

History and Process
Printmaking

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*For Diane, Ruth,
Jeff, Mia, and Stephen*

7 The History of Serigraphy

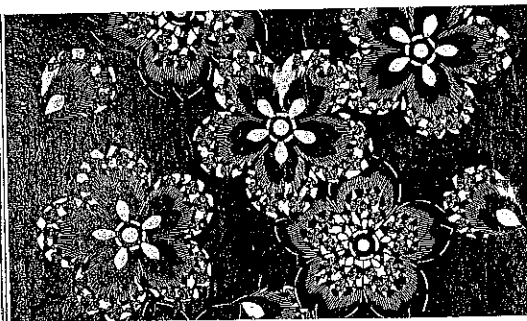
Screen printing is among the newest of the graphic arts. Of the four major printmaking categories discussed here, it has by far the shortest history as a fine-art medium. Nevertheless, the origin of the technique itself is still quite obscure. There is little doubt that the process owes much to the ancient and simple stencil methods practiced throughout many parts of the world. Early stencils and pigments were made from organic materials and so have not survived.

More precisely documented are the applications of stenciling developed in China and Japan between A.D. 500 and 1000. The Chinese and Japanese found the process well suited for transferring images to fabric (Fig. 479), as a means of decoration as well as for making embroidery patterns. The cutout stencil allowed the heavy deposition of dye and pigments so necessary for textile printing. In addition to satisfying these practical needs, stenciling was also considered an art form in itself in the East.

The technique probably reached the West through the journeys of Marco Polo in the late 13th and early 14th centuries, when so many new ideas and

materials were flooding Europe. It was still a relatively crude method at best, suitable only for bold shapes and patterns. One of the main drawbacks was that images could be produced only if the cut shapes remained attached to and supported by the stencil matrix itself. The difficulty of introducing floating shapes was apparent—a separate piece could not be used without changing its position or lifting off the surface. With the opening of Japan to westerners by the journeys of Commodore Matthew Perry in the mid-1850s, it was discovered that the Japanese had solved this problem long since.

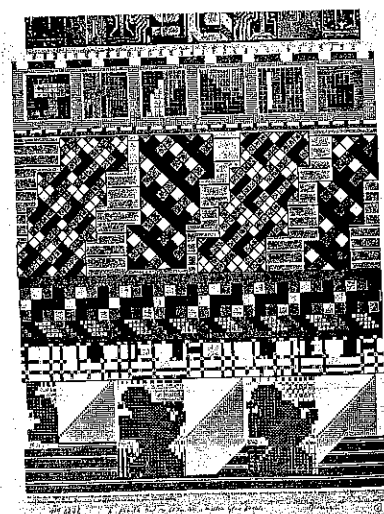
The Japanese had perfected a method of using fine silk threads and strands of human hair to hold the floating shapes in place, allowing intricate patterns of almost unlimited complexity to be made. The strands of hair or silk were attached to the surface of the stencil matrix at intervals of about $\frac{1}{4}$ inch. They extended in many directions and served to support the delicate, floating shapes. An identical stencil was placed on top, sealing the fibers firmly in position. The entire stencil was then varnished and flattened,



above: 479. Japanese stencil used to decorate silk. c. 1680–1750, Tokugawa period. Slater Memorial Museum, Norwich Free Academy, Norwich, Conn. (Vanderpoel Collection).



right: 480. Anthony Velonis. *Washington Square, New York City*. Before 1940. Serigraph. New York Public Library, Prints Division (Astor, Lenox, and Tilden Foundations).



far left: 483. R. B. Kitaj. *Nancy and Jim Dine*. 1970. Serigraph and collage, 33 1/2 x 23". Courtesy Marlborough Gallery, New York.

left: 484. Eduardo Paolozzi. *A Formula That Can Shatter into a Million Glass Bullets*. 1967. Serigraph. Courtesy Pace Editions Inc., New York.

forming the first direct precursor of the modern screen. Color was dabbed through the open areas with a stiff brush, yielding continuous patterns unimpeded by the thin threads and reproducing only the basic shapes.

Silk as a stencil carrier probably was used in France about 1870 for the printing of textiles. Screen printing, in fact, is still a major means of printing fabrics. England, which had very stringent and well-documented patent laws, recorded the use of a silk stencil in a patent awarded to Samuel Simson of Manchester in 1907. Printing through the stenciled silk was achieved with a stiff bristle brush. The squeegee later speeded up the process and also produced a more even layer of ink. It is not known for certain when the squeegee was introduced; however, by the early 20th century this tool was in common

use, and by the 1920s the first automatic screen printing machine had been invented.

The applications of the silkscreen technique in the early 20th century were largely commercial. The process was capable of meeting small runs on short notice and was relatively inexpensive. Silkscreen proved to be a perfect medium for the bold designs and colors that appealed to a burgeoning advertising industry. In particular, a new phenomenon—the billboard—owed its proliferation to silkscreen techniques. Cylindrical bottles, cans, and other oddly shaped items could be screen printed as well, and as time went on, new developments in electronics showed that silkscreen methods could be employed for printed circuitry of all kinds.

During the height of the Depression, a Work Progress Administration (WPA) silkscreen project

was begun under the direction of the artist and printmaker Anthony Velonis (Fig. 480). By 1935 Velonis and his group were able to bring the silkscreen process to the attention of serious artists for the first time. Many rejected the creative possibilities of silkscreen, largely because of the heavily commercial character it bore at that time. In order to differentiate creative silkscreen work from the more mundane purposes the process served, Carl Zigrosser, then curator of the Philadelphia Museum of Fine Arts, coined the term *serigraph*, from the Latin *seri*, meaning silk, and the Greek *graphos*, to write.

In the late 1920s, Louis D'Autremont in Dayton, Ohio, developed a knife-cut shellac stencil material called Profilm. The ease with which sharp-edge stencils could now be adhered to the screen changed the medium. Later, after Joseph Ulano improved the film and introduced both a lacquer stencil material and a gelatin photosensitive material, screen printing was able to keep pace with other graphic processes.

The National Serigraph Society was formed in 1940. This group exhibited screen prints throughout the world, emphasizing the creative aspects of the technique. Serigraphy soon became part of the vocabulary of graphic art, as museums added prints to their collections and in turn promoted the artistic legitimacy of the process. Initially, many of the WPA Art Project-sponsored prints imitated crayon drawings, watercolors, or oil paintings. During the period from 1935 to 1950, however, a considerable number of artists accepted the process for their own work and began to explore its particular characteristics. Harry Sternberg, Guy Maccoy, Hyman Worsager, Elizabeth Olds, Loris Bunce, Mervin Jules, Edward London, Ruth Gikow, Ben Shahn, and Velonis himself led the way (Fig. 481). In the 1950s the technique was further explored and adapted to more personal kinds of im-

agery, including that of the artist Marcel Duchamp (Fig. 482).

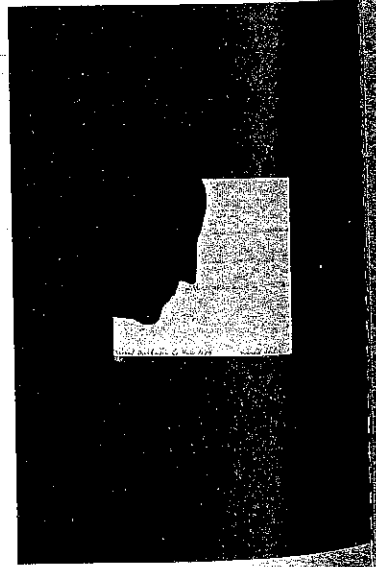
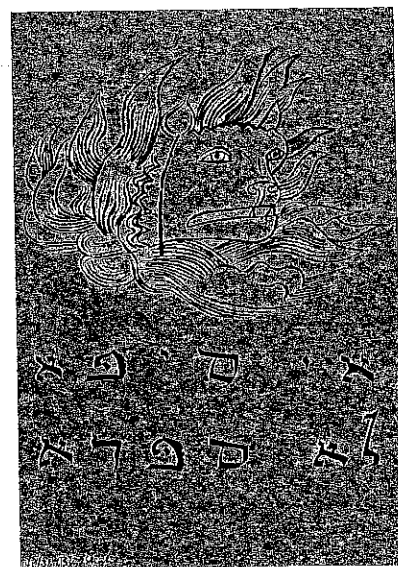
By the 1960s serigraphy had been adopted wholesale in the commercial printing industry. Its use for art prints was fostered by such influential figures as the English printer Christopher Prater. Prater began his career as a commercial printer, but he later produced works for such artists as Ron Kitaj and Eduardo Paolozzi (Figs. 483, 484).

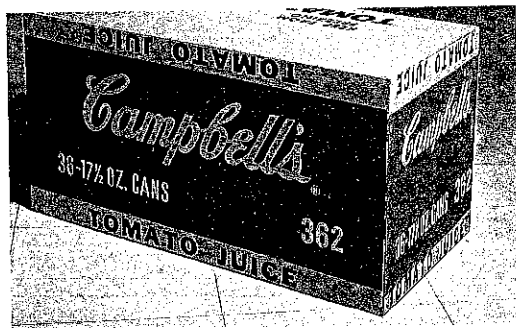
Screen printing proved ideal for the aesthetic movements of the sixties. Possibly because of the close relationship to commercial printing methods, the medium lent itself naturally to the popular or "Pop" art imagery of such artists as Andy Warhol, Jasper Johns, and Roy Lichtenstein (Figs. 485–487), who transformed immediately recognizable symbols of American culture into new artistic statements.

One of the greatest advantages of the silkscreen technique is the relative ease of multiple-color printing. A silkscreen workshop is not expensive to set up and requires fewer skills on the part of the printer than other methods. Virtually any paper can be used for printing, making silkscreen more accessible than any other print medium. In addition, the colors are more predictable than in other types of printmaking, since the inks tend to be opaque and ride on the surface of the paper. Thus, when artists of the mid-20th century began to concentrate on color as the actual subject of their works—in the broad areas of Color Field painting or the vibrating harmonies of optical art—silkscreen again served as a natural medium for adaptation to prints (Figs. 488, 489). The flat colors and precise, ruler-sharp edges of "hard-edge" painting and Minimal Art also translated readily into silkscreen printing, since they are innate characteristics of the stencil process (Figs. 490, 491; Pl. 26, p. 297; Pl. 31, p. 334).

right: 481. Ben Shahn. *Where There is a Book There is No Sword*. 1950. Serigraph printed in black, 13 7/8 x 11 5/8". Museum of Modern Art, New York.

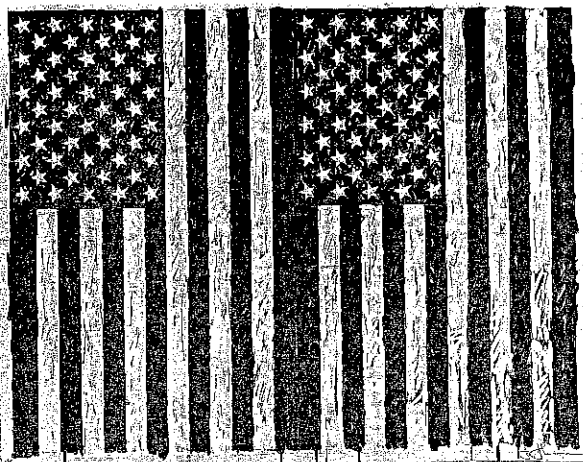
far right: 482. Marcel Duchamp. *Self-Portrait*. 1959. Serigraph printed in blue, 7 7/8" square. Museum of Modern Art, New York (gift of Lang Charities, Inc.).





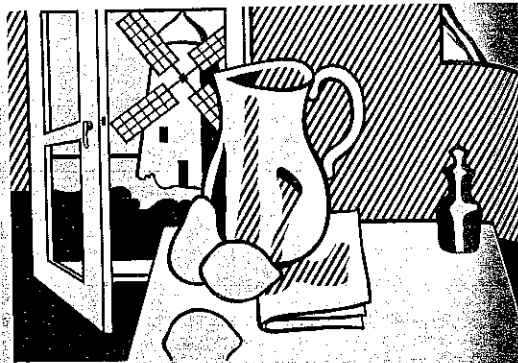
above: 485. Andy Warhol. *Campbell's*. 1964.
Serigraph on wood, 10 x 19 x 9 1/2".
Courtesy Leo Castelli, Inc., New York.

below: 486. Jasper Johns. *Flags I*. 1973.
31-color serigraph, 27 7/8 x 35 3/8".
Courtesy Leo Castelli, Inc., New York.

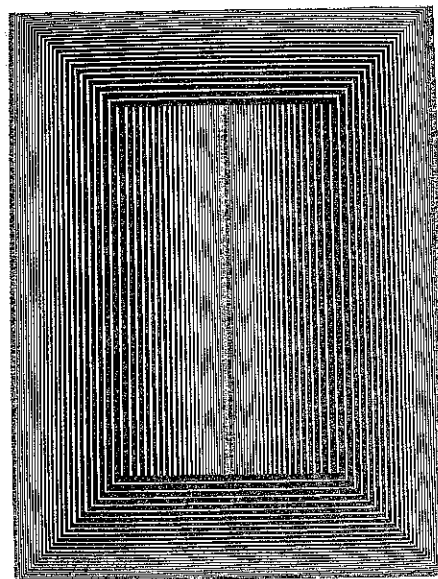


Indicative of the combined and expanded methods that many artists have investigated are Robert Rauschenberg's *Star Quarters* (Fig. 578); James Rosenquist's *Earth Moon* (Fig. 563); Roy Lichtenstein's *Moonscape*, printed on metallic plastic (Pl. 27, p. 298); Brice Marden's *Painting Study II*, printed with heated encaustics (Fig. 492); and Joe Tilson's *Diapositive: Clip-O-Matic Lips*, on acetate film with metallized acetate film (Pl. 28, p. 315). Silkscreen lends itself especially well to combination with other media, including painting and collage.

The reappearance of the figure in 20th-century art coincided in time with the trend toward increasing numbers of colors in silkscreen work, and these two elements complement each other (Fig. 493). With the advent of Photorealism, works in ten, twenty, or more colors can reproduce with photographic accuracy the figurative imagery of this style (Fig. 494). It should be clear that this medium has become an indispensable part of the artistic vocabulary of the times.

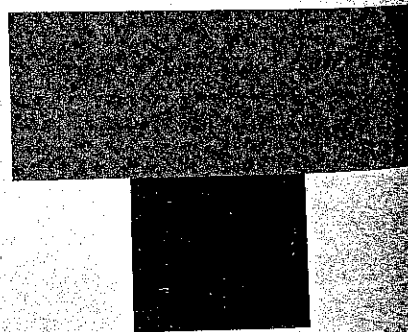


above: 487. Roy Lichtenstein.
Untitled, from *Six Still Lives*. 1974.
Serigraph and lithograph, 35 7/8 x 44 3/4".
Courtesy Multiples, Inc., New York.



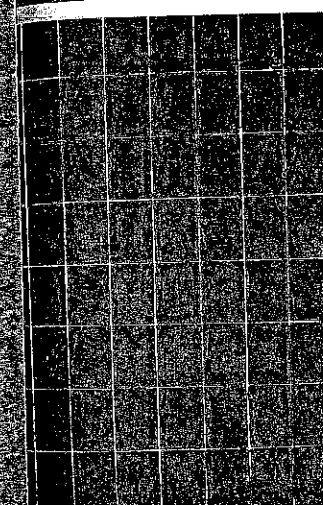
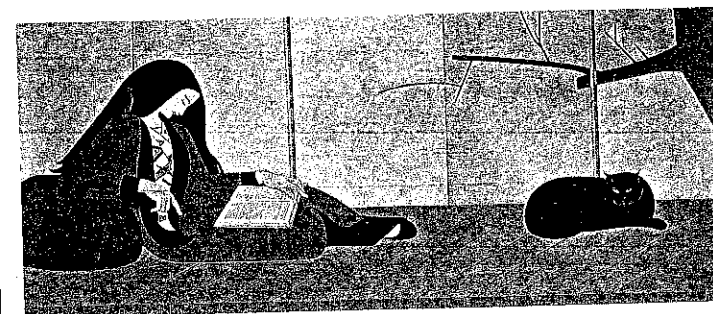
above: 488. Richard Anuszkiewicz.
No. VI, from *Sequential*. 1972.
Serigraph. Courtesy the artist.

below: 489. Ellsworth Kelly. *Black and Red*. 1970.
Serigraph, 24 7/8 x 30".
Courtesy Leo Castelli Inc., New York.



left: 490. Ernest Trova.
Print # 4, from *Series Seventy-Five*. 1975.
Serigraph, 42 x 35".
Courtesy Pace Editions, Inc., New York.

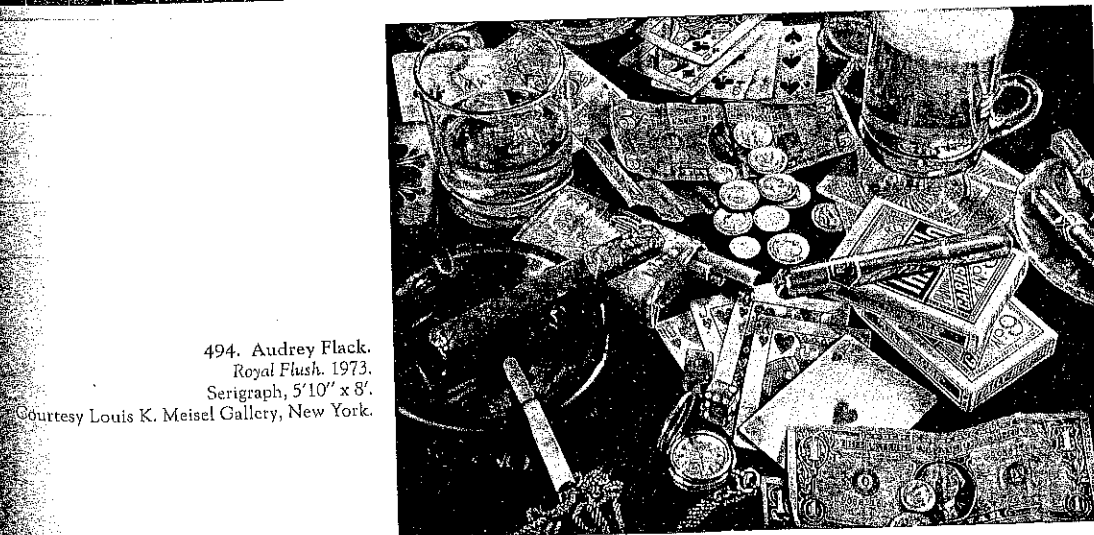
above: 491. Will Barnett. *Aurora*.
1977. Serigraph, 17 1/2 x 40".
Courtesy the artist.



far left: 492. Brice Marden.
Painting Study II. 1974.
Serigraph with wax
and graphite applications.
Courtesy Multiples, Inc., New York.



left: 493. Alex Katz.
Good Morning. 1975.
9-color serigraph, 37 1/2 x 28 1/2".
Courtesy Brooke Alexander, Inc., New York.



494. Audrey Flack.
Royal Flush. 1973.
Serigraph, 5'10" x 8'.
Courtesy Louis K. Meisel Gallery, New York.