Basic introduction to the traditional methods of the fine art of making prints. Water based inks will be used because of the recent warnings concerning health hazards in the arts.

The History of Printmaking will be incorporated into the course as well as some of the Masters who employed these techniques.

Printmaking is a very democratic art process. Its history goes back thousands of years to China and Japan. Today, it is a medium that appeals to young people because of the correlation with texting, and the power of word. Image and word combined are used in Advertising, Theology, Politics, Social Media and Photography. In introducing this course, I wanted students to engage in hands-on experience and express their world in a graphic medium.
**Types of Printmaking:**

- Relief/e.g. woodcut
- Linoleum
- E-Z cut
- Foam
- Eraser
- Monoprint
- Stencil/Silk Screen Printing
- Intaglio/Etching
- Drypoint

**Grades:**

Natural artistic ability is not graded. Students will be expected to attend all classes, to fully participate and be on time.

Grades are a combination of:
1. Class Attendance
2. Effort
3. Class Assignments
4. Journal to Document Class
5. No Headsets Being Used in Class

**Office of Disabilities and Learning Support Services:**

Students with disabilities who require reasonable academic accommodations should schedule an appointment to discuss specifics with me. It is the policy of Villanova to make reasonable academic accommodations for qualified individuals with disabilities. You must present verification and register with the Learning Support Office by contacting 610-519-5176 or at learning.support.services@villanova.edu or for physical access or temporary disabling conditions, please contact the Office of Disability Services at 610-519-4095 or email Stephen.mcwilliams@villanova.edu Registration is needed in order to receive accommodations.

**Academic Integrity:**

All students are expected to uphold Villanova’s Academic Integrity Policy and Code. Any incident of academic dishonesty will result in an “F” for the assignment and will be reported to the appropriate university officials, per regulations in the Graduate Studies (Liberal Arts and Sciences) Catalog. You can view the Academic Integrity Policy and Code, as well as other useful information related to writing papers, at the Academic Integrity Gateway web site: http://library.villanova.edu/Help/AcademicIntegrity
**Overview for Basic Printmaking SAR 5004 (Section 001)**

Monday
Section 001 – 10:30AM to 1:00PM
Sister Helen David Brancato
Fall 2015

**Each Class Might Vary Depending on the Progress of the Students**

<table>
<thead>
<tr>
<th>Monday, August 24th</th>
<th>Distribution of Supplies/History of Printmaking</th>
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<tbody>
<tr>
<td>Monday, August 31st</td>
<td>Simplifying the relief process with eraser printing</td>
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<td>Monday, September 7th</td>
<td>Labor Day</td>
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<td>Monday, September 14th</td>
<td>Graphic design/simplifying images/alternative printing plates</td>
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<tr>
<td>Monday, September 21st</td>
<td>Drawing ideas/themes/E-Z cut/multiple printing plates</td>
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<tr>
<td>Monday, September 28th</td>
<td>Linocut/Registration Techniques</td>
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<tr>
<td>Monday, October 5th</td>
<td>Reduction printing with foam</td>
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<td></td>
<td>Semester Recess</td>
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<td>Monday, October 19th</td>
<td>Monotype or Monoprint</td>
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<td>Monday, October 26th</td>
<td>Planographic process/Silk Screen Printing (Serigraphy)</td>
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<td>Monday, November 2nd</td>
<td>Hands-On Cutting of Stencils</td>
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<td>Monday, November 9th</td>
<td>Intaglio</td>
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<tr>
<td>Monday, November 16th</td>
<td>Drypoint using plastic plates</td>
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<tr>
<td>Monday, November 23rd</td>
<td>A Day to Experiment</td>
</tr>
<tr>
<td></td>
<td>Thanksgiving</td>
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<tr>
<td>Monday, November 30th</td>
<td>Continue Experiment</td>
</tr>
<tr>
<td>Monday, December 7th</td>
<td>Last Day of Class: Final Presentations of Prints and Journal</td>
</tr>
</tbody>
</table>
Research the Following Artists to Study Their Prints:

- Albrecht Durer
- Kathe Kollwitz
- Fritz Eichenberg
- Hokusai
- Pablo Picasso
- Leonard Bskin
- Helen Frankenthaler
- Jim Dine
- Mary Frank
- Andy Warhol
- Emil Nolde
- Rembrant
- Helen Siegel
- Robert McGovern
- Corita Kent
- (Look at Frank Stella’s Prints Outside of the Connelly Center Gallery on the 2nd Floor!)
Assignments Due for Basic Drawing 2021 (Section 001 & 002)

Tuesday & Thursday
Section 001 – 1:00PM – 2:15PM
Section 002 – 11:30AM – 12:45PM
Sister Helen David Brancato
Fall 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment Description</th>
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<tbody>
<tr>
<td>September 10</td>
<td>Still life - “show me what you can do”</td>
</tr>
<tr>
<td>September 17</td>
<td>Cloth &amp; drapery using line and form (charcoal-soft and compressed)</td>
</tr>
<tr>
<td>September 24</td>
<td>Detail of a Masterpiece (China Marker)</td>
</tr>
<tr>
<td>October 1</td>
<td>Upside-down drawing of a masterpiece (soft and compressed charcoal)</td>
</tr>
<tr>
<td>October 8</td>
<td>Erasing as a drawing method</td>
</tr>
<tr>
<td></td>
<td><strong>Mid Term Break</strong></td>
</tr>
<tr>
<td>October 22</td>
<td>Enlarge a plant or flower in the style of Georgia O’Keefe (sepia conte)</td>
</tr>
<tr>
<td>October 29</td>
<td>Pen and ink-buildings, stairways, cars, doorways using crosshatching or houses with personality in colored pencil and pen and ink</td>
</tr>
<tr>
<td>November 5</td>
<td>Create a collage, make a black and white Xerox copy, then do a drawing of your collage (matching shade for shade and shape for shape, texture for texture, background is just as important as foreground.)</td>
</tr>
<tr>
<td>November 12</td>
<td>6 portraits of one artist - see Picasso portraits for reference or self-portrait from a mirror image</td>
</tr>
<tr>
<td>November 19</td>
<td>Gesture drawings of animals (Philadelphia Zoo or Elmwood Zoo) from Life</td>
</tr>
<tr>
<td>November 24</td>
<td>Pastel Landscape</td>
</tr>
<tr>
<td>November 27</td>
<td>Thanksgiving</td>
</tr>
<tr>
<td>December 3</td>
<td>Figure in costume</td>
</tr>
<tr>
<td>December 10</td>
<td>Trees are like people</td>
</tr>
</tbody>
</table>
List of Masters for Your Reference:

Line
Durer
Leonardo DaVinci
Ingres
Degas
David
Klee
Vincent VanGogh

Gesture
Rembrandt
Toulouse Lautrec
Daumier
Delacroix

Volume - Contrast
Kathe Kollwitz
Michelangelo
Diego Rivera
Caravaggio
Max Escher
Philip Pearlstein
Paul Cadmus

Rene Magritte
Peter Bruegel
Paul Gauguin
Modigliani
Marc Chagall
Paula Moderson - Becker
Sidney Goodman
Lucian Freud
Chuck Close
George Seurat
Rubens
Dali
Tooker
Alice Neel
Frida Kahlo
Picasso
Renoir
Mary Cassatt
Grading System in the policy section of the Full-time Faculty Handbook, at www.villanova.edu/facultystaff/.

The grade report at the end of the semester is part of the student’s permanent record. Any inaccuracy on this record must be reported to the Registrar within two weeks of its receipt; otherwise, the record will stand as it is.

A is the highest academic grade possible; an honor grade which is not automatically given to a student who ranks highest in the course, but is reserved for accomplishment that is truly distinctive and demonstrably outstanding. It represents a superior mastery of course material and is a grade that demands a very high degree of understanding as well as originality or creativity as appropriate to the nature of the course. The grade indicates that the student works independently with unusual effectiveness and often takes the initiative in seeking new knowledge outside the formal confines of the course.

B is a grade that denotes achievement considerably above acceptable standards. Good mastery of course material is evident and student performance demonstrates a high degree of originality, creativity, or both. The grade indicates that the student works well independently and often demonstrates initiative. Analysis, synthesis, and critical expression, oral or written, are considerably above average.

C indicates a satisfactory degree of attainment and is the acceptable standard for graduation from college. It is the grade that may be expected of a student of average ability who gives to the work a reasonable amount of time and effort. This grade implies familiarity with the content of the course and acceptable mastery of course material; it implies that the student displays some evidence of originality and/or creativity, works independently at an acceptable level and completes all requirements in the course.

D denotes a limited understanding of the subject matter, meeting only the minimum requirements for passing the course. It signifies work which in quality and/or quantity falls below the average acceptable standard for the course. Performance is deficient in analysis, synthesis, and critical expression; there is little evidence of originality, creativity, or both.

F indicates inadequate or unsatisfactory attainment, serious deficiency in understanding of course material, and/or failure to complete requirements of the course.

N Incomplete: course work not completed.
S Satisfactory: Assigned in Satisfactory/Unsatisfactory courses (work must be equivalent to C or better).
SP Satisfactory Progress.
T Transfer grade
WX Approved withdrawal without penalty.
W Approved withdrawal with penalty.
U Unsatisfactory: Assigned in Satisfactory/Unsatisfactory courses.
PRINTMAKING

PLANOGRAPHIC Process

Lithography
Based on the antipathy between greasy and water. The image on the stone is neither above nor below the surface. Being printed.

* Prepare drawing on white side of litho plate with special litho crayon, pencil or touche.
* Do not get natural oil from fingers on printing plate.

* Use a piece of heavy cardboard to mount the plate.

* Use a soft cotton pad to degrease the plate. Keep the surface moist - the solution must be applied before each inking.

* Use brayer in one action to pick up ink. Ink should be tacky, roll-up 3 or 4 times.

* Inked plate is placed face down on a sheet of white paper. Place between 2 sheets of paper - simple wooden frame can be used for handpressing.

Relief Process

The image to be printed stands in relief on the block of wood, lino, etc.

* Woodcut
* Block printing
* Collagraph

* Wood block
* Lino-cutters

Intaglio Process

The image or design is engraved or etched so that it is below the surface of the metal plate.

* Etching
* Engraving
* Aquatint
* Drypoint
* Collagraph

Stencil Process

Forcing pigment through the "open" silk areas onto a sheet of paper directly under the screen.

* Serigraphy
* Silk screening

Serig - meaning silk graph - to draw. Serigraphy is the youngest of the printing arts. Its origin may have been in en or Japan but since 1918, its development is definitely American.

Printing Frame

A wooden frame with silk screen tightly stretched to the bottom. The screen is hinged to a baseboard. Where the paper is placed in the silk screen. The ink is pushed through the pores of the silk. The layer of ink is thicker than any other printing process.

Block out with -
Paper stencils
Masking tape
Liquid glue
Shellac
Rubber cement
Melted wax
Tusche and glue
Film lacquer

Solvents -
Toluene
Mineral spirits
Kerosene
Alcohol
Lacquer thinner
**Silk Screen**

In silk screening, the ink is pushed through the pores of the silk. The layer of ink is thicker than any other printing process.

Its origin: China, Japan, England — since 1910, its development is definitely American.

**Stencil Methods**

- Film Lacquer
- Paper Stencils
- Photographic Stencils
- Tusche (pronounced "toosh") + Glue
- Dry Brush Effects - Hand Painting on Screen

*Silk - 10 XX - 16 XX most commonly used
Silk Substitutes - Cotton, Dacron, Silk Organdy, Nylon, other open mesh materials

Squeegee Substitutes - Linoleum, Asphalt, Vinyl, Rubber Tire, Thick Cardboard, Windshield Scrapers, Wipers

Solvents - Wash Out for Oil Base

**Important:** Screen must be cleaned well after each use

Sister Helen David
Introduction

The definition of the print, like that of any other art medium, is in a constant state of evolution. It can be molded to the social and aesthetic needs of a given society and to the individual expression of a particular artist.

Unlike other art forms, which often could be viewed only on a limited basis, early prints found their way to a larger audience. The visual and social impact of these works became a potent mass media force. Prints were often utilitarian, educational tools in the form of religious images, book illustrations, playing cards, maps, and commemoratives of important historic events. As other types of printing and communication developed, the hand printmaking processes became more exclusive, attracting artists by the richness and variety inherent in the various techniques. Collectors of art began to place a premium on high-quality prints as artists used the prints creatively. The originality with which the plate, block, or stone was conceived carried over into the multiple impressions that were considered "original" works.

An important characteristic of the print, therefore, is its identity as a multiple. While an artist could certainly create just one impression from a block or plate, the usual practice is for an edition of many prints to be struck. For some people this casts doubt on the designation of the print as an original work of art. However, the criteria for originality in a print have the weight of long tradition to support them: a design conceived by the artist for this medium, printed under the supervision of the artist, and meeting standards of excellence established by the artist. Actually, multiples have existed in sculpture as well for centuries. The bronze-cast sculpture made from a mold can be duplicated several times, but each cast is considered an original sculpture.

It is now common practice to limit the edition size and to number and sign the prints. With some techniques, where the plate is soft or the image subject to deterioration, as in drypoint, it is appropriate to number the prints in sequence as they are pulled. The earlier impressions are the sharpest and thus the most valuable. However, with today’s more durable surfaces and especially with steel facing applied to metal plates, diminishing clarity is less of a problem.

This potential for extremely high print runs raises a number of questions—questions that have not yet been satisfactorily answered. In the early days of printmaking, edition size was governed by the durability of the plate. When the image would no longer print clearly, printing was halted. In fact, some of Rembrandt’s plates were actually printed long after the metal face had worn down, so that considerable detail was lost in the later impressions. The printmaker and dealer of today, presented with a plate capable of sustaining many thousands of identical impressions, must somehow decide when to stop. Obviously, the major consideration in this choice is financial. There is a natural temptation to print huge editions and therefore sell enormous quantities of any given print. On the other hand, the value of each individual print decreases as the size of the edition increases. A print from an edition of ten or twenty would be worth far more money than one from an edition of five thousand. Large editions, moreover, often bear the stigma of “commercialism.” As technology continues to advance the mechanical possibilities of printmaking, these questions may be difficult to resolve.

Innovations in 20th-century printmaking have to some extent confused the issue of what physically constitutes a print. The traditional idea of a print is a flat inked image on paper. But many prints today have three-dimensional objects or areas incorporated in them, and some are actual freestanding three-dimensional pieces. Also, a number of processes involve no
Few inventions in the history of civilization have played such a key role in the evolution of thought as the development of printed images. The cultural impact of printing was without parallel until our own age of computers, photography, and mass communications. The earliest printed images were relief prints— the best known method being the woodcut.

Relief printing takes its name from the fact that the printing surface is raised above its background. In wood block printing, for example, background areas that are not meant to print are carved away, leaving the image areas of the print in relief. Ink is applied to this raised surface, and the image is transferred to paper.

Carved reliefs capable of making an impression predate actual printing by many centuries. There were wooden stamps in Egypt, brick seals in Babylonia, and clay seals in Rome. Among other purposes, stamps were used for branding animals and criminals, in the latter case to indicate the particular crime committed. However, the idea of using carved reliefs to print multiple images on surfaces such as paper originated in China.

Seals carved from various substances had been common in China from earliest times, but one crucial invention set the Chinese apart from other cultures—the technique of papermaking. According to legend, paper was invented in A.D. 105. The availability of this material opened up a whole new world. For the first time the images on seals—as well as those on stamped wall tiles and stone reliefs—could be transferred to a suitable surface by a simple process.
been dated about 1380, and it probably was intended for printing on cloth. As can be seen in modern impressions taken from the block (Fig. 2), it has a bold, outline style suitable for textile decoration. The size of the total block to which this fragment belongs would have been too large for paper milled at that time. It was not until about 1400 that paper was available in sufficient quantity to be employed for the printing of religious and secular images. At that time the style and methods used previously for the textile designs (Fig. 3) were adapted to paper.

The center for woodcut printing in the 15th century was Germany. Of the rare surviving prints from this era, one of the earliest and most beautiful is the Rest on the Flight into Egypt (Fig. 4). Like the Bois Protar, this woodcut has simple forms composed by thick outlines; a heavy black ink is employed, and there is no shading. The drapery folds, however, are indicated by gracefully swelling loops. Hand coloring effectively heightens the clear woodcut design.

The next phase of woodcut development is indicated in one of the earliest dated prints, a St. Christopher of 1423 (Fig. 5). Here the drawing style has become more angular, and a thinner brown ink was used for printing. Cut parallel lines form a rudimentary shading. Coloring was done by hand or stencil.
cuted between 1450 and 1470. Gold leaf, precious stones, bits of cloth, and other decorative materials were sometimes embedded in the prints, using glue.

But printing served not only as an aid to spiritual fulfillment. It could also contribute to pleasurable secular functions, among which the most prominent was card playing. Card games became popular in Europe among all classes of society in the mid-1300s, and by the early 1400s there was a mass market for the new, cheaply printed cards (Fig. 6).

Block Books

A special adaptation of the woodcut technique was its use in illustrated books. In the early 15th century, before the invention of movable type, both text and illustrations were cut into the same block, hence the name block book. The best known of these books is probably the Biblia Pauperum, or "Bible of the Poor" (Fig. 7). The woodcut images in this book feature illustrations of New Testament episodes, together with the Old Testament subjects that prefigured them and portraits of the prophets who had foretold them. These productions offered an intelligible, basic account of biblical stories, which could be understood by the predominantly illiterate populace of the time. Probably of Netherlandish origin, the Biblia Pauperum has a clear, forthright style.

Page from block book. 8⅔ x 6⅜.
Kupferstichkabinett.
Staatliche Museen, Berlin.

Metropolitan Museum of Art, New York
(Harris Brisbane Dick Fund, 1923).

After the Biblia Pauperum, the most widespread block book was the Ars Moriendi or Art of Dying, which deals with the struggle between angelic and devilish forces for the soul of a dying man. Here again a Netherlandish master of great skill must have been responsible for the designs (Fig. 8). They reveal much sensitivity and sophistication in their use of shading to create effects of color, in the rendering of perspective, and in the dramatic interplay of the characters.

Book Illustration

A book much discussed by those who theorize about the origin of movable type is the Speculum Humanae Salvationis, or Mirror of Man's Salvation. This work was one of the first to combine printing from type with wood block images. In a later edition (Fig. 9), Günther Zanier of Augsburg had guild cutters produce blocks that were type-measure width. Unlike the
Mainz the following year, Reuwich’s Sanctae Peregrinationes (Fig. 10) not only depicts the exotic peoples seen during the voyage, but also contains some of the first accurately drawn cityscapes. One of the travelers’ stops was Venice, and to capture its panoramic vastness, Reuwich created the first foldout plate. Consisting of several woodblocks, this plate is nearly 5 feet long. Its sheer size and ornamental patterning alone stand as a great achievement, but the careful cutting and detailed observation add still further to this remarkable work.

Woodcutting in Italy

It may seem strange that a Northern artist should have been the one to make this great woodcut image of an Italian city, but in fact the Italians themselves did not really develop a style of woodcutting until the end of the 15th century. Reflecting the innovative developments of the Italian Renaissance, the southern style was one of exquisite lightness and openness. The most beautiful examples occur in a book published by Aldus Manutius in Venice in 1499, the Hypnerotomachia Poliphili (Fig. 11). This complex allegorical work is memorable chiefly for the woodcuts, which combine pure outlines and areas of solid black ink to create striking designs. The careful proportions of the figures and classically accurate perspective are in striking contrast to the many cramped, angular works produced at the same time in Germany.

In Florence the woodcut technique was adopted for innumerable small pamphlets having both religious and secular subjects. Possibly the most distinctive are those found in editions of popular plays known as rappresentazioni (Fig. 12). Each illustration is surrounded by a decorative border. The emphasis on linear design recalls the style of such leading contemporary Florentine painters as Botticelli, but the rather simplistic patterning introduced by the wood block cutters endows the prints with an appealing naïveté.

Dotted Metalcuts

The metalcut or dotted print (maniûre criblée) emerged during the second half of the 15th century. To produce an image on a metal plate—usually of lead, pewter, or copper—the artisan used instruments more typical of the armorer’s or goldsmith’s shop. The plate was worked in such a way that it could be printed in the manner of a woodcut. Planes and surfaces were cut, punched, or stamped to produce an extremely decorative effect (Figs. 13, 196). Many extant metalcuts are highly expressive, but the technique remained arduous and stylistically limited. Thus it is not surprising that few examples can be found dating later than 1500.

Europe—the 15th and 16th Centuries

Albrecht Dürer

It was the painter and printmaker Albrecht Dürer who, with a production of more than 250 graphic works, raised the woodcut to the level of fine art. Born in the cultivated and prosperous city of Nuremberg, Dürer was first trained by his father in the art of goldsmithing and in 1496 entered the workshop of the city’s leading artist, Michael Wolgemut. Here the young Dürer learned the fundamentals not only of painting, but also of printmaking and book publishing, for Wolgemut was responsible for the design and printing of several major works. The most important of these was the Nuremberg Chronicle, a history of the world from the time of the creation, which was illustrated with more than six hundred individual woodcuts (Fig. 14). Although the Chronicle was published after Dürer’s departure, it is fairly certain that he was involved in this massive project. The woodcuts by

known as the Apocalypse. Like most of Dürer's wood blocks, these works were cut by guild artisans known as Formschnieders. The most famous block, The Four Horsemen of the Apocalypse (Fig. 15), demonstrates a new monumental quality combined with an unprecedented sense of movement and energy. The horsemen—Famine, Death, War, and Pestilence—seem to fly through a wind-whipped space on their horses, trampling all of humanity. With remarkable skill Dürer captures the sense of this visionary moment through the most precise representation of details. He achieves this not only through complex textures of linear patterns, but also by an even more revolutionary development—a variable-thickness line that swells and tapers. The latter effect is much more easily obtainable in drawing or engraving. Dürer's pride in his accomplishment is marked by the introduction and prominent display of the distinctive monogram that would henceforth appear on all his works.

During his long career Dürer made six different versions of the Passion of Christ. The so-called Great Passion series was completed in 1510, but most of the prints date from the period 1497 to 1499, roughly the same time the artist was at work on the Apocalypse. Christ Bearing the Cross (Fig. 16) represents a splendid example of this production. Like The Four Horsemen this print has a dynamic composition, with strong opposing diagonals crisscrossing the field. There is here, too, an explicit scene of violence, in the flagellation of Christ. However, in contrast to the apocalyptic doom of total chaos, Christ Bearing the Cross is a scene of pathos, largely because of the masterful expressiveness with which Dürer has drawn the faces of the onlookers—Veronica, Simon the Cyrenian, St. John—as well as of Christ himself.

This same expressiveness assumed even greater depth in the Life of the Virgin, another of Dürer's major series. Many of these prints, such as the Death of the Virgin done in 1510 (Fig. 17), are intimate genre scenes, their quiet and composure a direct contrast to the energy of the Apocalypse and Passion series. Carefully rendered architectural settings demonstrate Dürer's advanced studies in Renaissance perspective. The fine, linear drawing style emphasizes the flow of draperies, the molding of volumes, and at the same time creates an elegant decorative effect.

Albertina Graphische Sammlung, Vienna.
Even more grandiose in conception was the Triumph of Maximilian I, an allegorical procession for which Dürer was commissioned to execute the triumphal car containing the Emperor (Fig. 21). This work, planned in 1512, was brought to an end by the death of Maximilian in 1519, but it was eventually issued as a sheet 60 yards long including the contributions of many artists. Dürer’s portion shows the Emperor riding in state surrounded by the figures of the Virtues, who offer him wreaths. The driver, Rea-
Dürer's Contemporaries

Dürer's woodcuts were, for the most part, traditional black-and-white images; other artists experimented with color and with different methods of printing from wood blocks. In the rich German banking city of Augsburg lived the artist Hans Burgkmair who, besides contributing to several of Maximilian's projects, also worked at perfecting the process of printing color, or chiaroscuro, woodcuts. Burgkmair used a multiple-block technique to obtain the rich chiaroscuro effect in his portrait of Johann Paumgartner (Fig. 23). The figure of Paumgartner is set in a Renaissance architectural background based on Italian prototypes. This device would later appear in the work of other artists, notably Hans Holbein the Younger.

Another artist who developed the chiaroscuro technique was Lucas Cranach, who became court painter to the Elector of Bavaria in Wittenberg. Cranach was even more deeply involved with Luther and the Protestant Reformation than was Dürer; in both paintings and prints he produced a number of stirring religious images (Fig. 24). Although his woodcuts were much influenced in style by the work of Dürer, the cutting is less refined. Cranach's prints depend more on the chiaroscuro provided by a second plate for their rich effect, rather than on fineness of detail. In the St. Christopher a tablet hanging on the tree shows Cranach's device—a winged serpent—which later became his coat of arms.

The Swiss soldier and artist Urs Graf also experimented with technique, especially with a type of white line engraving. He is best known, however, for depictions of his favorite subject—the elaborately dressed soldiers of the period. The conventional woodcut Soldiers and Death (Fig. 25) shows two such stalwarts, overdressed and equipped to the point of
Relief printing is perhaps the most direct of the four major printmaking processes. Its primary characteristic is the raised printing surface of the block, which can be created in any of several ways: by cutting the background away (as in a woodcut or a linocut), by carving the image into the block and leaving the background standing (as in a wood engraving), or by adding objects to a flat surface (as in metal relief).

Wood engraving was used widely for reproduction throughout the 19th century, and its creative possibilities continue to be explored. The image-making method resembles intaglio engraving, but printing is done in the same manner as for woodcut.

Many people associate relief printing with the stark, intense imagery of Edvard Munch (Pl. 7, p. 75) or with the stylized prints of Japan (Pl. 2, p. 22), both of which tend to exploit the natural characteristics of wood grain. Some contemporary prints also feature this special wood quality (Fig. 54). Others, such as Roy Lichtenstein’s Modern Head #1 (Fig. 55), depend upon geometric and patterned shapes independent of the wood’s textured surface.

A few contemporary printmakers, including Carol Summers and Helen Frankenthaler (Pls. 3, 4, pp. 55, 56), have developed special techniques to make the relief process uniquely their own, building up broad, free-flowing areas of color and shape with the flexibility of painting or silk-screen printing. There are few limits to the visual effects possible with adaptations of relief printing.
Museum of Modern Art, New York (gift of Mr. and Mrs. Albert A. List).


below: 56. Paul Gauguin. Te Ana. After 1895. Woodcut, 9¾ x 8¾".
Art Institute of Chicago (gift of the Print and Drawing Club).

ting can be done both with and against the grain. In softer woods such as pine or fir, the grain is more pronounced. While it is less able to hold fine detail, soft wood is easier to cut. Thus, the wood itself can influence the flow and curve of the linear cutting patterns. In some woodcuts produced in the West, the grain of the wood is strongly in evidence, as is cutting that favors the grain direction. The works of Edvard Munch and Paul Gauguin in particular show the textural influence of the wood (Fig. 56).
Hard Woods

Both maple and birch are extremely hard woods and difficult to cut, but they justify the effort if fine detail is needed. Boards are available in differing widths, usually in a standard 3/4-inch thickness. Because of the hardness of the wood, tools need frequent sharpening during the cutting.

Fruit Woods  The woods from the cherry, pear, or apple trees are some of the finest for woodcutting. They are hard and even-grained and will hold exquisite detail. Fruit woods tend to be expensive, however, and difficult to obtain.

Other Hard Woods  Of the many other hard woods, beech is the most even-grained, and excellent for fine detail. Walnut is often too expensive. Oak, while extremely hard, has an objectionable open grain. The softer mahogany cuts reasonably well but splinters easily. It performs in large areas of color, although some mahogany can have a very porous, textured surface.

Soft Woods

Pine  Throughout Northern Europe, Asia, and North America, one of the most abundant species of tree is the pine. It is an old and very widely used material for woodcutting.

Pine varies tremendously in evenness of grain, ease of cutting, and tendency to splinter. Sugar pine, grown on the East Coast of the United States, is one of the superior varieties of pine in North America for woodcut purposes. Firm and even-grained, it can be cut both with and against the grain. Good detail is possible with sharp tools and careful cutting, and despite its softness when compared to cherry or maple, pine is capable of producing thousands of prints from a single block.

Some pine has a strong grain pattern and much difference in hardness between the dark and light rings of the wood. The grain often shows in the final print, and in many cases it can be exaggerated for textural effects.

Poplar  Poplar has excellent qualities for woodcut. The grain tends to be smooth and even. Poplar holds detail well when cut both with and against the grain. It can be worked easily, does not warp readily, and is strong and resilient.

Poplar is often used for furniture, and an old chest of drawers can yield many beautiful wood block surfaces. Boards only 3/8 or 1/2 inch thick can still make excellent surfaces for cutting. Old drawing boards made from many laminated pieces of poplar are also excellent, for they offer two sides that can be made into a large-format woodcut.

Basswood  A drawing board made of basswood (as many drawing boards are) provides an excellent and handy surface for a woodcut. Basswood, or linden wood as it is known in Europe, is very similar to poplar in cutting qualities and ability to hold detail.

Plywood  By the nature of its formation, plywood is never quite as good for detail as a solid piece of wood. Each layer of wood in the plywood is cut and glued in a way different from its structure on the trunk of a tree. Certain kinds of plywood, however, prove invaluable for large woodcuts and solid areas. Some types, such as plywood made from basswood or birch, will hold a surprising amount of detail. The most common, fir plywood, has a strong grain and splinters easily. It can produce strong wood grain textures when scrubbed with a wire brush.
selves. Many were painters who took from the woodcuts elements of style, composition, or subject matter that would be useful in their own work: flat pictorial space, angles of vision, abstract patterns, cropped images, lyrical line, flattened colors, calligraphy, theatricality, shortened perspective, economy of form, atmospheric effects, preoccupation with nature, and compelling human emotions. However, two artists in particular, whose overall production was influenced by ukiyo-e, actually made a number of woodcuts. These were Paul Gauguin and Edvard Munch.

When Gauguin returned to Paris in 1893, after his first sojourn in Tahiti, he published a number of large woodcuts based on exotic themes developed in the South Pacific, and done in the context of familiarity with ukiyo-e (Figs. 49, 56). Having practiced his technique by carving crude wood sculptures, he literally attacked the planks pieced together from smaller wood blocks. The action of the knife cutting into wood becomes part of the imagery. This rough quality was abetted by Gauguin's method of using sandpaper to achieve variations in tone and a needle for the fine white lines. His deliberate primitivism in these depictions of native life exploits the black and white contrasts of the woodcut to suggest the intense mysticism and symbolism underlying his work.

Following in Gauguin’s footsteps, the Norwegian artist Edvard Munch also combined an interest in the woodcut texture with a knowledge of Japanese prints to express his highly personal imagery. A clear example of this mixture can be seen in The Kiss (Fig. 50). Here the grain of the wood block has been permitted to dominate the surface of the print, thus contribut-
trasts, yet there is a sense of control in the definite horizontals of the water line and clouds. The boat in the distance is haunting and mysterious, with some of the elusive quality of a dream image.

As with so many other aspects of 20th-century art, it was Pablo Picasso who gave a new impetus to the art of relief printing. In fact, finding the strictures of wood not at all to his liking, Picasso abandoned the old material in favor of a more modern substance—linoleum. Picasso began his linoleum cuts in 1939, but they reached their greatest height of technical splendor in the late 1950s and 1960s, with complex multicolor works such as Bust of a Woman after Cranach the Younger (Pl. 8, p. 76).

The Cranach study was printed by a conventional multiblock system. However, Picasso also developed a unique method for multicolor linocuts, as in Figure 129. Here the formidable task of achieving many colors was accomplished by a continual cutting of the linoleum block during the printing. The elimination process continued, building overlays of ink until the work was complete. The resultant image seems to glow with brilliant life and hue.

The role of relief printing as a medium of propaganda and satire did not die with Thomas Nast. One notable artist who carried the tradition into the 20th century was the Mexican Guadalupe Posada. Posada began his career as a lithographer but later turned to metal relief prints produced by drawing on metal with a resist and also by engraving on soft type-metal blocks with multiple-point gravers. In this form his remarkable talent and cryptic humor were given free rein. His Regalo de Calaveras (Fig. 53) resembles an ominous (yet amusing) modern-day danse macabre.

Contemporary Artists

It would not be inaccurate to say that relief printing has never entirely recovered from the decline it experienced after the 16th century. Contemporary artists have tended to concentrate on lithography, intaglio and silk screen methods. Nevertheless, there are exceptions to this trend, and a few printmakers have made substantial developments in the art of relief. Leonard Baskin has applied classical western cutting techniques to vividly modern imagery (Fig. 54). Helen Frankenthaler achieves a fluid textural effect muted colors (Pl. 4, p. 56). Carol Summers bleeds his ink through the fibers of the paper to yield a rich, bold surface (Pl. 3, p. 55). Jim Dine created a Bathrobe b combining woodcut with a lithographic outline (Pl. 6 p. 58). Employing Munch's technique, he cut three rough plywood blocks into twelve separate sections. The surface was inked with a litho roller so that would retain the rich wood texture.

In the mid-20th century artists in many fields have reexplored older techniques and applied them a modern idiom. There is every likelihood that this approach will be applied to relief printing processes and that age-old techniques will be combined with contemporary aesthetic and technology to make new statement.
Color linocut, $25\frac{3}{4} \times 21\frac{1}{8}$".
Courtesy Fischer Fine Art Ltd., London.