This secondary school curriculum guide is written in outline form to simplify the planning of a design-oriented art program. For each of 15 design units, a step-by-step set of instructions is given. Each unit is presented in three stages, each of which is a complete lesson in design. Materials and tools necessary for lesson preparation, motivation ideas, and exploration activities are given for each stage. In addition, each unit provides application suggestions for using the completed work, evaluation objectives, and ideas for expanding upon the lesson. Units include lessons on batik; enameling; resist printmaking; relief printmaking with paper, string, and wood strips; relief printmaking with felt pen, India ink, charcoal, crayon, cut paper, and linoleum or wood blocks; stitchery; hooking; weaving; constructing; modeling; slab sculpture; casting; mosaics; drawing; and painting. The document concludes with an extensive historical survey of art, accompanied by a 4-page bibliography on art history. Topics range from art in ancient Egypt to 20th century American art. (LH)
CURRICULUM GUIDE FOR ART

in the Secondary Schools

Benjamin C. Willis
General Superintendent of Schools

BOARD OF EDUCATION CITY OF CHICAGO

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The art program in the Chicago public schools provides the opportunity for every student under the guidance of his teacher to find means for expression and development of visual communication. The importance of active involvement with art for every student is emphasized in our program of general education. Art experiences help to develop in the student one of the most important attributes he may possess in life—the ability to search for and create new concepts. Developing this facet of his perception requires guidance by the teacher and practice by the student in the process.

The program of education in art in the Chicago public schools begins in kindergarten and continues through one year of required art in high school. The program is further enriched as students in all high schools who have the interest, aptitude, and ability are given the opportunity to elect one to three years of additional education in art.

Part of the role of education in a democracy is to develop the capacity for independent thought and action. Teachers help children and youth establish the habits of creativity as a part of everyday life. It is hoped that this guide will serve both the teacher and the administrator in clarifying and translating the intangibles of creative expression into concrete learning experiences.

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*Emeritus
HOW TO USE THE GUIDE

The High School Curriculum Guide for Required Art is written in outline form to simplify, for the teacher, the planning of a design-oriented art program. It provides great freedom in choice of teaching methods and time allotment for the various problems.

The design PROBLEMS are not presented in a sequential order. However, it is often advisable to begin with DRAWING and PAINTING. Because of their scope and variance of format, the DRAWING and PAINTING units—the foundation of all art programs—are located at the end of the guide. The fifteen problems should be included in the year of required art.

The TITLE of each unit indicates the process used in the final design PROBLEM and lists the media through which the PROBLEMS are to be interpreted.

WORKS OF ART are more directly related to the design PROBLEM than the PROCESS. They may be found in the Chicago Public School Approved List of Instructional Materials under "University Prints."

MOTIVATION gives impetus to the lesson, lists principles and elements to be reviewed or taught, and gives topics for discussion as needed for each design PROBLEM.

APPLICATION lists suggestions for the use of the completed design PROBLEM. It offers an excellent opportunity for the students to create articles for use in their daily living.

EVALUATION takes place after each problem is completed and indicates the learnings (design and process) that are expected to take place at the completion of the PROBLEM.

EXPANDING OPPORTUNITIES shows ways of going into depth in the design PROBLEM and may be used as an enrichment design PROBLEM for the whole class or for the talented students.

Each unit is presented in three stages, each of which is a complete design problem. All three stages must be completed in this order. The amount of time used for each may be determined by the teacher and class. Each design PROBLEM should be done to the best of each student's ability.

STAGE ONE:
States the first design PROBLEM with its translation into certain given media.

STAGE TWO:
Is the same as STAGE ONE but uses the intermediate design PROBLEM.

STAGE THREE:
Is the stage during which the design PROBLEM is actually being worked out in the art PROCESS. Limited directions for the PROCESS are included.

Each STAGE consists of:
PREPARATION which includes lists of materials and tools necessary to carry out the problem.

MOTIVATION which includes review and new design learnings and introduces interpretations to be used in design PROBLEMS.

EXPLORATION which represents the execution of the stated design PROBLEM.

APPLICATION (as explained above).

EVALUATION (as explained above).

EXPANDING OPPORTUNITIES (as explained above).

The work for required high school art has been planned with design learnings emphasizing the principles and elements interpolated with suggested design PROBLEMS in the PROCESS.

Design is an orderly arrangement of ideas stressing control and organization. The principles selected for these PROBLEMS are emphasis, subordination, rhythm, balance, harmony, and proportion. The elements or ingredients selected are line, shape, form, texture, color, space, and movement.

The goal of each PROBLEM is to create a design based on a clear comprehension of the principles and elements involved.

Design PROBLEMS selected may be used interchangeably with any principle or element. Investigation of each PROCESS allows freedom of choice and flexibility in each PROCESS while the design PROBLEM remains inflexible in its directives and desired ends. The design learnings and processes are avenues to sequential growth in the required art program.

A workable methodology for merging the teaching of art history with the day-to-day activity program of designing in the art PROCESSES is carefully incorporated into this guide.
ENAMELING

Design problems through colored tissue, transparent water colors or lacquers, and vitreous enamel.

WORKS OF ART
Shang (Yin) Dynasty—Bronze Vessel, Type Ting 0 92
XII Century—“The Adoration of the Magi” P 101
Saljuq, Iran—Luster Plate O 492
John Marin—“Lower Manhattan” H 169
Han Dynasty—Rubbings O 135

MOTIVATION

Review balance: symmetrical, asymmetrical
Discuss: geometric shapes, basic shapes, shapes in the environment: variety, relationships, arrangements
Review color: primary, secondary, color schemes: monochromatic, analogous, related, complementary

APPLICATION
Jewelry, home decor: plaques, desk accessories, box tops, trays, bowls

ÉVALUATION
Understanding of the enamel process
Skill in handling tools and materials and in following the set procedure
Learning to anticipate color changes of enamel when fired
Achieving balance through limited color and shape for good design
Appreciation of enameling through the ages

EXPANDING OPPORTUNITIES
Combining transparent, opaque, and opalescent enamels in various ways
Incorporating threads and lumps into the design
Using varied methods of applying enamel
Changing surface of copper by subtraction: incising, etching, drilling, cutting; by addition: found objects, displaced negative areas, and wire

STAGE ONE
Preparation:
Materials: poster and construction paper, glue, aluminum foil, felt pen, lacquer, alcohol.
Tools: brushes.

Motivation:
Combine a variety of sizes of one geometric shape into a balanced arrangement.
Select a geometric shape and color scheme.

Exploration:
Use a related color scheme interpreting the geometric design with poster or construction paper.
Interpret the geometric design using aluminum foil painted with transparent lacquer in an analogous color scheme.

STAGE TWO
Preparation:
Materials: transparent paper, tissue, cellophane, opaque paper, glue, string, ink.
Tools: scissors, pens.

Motivation:
Choose two geometric shapes from the immediate environment. Arrange the shapes, designed in line and mass; with variation in size. Retain original character of the object used.

Exploration:
Organize a well balanced monochromatic color scheme using opaque and transparent paper, cellophane, and transparent water color to interpret shapes.
Use pen and ink to create additional shapes.

STAGE THREE
Preparation:
Materials: powder enamels: transparent, opaque, opalescent; liquid enamels: slush enamels, lumps; threads, gum arabic, copper cleaner, copper (16 or 18 gauge), steel, findings, solder.
Tools: kiln, snips, saw, drill, file, spatula, asbestos sheet, small brushes, tongs, abrasive.

Motivation:
Repeat the geometric design of the background with a line or shape arrangement. Use one large shape or a group of small ones to achieve a balanced design.

Exploration:
Enameling process is composed of a repetition of the following steps: clean copper, apply enamel (using one or more of the following methods): sift, paint, stencil, pile.
Fire:
Cut copper, finish edges and corners, drill holes if necessary.
Create the design in a selected color scheme using opaque enamels.
Sift dominant color over entire surface and fire.
Paint shapes on background color with gum arabic, sift new color, shake off excess enamel, and fire.
Repeat process for additional color.
Obtain lines by using threads or drawing through sifted enamel.
RESIST PRINTMAKING
Design problems through cut paper, pencil, crayon, stencil, paper block-out, silk screen

WORKS OF ART
Arthur Dove—"Gold, Green and Brown"
H 207
Jacques Lipchitz—"Man with a Guitar"
H 327
Robert Motherwell—"Elegy"
H 298
XVIII Dynasty—
"Presentation of Tribute to Tutankhamon"
M 112

MOTIVATION
Review: emphasis, shape, line
Discuss: negative and positive shapes
Observe and discuss: rectangular shapes found in environment

APPLICATION
Wall hangings, program covers, mats, wrappings, emblems, posters, apparel

EVALUATION
Understanding the silk screen process
Skill in handling tools and materials
Ability to create emphasis through shape and line
Ability to design with geometric shapes for the silk screen process
Appreciating serigraphs as an art form

EXPANDING OPPORTUNITIES
Printing with multiple screens
Combining printmaking with other techniques: stitchery, painting, collage, hooking, batik
Using other block-out media

STAGE ONE
Preparation:
Materials: tracing paper, bond paper.
Tools: scissors, pencil, crayon.
Motivation:
Arrange rectangles of varying sizes in a horizontal or vertical movement.
Exploration:
Interpret design in cut paper.
Place sheet of thin paper over design and obtain rubbings.

STAGE TWO
Preparation:
Materials: stencil paper, cardboard, waxed paper, ink.
Tools: stencil knives, razor blades, pencils, pens, crayons.
Motivation:
Organize rectangles and rectilinears in juxtaposition.
Exploration:
Interpret rectangular design in stencil.
Interpret rectilinears in crayon.

STAGE THREE
Preparation:
Materials: bond paper, newsprint, tissue, fabric acetate, wood, water or oil paints, oil solvents.
Tools: pencils, pens, crayons, improvised or manufactured screens, improvised or manufactured squeegee, scissors, spoon.
Motivation:
Design a unit of rectangles in juxtaposition with overlapping rectilinears.
Exploration:
Prepare cut bond paper design to size and place on a sheet of newsprint.
Position screen over cut paper design.
Spoon paint at top edge of screen.
Using squeegee, pull paint to lower edge of screen, thus adhering paper.
Repeat printing process for additional prints.
RELIEF PRINTMAKING
Design problems through paper, string, wood strips, and relief printing

WORKS OF ART
Albrecht Durer—"The Flight into Egypt"
L 26
Emil Nolde—"The Prophet"
L 138
Erwin Heckel—"Self-Portrait"
L 146

MOTIVATION
Review: basic shapes, emphasis, line
Discuss: shapes and lines as seen in buildings, doors, windows, fences, sidewalks, or other environment

APPLICATION
Wall hangings, book covers, mats, trays, program covers, posters

EVALUATION
Understanding the relief printing process through cardboard printing
Skill in handling tools and materials and in following set procedures
Achieving harmony in design through the use of shapes and lines
Recognizing relief printing as an art form

EXPANDING OPPORTUNITIES
Using other materials in place of cardboard to glue to block: cloth, linoleum, thin wood
Drawing on areas of inked block or inked paper and combining with the printing process
Printing on a variety of surfaces: paper, cloth, or thin wood

STAGE ONE
Preparation:
Materials: paper, string, wood strips.
Tools: scissors, pencil.

Motivation:
Arrange several sizes of rectangles into a design.

Exploration:
Translate a design of rectangles with cut paper.

STAGE TWO
Preparation:
Materials: paper, string, wood strips.
Tools: scissors, pencil.

Motivation:
Create a rectilinear design by intersecting lines.

Exploration:
Organize a rectilinear design using string, strips of paper or wood.

STAGE THREE
Preparation:
Materials: cardboard, string, glue, shellac, water-soluble ink, paper.
Tools: brush, brayer, pan, spoon or press.

Motivation:
Create a design combining rectangles and rectilinear shapes by superimposing or overlapping.

Exploration:
Create a design by gluing rectangles of light cardboard to heavier cardboard surface. Superimpose rectilinear shapes of string by gluing to the surface and thus attaining harmony through line and shape.
There are two methods of using the cardboard plate: inked and clean. When ink is applied directly to the plate, the plate must be shellacked beforehand.

Inked plate
Use water-soluble ink. Roll brayer in ink and apply to plate. Place paper over prepared plate and apply pressure with press, spoon, or clean brayer.
Remove print.

Clean plate
Place a sheet of paper over plate. Roll inked brayer over the paper.
Remove print.
RELIEF PRINTMAKING
Design problems through felt pen, India ink, charcoal, crayon, cut paper, and linoleum block or wood block

WORKS OF ART
Stuart Davis—"Summer Landscape" H 234
Pablo Picasso—"Ma Jolie" E 464
Piet Mondrian—"Broadway Boogie-Woogie" E 319
Paul Cézanne—"View of Gardanne" E 411

MOTIVATION
Review: rhythm, line, and shape
Discuss: line and shape in animal forms

APPLICATION
Wall decorations, book covers, mats, tray inserts, aprons, scarves, napkins, tablecloths

EVALUATION
Understanding printmaking through the linoleum or wood-block process
Skill in handling tools and materials
Ability to achieve rhythm through line and shape
Competency to design from nature
Understanding printmaking as an art form
Appreciation of contemporary linoleum and wood-block prints

EXPANDING OPPORTUNITIES
Printing block in variations: side by side, half drop
Using block of various shapes
Printing on a variety of surfaces: cloth, tissue paper, wood

STAGE ONE
Preparation:
Materials: India ink, charcoal, bond and manila paper, construction paper, crayons.
Tools: scissors, felt pen, pens, pencils.
Motivation:
Select an animal form using photographs. Interpret animal form in line.
Exploration:
Interpret rhythmic design in line using felt pen, India ink, and pen or charcoal on bond or manila paper.

STAGE TWO
Preparation:
Materials: India ink, charcoal, bond or manila paper, construction paper, crayons.
Tools: scissors, felt pen, pens, pencils.
Motivation:
Interpret animal form in shape.
Exploration:
Interpret the design using crayon, ink, or cut paper.

STAGE THREE
Preparation:
Tools: brayer, ink pan, linoleum or wood-cutting tools, pencil.
Motivation:
Interpret animal in shape and line to form a rhythmic design by repetition of a variety of shapes and/or lines.
Exploration:
Prepare design to size of block on tracing paper.
Draw complete design on block or trace, using carbon paper.
Cut design, using one or more tools.
Use tool to carve lines which follow the contour of the shape.
With water-soluble ink, print several test samples at various stages of carving to evaluate for rhythmic design in line, shape, and texture.
When design is achieved, make repeat prints on various types and textures of paper. Colors may be superimposed in the printing.
Use free alternation of vertical and horizontal overprints with two colors.
STITCHERY
Design problems through cut paper, colored tissue, tempera paint, crayons, and stitching with threads and yarns.

WORKS OF ART
Pablo Picasso—“Guernica” ME 73
Vincent van Gogh—“The Starry Night” E 433
Early Chou Dynasty—“Bronze Owl” O 101

MOTIVATION
Review: color: primary, secondary, related
Discuss: color and shape in nature

APPLICATION
Wall hangings, purses, pillows, place mats, clothing embellishment

EVALUATION
Understanding the stitchery technique
Skill in handling tools and materials
Ability to follow a related color scheme with stitchery
Ability to adapt shapes from nature and imagination for emphasis in design

EXPANDING OPPORTUNITIES
Working in large and miniature sizes
Using a variety of background materials
Combining with weaving, hooking, batik
Embellishing prints made in classroom
Using one stitch with variations

STAGE ONE
Preparation:
Materials: construction paper, tissue paper, paste,
Tools: pencil or felt tip pen, scissors.

Motivation:
Select a bird form from photograph or imagination.
Interpret bird in shape.

Exploration:
Interpret the design using cut paper.

STAGE TWO
Preparation:
Materials: construction paper, tissue paper, paste,
Tools: pencil or felt tip pen, scissors.

Motivation:
Interpret two or more bird shapes.
Organize by overlapping, juxtaposition, or movement.

Exploration:
Interpret several shapes with colored tissue using a related color scheme.

STAGE THREE
Preparation:
Materials: tempera paint or crayons, manila paper, tracing paper, yarns, threads, cloth—burlap, felt, muslin.
Tools: needles, scissors, thimble, pencil, brush.

Motivation:
Interpret a combination of bird and floral, or other shapes, to form a design.

Exploration:
Interpret the chosen design in crayon or tempera paint and follow a related color scheme.
Enlarge to size of cloth using manila or tracing paper.
Draw design freely or trace on cloth.
Stitch (painting with thread) following the related color scheme.
Use one basic stitch or several different ones using one of the following plans: entire composition stitched, shapes alone embroidered, or background stitched leaving shapes as negative areas. Hem or fringe completed design.
HOOKING
Design problems through cut paper, colored tissue, and hooking with yarns

WORKS OF ART
Claude Monet—“The Poplars”
E 164
XIX Dynasty—“Seti I Making Offering to Osiris”
M 104
XVIII Dynasty—Chairs of Yuya and Tuyu
M 117
Hasegawa Tohaku—“Tiger”
O 365

MOTIVATION
Review: Emphasis, basic shapes, color: primary, secondary, related, analogous, monochromatic
Discuss: color and shape in nature forms

APPLICATION
Rugs, wall hangings, mats, pillows, purses

EVALUATION
Understanding of the hooking process
Skill in handling tools and materials
Ability to follow an analogous color scheme with yarn
Ability to adapt shapes from nature forms for emphasis in design
Appreciation of the art of past and present hooking

EXPANDING OPPORTUNITIES
Combining hooking with stitchery
Combining unhooked areas with hooked areas

STAGE ONE
Preparation:
Materials: construction or poster paper, colored tissue paper.
Tools: scissors, pencil or brush.

Motivation:
Select a nature form using specimen and/or photograph.
Interpret nature subject in shape.

Exploration:
Interpret the design using cut paper.

STAGE TWO
Preparation:
Materials: construction or poster paper, colored tissue paper.
Tools: scissors, pencil or brush.

Motivation:
Interpret nature subject in cross section.

Exploration:
Interpret a nature design in shape with colored tissue using an analogous color scheme.

STAGE THREE
Preparation:
Materials: burlap, yarns, tracing paper.
Tools: hooking needle or crochet hook, frame or embroidery hoops, tacks, chalk or pencil or crayons, scissors.

Motivation:
Interpret a combination of whole nature.
Use shapes and cross sections of nature.
Use shapes to form a design.

Exploration:
Interpret a chosen design in crayon or paint. Enlarge to size of burlap on tracing paper.
Stretch burlap over frame or embroidery hoops.
Draw design freely or trace on burlap with crayon, pencil, or tailor’s chalk.
Indicate analogous color scheme on burlap or follow from paper plan while hooking.
Hook with hooking needle or crochet hook. Both tools allow for variation in height of loops.
Cut loops or shear for sculpturing or leave loops intact when hooking is completed.
Hem or fringe sides after finished piece has been removed from frame or hooks.
WEAVING
Design problems through cut paper, tissue paper, pencil, crayons, and yarn

WORKS OF ART
Michelangelo Buonarroti—"Ceiling" MC 9
Dipylon Vase—Funeral Scenes, VIII Century B.C. MA 11
Ch'en Jung—"Nine Dragons" Section O 239
Ralph Blakelock—"Moonlight" H 67

MOTIVATION
Review: shape and texture
Discuss: emphasis and related color

APPLICATION
Wall hangings, table accessories, mats, purses, space dividers

EVALUATION
Understanding a weaving technique
Skill in handling tools and materials
Ability to adapt a color scheme to weaving
Ability to compose geometric shapes into an imaginative design and achieve emphasis through shape, color, and texture

EXPANDING OPPORTUNITIES
Accenting weaving with beads, stones, small enamels, twigs, or other found and natural materials
Combining other techniques with weaving, such as applique, stitchery, crochet
Pulling some weft threads from fabrics such as burlap, monk's cloth, hop sacking, and reweaving pulled areas
Using an object from nature as a source of inspiration for a woven piece or trying picture weaving

STAGE ONE
Preparation:
Materials: construction paper, tissue paper, crayons.
Tools: pencil, scissors.
Motivation:
Arrange several sizes of circles into a design.
Exploration:
Using cut paper or drawing with pencil, create a design by organizing circles of varying sizes into horizontal or vertical movement.

STAGE TWO
Preparation:
Materials: construction paper, tissue paper, crayons.
Tools: pencil, scissors.
Motivation:
Create a design of elliptical shapes of several sizes.
Exploration:
Organize the design of ovals in a horizontal or vertical direction. Design with a related color scheme using colored tissue paper or drawing with crayon.

STAGE THREE
Preparation:
Materials: crayon or tempera paint, tissue paper, yarns, tracing paper, construction paper.
Tools: pencil, brush, scissors, needle, frame, nails, hammer.
Motivation:
Organize a design composed of circles and/or ovals of varying sizes using a vertical or horizontal movement. Arrange shapes by juxtaposition, overlapping, and superimposing.
Exploration:
Interpret the design in crayon, tempera, or cut tissue paper. Follow a related color scheme. If necessary, enlarge the design to the size of the weaving frame using manila or tracing paper. The plan for the weaving problem is called a cartoon.
Prepare the frame by placing nails evenly and equidistant across top and bottom. String warp thread tautly around nails on frame from top to bottom. Place cartoon behind warp threads or next to the frame for reference.
Choose a variety of yarns in related colors, following the cartoon.
Weave four or five rows of plain weave across top and bottom of frame to stabilize the warp.
Any number of warp threads may be crossed at one time to create variety in texture.
The rhythmic quality of the design can be emphasized by introducing deviations in the direction of the weaving.
To introduce negative areas in the design, leave portions of the design plan unwoven.
When weaving is completed, slip dowel rods through the top and bottom warp threads where tied around nails.
CONSTRUCTING
Design problems through cut or torn paper, string, paper, library paste, shellac.

WORKS OF ART
- Joan Miro—"Person Throwing a Stone at a Bird" E 343
- Constantin Brancusi—"The Fish" ME 150
- Pablo Picasso—"The Three Musicians" E 466

MOTIVATION
Review: basic shapes, color: primary, secondary
Discuss: related colors, free-form shapes

APPLICATION
Candle holders, napkin holders, jewelry: bracelets, cuff links, pendants, tie bars, brooches, barrettes, money clips

EVALUATION
Understanding paper-paste construction process
Skill in handling materials
Ability to use a related color scheme in paper
Ability to adapt shapes from nature or geometric shapes
Ability to show emphasis through shape, color, value
Ability to plan colors in terms of value as well as color scheme
Appreciation of construction process with other materials as well as paper

EXPANDING OPPORTUNITIES
Constructing complex pieces of jewelry
Combining paper-paste construction with wood for plaques, box tops

STAGE ONE
Preparation:
Materials: construction paper, paste, string.
Tools: pencil, scissors.

Motivation:
Interpret a free-form shape from nature or use a geometric shape.

Exploration:
Create small free forms or geometric shapes by arranging string, drawing, or cutting paper.

STAGE TWO
Preparation:
Materials: construction paper, paste, string.
Tools: pencil, scissors.

Motivation:
Make a horizontal or circular arrangement with light and dark paper.

Exploration:
Make a horizontal or circular arrangement of torn strips of construction paper, alternating light and dark values of related colors in juxtaposition or overlapping.

STAGE THREE
Preparation:
Materials: paper, library paste, shellac, alcohol, sandpaper, findings.
Tools: pencil, brush, scissors, file.

Motivation:
Construct a free form or geometric form from layers of colored paper to achieve a design consisting of alternating light and dark values of color.

Exploration:
Construct form by laminating twelve to fourteen layers of identical paper shapes. Adhere two pasted sides together to form a permanent bond: be sure that edges and entire area are evenly covered with library paste. Alternate light and dark values of a related color scheme. Dry overnight or until board-hard.

Bevel sides with sandpaper or file. Expose all colors used. Start with coarse or medium file or sandpaper and finish with fine or extra fine. Beveled edge may be one width or varied in width. After sides are smooth, face of the piece may be sanded in various areas and depths, thus exposing more colors and giving further emphasis to shape and hue. Paint face of piece with shellac. Use about eight or nine coats, allowing each to dry thoroughly between coats. Continue to shellac until piece dries glossy. Allow piece to dry several days before painting back with shellac, using about three coats. Affix findings to piece with a strong glue like epoxy.
MODELING
Design problems through cut paper, modeled paper, and modeled aluminum foil

WORKS OF ART
XVIII Dynasty—
"Slave Unguent Spoon" and Others
M 119

Early Christian—
"The Three Maries at the Tomb and Ascension of Christ"
K 221

Early Romanesque—
"The Adoration of the Magi"
K 285

MOTIVATION
Review: texture, line
Discuss: harmony, shapes as found in nature: animal, plant (from photograph or imagination)

APPLICATION
Wall plaques, box covers, book covers, jewelry, Christmas ornaments

EVALUATION
Understanding the modeling process
Skill in handling tools and materials
Achieving harmony through line, shape, texture

EXPANDING OPPORTUNITIES
Using other materials for modeling: copper, tin, brass, leather
Combining modeling with other process: mosaic, woodcarving, sculpture, ceramics, enameling
Designing jewelry
Creating oxidized appearance by applying India-ink to scratched surface and rubbing off excess ink

STAGE ONE
Preparation:
Tools: scissors, blunt tools for modeling: pencil, pen, clay-modeling tools, sticks.

Motivation:
Interpret an animal in shape.

Exploration:
Interpret the design by using cut paper.

STAGE TWO
Preparation:
Tools: scissors, blunt tools for modeling: pencil, pen, clay-modeling tools, sticks.

Motivation:
Interpret plant form in line.

Exploration:
Model the design by using a variety of blunt tools on heavy paper: construction, detail, drawing, modelit, shirt cardboard.

STAGE THREE
Preparation:
Materials: construction paper, tracing or carbon paper, heavy aluminum foil.
Tools: scissors, blunt tools for modeling: clay-modeling tools, pencil, pen, sticks.

Motivation:
Create a harmonious design by combining animal shapes and linear plant forms.

Exploration:
Interpret design of linear plant forms and animal shapes on heavy aluminum foil to create harmony with line, shape, and texture.

Enlarge design to size of aluminum foil.

Transfer design to heavy foil using tracing paper or carbon paper with cushion under the foil.

Practice modeling in line; texture; and shape on scrap foil. Use a cushion of paper under the foil. Try a variety of blunt tools: pencil, pen, sticks.

Using several tools, model the entire design. Keep cushion of paper under foil at all times. Follow plan of texture, line, shape carefully so that harmony is attained in design.

Pour plaster of paris into the back of the design to keep it intact. This is needed only when piece is to be handled often.
SLAB SCULPTURE
Design problems through oil clay, corrugated or plain cardboard, clay

WORKS OF ART
Frank Lloyd Wright—“Robie House” Chicago
GM 100
Slab from West Frieze of Parthenon, Athens
A 145
Lorenzo Ghiberti—East Doors, Baptistry, Florence
B 420
XVIII Dynasty—“Khamhret”
M 95
Congregational Mosque, from the South, Isfahan
O 466
Amedeo Modigliani—“Head”
ME 159

MOTIVATION
Review: Shape and texture
Discuss: balance, rectangular shapes as found in environment

APPLICATION
Decoration, planters, containers, room dividers, candle holders

EVALUATION
Understanding slab construction
Skill in handling tools and materials
Understanding limitations and potentials of clay
Competency to compose geometric shapes into an imaginative design and achieve balance through texture and shape
Appreciation of contemporary sculptural forms

EXPANDING OPPORTUNITIES
Organizing series of related sculptures
Combining sculptural forms and geometric shapes
Combining slab sculpture with other techniques, such as enamel and mosaic
Combining clay with other rigid materials: wood, metal, plastic, wire
Working in miniature or colossal

STAGE ONE
Preparation:
Materials: oil or water clay.
Tools: rolling pin, sticks for gauges, ceramic tools, found objects.
Motivation:
Achieve textural effects on rectangles of varying sizes.
Exploration:
Create texture on rectangular slabs of clay through addition or subtraction.

STAGE TWO
Preparation:
Materials: plain or corrugated cardboard, glues, tape.
Tools: scissors, razor blades.
Motivation:
Create balance in vertical construction of varied sized rectangles.
Exploration:
Using cardboard rectangles, organize a three-dimensional design in a balanced vertical movement.

STAGE THREE
Preparation:
Materials: water clay, glaze and underglaze, water or slip.
Tools: rolling pin, sticks or dowel rods for gauges, sponge, plastic or oilcloth, ceramic tools, found objects, plaster bats.
Containers: water, slip, glaze, brushes, kiln.
Motivation:
Organize a balanced, vertical construction of various sized rectangles. Enrich the sculpture by textural surface treatment and through addition and subtraction.
Exploration:
Prepare clay.
On a wet cloth, roll clay to half-inch thickness using gauges.
Cut varied sized rectangles, All clay being used for construction should be stored on damp bat and covered with plastic or wet cloth between classes.
Organize slabs a few at a time and join abutting edges by scoring and moistening them. Further strength may be gained by smoothing thin coils into joints.
Negative space may be introduced by cutting away areas. The positive shapes are used for enrichment. Further interest may be gained by creating textures to enrich the surface of the sculpture.
When the design is complete, allow to dry slowly until bone dry. Fire.
Piece may be considered complete at this stage, or glazed and fired.
CASTING
Design problems through cut or torn paper, string, pencil, found objects, and cast plaster

WORKS OF ART
Theodore Roszak—“Spectre of Kitty Hawk” H 330
IV-V Century A. D.—Sarcophagus of Saint Theodore K 7
XII Dynasty—“Herdman” M 69
Andhra—East Gate, Great Stupa O 19

MOTIVATION
Review: Principles and elements in art
Discuss: rhythm, shapes as found in nature and imagination

APPLICATION
Wall plaques, paper weights, book ends

EVALUATION
Understanding the casting process
Skill in handling tools and materials
Achieving rhythm through line, shape, texture

EXPANDING OPPORTUNITIES
Designing directly in sand using various hand and finger movements.
Casting with cement
Making a group of sand castings to make a sculpture

STAGE ONE
Preparation:
Materials: construction paper or other, pencil, string, found objects, glue.
Tools: scissors.

Motivation:
Interpret a nature form.

Exploration:
Interpret the design by tearing paper.

STAGE TWO
Preparation:
Materials: construction paper or other, pencil, string, found objects, glue.
Tools: scissors.

Motivation:
Embellish the shape with line and circular forms.

Exploration:
Embellish a shape (cut, torn, drawn) with line and circular shapes in rhythmic manner.
Line may be interpreted through drawing or arrangement of string. Circles may be indicated by drawing or by adding paper or cloth shapes.

STAGE THREE
Preparation:
Materials: box, plaster, water, sand, found objects.
Tools: clay modeling, found objects, box to hold sand, bowl for mixing plaster.

Motivation:
Interpret a nature form, creating rhythm with line, circular forms, and texture.

Exploration:
Model design of form into damp sand.
Create rhythm with line, circular forms, and texture.
Lines may be indicated by adding string, carving, or building up ridges in sand. Circular forms may be done as above and/or by imprinting found objects and poking finger tips to various depths.
Texture can be achieved by carving (using fingers, tools, comb, or other found objects), by building, by imprinting (using found objects, corrugated board, beads, pebbles), and by imbedding (pebbles, beads, seeds, found objects).
When the design is completed, and while the sand is still damp, pour the prepared plaster into the designed sand mold.
If the piece is to be hung, insert greased dowel rod or pencil into sand mold before casting to provide for wire or cord. A hanger may be imbedded into wet plaster after pouring.
After plaster has hardened, remove from sand and file or scrape off rough and thin edges.

STAGE ONE
Preparation:
Materials: construction paper or other, pencil, string, found objects, glue.
Tools: scissors.

Motivation:
Interpret a nature form.

Exploration:
Interpret the design by tearing paper.

STAGE TWO
Preparation:
Materials: construction paper or other, pencil, string, found objects, glue.
Tools: scissors.

Motivation:
Embellish the shape with line and circular forms.

Exploration:
Embellish a shape (cut, torn, drawn) with line and circular shapes in rhythmic manner.
Line may be interpreted through drawing or arrangement of string. Circles may be indicated by drawing or by adding paper or cloth shapes.

STAGE THREE
Preparation:
Materials: box, plaster, water, sand, found objects.
Tools: clay modeling, found objects, box to hold sand, bowl for mixing plaster.

Motivation:
Interpret a nature form, creating rhythm with line, circular forms, and texture.

Exploration:
Model design of form into damp sand.
Create rhythm with line, circular forms, and texture.
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After plaster has hardened, remove from sand and file or scrape off rough and thin edges.
MOSAICS
Design problems through cut or torn paper, crayon, tempera paint, and glass tesserae

WORKS OF ART
Mosaic, VI Century—
S. Apollinare Nuovo, Ravenna
K 28
Cathedral Window—Chartres, French Gothic
K 160
Tympanum—"The Last Judgment"
French Romanesque
K 5
Initial Page of Mathew—
"Book of Kells" Manuscript, Celtic
K 24
Stained Glass Windows—
"Daniel and David" German Romanesque
K 276

MOTIVATION
Review: basic shapes, color:
primary, secondary
Discuss: related color, shapes as seen in
environment (buildings, doors, windows, fences), balance

APPLICATION
Wall plaques, book ends, paper weights,
box tops, table surface, tiles, bowls

EVALUATION
Understanding the mosaic process
Skill in handling tools and materials
Achieving balance through distribution
of color and shape
Competency to translate a related color
scheme into tesserae
Appreciation of mosaics from other cultures,
contemporary artists, and environment

EXPANDING OPPORTUNITIES
Making own tesserae
Using pebbles and stone
Using broken commercial tiles
Embellishing tiles with glass
or vitreous enamels
Combining different types of tesserae
Using for inlays in wood or ceramic pieces

STAGE ONE
Preparation:
Materials: construction paper, tissue paper, color pages from magazines, paste.
Tools: scissors, pencil.

Motivation:
Arrange several sizes of rectangles into a design.

Exploration:
Using cut paper, arrange the design in a vertical or horizontal movement.

STAGE TWO
Preparation:
Materials: construction paper, tissue paper, color pages from magazines, paste.
Tools: scissors, pencil.

Motivation:
Create a design of rectangles. Attain balance by overlapping or superimposing.

Exploration:
Organize the design of rectangles using \( \frac{1}{2} \)" maximum size cut or torn tesserae.
Use colored pages from magazines or colored tissue.
Follow a related color scheme.

STAGE THREE
Preparation:
Materials: construction or manila paper, tempera paint or crayon, tracing paper,
foundation board (plywood, hardboard), glass in related colors (medicine and
pop bottles, drinking glasses, scrap glass), waterproof adhesive, grout.
Tools: pliers or tile cutter or hammer, spatula, protective goggles, grout container.

Motivation:
Create a design composed of rectangles and triangles of varying sizes using
a vertical or horizontal movement. Achieve balance by arranging shapes
through juxtaposition, overlapping, and superimposing.

Exploration:
Interpret the design in crayon, tempera or cut paper; follow a related color
scheme. Enlarge the design to size of the foundation chosen, using manila
paper or tracing paper. Copy design on foundation.
Very carefully break or cut glass into small pieces. Arrange related colors of
glass into separate piles to create a palette.
Very carefully apply glass to foundation using a waterproof adhesive, following
the planned color scheme. Use pieces of foil under some of the glass for
further depth of color if desired. Apply grout, colored or white, when all tesserae have been glued in place.
Use spatula or heavy gloves to protect hands while applying grout.
Wipe excess grout from surface with damp cloth or sponge.
Use carborundum stone to round off sharp edges.
DRAWING
Design problems through pencil, pen, crayon, felt tip pen, sticks

WORKS OF ART
Vincent van Gogh—"Self-Portrait"
ME 95
French Gothic Manuscript—
"The Entombment and the Three Marys at the Tomb"
K 288
Jackson Pollock—"Autumn Rhythm"
H 125
Sesshū—"Winter Landscape"
O 346
Leonardo da Vinci—"Landscape" (Drawing)
C 45

MOTIVATION
Review: principles and elements
Discuss: emphasis, line: directional, qualitative, spacial relationship

APPLICATION
Wall decorations, design for stitchery, design for printmaking

EVALUATION
Understanding different ways to draw
Competency in handling drawing tools and materials
Ability to organize a drawing by incorporating principles and elements of design
Recognition of different qualities of line
Ability to create movement through line
Ability to create the illusion of space through line
Appreciation of drawing through the ages

EXPANDING OPPORTUNITIES
Working with variation in size: miniature to colossal
Investigating various styles and techniques
Using drawing in planning designs for batik, stitchery, and prints
Investigating various orthodox and unorthodox tools

Preparation (for all stages):
Tools: pencil, pen, crayons, felt tip pen, sticks.

Motivation (for all stages): Review principles and elements.
Discuss movement, space, kinds of line (directional, qualitative), emphasis and methods of achieving it.

Exploration (for all stages):
Select an object familiar to school or home: clothes and accessories, groceries and packages, tools, art materials, laboratory, shop, or sports equipment.
Discuss the kinds of lines found in these objects: outline, skeletal, surface, textural.

STAGE ONE
Interpret, with contour line, a single object found in the classroom. Work toward obtaining the essence of the object by repeated drawings.

STAGE TWO
Interpret the human figure with contour line using a class model.

STAGE THREE
Achieve emphasis by combining two or three objects of one category found in the classroom.

STAGE FOUR
Develop emphasis through line in a composition of three or more human figures.

STAGE FIVE
Interpret a still life composition with contour lines incorporating foreground and background.

STAGE SIX
Achieve emphasis through line in a composition using human figures in their environment. Develop drawings to extract character and define spatial relationships.

Before continuing with the following stages:
Review line.
Discuss use of line in design, such as texture, value, form, shape.

STAGE SEVEN
Use concentric lines to interpret a fruit or a vegetable shape into three-dimensional form.

STAGE EIGHT
Use a complexity of continuous lines to model edges and planes of geometric objects seen in the environment.

STAGE NINE
Use a continuous line to record the action of an animal or figure.

STAGE TEN
Interpret two figures engaged in a partner activity employing continuous line.
PAINTING
Design problems through paint: tempera, water color, gouache, acrylics, oils, lacquers, enamels, inks

WORKS OF ART
Sung Dynasty—"Mountain Landscape with Travelers" O 198
Paul Cézanne—"Still Life" E 266.
Pablo Picasso—"Still Life" E 308
André Derain—"London Bridge" E 303

MOTIVATION
Review: all principles and elements
Discuss: value, mood, color: primary, secondary, monochromatic, analogous, related

APPLICATION
Wall decorations, posters, greeting cards, calendars

EVALUATION
Understanding ways to paint
Skill in handling painting tools and materials
Ability to design a painting by incorporating principles and elements of design
Knowledge and use of primary and secondary colors
Ability to create infinite values in color
Competency in relating color gradation within limitations
Recognition of the implications of color and its influences on individuals and cultures
Appreciation of painting in all cultures including work of contemporary artists

EXPANDING OPPORTUNITIES
Using the suggested topics in new directions: combining of media, using new media (egg tempera, lacquers, enamels), exploring with a variety of surfaces, working with variation in size (miniature to colossal), investigating various styles and techniques
Further painting problems can be developed with definite principles and elements in mind from the following suggested topics: landscape, animals, home, careers, leisure activities, city, crowds

Preparation (for all stages):
Materials: manila papers, poster paper, water color paper, bristol board, paints.
Tools: brushes of all shapes, sizes, and qualities, 4B pencil, charcoal, pen, sponge, found objects.

Motivation and exploration (for all stages):
A color notebook should be kept by individual students if feasible. Color illustrations from newspapers and magazines depicting the use of color in all its phases and articles relating to its use should be classified for easy reference.

Kinds: primary, secondary, tertiary.
Schemes: monochromatic, analogous, related.
Implications: in cultures, in religion, in customs, in superstition, in contemporary marketing.

If it is not practical to keep individual notebooks, the classes should cooperate in furnishing the same type of material for the art room bulletin board.

STAGE ONE
Create a composition of varied sized rectangles using one tempera color plus black and/or white for color value. On a sheet of paper 9 x 12 inches organize the rectangles, limiting them to a maximum size of two inches, overlapping or juxtapositioning to achieve rhythm and balance.

STAGE TWO
Select one shape from nature which will be repeated in various sizes using two related colors plus black and/or white for color value. Incorporate texture and/or design in the nature motif; thus stressing rhythm and value in the composition.

STAGE THREE
Create a composition of man-made structures derived from geometric shapes. Use an analogous color scheme emphasizing the primary color. Small human figures may add texture and variety of movement.

STAGE FOUR
Arrange a series of studies in still life organized to show relationships of objects in space stressing gradation of color. Include a repetition of shape, movement, and varied textures. Show the natural colors of the objects or depict the still life in a monochromatic color organization. Textures may be achieved by using sponges, sticks, crumpled paper, and found objects. Value may be attained by the addition of white and black.
STAGE FIVE
Make a series of painting sketches from short poses by various models in
different positions stressing movement and value. Use these sketches as
the basis of a composition involving group activity.

STAGE SIX
Employ the above knowledge gained as a reference. Organize a composition
of figures involved in a school activity. Using a definite color scheme to
express the mood, emphasize depth through value, sizes of figures, overlapping
of shapes, and contrast of color.

STAGE SEVEN
Discuss essential facial characteristics. Use the model, noting the
differences and similarities by comparison with other members of the class.
Sketch from the model on 18 x 24 inch manila paper, using pencil, charcoal,
and/or one color paint.
Conduct a class critique for completed sketches to see if essence of
character has been attained.

STAGE EIGHT
Paint a portrait based on the experience gained in Stage Seven.
Organize a composition using a selected color scheme and again stressing
sensitivity to individual characteristic through line, shape, value, and texture.

STAGE NINE
Discuss connotation of color in mood. Organize a painting composition based
on fantasy. Choose a color scheme that fits the theme of the composition;
show emphasis through the color chosen. Introduce texture and line for
added interest and balance.
ANCIENT ART—EGYPT (c. 4000-1085 B.C.)

Some of civilization's earliest developments began in the Near East. The civilization of Ancient Egypt can be traced as far back as 4000 B.C. (M 31). Because rainfall was so scarce, crops were dependent upon the annual flooding of the Nile. The importance of the Nile was reflected in the religion of Egypt, which gave great prominence to Osiris and his resurrection. Amun-Re, the sun god, was another of the great gods in a pantheon that included many. By 3200 B.C., the entire Nile valley was under the rule of one king—the pharaoh (M 167). The style of art which the Egyptians evolved during this time continued until the end of the Empire period, 1085 B.C.

M 31 Slate Palette of King Narmer
M 167 Khafrae, IV Dynasty

Since the continuation of life after death was at the core of Egyptian religious belief, it was necessary to preserve the body and to provide it with the objects (or representations of them in sculpture or painting) necessary for this afterlife. The great pyramids at Giza (G 12-G 13) were built by three of the most powerful pharaohs of the Old Kingdom as personal tombs. These pyramids are tremendous in scale, with an impressive dignity befitting their purpose (M 46).

G 12 Egyptian Pyramid & Mastaba Construction
G 13 Pyramids, Gizeh
M 46 Sphinx etc.

In the centuries after the building of the great pyramids at Giza, the emphasis shifted to the building of temples along the Nile, each dedicated to a god (G 1). Like the pyramids, these were built of limestone. Colonnaded halls with massive pillars were used, which were often stylized forms of papyrus or lotus plants. In one temple form, the entrance was flanked by majestic pylons, (G 8-G 21-G 11) impressive in their massiveness which set off the sanctuary within from the world without.

G 1 Rock-cut Temples, Abu Simbel
G 8 Pylon, Temple of Horus, EDFU
G 21 Restored Temple of Amun Luxor
G 11 Temple of Horus, EDFU

If the mummified body in the tombs was destroyed, a sculptured image could serve as its substitute. With this idea in mind, the Egyptian sculptor carved portraits of the pharaoh that had great dignity and that embodied a feeling of permanence in their form. The figure sits immobile (M 63-G 2); the sculptor, who began with the massive block of stone as it came to him from the quarry, carved the form by creating a series of planes which were parallel to the sides of the block. The portrait heads of the pharaohs and their queens and retainers (M 166-M 80-M 92) were forceful, yet highly simplified representations of the human visage; they were recognizable portraits, but with all individualized detail eliminated.

M 63 Seated Amenemhet III, Cairo
G 2 Temple of Amon-Re, Abu Simbel
M 166 Bust of Prince Ankhhaf
M 80 Head of Thutmoses III
M 92 Ramses II

Relief carvings and paintings on the walls of the tombs (M 33-M 95) illustrated the many aspects of life the Egyptian hoped to continue in the hereafter. In their power of linking the Egyptian's life in this world with the life to come, the carvings served a definite and useful purpose (M 114). In other words, the ancient Egyptian put his art to work for him. The king is shown in his varied activities—boating, hunting, fishing, feasting, at war (M 112). Other pictures show the bakers, farmers, tailors, carpenters and entertainers at work on the necessities of life (M 107-M 53). This idea is carried further in the small-scale wooden models of boats, houses, and shops (M 59) that became popular in later times.

M 33 Wooden Panels of Hesire
M 95 Khamhnet
M 114 Weighing of the Heart, Papyrus of Ani
M 112 Presentation of Tribute to Tutankhamon
M 107 Painted wall decoration, Thebes
M 53 Fattening Geese
M 59 Model Garden

The Egyptians valued craftsmanship and took pleasure in fine furniture of carved wood inlaid with ivory (M 112-M 79); jewelry of gold, enamel, and precious stones (M 76-M 119-M 178-M 121); and the many products of the potter, including both glazed and unglazed vessels. Many of these objects had been used by the Egyptian during his life on earth, before being placed in the tomb.

M 117 Chairs of Yuya and Tuyu
M 79 Jewel Casket Illahun
M 76 Gold Pectorals of Sesostiris
M 119 Sponges
M 178 Gold Mask of King Tutankhamon
M 121 Gold Vessels of Ramses II

For the Egyptian, all things had their place, and this idea was true of his art. Since his sculptured images and his painted pictures served such an important purpose, they, too, had to follow a definitely prescribed pattern. In a relief or a painting, the representation of the pharaoh was always lazier than that of any other figure; his gestures were slow and formal befitting his great dignity and power. Certain conventions for representing the human figure were established: different parts of the body were shown from different points of view; for example, the shoulders were frontal, which meant that both arms could be fully seen; legs and feet were in profile as was the head, but the eye was a full front view (M 104). Although these conventions might vary in depicting ordinary men, they were strictly observed in depicting the pharaoh. It was an art that was essentially flat and two-dimensional in concept; there was no illusion of depth created by perspective and no feeling of volume in the forms as a result of light and shadow. There was a sensitive, balanced relationship between the figures and the background space, and the composition was carefully ordered by placing each group of figures in a horizontal zone with its own base line. Finally, to indicate the importance of...
the pharaoh, his size was always much greater than that of his subjects (M 95).

M 104 Seti I making offering to Osiris
M 95 Khamnet

The ancient Egyptian, who valued order and stability in his civilization, evolved an art that reflected these qualities. From the early, ponderous pyramids to the beautifully restrained wall reliefs and paintings and the delicate and refined articles of personal use, his art shows a degree of consistency and an adherence to established tradition unequalled in any other time or place.

MIDDLE EAST (c. 3000 B.C.-A.D. 641)
Contemporary with ancient Egypt were the civilizations of the valley between the Tigris and Euphrates rivers to the north. Religious beliefs centered upon nature gods, and tombs were unimportant. Sculptured figures in stone were stiff and compact. The palaces of the Assyrian kings were built of brick and were lavishly decorated. Great, powerful winged-bull figures guarded the gateways; large stone panels carved in low relief sheathed many of the walls. The subjects portrayed in these reliefs were varied—winged deities, the king in religious observances at war, receiving captives. Conventions for representing the human figure were similar in some respects to those of Egypt, but were less rigidly observed. The representations of animals, especially, were keenly expressed and of a higher order; in design these reliefs strike a balance between plain areas and those decorated with a delicate incised texture.

GREEK ART—(c. 1100 B.C.-c. 100 B.C.)
Very different from the Egyptian civilization was that which arose in the eastern Mediterranean. That phase known as Aegean can be traced as far back as 3000 B.C. By 1100 B.C. Greece was the center of this civilization which spread out over the islands of the Mediterranean and the coast of Asia Minor and later expanded farther westward.

Unlike Egypt, with its long Nile valley and the monolithic state it evolved, Greece has a terrain broken by mountains and valleys and, although their basic culture was the same, a number of different small city-states arose in the valleys. Although one among many, the city-state of Athens has become a symbol of Greek civilization and, indeed, all of its arts did flourish. In contrast to the conservative character of Egyptian civilization, Greek art is less bound by tradition and is, thus, freer in expression. In Greek religion the forces of nature were personified and, as described in Greek mythology, the gods were endowed with human qualities and appearance. The carving of images to represent these gods gave rise to the need for sculpture; the need for protection from the elements necessitated suitable architecture.

The temple which served to house these cult statues was relatively simple in plan and, despite a number of variations, the basic plan changed little over the centuries (G 40). Instead of a variety of temple forms, the Greek architect gave his attention to refinement of proportions and relationships of parts. Unlike the great pylon temples of Egypt, which enclosed the place of worship, the temple in Greece faced outward and the exterior was emphasized. One of the finest examples of Greek architecture and one which well illustrates the sense of balance and feeling of proportion is the Parthenon of the fifth century B.C. at Athens (G 41-G 42). Set on a three-step base, the columns that surround the sanctuary room rise to support the gently sloping roof. It is a composition of carefully ordered horizontal and vertical movements, and a delicate balance is struck between variety and unity (G 43-G 44-G 52-G 59-G 65-G 48). 

G 40 Plan of Acropolis, Athens

G 41 Parthenon, Athens
G 42 Parthenon, Athens
G 43 Parthenon, Athens
G 44 Parthenon, Athens
G 52 Temple of Athens Nike
G 69 Plans of Greek Temples
G 46 Erechtheum, Athens

The earliest pieces of sculpture which have survived from the seventh and sixth century B.C. are stone, although it is thought that still earlier ones were executed in wood. Representations of the human figure are stiff, compact masses which are "geometric" (cylindrical) (A 22) and symbolic rather than realistic in appearance. They stand of sit immobile with arms pressed against the sides and with the linear design of the folds in the drapery (A 25) playing over the surface. In the standing male figures (Kouroi) the symmetry of pose is only slightly broken by the separation of the legs—one foot placed ahead of the other. Although the treatment is still somewhat austere, various anatomical details, such as the knees, are treated in detail. Still, the emphasis is on an abstract pattern rather than on representation of anatomy. However, by the fifth century, the frontal pose and the feeling of monumentality have given way to the visual reproduction of the human figure, more or less accurate in detail, and action becomes part of the pose. This development necessitates greater knowledge of anatomy and an understanding of how the human body, made up of bones and muscles, works. Still, the feeling of stone is present in the sculpture of this period, and the artist has simplified details of the muscles and stylized the hair and drapery (A 82-A 446). The figure is sometimes shown as if in action, and flexed legs and arms act as countermovements to the torso, which is often shown twisting on its axis (A 62).

A 22 Hero of Samos
A 25 Acropolis Figures
A 82 Archer, Temple of Aigina
A 446 Head of Apollo—Temple of Zeus, Olympia
A 62 Diskobolos

Although today Greek sculpture appears to us as white marble (or sometimes bronze), it was originally waxed and painted. Many of the pieces we now have were part of integrated ensembles of sculpture which illustrated the myth of a particular god and were to be found on the pediments (MA 66—A 136) of the temples. The relief sculpture—long friezes and individual panels—also played an important part in the decoration (A 145-A 157). This relief sculpture was not so strictly conventionalized as that of Egypt and indicates the difference in the two styles.

MA 66 Temple of Zeus, Olympia
A 145 Parthenon, West Frieze
A 157 Parthenon, Seated Deities

The later phase of Greek art (late fifth century to first century B.C.) is characterized by greater emphasis on a more individualistic form of expression. The serene idealism to be found in much of the fifth century sculpture gradually gives way to a refined elegance (A 458—A 303—A 190) or sensual qualities and the individual emotional expression of the Hellenistic period.

A 458 Athena Lemnia
A 303 "Winged Victory," Nike

Although architecture and sculpture were the art forms in which the greatest creative energy of the Greeks was directed, they were not the only ones. Painting, both murals on walls and panels pictures, were done although none of these has survived and we know of them only through description. Pottery was made in great quantity and was traded over great distances. In form, the early pieces are bold combinations of geometric volumes, sections of cylinders, ovoids, and cones decorated with conventionalized linear designs in horizontal bands which cover the entire surface (MA 11). This style of decoration gave way to fewer, but larger...
silhouettes of the figures painted in a sharp, crisp style. In the finest examples there is a fine feeling of balance between the figure and the background. The basic form of the vessels, too, changed in the direction of greater refinement rather than the vigorous energetic combinations of cut-out volumes of the early pottery (MA 32).

MA 11 Diplum Vase
MA 32 Lekythos: Seated and Standing Women

ETRUSCAN AND ROMAN ART—(c. 1000 B.C.-c. 400 A.D.)

In Italy, during this period, there were a number of tribes competing for control over the peninsula. Chief among these were the Etruscans whose art was subjected to influence from Greece (MA 49). Some pieces of terra cotta sculpture have a distinct life and vitality that seems in contrast with their purpose as funerary pieces (MA 53). Also paintings on tomb walls have a gay, exuberant quality (MB 27), unlike the more restrained Greek and sober Egyptian. In their buildings, the Etruscans made use of the arch, a structural device quite different from the post and lintel used by the Egyptians and Greeks.

MA 49 Apoll of Veii
MA 53 Sarcophagus from Cervetri
MB 27 Tomb of Lionesses, Tarquinia

For several centuries before the birth of Christ, the Romans and Etruscans had been rivals with the former finally gaining control of all of Italy. The energies of the men of Rome found their way into all aspects of life in the empire; is the capital of Constantinople, the Hellenic style and various oriental influences more abstract and symbolic, fused into the style which we know as Byzantine (G 110—G 115—G 121—G 198). In this art, which was created for religious purposes, a number of artistic symbols were established. For example, the fish became the symbol for Christ; the ship became the symbol of the Church itself; the peacock became the symbol of the Resurrection (K 7). Those and others that evolved were represented then, as now, in all media; such as in relief carvings (K 221) and in mosaics as a kind of visual language which told the Biblical stories. Mosaics, pictures created by setting tiny cubes of colored glass or stone into moist plaster, covered the walls of many of the finest churches of this period (K 21—K.175—B 20—B 28—B 30—B 40). Many of these tiny pieces of glass are backed with gold and, when set into the plaster wall at various angles, they create a shimmering glow in the dark church interior that in richness and splendor has seldom been equaled.

K 3 The Good Shepherd
B 371 Christian Sarcophagus
G 110 Santa Sophia, Istanbul
G 115 Santa Sophia, Istanbul
G 121 Baptistery of the Orthodox, Ravenna
G 198 Façade, San Marco, Venice
K 7 Sarcophagus of St. Theodore
K 221 Ivory: 3 Maries at the Tomb and Ascension of Christ
K 21 Mosaic, San Marco, Venice
K 175 Head of Christ, Santa Sophia (Mosaic). Istanbul
B 20 Mosaic, in Classic, Ravenna
B 28 Mosaic, S. Apollinare Nuovo, Ravenna
B 30 Mosaic, S. Vitale, Ravenna
B 40 Mosaic, San Marco, Venice

Byzantine art with its emphasis on the symbol was abstract rather than realistic in concept; mosaics, paintings, and reliefs are designed within limited depth (P 126). Figures are flat with little or no shadow and stand forth against their background clearly and distinctly. In contrast, some of the paintings or relief carvings which have survived illustrate an opposing style with its origins in late Greek art (K 12). In these, the aim was to represent the illusion of volume in three-dimensional space based on observation of the actual world. In the course of time, this latter style gained ascendancy in the west; the former Byzantine art was dominant in the east. The latter, as it was patronized by the Eastern church and the court, became even more stylized and spiritual in concept (MB 51—MB 47). Even after the fall of Constantinople to the Moslems in the fifteenth century, the Byzantine style persisted in the painting of religious icons in Russia.

P 126 Madonna—Byzantine painting
K 12 Ivory: Angel—Alexandria
MB 51 Madonna—Detail of Icon, Encaustic on Wood
MB 47 Christ Pantocrator, Cefalu

MEDIEVAL ART—(c. 400-1200 A.D.)

During the long, chaotic period from the fifth to the eleventh century in Italy and western Europe, the church was the single institution capable of giving protection and patronage to learning and the arts. The unity which Roman rule had given to western Europe was lost, and without strong centralized power, feudalism developed. The anarchic tendencies fostered by feudalism were somewhat offset by the monasteries and this, in turn, became the stimulus for Romanesque art of the eleventh and twelfth centuries. The monasteries sought to establish stable, prospering communities which fostered the arts (K 184—K 24—K 157).

K 184 Lindisfarne Gospels; St. Matthew
K 24 Initial Page of Matthew: Book of Kells
K 157 Carolingian Ivory Book. Cover: Scenes from the Passion

The crusades, the first two during this period, renewed contact with the East and Byzantine art and the Oriental arts became an important influence on Romanesque art. These, and other elements, such as increased trade and the need for larger and more
impressive churches, resulted in tremendous building activity during the Romanesque period (G 131—MG 182—G 184). As the form implies, the builders of this age made use of and adapted to their needs the forms and what knowledge they had of Roman architecture. A Romanesque church, with its heavy buttressed walls, has a protective fortress-like quality appropriate for the age (MG 45—G 236). Although building styles varied from region to region, it was necessary for the Romanesque architect to provide a good-sized space for the crowds of worshippers to cover this with a fireproof roof, usually the barrel vault or the intersecting groin vaults. Although in richness of color their mural decoration cannot compare with the Byzantine mosaics, there is still a great vigor and a robust quality to the mural paintings which decorated the interiors of some. Inlaid marble and rows of arcades that decorated the exterior of many of the Romanesque churches in Italy (G 156—G 160). Those of France, England, and Germany were built of limestone and depended on sculpture to enrich the exterior. This consisted of relief sculpture placed around the main portal, to each side and immediately above the door. This sculpture is one of the great achievements of Romanesque art (K 48—K 50—K 51—K 54—K 135). The artist kept the function of his sculpture clearly in mind, using the enrichment of the wall surface and whether the relief carving was either in low or high relief, to echo in parallel planes the wall itself (K 198). Religious figures, often grouped to illustrate such themes as the last judgment, or fanciful visionary animal and plant forms, often in profusion, were designed within definitely framed boundaries (K 51). The fears and anguish of an age in which strife and pestilence were all too frequent were given eloquent expression in sculpture of such Romanesque churches as Moissac and Autun in France; the finest examples achieve a transcendental quality which results in religious art of high order.

G 131 Plans of Central and Southern Italian Romanesque Churches
MG 182 Exterior of Apses and Plan, St. Etienne, Caen
G 184 Cathedral and Leaning Tower, Pisa
MG 45 Facade, St. Etienne, Caen
G 326 Abbey Church, Vezelay
G 156 Facade, San Miniato, Florence
G 160 Facade, San Giusto, Lucca
K 48 Tympanum of Portal Church, Moissac
K 50 Tympanum: La Madeleine Vezelay
K 51 Tympanum: The Last Judgment. Cathedral, Autun
K 54 Saint Trophime, Aides
K 125 West portal Cathedral, Rochester
K 198 St. Peter, South Portal, Jamb Figure. Church, Moissac.

Other religious arts such as metal work and the illustration of Biblical texts were also emphasized (P 101—K 285). The manuscripts are often strong in the richness of their linear design (K 286).

P 101 Limoges Chalvaleve (Enamel)
K 286 Adoration of Magi (Whale Bone) Anglo-Norman
K 286 Winchester Bible. Initials with illumination

GOTHIC ART—(XII-XVI CENTURY)
The insecurity which had marked life in the Romanesque period gave way in some degree to law and order which provided the necessary conditions for the Gothic period. Stability led to expanded trade and the growth of cities made them the centers, rather than the more rural monastic communities of the Romanesque period. The expansion of urban life was to a great extent responsible for the elaboration of Gothic art. Many of the towns were also the centers of administration of the Bishops of the church and, consequently, the great cathedrals were located there. Universities were also established and there was much inquiry and an enthusiastic fascination for the study of this world—in place of the concentration on the hereafter which had prevailed during the Romanesque period. There is in much of Gothic art a sense of fresh and compelling joy in the world—in its plants, animals, and in man himself.

In the religious context, devotion to the Virgin Mary, Queen of Heaven, achieved great importance. The Virgin and her Son, symbol of the love of mother and child, were depicted with a grace and gentleness which had not been apparent in the art of a more robust Romanesque age. (G 269—G 251—G 271—G 287—G 294—G 384—G 404—G 483).

G 269 Cathedral, Chartres
G 251 Cathedral, Amiens
G 271 South Porch, Chartres
G 287 Notre Dame, Paris
G 294 Cathedral, Reims
G 384 Cathedral, Lincoln
G 392 Westminster Abbey Interior
G 404 Cathedral, Salisbury
G 483 Cathedral, Cologne

The Romanesque church had an appearance that was massive and it exuded a feeling of permanence and protectiveness that was needed in such an unsettled age. The accumulated knowledge of building techniques enabled the Gothic architect to build his churches to great heights. By means of a complicated system of buttressing, large openings could be cut into the walls of these and the spaces filled with stained glass (G 331). As one enters a great Gothic cathedral, (Chartres in France for example) his attention is focused on the altar in the distance (G 273); on each side of the nave, great clustered piers soar upward finally flaring into the separate ribs that support the thin stone sheathing of the vault itself (G 394), on either side of the nave are the side aisles, their vaults lower, their side walls pierced by the panels of rich, glowing translucent panels of color seemingly suspended in space, (G 253) the stained glass that is one of the unique achievements of the Gothic period. Along each side of the nave, the upper walls (the clerestory) are pierced for stained glass and in each of the transepts and above the main portal are placed the great radiating circles of the “rose windows” (K 160). (See the ground plan of a Gothic church most typically in the form of a cross—the arms of which are called the transepts (G 330). The windows as well as the great concentration of sculpture on the three facades were all intended to tell in almost encyclopedic fashion the religious story, to which the structure was dedicated. In constructing a window, separate pieces of colored glass are held together by “leads” and the whole is reinforced by heavier iron bands or, as in the rose windows, a stone armature (K 276). In the shadowed half-light of the interior, they glow with an intense color unequalled in any other medium.

G 331 Gothic Sections: Paris, Amiens, Bourges
G 273 Choir and Nave; Cathedral, Chartres
G 394 Westminster Abbey, London, Henry, VII Chapel
G 253 Amiens—Interior
K 160 Window—Chartres
G 330 Gothic Plans: Amiens, Chartres, Paris
K 276 Stained Glass Windows:
Daniel and David Cathedral, Augsburg

The ideal plan for a Gothic cathedral called for a series of towers capped by tall pointed spires. Although this plan was seldom completed in its entirety, two bell towers were usually built to flank the west or main facade. Around this doorway (as well as around the portals of the north and south transept facades were) organized the great sculpture compositions. Those of Notre Dame of Chartres, France illustrate the early Gothic style (G 270). The majesty of Christ and the story of His Virgin mother are woven into a theme with many variations. Christ, the symbols of the four
Evangelists, the Apostles, the signs of the zodiac, the labors of the months and the seven liberal arts are organized in the three tympanums in clearly defined areas of relief sculpture (K 56). Below the figures which represent the kings and queens of the Old Testament are in columnar form, their hands and arms held close to their sides; they stand in simple dignity on each side of the door (K 57). Proportions of the body are strictly controlled and details such as folds in the drapery and hair are designed as abstract, rhythmical patterns which enhance the surface of the form. In style, these figures from the west portal of Chartres have much in common with Romanesque sculpture. Those on the west portal of Amiens Cathedral from the early thirteenth century indicate the direction that Gothic sculpture was to take for example, toward greater realism (K 69). A climax in the Gothic style is to be found in the figures which flank the portals of the west façade of Notre Dame de Reims which date from the mid-thirteenth century (K 82—K 84). Although placed in the same architectural position, relatively, as the twelfth century kings and queens of Chartres, the feeling of the cylindrical column has been lost and, instead, the figures stand forth on a pedestal base independent of the background wall. The vertical axis of the earlier figures at Chartres that made them so much a part of architecture, has given way to a more naturalistic conception of the human figure with well-articulated parts and a body that has moved off center, bending, twisting, and turning as in life. In proportions and in modelling of the body as well as in the treatment of the drapery which clothes them, these figures are much closer to a realistic conception than anything in western art since the Greek and Roman art of late classical times. These are not the transcendent conceptions of beings seen as in a vision—the Romanesque idea—but are human in every way though extraordinarily serene and graceful (K 161—K 68).

C 270 West Portal, Chartres
K 56 Tympanum, Central Portal, Chartres
K 57 West front, Chartres
K 69 Apostles, Cathedral, Amiens
K 82 Reims—Annunciation and Visitation
K 84 Reims—A King
K 161 Virgin—Amiens
K 68 Christ—Amiens

The vitality of the age, as indicated in its commerce, town building, and especially in the emphasis on learning in the universities and expression in the arts, was also part of the Gothic style of painting. This can be seen in the miniatures that illustrated the handwritten books; it is also clear in the large compositions which were woven as tapestries toward the end of the Gothic period (K 92—K 268—K 273).

K 92 Ivory—Coronation of Virgin
K 268 Manuscript, Entombment and Three Maries of the Tomb
K 273 Tapestry

Our discussion has concentrated on Gothic art as it evolved in France; but a style as vigorous as the Gothic which persisted for more than three centuries is to be found throughout Europe, in England, Germany, Spain, and Italy. In each it was modified by local taste and never achieved any degree of homogeneity.

During the fourteenth, fifteenth, and sixteenth centuries, Gothic expression became even more complicated and flamboyant in its combination of structural and purely ornamental forms in architecture and it included more and more decorative elements in painting and sculpture (G 394—G 472—K 117—K 107). In these arts, too, the trend toward realism grew—a presentation of the human figure of solid, weighty mass with increasing attention to realistic detail. Many of the miniature paintings in the illuminated manuscripts for example, the Book of Hours of the Duc de Berry; by Pol de Limbourg and brothers ca. 1416 (K 202—K 203—others) are paintings which show the trend toward naturalism.

This is especially true in the painting of the background—a landscape which includes various activities indicative of each month. Although the compositions often make a handsome surface pattern and are decorative designs of high order that have much in common with other Gothic designs, they also contain elements of naturalism that will be much further developed in the succeeding age, the Renaissance.

G 394 Westminster Abbey, Henry VII Chapel
G 472 San Gregorio Valladolid, Spain
K 117 Madonna and Child, Touraine
K 107 Claus Sluter, 1391: Madonna and Child
K 202 Book of Hours, December
K 203 Book of Hours, April

RENAISSANCE—(XV-XVI CENTURY)

In art, as we have seen, a particular style emerges, gradually develops, and matures. As we look back on it, we can observe that its later phases not only elaborate its early forms but seem to contain elements from which will come the early stages of the succeeding style. Although the term Renaissance means "rebirth," the transition from late Gothic into Renaissance was gradual. However, the introduction of new components was to transform not only the life, but the art of Europe during the fifteenth and sixteenth centuries. Although the idea is many-sided and complex, we may take Italy as an example and there, in the fifteenth century we find the various components of the Renaissance at work. From this center, ideas later spread into western and northern Europe.

The intellectual life of this period is characterized by great interest in antiquity, the ruins of Roman civilization, the fragments of sculpture that were unearthed, and the writings of the Greeks and Romans that were translated and disseminated by the newly invented printing press. The cities of Italy, such as Pisa, Siena, Florence, and Venice greatly expanded their trade both across the Alps and with the East and as a result became wealthy and powerful. There grew up a brisk commercial and often political rivalry among them. This political strife was one aspect of the age in which the term "humanism" was applied to a cluster of values that were gradually enunciated. Humanism placed great importance on man the individual and on his freedom. As a part of this emphasis, great value was placed on man's powers of reason and his ability to know himself. This ideal was often ignored and seldom realized in actual life although as an ideal it had value. As we shall see, this emphasis on the rational meant that the intellectual curiosity of the Gothic period was subjected to a more disciplined scrutiny. Knowledge of himself but also greater knowledge and investigation of his world distinguished the Renaissance artist from his predecessors. And, the individual artist received a recognition from his contemporaries hitherto unthought of, making his place in society more significant.

Although, as in the past, the church continued to be an important patron of the arts, and therefore many subjects in art were religious, there were other sources of patronage as well. The civic governments of the city-states, such as Florence, Pisa, and Venice each fostered the arts and provided the artists with commissions. In addition, much of the wealth accumulated by such powerful families as the Medici of Florence were used to assemble great collections of art.

Although the names of some of the Greek artists and some of those from the Gothic age have come down to us, the role of the individual did not take on the importance that it did in the Renaissance and the artists all stand forth as fascinating personalities in their own right. It was customary for artists to begin their studies as an apprentice in the shop of a master, but in a period when the individual was so important, a number of distinct styles
emerged and the work of lesser artists seems to take a subordinate place.

The Florentine artist, Giotto, painted the frescoes in the Arena Chapel in Padua at the beginning of the fourteenth century (B 54). Although this places them in the Gothic period in time, these paintings are so advanced in concept and so ahead of their period, that Florentine artists a century later would exploit what he had begun. This great cycle of frescoes deals with the life of the Virgin and episodes in the life of Christ. Using the medium of fresco in which the artist applies color directly to the wet plaster, Giotto conceived, designed, and painted his subject in a succession of panels that told the story (B 58—B 60—B 66—B 64—B 71). His concept of the great drama of the subject was expressed in his compositions which achieved great power and a monumental grandeur. By careful control of light and shadow, he creates a limited space within which the drama takes place. The figures are related to each other both compositionally and psychologically as integrated units of the composition. Unnecessary detail is eliminated; forms are simple and monumental creating an effect of great dignity. The illusion of actual forms, characterized by volume and weight existing in real space, is greater than ever before in painting.

During the fifteenth century in Florence, the great wealth that was being accumulated served to stimulate all the arts. In architecture, Brunelleschi’s dome for the cathedral (G 146) expressed something of the sense of power that Renaissance man had found. (The cathedral itself is primarily Gothic; the dome, however, was begun in 1420.) It dominates the city of Florence and is an excellent example of what the early Renaissance artist, valued—a design in which the individual parts are well integrated with clarity and order. It is an expression of man’s faith in himself, for right and direct, in contrast with the Gothic cathedral with its vertical spires symbolic of his religious aspiration, restless and unfulfilled. This careful ordering of all the parts according to a clearly realized plan was typical of Renaissance architecture and parallels that of ancient Greece and Rome (G 214—MG 176). There was much conscious emulation of specific forms, such as moldings, indicating the Renaissance admiration for classical art.

One of the sculptors who was most inspiring in giving direction to the early Renaissance was Donatello. He placed special emphasis on observation of nature making that his starting point in carving religious figures in a forceful three-dimensional manner (B 434—B 435—B 438). Verrocchio, a painter as well as a sculptor, in his equestrian figure “Colleoni” infused the subject with an intense, harsh, barely contained energy that expresses the struggle from which the forms emerge or are lost.

Although “the change in concept between the Renaissance and medieval periods can be detected in architecture and sculpture, it is most evident in the painting. Masaccio in the early fifteenth century was able to make advances on Giotto’s accomplishments and never before had any artist painted such a complex grouping of interrelated figures in such a spacious area (B 140—B 141—B 142—B 143). The feeling of distance—space filled with light and air—is strongly felt and emphatically expressed; his figures are massive and weighty and, as in Donatello’s sculpture, are plausible dignified renderings of the human body. Piero della Francesca’s painting of man imbued him with dignity and a solemn grandeur. His figures were fitted into a plan of geometric simplicity, cool, abstract, almost impersonal (B 233—B 225). It was an age of experimentation and the approaches to art were varied and inventive. The sculptor, painter, and goldsmith Pollaiuolo began an intensive study of the human figure in movement. The painter Uccello was fascinated with the possibility of using perspective to organize his pictures of imaginative, stagelike battle scenes (B 137). Some artists, however, were conservative, and in the work of such painters as Fra Angelico, for example, the continuation of the medieval tradition can be seen in his paintings of bright color and gold leaf (B 120—B 118).

Later in the fifteenth century, another Florentine artist somewhat outside the mainstream, but one of the great painters of the period, was Botticelli (B 175—B 183). He shows a strong feeling for a sinuous rhythmic line and its pattern plays across the picture alive and full of energy. His forms have little of the substance that Masaccio’s had nor are they conceived as broadly as della Francesca’s. Botticelli’s emphasis on this one visual element, line, shows how much he has in common with Oriental art which also places such great importance on it.

Botticelli’s contemporary, Leonardo da Vinci, truly one of the most remarkable men of all time, typified the Renaissance ideal of the “universal man” with his far-ranging mind and scientific approach. He investigated botany, (C 41) geology, (C 45) zoology, engineering (C 59) optics, color, perspective (C 31) and anatomy. Painting and sculpture were but two of his many interests. His many drawings of anatomy and his studies of perspective related his work to that of earlier artists. His painting of the “Last Supper” well illustrates how perspective can be used to organize the composition (C 2, C 5, C 6). However, although this mathematical and logical process, perspective, fascinated him, it was subordinated in his pictures to the idea, and the “Last Supper” is a series of subtle psychological studies of Christ and the disciples. Some of the drawings (C 11) and paintings such as the “Madonna of the Rocks” (C 12) and the “Mona Lisa” (C 10) exhibit an elusive quality which is largely the result of his use of dark shadows from which the forms emerge or are lost.

C 41 Drawing, Star of Bethlehem and other plants, Leonardo da Vinci
C 45 Drawing, Landscape, Leonardo da Vinci

B 422 East Doors; Story of Abraham, Lorenzo Ghiberti
B 494 The Incredulity of Thomas, Andrea del Verrocchio
B 394 South Doors Baptistery, Florence, Andrea Pisano
B 420 East Doors, Baptistery, Florence, Lorenzo Ghiberti
the cities of Northern Italy dominated by Venice. A passion for effect. One of the great artists of Venice was Giorgione whose new technique of oil painting was a rich and sumptuous use of color. The use of the Italy as, exemplified, in Giovanni Bellini's painting, "Religious classical art can be seen in the work of Mantegna (B 108). A limited to this region and there was a great deal of art fostered by central Italy. However, the ideas of the Renaissance were not spiritual idea (C 135).

human figure not an end in itself but a means for expressing a human being himself, their studies of anatomy and the intensification that markS so much of Renaissance art.

G 233 St. Peter's and Piazza, Rome
C 462 Madonna and Child, Michelangelo
C 451 Moses, Michelangelo

In his composition of the Medici tombs (C 460), and in the fresco painting of the Sistine Chapel, the tension between these opposing focus is illustrated. In the latter, vast numbers of human figures are kept under control by their organization within the clearly defined architectural pattern (MC 9—C 118). Michelangelo and the other artists of the Renaissance through their broadened interest in man himself, their studies of anatomy and the intensification of what they were beginning to learn of classical art, made of the human figure not an end in itself but a means for expressing a spiritual idea (C 135).

C 460 Lorento, Sculpture, Michelangelo
MC 8 Sistine Ceiling, Vatican, Rome, Painting, Michelangelo
C 118 Jerusalem, Painting, Michelangelo
C 135 Christ the Judge, Painting, Michangelo

Leonardo, Michelangelo and Raphael were artists who worked in central Italy. However, the ideas of the Renaissance were not limited to this region and there was a great deal of art fostered by the cities of Northern Italy dominated by Venice. A passion for classical art can be seen in the work of Mantegna (B 108). A greater interest in landscape is one element in the art of Northern Italy as exemplified in Giovanni Bellini's painting, "Religious Allegory" (B 347). Also characteristic of much of the Venetian painting was a rich and sumptuous use of color. The use of the new technique of oil on canvas was important in realizing this effect. One of the great artists of Venice was Giorgione whose painting has qualities of tranquillity, idyllic charm as a result of his individual use of color and light-infused atmosphere (C 256).

B 108 The Church Militant and Triumphant, Andrea Mantegna
B 347 Religious Allegory, Giovanni Bellini
C 255 The Three Philosophers, Giorgione

The use of color by the Venetian masters integrated as it was with the effect of light and atmosphere was essentially new to painting. In many ways, the painting of Giorgione's contemporary, Titian, is similar, although his temperament was more direct and exuberant than the latter. The painting of his long and prolific career is characterized by his fine sense of composition in which volumes and the space around them are well defined and both color and texture of materials such as flesh, silks, and fur are richly painted. His work exudes a grace and his subjects have a stately calm. (C 266—C 279—C 28—C 291—MC 26—C 286).

C 266 The Man with the Glove, Titian
C 279 The Entombment, Titian
C 28 Madonna of the Pesaro Family, Titian
C 291 Presentation of the Virgin, Titian
MC 26 Pope Paul III and His Nephews, Titian
C 286 Arentino, Titian

The dignity and calm which was characteristic of Titian's work is lost in the work of Tintoretto where the equilibrium is replaced by a dynamic, compositional style in which diagonals carry the eye deep into the background space. In contrast with the light-filled spaces of Giorgione's paintings, Tintoretto's are dark and shadowy with sharply contrasting lights that flicker across the canvas. He is one of the artists of the sixteenth century Italy whose work is classified under the Mannerist style (C 323—C 325—C 332—MC 34—MC 33).

C 323 The Miracle of the Slave, Jacopo Robusti Tintoretto
C 325 The Marriage at Cana, Jacopo Robusti Tintoretto
C 326 The Presentation of the Virgin, Jacopo Robusti Tintoretto
MC 33 The Last Supper, Jacopo Robusti Tintoretto
MC 33 Transporting the Body of St. Mark from Alexandria, Jacopo Robusti Tintoretto

Although the Gothic tradition persisted in the countries of northern and western Europe longer than it did in Italy, the Renaissance gradually spread. In the sixteenth century, Dürer (L 26—L 24), Grünewald (MD 22), and Holbein (MD 33) in Germany; Bosch and Brueghel (MD 45—MD 15) in the Low Countries, and El Greco (ME 62) in Spain all adopted and adapted elements of late Renaissance style. The influence of Tintoretto is evident in El Greco's painting with the flickering, ethereal light that flashes across the canvas (E 204). Forms have little material substance, are weightless and dematerialized, and the result is a religious spiritual expression (ME 52).

L 26 FlighInto Egypt, Albrecht Dürer
L 24 Apocalypse, Albrecht Dürer
MD 22 Isenheim Altarpiece
(Detail) The Crucifixion, Matthias Grünewald
MD 33 Henry VIII, Holbein
MD 45 The Fall of Icarus, Brueghel
MD 15 Hunters in the Snow, Brueghel
ME 62 View of Toledo, El Greco (Domenico Theotocopoulos)
E 204 Burial of the Count of Orgaz, El Greco
(Domenico Theotocopoulos)
ME 52 Assumption (Santa Cruz, Toledo).
El Greco (Domenico Theotocopoulos)

BAROQUE AND ROCOCO—(1600-1750)
The term "Baroque" is applied to art of the seventeenth century—a style as full of dynamic energy as the age itself. Artists such as Bernini (MC 11), and Caravaggio (MC 17) developed the style in Italy. But the opulent, exuberant qualities, rich color, and sensuous use of pigment which characterized the painting was most completely realized by the Flemish painter, Rubens (D 104). His themes, whether religious (MD 12) or mythological, are dramatic organizations of solid volumes that move in a series of sinuous curves through an open airy space. Indeed, his landscapes, (D 136) though few are exceptionally fine. The huge quantity of
work by Rubens and the uneven quality may be explained by his practice of assigning much of the painting to his shop assistants. MD 104 Rubens and Isabella Brandt, Peter Paul Rubens
D 104 The Elevation of the Cross, Peter Paul Rubens
D 136 The Castle of Steen, Peter Paul Rubens

Almost contemporary with Rubens was the Dutch artist, Rembrandt. The religion of Holland was Protestant rather than Catholic and there was little patronage of art by the church, however, portrait which was secular was sanctioned and highly valued. The one, all-consuming passion of Rembrandt was for light as it plays over the surfaces of forms and throughout space (D 243). Light as it is projected into the picture space from a door or a window or as it radiates from a point within the picture contrasts with areas of shadow that are limpid and mellow; both light and shadow interact to create paintings of depth and dramatic power (D 253). Rembrandt's use of the technique of indirect oil painting and the numerous glazes that he applied one after the other enabled him to create this effect of deep but transparent shadow (D 256—D 262—D 266—P 108).

D 243 Portrait of Rembrandt's Mother, Rembrandt
D 253 Christ at Emmaus, Rembrandt
D 232 Rembrandt and Saskia, Rembrandt
D 256 Man with the Helmet, Rembrandt
D 267 Hendrickje Stoffels, Rembrandt
P 108 Portrait of the Artist, Rembrandt

Other Dutch artists were also interested in light and its possibilities. Many of them painted interiors of houses enlivened by a variety of everyday activities in a manner that had great charm but did not have the great breadth found in Rembrandt. The greatest of the artists was Vermeer whose paintings of interiors are inhabited most often by a single figure poised and serene (D 336—D 339). The figure and all the objects of the interior are bathed in a clear, even light that has less dramatic power than Rembrandt's.

D 336 The Lacemaker, Vermeer
D 339 The Letter, Vermeer

Influence from Italy in the seventeenth century continued to make itself felt in Spain. In contrast to the intense spirituality of El Greco's work of the late sixteenth century, the painting of Velazquez exhibits a coolness and detachment. His brushwork was masterfully controlled yet looser and freer than that of most of his contemporaries (E 224—E 225—ME 34). The extraordinary artist, Goya, at the end of the eighteenth century and the beginning of the nineteenth was one of Spain's greatest. Although he served as a court painter, his portraits of the royal family and others are incisive and revealing in their expression of character (ME 54—ME 107). His grasp of problems of form and composition is acute (ME 90), but another aspect of his personality is of great importance to his art. His concern over contemporary problems made him a most effective satirist and social commentator (E 247).

Still another facet to his work is his puzzling and enigmatic painting with dome of western man, and awareness and appreciation of non-European arts has gradually deepened that from its beginnings in the Near East. Although the limitations of this brief survey mean that we cannot treat the art of civilizations outside this area in detail, we should be aware that the cultures of Islam (in the Near East and Persia), of India, China, Japan and those cultures we erroneously term primitive (Indian America, Africa, and Oceania) have each created art styles that have evolved through different phases of growth comparable to western art, for example, European and American. Many of these art styles are fully as old and they are all equally as valid as expressions of the values of their particular civilizations as are those arts we call our own.

Beginning in the fifteenth century, voyages of exploration and discovery widened the horizon of western man, and awareness and appreciation of non-European arts has gradually deepened that from its beginnings in the Near East. Although the limitations of this brief survey mean that we cannot treat the art of civilizations outside this area in detail, we should be aware that the cultures of Islam (in the Near East and Persia), of India, China, Japan and those cultures we erroneously term primitive (Indian America, Africa, and Oceania) have each created art styles that have evolved through different phases of growth comparable to western art, for example, European and American. Many of these art styles are fully as old and they are all equally as valid as expressions of the values of their particular civilizations as are those arts we call our own.

In those cultures over which the Islamic religion had spread, beginning in the seventh and eighth centuries, the arts emphasized color and pattern. In architecture, buildings of brick, were faced with glazed tile in brilliant color (O 466—O 470—O 554—O 555), manuscripts were illuminated with miniature paintings rendered in bright, flat areas of color over which plays a delicate linear pattern (O 534—O 536—O 492—O 695).

O 466 Mosque, Isfahan
O 470 Sultans, Mosque, Ardistan
O 554 Arcades, Great Mosque, Cordova
O 555 Court of the Lions, Alhambra, Granada
O 534 Tahminah Comes to Rustam's Chamber, Iranian Manuscript
O 536 The Sick Lion Catches an Ass, Iranian Manuscript
O 492 Luster Plate, Mughul, Iran
O 595 Floral Carpet, Mughul
The art of India and southeast Asia was religious in motivation and the religious structures were built of stone incorporated great amounts of relief sculpture or free standing figures which express Hindu or Buddhist themes (O 16—O 18—O 19—O 82). Some of these sculptures were richly ornamented; others were plain and smooth of surface and expressed an inherent, serene, benign, highly spiritual quality (O 77—O 61—O 48).

O 16 Chhatrapati Shivaji
O 18 Great Stupa, Andhara
O 19 East Gate, Great Stupa
O 82 Great Stupa, Borobudur, Java
O 77 Head of Buddha, Cambodia
O 61 Saiva Trinity
O 48 Great Bodhisattva, Ajanta Cave

The civilization of China, which is many centuries old, accepted Buddhism but modified it with the Confucianist and Taoist philosophies and also placed great value on the arts. Ritual bronzes and tomb sculpture indicate the importance of ancestor veneration (O 82—O 101—O 135—O 199). Examples of Chinese Buddhist sculpture are more human in feeling than those from India (O 150—O 151). However, it is the art of the brush, for example, painting, and calligraphy that were given the greatest status by the Chinese scholars and artists. Subject matter for painting was most often landscape: the great panoramic views or minute sections of the plant and animal world. Some of these paintings were on long, vertical scrolls or long horizontal scrolls, unrolled a section at a time (O 198—O 208—O 215—O 219—O 238—O 242—O 207—O 226—O 250):

O 32 Bronze Vessels, Sheng Dynasty, China
O 101 Bronze Owl, Early Chou Dynasty, China
O 135 Rubbings from stone carvings, Han Dynasty
O 159 Tomb Figures, Tang Dynasty
O 150 Avalokitesvara, Wei
O 151 Detail, Avalokitesvara
O 198 Mountain Landscape with Travelers, Sung Dynasty
O 209 Autumn in the Valley of the Yellow River, Kuo Hsi
O 215 Bullock-Carts winding up a Mountain Path, Chu-Jui
O 219 The Five-Colored Parakeet Emperor Hui Tsung
O 238 Nine Dragons (Section) Chen Jung
O 242 Persimmons, Mu-chi
O 207 A Temple Among the Snowy Hills, Fan Kuan
O 226 Bare Willows and Distant Mountains, Ma Yuan
O 250 Calligraphy, Wang Hsi-Chih

Japanese culture and its art drew upon the older civilization of China for many of its ideas. But certain indigenous elements make Japanese painting and sculpture more incisive and less meditative in mood than that of China. The native Shinto religion was practiced side by side with Buddhism imported from China (O 251—O 252—O 361—O 307—O 346—O 365—O 372). Japanese architecture, much of which was designed to facilitate the circulation of air, has been greatly admired by our twentieth century architects, whose designs often reflect this interest.

O 251 Japan, The Great Shrine of Izumo
O 252 General View of Horuyu Temple
O 261 Lady Tachibana’s Shrine, Amida Trinity, Horuyuji
O 307 Animal Caricatures Toba Sojo
O 346 Winter Landscape, Sesshu
O 365 Tiger, Hasegawa Tohaku
O 372 Shrike on a Withered Tree, Miyamoto Nito

From the late seventeenth century until the mid-nineteenth century, a number of Japan’s greatest artists designed wood block prints. These are a great achievement in the medium; their flat two-dimensional design and placement of the figures in the space influenced the French Impressionists and Post-Impressionists (O 396—O 400).

O 396 Ukiyoe Prints, Suzuki Harunobu
O 400 Tokaido, Shino Hiroshige

Although the Europeans had had tenuous contacts with the Orient for centuries, it was only in the late eighteenth century that other parts of the non-European world were opened up by the great activity in exploration. Over the last 300 years, we have become aware and have learned to appreciate the great achievements of the American Indian cultures, the rich background of African kingdoms that are often of great antiquity, and the island civilizations of the Pacific. As stated earlier, these new sources of inspiration have meant much to the twentieth century artist.

NINETEENTH CENTURY EUROPEAN ART

By the nineteenth century, many of the ideas that had held the attention of the artists of the Renaissance and those of the centuries after had begun to give way, and the basis for revolutionary developments in the second half of the century was established. In England, Turner’s visionary paintings of the sea were in many ways closer to abstraction (F 97—MF 37); the landscapes of Constable had a fresh and spontaneous quality (MF 38—F 102); and, in France, Delacroix, whose paintings owed much to Rubens, was able to intensify the feeling of color by his application of thin strokes (E 385).

F 97 The Fighting Temerarie, Joseph Turner
MF 37 Steamer in a Snowstorm, Joseph Turner
MF 38 Weymouth Bay, John Constable
F 102 The Hay Wain, John Constable
E 385 The Lion Hunt, Eugene Delacroix

France, specifically Paris, was the center for ideas; it was here in the 1860’s that a group of artists who were to give direction to painting, met and worked. For subject matter they chose those situations and figures, still life or landscape, which they could depict naturalistically from first-hand experience, thus rejecting such themes as religious subjects or historical episodes. This group—also known as the “Impressionists”—Manet’s work may be characterized by its sharp contrast in values and its adept brush that showed his great technical virtuosity. (E 394—E 395), the work of Degas was lean and spare in quality with a composition which effectively balanced shape against space (E 160—E 261—E 205). In his work, especially, and in that of other Impressionists, we can see influences from Japanese art, particularly the woodcuts. Monet, Pissarro (E 258), and Renoir shared a strong interest in landscape. Their naturalistic approach meant a representation based on the actual scene with no modification. Their keen observation made them aware of light and color, and their style was adapted to render these phenomena most effectively. They taught themselves to see light and color objectively and their method meant that the local color, for example, the redness of an apple—is modified by the colors of its surroundings, the yellow color of sunlight, and the violet color of the shadow area (violet because it was the opposite, the complementary color of yellow). In order that the impact of light and color should be great, they applied their paint in tiny dabs. Spots of yellow and green side by side fused and to the eye, became a single color—stronger and richer than if the artist had mixed it for us on his palette with his brush. When this way of seeing and this technique were fully utilized as in Monet’s work, for example, the picture seemed to consist of a colored haze rather than solid objects placed in well-defined space (E 164—E 166—E 418) or Renoir (E 274). Forms seemed to dissolve in a colored haze and it was this very amorphous quality and the momentariness of and informality of the subject matter in the work of such artists as Monet against which some of the great artists of the 80’s and 90’s reacted. The Impressionist treatment was entirely too casual for someone like Suvrat (E 441—E 289). In
his painting called “Sunday Afternoon on Grande Jatte Island,” he
took the Impressionist’s purely intuitive, spontaneous approach to
color, disciplined it by his studies of the color theories of scientists
and, rather than a “snapshot” view of a Sunday afternoon in
Paris, his painting is a synthesis composed of many studies and
much careful observation. Space is clearly defined and solid
volumes are carefully placed within it. His work may be compared
with that of the earlier French artist, Poussin, or with Piero della Francesca
from fifteenth century Italy.
E 394 The Balcony, Edouard Manet
E 395 Gare St. Lazare, Edouard Manet
E 160 The Dancer, Edgar Degas
E 261 Cafe, Boulevard Montmartre, Edgar Degas
E 405 Two Laundresses Ironing, Edgar Degas
E 258 Boulevard des Italiens at Night, Camille Pissarro
E 164 The Poplars, Claude Monet
E 165 Westminster, Claude Monet
E 168 Rouen Cathedral: Tour D’Albane, Claude Monet
E 418 La Grenouillere, Claude Monet
E 274 Le Moulin de la Galette, Auguste Renoir
E 441 La Parade, Georges Seurat
E 289 Le Cirque, Georges Seurat

Cezanne’s painting was Impressionist in style during the 1870’s
(E 410) but he, too, was dissatisfied with the lack of form and
conscious organization. Whether still life, landscape, or portrait,
his painting has a monumental grandeur that seems to unite
tradition of the past with his immediate experience before the
subject. From his concentration on solid volume painted (E 265—
E 266—E 267—E 411—E 413) in intense warm and cool colors,
his late painting evolved toward a more abstract concept that tied
the foreground and background together in a more unified way.
E 410 The House of the Hanged Man, Paul Cezanne
E 265 Mount Saint Victoire, Paul Cezanne
E 266 Still Life, Paul Cezanne
E 267 Portrait of the Artist, Paul Cezanne
E 411 View of Gardanne, Paul Cezanne
E 413 The Card Players, Paul Cezanne

The French artist Gauguin developed a style of painting made up of
flatly painted curvilinear shapes of strong color and of unusual
rich harmonic combinations (E 175). His interest in the exotic
and his restless nature led him from the cosmopolitan life of Paris to
rural Brittany and finally to Tahiti and the Marquesas islands in the
south Pacific (E 289). Medieval art, Oriental art, and that from the
certain non-European arts as well as German late Gothic art were
associated with one of the German Expressionist groups was the
Russian artist, Kandinsky. Like them, he too, was interested in the
emotional and psychological properties of color, shape, and line
and by 1913, he had eliminated all reference to recognizable
subject matter in his painting (E 351—E 352). A viewer of a non-
objective painting such as this is called upon to respond directly to
the color, shape, and line instead of indirectly through the subject
matter which the artist represents. Kandinsky and the other artists
who adhere to this idea feel that their painting has a greater
validity because unnecessary details such as representation of
subject matter—the objects and experiences of our world—have
been eliminated. A non-objective painting or sculpture has no
reference to the ordinary world of our experience, an abstract
work of art has been abstracted from nature and vestiges of natural
appearance remain. This concept of painting and sculpture which
breaks with the past is of tremendous importance in the art of our
today, although it should be emphasized that by no means all
modern artists subscribe to this view.
E 351 Improvisation Number 30, Wassily Kandinsky
E 352 Arrow, Number 258, Wassily Kandinsky

The Van Gogh and Gauguin were important in the evolution of
Expressionism in its various phases and Cezanne, another of the
Post-Impressionists, was equally important in the evolution of
Cubism. The artists Picasso and Braque were two of the creators of
this style, although it has had many other adherents since, Cezanne
in his late painting had brought form and space into a closer unity
and both had been treated with a high degree of abstraction that
emphasized the “picture plane,” that is, the canvas to which
paint had been applied). During 1907, 1908, 1909 and 1910
Braque and Picasso carried this approach to painting still further,
Cezanne had tried to adjust the abstract elements in his structure
which was basically geometric, to the real world as he saw it. The
Cubist painting of Braque and Picasso stretched the link between
the representation of reality even further (E 308). In addition to
Cezanne, an important inspiration for Picasso especially during this
time was the sculpture from Africa which he began to study. There
are many styles of African sculpture and all of them with but few
exceptions treat the human figure more or less abstractly. Most
African sculpture is composed of a series of volumes—cones,
cylinders, ovoids, and spheres—which are complexly organized
into a unit which is recognizable as a human figure. In Cubist
painting, space is shallow and both space and form seem to be
intermingled. In other words, the artist has seen the human figure
simultaneously from above, below, and the side. In fact, he has
even “dissected” it and cross sections are included (ME 71).
E 308 Still Life, Pablo Picasso

E 71 Femme aux Poires, Pablo Picasso

About 1905, the influence of Van Gogh and Gauguin is evident in
the work of young French artists. The Fauves, (Vlaminck, Derain)
(E 302—E 303). Matisse the most important of the Fauve painters
who, like Gauguin, greatly interested in many of the non-European
arts; for example, African sculpture, or Persian rugs (E 298). All of
these artists helped the Fauves in formulating their style. Design it
shapes, usually angular (E 465—E 468). The figure or the still life that served as the starting point for each painting could be discerned if careful attention is paid to each step and by noting certain identifiable elements, for example, hands and strings on the guitar (E 454). This is the barest description of what is a highly complicated style. What has been said applies specifically to the phase of Cubism termed “analytical” and must be modified slightly when we look at the succeeding phase known as “synthetic” (E 466).

E 465 Accordionist, Pablo Picasso
E 468 Man with a Guitar, Georges Braque
E 466 The Three Musicians, Pablo Picasso

One of the very important developments in Cubism which occurred in 1912 was the addition of foreign material into the painting, collage. By pasting on pieces of newspaper, wallpaper, or oil cloth (E 469), Picasso and Braque added to the textual possibilities of painting, emphasized the creativity of the artist’s thought rather than his skill in handling paint, and reemphasized the surface of the picture plane. It was the beginning of the practice of making art from a wide variety of materials. Materials other than oil paint and canvas or water color and paper of other than the conventional materials of sculpture such as stone, clay, and bronze.

E 469 Musical Forms, Georges Braque

To some artists the vestiges of nature that one can still see in the highly abstract cubist paintings were a hindrance and they sought to eliminate them. Line or shapes were carefully balanced and related and any illusion of depth was suppressed. The term “nonobjective” which was applied to Kandinsky’s painting is also applicable to the work of Mondrian. He began with Cubism but he soon eliminated all suggestion of representation and concentrated on a study of the relationship between vertical and horizontal black lines (E 460) on white ground and pure flat colors; red, yellow, blue (E 320). In his painting, forces are carefully adjusted and delicately poised equilibrium is the result (E 319). Other artists in agreement with Mondrian’s ideas joined him in a movement known as de Stijl, which was essentially Dutch.

E 460 Plus and Minus, Piet Mondrian
E 320 Composition in White, Black, and Red, Piet Mondrian
E 319 Broadway Boogie-Whoogie, Piet Mondrian

In Russia, the joint movements of Suprematism and Constructivism were also based to a large extent on Cubism. The artists of these movements like Mondrian painted nonobjectively using pure geometric elements. In contrast to Mondrian and other de Stijl artists, the canvases of such artists as Malevich (E 321) or El Lissitzky (E 475) are composed of flat shapes placed in diagonal axes. Although at first it may sound like a very slight distinction, it was of great importance to the artists concerned and this helps to illustrate the self-imposed limitations of many twentieth century artists.

E 321 Suprematist Composition: White on White, Kazimir Malevich
E 475 Proun 99, El Lissitzky

Cubism also influenced Italian Futurism, but where the Cubists had registered separate images—top, bottom, and slices—of an object, the Futurist sought to combine the flux and flow of the moving object as it moved through and fused with space (E 312—E 329—E 318). This technique was well suited to rendering the urban, mechanized world of moving cars, trains, and planes with which we have become so familiar (ME 158).

E 312 Bal Tabarin, Gino Severini
E 329 Materia, Umberto Boccioni
E 319 Dog on Leash, Giacomo Bolla

ME 158 Unique Forms of Continuity in Space, Bronze, Umberto Boccioni

TWENTIETH CENTURY ARCHITECTURE, PAINTING, AND SCULPTURE

In the years preceding the first World War, Futurism was the painting style that most immediately reflected the changes brought about by the twentieth century technology. Emphasis on analysis and intellectual order in Cubism and the other movements, de Stijl, Suprematism, and Constructivism also reflect this although somewhat indirectly. These styles also seem to be closely allied in their character with much of modern architecture.

In the nineteenth century, iron, first, and then steel, were put to an even greater use in the construction of bridges, exposition halls, such as the Crystal Palace in London (1850–51) (GM 132) and the Eiffel Tower in Paris (1889) (GM 161). As cities grew and the need for usable space concentrated in a small area became more acute, the demand for specialized building forms became apparent, thus the evolution of the tall buildings in the late nineteenth century. There may not be a single spot at which the skyscraper was invented but the buildings of Chicago erected in the eighties and nineties after the fire of 1871 were very important in the evolution of this building form. With steel for the internal skeleton, the walls did not have to support the building and more and more of the wall surface could be of glass which made possible more light and air in the interior. Increased use of electricity and the invention of the elevator all contributed to this building form (GM 361—GM 77—GM 94—GM 363—GM 61—GM 86).

GM 132 Crystal Palace, London: Architect, Paxton
GM 161 Eiffel Tower, Paris: Architect, Eiffel
GM 361 Auditorium Building, Chicago: Architects, Adler and Sullivan
GM 77 Reliance Building, Chicago: Architects, Burnham and Root
GM 94 Carson, Pirie and Scott Department Store, Chicago: Architect, Louis Sullivan
GM 363 Monadnock Building, Chicago: Architects, Burnham and Root
GM 86 Guaranty Building, Buffalo, New York: Architects, Adler and Sullivan

Great innovations which helped in the creation of an architectural style typical of the twentieth century were made in the early work of Frank Lloyd Wright in the Chicago area around the turn of the century (GM 80). His great concern at that time was with domestic architecture and the “Prairie House,” is the term applied to those built in this style (GM 81). In a Cubist painting, the form is “opened up” and the space surrounding it penetrates and intermingles with it. In Wright’s Prairie Houses, as in much of the rest of twentieth century architecture, there is a similar occurrence. In his Robie House, (GM 100) for instance, the wide overhanging planes of the roofs emphasize the horizontal with their deep shadows; the vertical slabs of walls and chimney stabilize the design and knit it together but do not separate interior and exterior as does the traditional use of the wall.

GM 80 Unity Church: Oak Park, Illinois: Architect, Frank Lloyd Wright
GM 81 Coonley House: Riverside, Illinois: Architect, Frank Lloyd Wright
GM 100 Robie House, Chicago, Architect, Frank Lloyd Wright

The buildings of Mies van der Rohe in the 1950’s, most of them built in America, carry this concept of the transparent wall still further and structural steel beams and the large sheets of glass that our highly industrial age has made abundant are joined together in a balanced design (GM 383—GM 390—GM 391). This brief statement about architecture should also call attention to the inventive use of another material—reinforced concrete—by such creative architects as Le Corbusier (GM 176—GM 179).

GM 383 Apartment Houses, 860 Lake Shore Drive, Chicago: Architect, Ludwig Mies van der Rohe
Although our century is marked by great achievements, not only in the arts but in other fields of human endeavor, it has also been flawed, as we all know, by two great wars and, despite great material progress, there are still vast areas of great hardship as a result of prejudice, waste, and ignorance. Artists have reacted to this and have created significant forms of art which have taken as their theme, the anxiety and fear, for example, the early examples of German Expressionism, or the anguish which has been so much a part of our time (ME 73—E 362); or the whole field of the irrational—that side of man's nature which seems uncontrolled by his powers of reason (E 335). In fact the Dada and Surrealist movements have both taken these regions of human nature for particular study and exploration. During the first World War, groups of young people, both in New York, Zurich, Berlin, Cologne and other cities were motivated by similar impulses; their art as well as their other activities undermined long-held ideas and traditional values about art and good taste. One of the consequences has been that any material could be and often was used to make a picture or to construct a sculpture—often rubbish or the contents of the waste basket were used as in the collages of Kurt Schwitters (E 473). Many artists also welcomed the "accidents" that occurred in their work, for example, the cracks in the glass in Duchamp's composition on large glass sheets (E 472), or a collage by Arp, made of pieces of paper which he scattered and pasted down at random. Dadaism was nihilistic in its attitude and destructive of established values but its very existence was significant and many of the young, talented artists of the time participated. After its end they joined together to form the movement we know as Surrealism.

ME 73 Guernica, Pablo Picasso
E 362 Man Pointing, Albert Giacometti
E 335 I and My Village, Marc Chagall
E 473 Merz Picture 19, (collage) Kurt Schwitters
E 472 To be Looked at with One Eye, (glass, oil, collage), Marcel Duchamp

For the Surrealists, the irrational side of man was as important as that which was controlled by his reason alone. Greatly interested in the world of psychic experience and the contemporary psycho-analytical research, they sought to delve into men's subconscious and, by means of painting the images that originated there, to link the conscious and subconscious realms to "resolve the contradictory states of dream and reality" (E 339). Accidents which occur at the time an artist makes a picture often suggest new images; techniques, such as automatic drawing and writing, freed the mind and the hand from disciplined control. The work of some Surrealist artists involves the element of surprise and in their painting or sculpture easily recognizable subjects are placed in unfamiliar, even alarming situations (E 342). Often we are startled by the phenomenon of the waste basket were used as in the collages of Kurt Schwitters (E 473). Many artists also welcomed the "accidents" that occurred in their work, for example, the cracks in the glass in Duchamp's composition on large glass sheets (E 472), or a collage by Arp, made of pieces of paper which he scattered and pasted down at random. Dadaism was nihilistic in its attitude and destructive of established values but its very existence was significant and many of the young, talented artists of the time participated. After its end they joined together to form the movement we know as Surrealism.

ME 725 The Citizens of Calais, Auguste Rodin
ME 18 Boccaccio, Auguste Rodin

We have already noted the influence of African sculpture on Cubist painting and it, as well as other sculpture from other non-European sources, has had a great affect on our modern sculpture (ME 159).

ME 159 Head, (stone) Amedeo Modigliani

Although Cubism was essentially a movement involved with painting which emphasized the two-dimensional flatness of the canvas and the compression of space and form, it also affected sculpture. First, the fusion of form and space was utilized by a number of artists directly associated with Cubism (H 327—ME 151—ME 155). This idea was further expanded by the Futurist sculptor, Boccioni (ME 157). Second, the introduction of extraneous material into the work of art—collage—by the Cubists greatly expanded the textural possibilities open to sculptors. Techniques such as welding and the use of such new materials (new to sculpture) as steel and plastics have greatly expanded the potential of sculpture in this century (ME 152—M 323).

H 327 Man with a Guitar, Jacques Lipchitz
ME 151 The Great Horse, Duchamp-Villon
ME 155 Head of a Woman, Pablo Picasso
ME 157 Development of a Bottle in Space, Umberto Boccioni
ME 152 Head (wrought iron) Julio Gonzalez
H 323 Whale, Stable (sheet steel), Alexander Calder

The Constructivists, Gabo and Pevsner, and more recently, Lipchitz, have created sculptures of metal rods, wires, and plastics which are of great precision and which are often open and airy in their realization of space (ME 161—E 361—H 333). In fact, this emphasis on space as it flows into, around, and through open areas in the sculpture gives new meaning to empty space that in most traditional sculpture serves to envelop the material form rather than to unite with it in a new relationship (H 326). The mobiles (moving, sculpture) of Calder made of rods, wires, and pieces of brightly painted metal make us more aware of space than solid form. In contrast to most traditional sculpture which is placed on a base, his mobiles are suspended and their free-swaying movements are ever-changing. As with the Dadaists and Surrealists, Calder encourages accident and chance to play a part in the swing of his mobile sculpture.

ME 161 Developable Column, Antoine Pevsner
E 361 Head of a Woman, Naum Gabo
H 333 Variation Number 7; Full Moon, Richard Lippold
H 326 Woman Combing her Hair, Alexander Archipenko

The emphasis on voids in and around the material form can be seen in the work of Lipchitz (H 318), Roszak (H 330), and most obviously in the work of Henry Moore. The major theme in his...
work is the female figure—reclining, seated, standing; and the materials he uses for his sculpture are wood, stone, and bronze (MF 26—MF 212). In both his choice of subject and the materials he uses, he is close to traditional sculpture. However, no modern sculptor is more concerned with the interaction between solid form, and volume and the spaces, and voids that it defines. Though recognizable, his human figures also evoke in us the experience of eroded pebbles, caves in a hillside, the form of a bone, or the organic twisting form of a tree trunk (F 149).

H 318 Figure (bronze), Jacques Lipchitz
H 330 Spectre of Kitty Hawk (welded and hammered steel, brazed), Theodore Roszak
MF 26 Recumbent Figure, Henry Moore
MF 27 Family Group (bronze), Henry Moore
F 149 Two Forms (wood), Henry Moore

In many ways, the sculpture of Brancusi stands apart from the work of those artists who are so concerned with open space. His forms are closed, compact, densely concentrated single units. In his approach, one that was the result of his religious, almost mystical temperament, the ovoid or egg form served as the basis for his highly abstract concept of the human head, a bird in flight, or a fish (ME 51—ME 150—ME 149). His sculpture seems to be the concentrated distillation of introspective, intense, and powerful forces.

ME 51 Mademoselle Pogany, Constantin Brancusi
ME 150 The Fish (marble), Constantin Brancusi
ME 149 Bird in Space, Constantin Brancusi

American Art

Although there are distinctively American qualities to be found in the painting, architecture, and sculpture throughout our history, American art had never played a major role in the history of world art until the middle of the twentieth century.

Individual artists such as Copley (H 1—MH 53), Stuart (H 10), Ear (MH 31), Cole (H 28), Bingham (H 260), Harnett (H 158), Homer (H 62), Eakins (H 268), Whistler (P 76), Cassatt (H 152), Blakelock (H 67), Ryder (MH 79), were responsible for great, though isolated, achievements in painting. As we have mentioned, architects such as Louis Sullivan and Frank Lloyd Wright toward the end of the nineteenth century also gave expression to American ideals in their architecture. Their work, like that of many of the painters, (Cole, for example,) was strongly influenced by the romantic ideals in which expression is highly emotional and imaginative. If, however, this defines in broad terms an ever-recurring theme in our art, there have been artists whose work reflected many different states between such a highly objective approach and a more objective, often detached depiction of the American Scene; the realists. Neither realism nor Romanticism can be considered as styles in American art but they do characterize differing trends, sometimes combined in the work of a single artist such as Marin (H 169—H 171) or Hartley (H 206).

During the 30 years after the large exhibition of the newest in European art, the Armory show in New York in 1913, there continued to be an unresolved conflict between the American artist and his public. Styles such as Expressionism, Cubism, and the various approaches to nonobjective art and, later in the 1930's, Surrealism, all posed a challenge to our artists. In addition to Marin, Hartley, such artists as Weber (H 211), Stuart Davis (H 234), Demuth (H 188), O'Keeffe (H 224—H 281), Dove (H 207), Sheeler (H 280), Hopper (H 215), Burchfield (H 230), attempted to understand and utilize the ideas that had revolutionized twentieth century European art and still maintain and reaffirm their own identity as American artists. They were successful only in varying degrees and not until the mid 1940's did an American art emerge that ranks with those major developments of the century that had already occurred abroad. Our art has strongly influenced European artists. The natural process of maturation undoubtedly contributed to this; but during the second World War many European artists took refuge here and their presence was of great importance in the formation of the style of painting we know as "abstract Expressionism" (H 248—H 124—H 244—H 298).

H 1 Paul Revere, John S. Copley
MH 53 Samuel Adams, John S. Copley
H 10 George Washington, Gilbert Stuart
MH 31 Roger Sherman, Ralph Earl
H 28 Oxbow of the Connecticut near Northampton, Thomas Cole
H 260 Fur Traders Descending the Missouri, George Bingham
H 158 Old Models, William Harnett
H 52 The Lookout, All's Well, Winslow Homer
P 76 The White Girl, James A. McNeill Whistler
H 152 Young Mother Sewing, Mary Cassatt
H 67 Moonlight, Ralph Blakelock
MH 79 Death on a Pale Horse, Albert Ryder
H 169 Lower Manhattan, John Marin
H 171 Maine Islands, John Marin
H 206 The Lighthouse, Marsden Hartley
H 211 Chinese Restaurant, MAX WEBER
H 234 Summer Landscape, Stuart Davis
H 188 A Flower Study, Charles Demuth
H 224 Corn, Dark, Georgia O'Keeffe
H 281 Ranchos Church, Georgia O'Keeffe
H 207 Gold, Green and Brown, Arthur Dove
H 280 On a Theme of Farm Buildings, Charles Sheeler
H 215 Night Hawks, Edward Hopper
H 230 The Nightwind, Charles Burchfield
H 125 Autumn Rhythm, Jackson Pollock
H 248 Chief, Franz Kline
H 124 Woman, I; William De Kooning
H 244 Agony, Arshile Gorky
H 298 Elegy, Robert Motherwell

As the name implies, the means which the artists selected to express themselves were completely abstract; and nonobjective. However, unlike other nonobjective artists before them, they did not try to paint in order to give form to an idea they had clearly in mind, a careful adjustment of formal relations. They attempted instead, to find new meaning in the action of making a painting itself—the brushstrokes, the drips, and spatters of the paint which seem to be free, unconstrained pattern of action that results from the encounter between artist and his material—paint and canvas.

American sculpture, partly because of the nature of materials, did not at first find as many innovators as painting; yet such artists as Calder, Roszak, and Lippold, have produced work of exceptional quality and many of our sculptors today use the welding torch almost as a drawing tool. At present, sculpture which is involved with many new ideas and materials, is at a most promising point.

The momentum of abstract Expressionism had been lost by the late 1950's and new approaches have been investigated on many fronts. Artists of today use many materials in their creations and paint images such as letters and signs that we have long taken for granted; they create new forms that seem to be neither sculpture nor painting and these are given greater and greater prominence. Finally, although there can be no last word on an American art of such variety and promise, we can be proud of the achievement over the last 20 years during which our artists, like pioneers, have opened up new territory.
BIBLIOGRAPHY FOR THE OUTLINE TO A HISTORY OF ART

(Note: The books listed here are only a brief sampling of the many that are available in any good art library. These have been selected primarily with the idea of general usefulness in mind; however, the extensive bibliographies included in many of these works are rich sources for further reference. Many of the books listed here have been reissued in paperback form and can be obtained at small expense.)

GENERAL BACKGROUND


ANCIENT ART


BYZANTINE, EARLY CHRISTIAN AND MEDIEVAL ART


**RENAISSANCE—BAROQUE, AND ROCOCO**


**NON-EUROPEAN ARTS**


NINETEENTH AND TWENTIETH CENTURY ART


