bates & Guild Company, 1902. Second edition.

Bonagura, Tony; Bartuska, Frank; and Crane, Bruce. *Custom Lettering through Photography*. New York: Custom Lettering, Inc., 1948.

Cholet, Bert (ed.) Script and Manuscript Lettering. New York: Higgins Ink Co., 1943 and 1946.

"Creativity in Type Design." Print, May-June 1958, Vol. XI, No. 6.

15 award winning type face designs. North Miami, Florida: Visual Graphics Corporation, 1967.

Ferriter, Roger. Typeformance. Palo Alto, California: Communication Arts Books, 1983.

Harvey, Francis. "Type and the TV Screen." Print, April-May 1954, Vol. VIII, No. 6.

Hollister, Paul (ed.) American Alphabets. New York: Harper & Brothers, 1930.

Hornung, Clarence. Lettering from A to Z. Chicago and New York: Ziff-Davis, 1946.

The Lettering Studio: A Design Portfolio. New York: John N. Schaedler, Inc., 1970.

McGrew, Mac. *American Metal Typefaces of the Twentieth Century*. New Castle, Delaware: Oak Knoll Books, 1993.

Norton, Robert. "Display Photo-Setting in the Seventies." *Penrose Annual*, New York: Visual Communications Books, 1972, Volume 65.

Pankow, David (ed.) *American Proprietary Typefaces*. New York: American Printing History Association, 1998.

Pistilli Roman. New York: Aaron Burns & Co., division of Rapid Typographers Inc., 1965.

Reinhardt, Charles W. *Lettering for Draftsmen, Engineers and Students*. New York: D. Van Nostrand & Company, 1906. Tenth edition.

Rondthaler, Edward. *Life with Letters as they turned photogenic*. New York: Hastings House, Publishers and Photo-Lettering Inc., 1981.

Schmidt, Klaus. "Display Composition on the Photo Typositor." *Printing in the 20th Century, a Penrose Anthology*, James Moran (ed.), New York: Visual Communications Books, Hastings House Publishers, 1974.

Shapiro, Charles. *Encyclopedia of Contemporary Typesetting*. Pittsburgh: Graphic Arts Technical Foundation, 1977.

Stevens, Thomas Wood. *Lettering*. New York and Chicago: The Prang Company, 1916. Second edition.

Thompson, Tommy. *The Script Letter: Its Form, Construction and Application.* Studio Publications, 1939, revised 1955. Republished as *Script Lettering for Artists.* New York: Dover Publications, 1965.

Weiss, Egon. The Design of Lettering. New York: The Pencil Points Press, 1932.

Author's notes:

Discussions with Klaus Schmidt, master typographer and former Vice President at Young and Rubicam; and Joseph Treacy, principal of Treacyfaces and owner of The Headliners type library, were invaluable in giving perspective to this narrative. Under full disclosure, the author admits his experience as a former buyer of display phototype from Photo-Lettering, Techni-Process Lettering, and Headliners; and to foolishly deciding to collect film fonts when they became technologically obsolete.

*In the United States, businesses specializing in typesetting for customers often referred to themselves as typographers. Those individuals who worked in typography, such as skilled typesetters or typographic designers, were also identified as typographers. Both meanings, as understood during that time, are used here.

Image source notes:
[Rutherford] *I*•*T*•*U* Lessons in Printing: Photocomposition, Ruling and Pasteup—Unit X. Indianapolis: International Typographical Union, 1955.
[Typositor]
Photo-Typositor sales promotion packet; mid-1960s
[Pistilli Roman] *Typositor Typography.* New York: Aaron Burns & Co., division of Rapid Typographers Inc., 1965