THEORY AND PRACTICE
OF
TEACHING ART

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THEORY AND PRACTICE
OF TEACHING ART

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THEORY AND PRACTICE OF TEACHING ART

The Purpose of Art Teaching

The true purpose of art teaching is the education of the whole people for appreciation.

A training that calls for a very direct exercise of the critical powers, developing judgment and skill, is a training that will increase the individual’s efficiency whatever his calling may be.

The general public has not thought of art education in this way, but has acknowledged the value of “drawing,” especially when it can serve some utilitarian purpose.

A better understanding of the true usefulness of art recognizes creative power as a divine gift, the natural endowment of every human soul, showing itself at first in the form that we call appreciation. This appreciation leads a certain number to produce actual works of art, greater or lesser,—perhaps a temple, perhaps only a cup,—but it leads the majority to desire finer form and more harmony of tone and color in surroundings and in things for daily use. It is the individual’s right to have full control of these powers.

Even from the economic side, that education is deficient which leaves one unable to judge of form and color when he is constantly required to use such judgment. This lack of appreciation is responsible for an immense waste of labor, skill and money in
the production of useless and ugly things. Works of fine art stand among the things which the world prizes most highly. A nation's ideals are revealed in its art, and its art has greatest value when it is the expression of the spirit of the whole people.

In a sympathetic public is found the life-giving influence which creates works of fine art, and the measure of their excellence is the measure of the nation's appreciation.

The attainment of such an end as this places public art education above a mere training in drawing, painting or modelling, and above the so-called practical applications. The work must be organized for a steady growth in good judgment as to form, tone and color, through all grades from the kindergarten to the university. The main question at all stages is whether the art work of the school is making this good red blood of appreciation and giving to the individual the greatest possible encouragement to express himself.

ACADEMIC ART TEACHING

Artists themselves, when by their works they can hold the attention of the people, become the teachers of the people, in a large sense. But when there is need of well defined methods of teaching for general use in public schools, the artist if asked for help will naturally suggest the means by which he obtained his professional training. The public will also look to the art school for direction, or at least for a theory. Unless the professional people have recognized the necessity of general culture in art, and have thoroughly studied the conditions, the probability is that they will offer only a modification of what we will call "academic" teaching. This has been the case in large measure and art education has not advanced equally with general education.

Since the days of Leonardo da Vinci the main effort in art teaching has been toward representation. Before that period the main purpose was the creation of harmony. Under the influences of the later Renaissance, representative drawing has been given an importance far beyond its real deserts.

If the fundamental principle of academic art teaching could be stated in a phrase, it would be "First, learn to draw,"—referring to accurate representation. Naturally the methods and principles of the professional art school have been copied in formu-
lating courses for public school teaching. Hence we find representation holding the chief place in art courses under the various names of freehand drawing, light and shade, mass painting, etc.

The followers of the academic ideal relegated design to a secondary place under the term "decorative art," and sought to explain the beauty of design by an analysis of historic styles. Courses in design became a study of styles, just as courses in drawing became a study of nature.

The effort of the academic method is centered upon "learning to draw," and in two directions: nature forms and historic art. The principle is—first acquire a knowledge of facts, either of nature's facts or art's facts, then use them in your own creative expression. Roughly outlined, courses in art would be based upon a scheme like this:

```
Academic Method

Representation
- Drawing from casts and other objects
- Perspective
- Light and shade
- Color study, from nature

Design
- Painting
- Picture study
- Composition, incidental

Historic ornament
- Structure of pattern
- Perspective
- Color exercises
- Wash drawing
- Composition, in some style or period

Pencil drawing
- Pen drawing
- Charcoal line drawing
- Brush drawing, etc.
- Charcoal
- Water color
- Oil
```
It is true that individual teachers vary this program, introducing other elements and combining both representation and design in one course, but in the main the effort goes to the acquiring of facts and knowledge *out of which* appreciation may grow *somehow*, if indeed the matter is considered at all. Such an aim as this is too uncertain and inadequate. The work does not tend to original expression: It is a partial education, leaving the pupil without sufficient grasp upon the essentials.

**SYNTHETIC TEACHING**

If we regard the purpose of art instruction to be the development of *power*, it is evident that our whole scheme of teaching must be radically different from that outlined above. A possible progression for courses in art is suggested in observing how the creative force has expressed itself, from the beginning in rude rhythms, to the supreme art works of the world.

Comparison of the fine arts, as to structure, shows that a few fundamental ideas are common to them all.\(^1\) Investigation of methods of teaching other arts will suggest at least a theory of procedure in the case of the space-arts.

Having discovered what are the elements and basic principles, the first step is an effort to create with them, be it only a harmony of two or three lines or spots. From this, one proceeds in successive steps up to compositions of great complexity—the design, the sculptured group, the building, or the picture,—using nature's facts and historic knowledge, acquiring skill of hand and accuracy of vision, employing every possible aid to strong and clear expression.

Skill in drawing will now be sought as a means of expression, not considered as an end in itself. Historic styles will now serve as examples of *harmony*, not as mere models.

The earlier and more elementary part of such a course is from its general nature suited to the public schools and to all classes of students. The later problems are naturally those of the specialist, the teacher and the professional artist.

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\(^1\) *The Genesis of Art Form*, by George Lansing Raymond.
In the space-arts the elements are but three:

LINE—the boundary of a space.
DARK-and-LIGHT—the mass, or quantity of light.
COLOR—the quality of light.

These constitute a language for all forms of space-art whether representative or decorative; architectural, sculptural or pictorial. There is no necessity for any twofold division into representation and design. Design is rather the very beginning, the primer of art, and there is one sense in which all good space-art may be called design.
Under the heading of Line may be grouped all kinds of line harmony, beauty of contour, proportion of spaces, relations of size,—all drawing, whether representative or decorative.

Under Dark-and-Light, elementary and advanced tone study, painting; composition of masses in architecture, patterns and pictures.

Under Color, the theory of color, relations of hue, dark and light color, and intensity,—color harmony.

The natural sequence in the use of this threefold language would be: 1. Line, 2. Dark-and-Light, 3. Color. It seems best to begin with Line but there should be no rigid division. It is quite possible to begin with Color, or even with all three of the elements, provided the progression is maintained, and the appreciation of harmony be the main purpose.

As this method of teaching approaches art from the side of composition, it may be called the Synthetic Method, to distinguish it from the academic, which is analytic.

A course of study from this point of view would be based upon an outline something like this:

```
Synthetic Method

LINE
- Spacing, Line structure
- Character of line, expression
- Principles of Design
- Composition of line
- Representation

DARK and LIGHT
- Massing, Values
- Quality of tone
- Composition of Dark-and-Light
- Light and shadow in representation

COLOR
- Hue, Value, Intensity
- Color harmony
- Color composition

Drawing and Modelling

Painting
```
COURSES

Two things are essential to success in any form of work in the space-arts.
1. Appreciation of harmony of line, tone and color, whether in Architecture, Pictures, Sculpture, Design, or Nature.
2. Ability to express ideas in terms of harmonious line, tone and color.

Under these two heads may be grouped all studies in the theory and history of art, and all the various forms of training for hand and eye. Courses should be planned for a progressive growth in appreciation and power of expression, developing freedom and skill in drawing, painting, modelling and construction. The work is intended to be primarily an exercise of the mind, aiming for power rather than a superficially pleasing result. In fact the student's work may be far from what is ordinarily considered a successful drawing and yet he may have made a genuine and decided advance in artistic power. Unusual creative genius will often express itself in terms seemingly rude. Accuracy and finish in execution certainly have great value, but more important is the personal feeling, the fresh individual way of expressing ideas in art-form.

In a four-year course the work of the first year or so would be of three kinds: (1) a general course in art structure, devoted to principles of line composition; space-filling; massing and distribution of tones; and color-harmony—with extensive studio practice in brush and charcoal drawing, and painting in ink and color; (2) freehand drawing; (3) studies in the history and appreciation of the world's art. In a large institution this could be a course for those who desire a general knowledge of art, as well as for those who will engage in art-pursuits.

In succeeding years there would be more specialization, fitting for painting from life, illustration, designing, industrial arts, house decoration, or teaching.¹

¹ See Teachers College Announcements for programs of art courses.
SPACING AND PROPORTION

Spacing or the kind of beauty created by arranging lines and spaces, is the first subject considered. There are many ways of beginning a study of spacing, but Fig. 3 illustrates one series. These exercises in line-spacing show that great variety of expression is possible even with a simple group of straight lines. By arranging sets in a square, a unit is constructed. In making many of these units and selecting the best, the student is forced to use his appreciative powers and a certain amount of invention. The effort must be toward making a fine arrangement; mere difference of spacing would have no art value.

FIG. 3.—SPACING. PRACTICE WITH JAPANESE BRUSH.
Drawing. Use of the Japanese Brush

First, make rough sketches in charcoal; then draw the lines with the Japanese brush and ink—either directly over the charcoal lines, or on Japanese paper. All work must be absolutely free-hand. No measurement of any sort is advisable. The brush is held perpendicular to the paper, like an etcher's needle, and is moved very slowly, with deliberate intention as to the width and direction of the line. The Japanese brush has been chosen because it is an implement made expressly for line drawing, is readily obtainable and very inexpensive. Moreover it is the most sensitive implement for drawing, admitting of great variety in the quality and width of stroke.

The exercise of drawing deliberately, of causing the hand to obey the will, is in itself a training in skill and execution.

Ink and Ink Stone

Japanese stick ink is the most economical, as a little grinding upon the ink stone will produce a sufficient quantity for a large amount of work. Bottle ink or water colors can be used. The materials suggested above are the best for the purposes desired, but they are not absolutely necessary. The exercises in line drawing and in spacing could be executed with pencil, charcoal, crayon, or even oil paint brushes. The principles can be taught in any medium.

Tracing

As the effort is always toward the finer qualities, tracing is practised for the improvement of the spacings, or refinement of the lines. For this purpose, and for line work with the brush, Japanese paper is the best. It is sized, is very strong, soft in color, and transparent. Mere mechanical tracing has no value, but tracing for improvement has a distinct art-use.

Historic Examples

Such simple spacing of straight lines suggests at once the architectural moulding and its kindred. The best examples, Greek, Gothic, and Renaissance, can be shown and their excellence pointed out.
Application

If desirable at this stage the lesson can be applied directly to designs for mouldings, line borders for book covers, framing, etc.

![Diagram of rectangular panels]

**Fig. 4.—Spacing of rectangular panels. Free brush-work.**

**Rectangular Spacing**

The first problem involved a very simple synthesis. The next should include the first with an added step. Rectangular paneling, the arrangement of enclosed spaces, seems to follow naturally. The square and circle being invariable, composition is possible only with the interior lines. But the rectangle is infinitely variable; its proportion is a matter of choice; hence rectangular spacing lays a double burden upon the designer, *boundary lines* and *interior lines*.

Suppose the Door is chosen as a subject. Its panelling affords an opportunity for spacing. (Fig. 4) *After* the exercise in original arrangements of rectangular panels the student may:

1. Draw an actual door in perspective. (Fig. 5)
2. Make a working drawing from a free-hand design, adapting it to the requirements of construction. (Fig. 7)

Another good subject is a box with panels for top, front, and ends; with perspective drawing and working drawing. (Fig. 6)
FIG. 5.—DOOR, IN PERSPECTIVE. FREEHAND DRAWING.

FIG. 6.—SPACING AND NOTAN. ORIGINAL DESIGN FOR BOX WITH METAL CORNERS AND KEY-PLATE.
FIG. 7.—WORKING DRAWING FROM AN ARRANGEMENT IN FIG. 4.
IRREGULAR SPACING. LANDSCAPE

Irregular spacing of straight lines, vertical and horizontal, suggests a unit for textile design, the familiar plaid pattern. But a similar system of lines might be the basis of a pictorial composition. (Fig. 8) In either case a few main lines cut the space into smaller divisions. Both are designs, and their excellence depends upon the same principle. The introduction of landscape now, points to the unity of all forms of space-art, and incidentally gives the student an added interest.

FIG. 8.—IRREGULAR SPACING.
Curved Lines

A series of exercises in curved line could be undertaken at this time, with many applications. These would necessarily be geometric. It will be better, if time is limited, to take flower forms as line themes for spacing. (Fig. 9) This does not mean merely drawing flowers from nature and enclosing them in a space—a rather mechanical operation—but a choice of certain flower
forms and the attempt to use them as a line scheme within a space. Such an exercise would suggest a reason for drawing the flower from nature, especially if the panels are developed into designs for actual use.

*Note the difference between drawing merely to acquire skill or to obtain knowledge of facts, and drawing things because they are beautiful or because there is a definite art-use for the drawing. (See p. 52.)*

**LINE IN POTTERY FORMS**

For a more intimate study of the nature of curved line beauty, there might be an exercise in composing curves of pottery. (Fig. 10) It will be seen that there is beauty of spacing in the curve itself.

![Figure 10](image.jpg)

**FIG. 10.—PROPORTION IN CURVED LINE. ORIGINAL DESIGNS.**

**APPLICATION IN CLAY MODELLING OR METAL**

Immediate application can be made in clay modelling, by building up bowls and vases from original designs by students. The same may be said for hammered metal.

**GREEK VASES. POTTERY**

Fine examples of curves can be shown, at least in photograph. But here is the opportunity for work in the museum—for the drawing of Greek vases, pottery, and even of sculptured figures and animals,—as examples of beauty of curve.
PRINCIPLES OF DESIGN

So far there has been a consideration of spacing for a general effect of good arrangement. Following this would be the study of certain definite ideas of composition—distinct ways of creating harmony of line. These ways, for want of a better name, may be called Principles of Design. For ordinary purposes of teaching two will suffice—and may be named Subordination and Rhythmic Repetition.

Other principles of lesser importance, Symmetry, Opposition, Transition, could be specially studied if necessary, but usually they are included in exercises in the two first named.
Subordination is that principle by which the parts are mutually dependent upon some dominating part or group of parts. A good illustration is the flower with its main line of stem, from which radiate the lesser lines of leaves and petals. (Fig. 9) Lines and spaces may be arranged in principal and subordinate groups. (Fig. 13)

There is a central or dominating idea and all others are contributory, like the "point" of a story, the "centre of interest" or the "focus" of the picture, the "main line" of the statue, the "style" of the building, the "key" of the color scheme.
An exercise in this principle is illustrated in Fig. 13. A branch of apples furnishes a set of lines and spaces that may be set into a rectangular panel. The unity of such a design is dependent upon the simple and clear disposition of the main spacings.
Landscape is an excellent subject for studies in Subordination. (See above, and Figs. 26, 40) An extended series could be introduced, involving flowers, fruit, figures, animals, landscape, architectural detail, and decorative panels.

APPLICATIONS
Panels for wood and metal. (Figs. 7, 12)
Book cover design.
Illustration with page composition.
Landscape sketching. (Figs. 2, 27)
With this work would be associated drawing from nature and special research in the history of architecture, painting, and design. Photographs of fine examples could be shown the class, and museum work in copying be carried on in connection with the lesson.

FIG. 15.—ORIGINAL DESIGN IN REPETITION.

RHYTHMIC REPETITION

This is perhaps the oldest form of art expression. The dance, the drum-beat, the rhythmic chant, rude rhymes, incised and painted borders on pottery, woven borders and patterns—all these are harmonies created according to one underlying principle. They are the beginnings of the drama, music, poetry, architecture, and painting.

Mere repetition has no art-value, but repetition in fine spacing, with an intention of producing harmony,—this calls for appreciation and the power to choose well.
Borders

It is not necessary to illustrate here the well known straight line frets and borders, the zigzags and meanders and swastikas, common in all art, from the engraved paddle and tapa cloth of the savage, to the Greek temple. The class may profitably study the development of rhythmic borders by taking a series of straight lines \[ \begin{array}{cccccccc} \hline H & H & H & H & H & H & H & H \\ \hline \end{array} \] or \[ \begin{array}{cccccccc} A & A & A & A & A & A & A & A \\ \end{array} \] adding other lines and producing varieties of the so-called Greek fret. These might furnish motifs, the best of which could be drawn large enough to afford interesting spacing.

A good exercise for beginning the study of this principle is based upon the straight or curved line border. The instructor may suggest several themes, or the students may choose them from primitive art, or invent them, and compose variations in many spacings. (Figs. 19, 22, 23)

Another series can be based upon such simple units as the line and dot (Fig. 16), or \(| \to \).

Surface Pattern

This is a more complicated form of rhythmic repetition, yet the structure is very simple, all being reducible to a geometric skeleton of squares, triangles, rectangles, or diamonds. The checker board is a good line scheme for a beginning, placing a figure in each square or each alternate square. The class should consult books upon the structure of pattern.\(^1\)

Now returning to borders, more difficult problems are undertaken, using curved line, flowers, animals and figures. (Figs. 1, 34, 35) Then the same units may be combined in surface patterns. (Figs. 23, 46)

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The collection of textiles or photographic reproductions of them will demonstrate the methods of composing pattern through the ages, but most important of all is the appreciation of the finer qualities as to spacing, proportion, and rhythm. For example the Italian of the fourteenth century has a distinction of line harmony which is lost by the eighteenth century. Compare the examples shown in Fig. 17 on opposite page.

Landscape. Pictorial Expression

Rhythmic repetition is a structural principle often chosen by the masters of landscape. A mural painting, for example, with the vertical lines of trees cutting horizontal lines may thus harmonize with an architectural setting of columns and pilasters. Repetition in landscape tends to an expression of solemnity and calm, or of harmonious motion. Its effect is to unify and simplify the whole composition.

Repetition occurs in nature in countless forms, but for students’ purposes the lines of trees, hills and mountains, tide lines, boats, flocks of birds and animals, hayfields and streets will afford abundant material. For this, as for all composition work the student should make many studies from nature. He thus has, as we said above, a definite art-use for the drawings and a very strong incentive for learning to draw. (See p. 52.)

Applications

Even for repeating patterns and compositions in line only, there are many possible applications. Here are a few of them:
- Line and dot border for book covers,
- Incised lines in wood carving,
- Patterns in perforated metal for “Paul Revere” lanterns, lamp shades, sconces, etc.,
- Embroidered lines,
- Patterns in kindergarten sewing.
FIG. 17.—TEXTILE PATTERNS.\(^1\) **ITALIAN AND SPANISH BROCADES.** FLORAL DESIGN IS OF THE XVIII CENTURY; THE OTHERS EARLY XVI.

\(^1\)A collection of over three hundred choice examples of textile-art was presented to Teachers College by Dr. Denman W. Ross.
DARK AND LIGHT (or Notan)

Though for convenience the elements, Line, Dark-and-Light, Color, are treated separately in this book, it must not be inferred that classroom practice conforms to this sequence. In fact dark-and-light exercises should enter the course near the beginning, and color should follow close after dark-and-light. The order would be something like this:

1. A line exercise involving a principle of design.
2. Choose one drawing and see how many good dark-and-light schemes it will give.
3. Substitute colors for neutral tones.

![Diagram of dark-and-light designs]

FIG. 18.—DARK-AND-LIGHT, TWO VALUES. SUBORDINATION AND RHYTHMIC REPETITION. ORIGINAL DESIGNS.

1 We have no one word in English for this idea. The Japanese word notan, "dark, light," is very expressive and more direct than the Italian word chiaroscuro.
These will show how many are the possibilities in even one design, and will develop capacity for invention.

The use of tone, varying the quantity of light upon a line design, brings in a new and different kind of harmony. The most elementary form of this is in the contrast of two values, black with white. The most complete is the picture in full tone. The progression is then:

1. Two values, black and white. (Figs. 18, 19)
2. Two values, dark gray and light gray. (Figs. 53, 70)
3. Three values, dark, medium, and light. (Figs. 29, 35)
4. More than three values. (Fig. 39)

Dark-and-Light exercises are the beginning of painting. Here again the Japanese materials are very satisfactory, but it is possible to do all the work with water colors, charcoal, oil paint, or even pencil.

**Two Values**

The problems may be infinitely varied and should differ from year to year.

In Fig. 19 are some of the first attempted.

Fig. 18 might follow these, illustrating Subordination and Repetition, and Fig. 21, Symmetry and Subordination.
Figs. 1 and 20, textile patterns, inspired by eastern Mediterranean embroidery, involve not only dark-and-light but the first step in color study, as they can be executed in blue or red.
FIG. 21.—DARK-AND-LIGHT, TWO VALUES. SUBORDINATION AND SYMMETRY. WILD ROSE MOTIF.

FIG. 22.—RUG DESIGN IN RED AND BLACK CRAYON. SYMBOLS OF RIVER AND PINE TREES.
Dark-and-Light in Pictures. The Picturesque

The peculiar beauty of landscape which we designate by the term "picturesque" is largely the beauty of dark-and-light. Artists call it "massing" and "spotting." (Frontispiece)

The structural use of the dark-and-light element in pictorial art may be studied by making ink sketches in two values:
1. From the masters of painting. (Fig. 24)
2. From nature. (Fig. 25)
FIG. 24.—DARK-AND-LIGHT MASSING. SKETCHES FROM THE MASTERS.

FIG. 25.—DARK-AND-LIGHT MASSING. FROM NATURE. FREE BRUSH-WORK.
Follow this with exercises in dark-and-light, two values, as illustrated in Fig. 26. A landscape is composed in line, then many variations are played upon the single theme. The students should use their own sketches from nature. In default of those, the instructor draws the landscape subject upon the board, or gives the class photographs from which to make compositions.
FIG. 27.—LINE AND NOTAN. BRUSH SKETCHES, TWO VALUES.
Applications

Some eminent illustrators have used two values, black on white, not merely for page decorations but for complete compositions with figures.\(^1\) Blue and white china, and pottery with blue or black patterns are excellent examples of the use of two values in both patterns and pictures.\(^2\)

Metal corners and key plates, posters, page ornaments, designs in gilt or one color on book covers, and stencil designs on cloth and paper are a few of the applications of this element in design. (Figs. 6, 46)

\(^1\) Illustrations by R. Anning Bell and others in *The Banbury Cross Series.*

\(^2\) Collections in museums—Ming porcelain, Japanese pottery, Mexican ware, the Dedham plate.
THREE AND MORE VALUES

With three values, light, medium, and dark, a new idea is introduced, the interval. This medium tone is the element which harmonizes extremes of difference. Both dark and light may float in it, and by it the whole composition is unified. To mix this tone in ink wash, to determine its depth and apply it successfully to paper, is a matter of good judgment and skillful handling.

EXERCISES

Fig. 32. Textile patterns are drawn freehand from historic examples, then used as line schemes for variations in three values.

Figs. 29, 31. Some of the earlier line work developed in dark-and-light of three values.

Figs. 34, 35, 36, 37 are original motifs developed in three or four values.

FIG. 29.—CHARCOAL TONE-STUDIES, THREE VALUES. ORIGINAL DESIGNS.

FIG. 30.—INK STUDY, THREE VALUES. ORIGINAL DESIGN.
FIG. 31.—COPTIC DESIGN, THREE VALUES.

FIG. 32.—DARK-AND-LIGHT, THREE VALUES. VARIATIONS WITH ANCIENT TEXTILE PATTERNS. JAPANESE INK.
FIG. 33.—DARK-AND-LIGHT, THREE VALUES. ORIGINAL DESIGNS BASED ON EASTERN EMBROIDERIES.
FIG. 34.—THREE VALUES. ORIGINAL DESIGNS.
AESOP'S FABLE, THE SUN AND THE WIND.

AESOP'S FABLE, THE WOLF AND THE CRANE.

YUCATAN MOTIF.

FIG. 35.—CHARCOAL TONE-STUDIES, THREE VALUES. ORIGINAL DESIGNS.
FIG. 36.—THREE VALUES. ORIGINAL DESIGNS. INK-WASH.
Prepare a neutral scale in seven tones. Paint designs with tones from this scale. Still life in terms of this scale may be executed in charcoal or in oil. The effort is toward an appreciation of finer intervals, toward simplicity of tone, and unity in the whole result.

**LANDSCAPE**

For landscape and all pictorial work in a few values, ink or water color may be used, but charcoal will be found very convenient. It is an especially good medium for those who intend to pursue the profession of painting. For large designs in full values charcoal and oil paint are the best mediums.

The paper is covered with a middle tone, darks put in with soft charcoal, lights taken out with bread or rubber (Figs. 39, 40)
Study also the frontispiece, by the Japanese Master Yeitoku, as a fine example of tone-composition, of gradation of ink-washes, of beautiful handling of the brush, and of perspective.
FIG. 40.—COMPOSITIONS, "THE HUDSON" AND "OLD IPSWICH HOUSES." CHARCOAL.
Applications

Figures from life in a few flat tones of charcoal (Fig. 41), seeking to express action, character, and life.

Original composition of figures and landscape, as illustrations, or as mural decorations. (Fig. 50)

Book illustration, and general pictorial work. The mezzotint, etching and ink painting.1 (Frontispiece)

FIG. 41.—SKETCHES FROM LIFE.

COLOR

The study of color proceeds in three stages:
1. Theory of color, with exercises.
2. Observation of, and copying of good color.
3. Original color composition.

Theory of Color

The science of color may have more or less attention, but the art student's main quest is for color harmony. What constitutes a harmony can only be decided by the appreciations—by a color feeling developed through exercises and experience.

1 Article by Sir F. Seymour Haden, Harper's Magazine.
If one space is to vary from another by color, the difference can be in three ways only:

1. Difference of Hue, as red from green.
2. Difference of Dark-and-Light, as dark blue, light blue.
3. Difference of Intensity—as gray yellow, and bright red.

See diagram, Fig. 42.¹

Exercises involving difference of Hue

A circle is drawn and divided into five parts (Fig. 42a). The centre is painted a neutral gray of a medium value. The other divisions are painted in primary hues of the same value as the centre, and equal in intensity. This may be repeated in a light

¹ For the statement of the theory of color the author is indebted to Professor Ernest F. Fenollosa.

The reader is referred also to A Color Notation by Mr. Albert H. Munsell. Mr. Munsell has prepared color spheres illustrating the differences and values of color, also scales, crayons, and tuned colors for classroom use.
or dark key by painting N light or dark. A line design (Fig. 42d), geometric or pictorial, is chosen and the spaces painted in hues from the circle. The possible differences are two only—size and hue. As there is no difference of dark-and-light or intensity, the beauty of the design would lie in a certain iridescence, suggesting perhaps stained glass.

The ability to paint hues of equal value and intensity is worth much to the artist. The ability to perceive such relations tends to a finer sense of harmony.

**Exercises in dark and light colors**

One color is chosen, say Prussian Blue, and is painted in a scale of five tones from light to dark. (Fig. 42b) A design is colored in terms of the scale—in two values like Fig. 1 or in three or more values.

For illustrations we refer again to blue china, to the blue and white textiles, and to Eastern embroideries. Other hues may be used in like manner.

**Exercises in bright and gray colors**

This is the most difficult of all as it requires more appreciation of delicate differences. A simple scale is suggested in Fig. 42c. Perhaps Vermilion is chosen—this is a brilliant hue rather above the medium value. Painting the upper space with pure vermilion and the lower space with pure gray, the intervening spaces are filled with tones of more or less brilliancy according to place. A design should then be colored in terms of this scale. (Fig. 42f) Other hues should be scaled in the same manner.

In the first year the study of theory of color should be restricted to these few elementary steps. After some practice in these, the class could enter directly upon color composition, taking up theory later on.

One approach to color composition is through dark-and-light with exercises like the following: A design is painted in three values (Fig. 31 or Fig. 35), with ink or black water color. Color is then mixed with one, two, or all of these values. The result will be a design with suggestions of hues more or less
vague. They will tend to harmonize as there is a good dark-and-light relation, and an equality of intensity. Moreover the neutral gray holds them in solution and unifies them. By diminishing the amount of neutral, one approaches brilliancy. Full harmony of color depends upon many conditions, but in elementary work we try to obtain at least three simple harmonies:
1. Good spacing, which governs the quantity of color.
2. Harmonious massing of dark and light colors.

**COPYING**

The color-exercises serve to impress upon the mind the fact of certain fundamental relations of color, but an appreciation of the higher harmonies must come from a sympathetic study of masterpieces of color. To avoid confusion it is best to copy single passages at first, or to make small free sketches of the main color scheme. For classroom use there are scarcely more than two kinds of material available—the textile and the Japanese print.

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**FIG. 43.—COLOR EXERCISES. WOOD-BLOCK PRINTING. END PAPERS, ONE COLOR ON TINTED PAPER.**
Applications

Printing with wood blocks.¹

As color harmony depends upon good spacing, good massing of darks and lights, and a balance of intensities, it is obvious that the student needs opportunity to try many ways of arranging colors and masses. Choosing rhythmic repetition as the principle with which to try one set of experiments, a unit is designed and cut upon a wood block. By printing this figure in different arrangements, a well-spaced pattern is evolved (Figs. 43 and 44). By printing in colors, following the best spacing, there is opportunity for creating numberless color schemes.

FIG. 44.—WOOD-BLOCK PRINTING. STUDIES IN RHYTHM AND COLOR.

By permission of the Manual Training Magazine.

There is not space to enter here upon a full description of this process. It is sufficient to say that the patterns may be printed on cloth with dyes or oil color,—curtains, draperies, etc. (Fig. 44), or upon paper with dry colors mixed with mucilage, end-papers for books (Fig. 43). The hand-printed stuffs of India are the best examples for illustration.

**Advanced Color**

More complex exercises in Hue, etc., but using oil paint as the medium and applying the units of the scales to designs for stained glass, posters, and illustrations. Copying of fine color schemes from textiles and Japanese prints.
Stencils

The Stencil is another valuable medium for experimenting with many variations of color. The wood block necessarily limits the student to small units, but the stencil admits of very large and complicated figures. (Fig. 46)

FIG. 46.—STENCILLED PATTERNS.

1 For discussion of the educational value of stencilling see Walter Crane’s The Claims of Decorative Art.
LANDSCAPE

When pictorial composition has been carried beyond three values of dark-and-light and beyond the elementary stages of color composition, the charcoal landscape is one good subject for illustrating all the principles so far studied. (Figs. 39, 47)

The landscape is first drawn in line to decide upon the spacing, then blotted in with a few tones of charcoal for harmonious massing, good tone intervals, and some variety of texture. When fixed, water color is washed over the charcoal tones in such hues as the student may decide upon. If the dark-and-light foundation is good the result should be a rich and vibrating color harmony.

Follow with landscapes in five or six values, executed in charcoal or oil.

Whether the final problem in a course be a design or a picture, the essential point is that experience be summed up in an original work involving a free use of the language of Line, Dark-and-Light, and Color.
FIG. 48.—OBJECT DRAWING.

FIG. 49.—BLACKBOARD SKETCHES.
APPLICATIONS OF ART PRINCIPLES
FREEHAND DRAWING AND PAINTING

In a synthetic method of teaching art, representation follows design. Gathering of materials must follow plan of structure; drawing, and painting from nature, are ways of collecting facts, and are helps to expression, not expression itself. Drawing is a process used in art; it is not art itself. The best drawing partakes of the nature of design, for it has lines of power, vibrating and rhythmic, charged with something beyond mere accuracy.¹

Freehand Drawing is indispensable to the painter, sculptor, designer, and teacher; it is valuable to every one as a training in observation and skill. It should be in the art-course from the beginning—from kindergarten onward—but it is not the basis of all art work.

The larger part of the world's art is in the form of architecture and abstract design (where nature-imitation could have no place)—purely structures of line, tone, and color. We judge

¹ See Berenson's comparison of Giotto and Sassetta in A Sienese Painter of the Franciscan Legend (John Lane).
such art-works by their quality, not by their likeness to anything in nature. Figure-painting, figure-sculpture, landscape and portraiture are representative arts, but the best of such work is as truly a structure of line, tone and color as is architecture. The representation may be accurate, as in Holbein's portraits, or may vary from nature's proportions as in the Athena Lemnia of Pheidias,—it does not affect the quality. If we can once see that synthetic structure (design) is the basis of all the fine arts, we shall give freehand drawing its right place and its true value.

Reasons for drawing and painting from nature may be stated in this way:

1. Because the object drawn has beautiful lines, tones or colors which are worth studying and remembering. (Fig. 9)
2. Because the object drawn furnishes a motif for design, decoration, or illustration. (Figs. 21, 57)
3. For practice in rendering effects of perspective (Fig. 5), light and shade (Fig. 68), texture and color.

There must be an art purpose in the representation; it should not be attempted as a mere exercise in skill.1

FIG. 51.—CHARCOAL ILLUSTRATION, "SHERE KHAN"
(KIPLING, "THE JUNGLE BOOK").

1 This subject is treated at length in Composition by Arthur W. Dow.
FIG. 52.—COMPOSITION, "THE SILENT STREET."
Courses in Art Structure and Principles of Design give the student knowledge of and experience in the fundamental ideas of all art-work, together with an appreciation of fine qualities. The application of art principles in creative work requires facility and power in drawing and painting (representation).

Casts, still life, and the living model,—the usual studio subjects,—are the basis for the study of representation. Outdoor landscape painting and sketching should be practised as much as possible.

Mere nature-imitation is not specially valuable; the aim must be to represent forcefully and with character, to see things in their true proportions and tone values, to express the qualities of lines and textures.

The course in freehand drawing prepares the teacher for the blackboard demonstration so essential in the presentation of art lessons in schools. (Fig. 49)
FIG. 54.—COMPOSITIONS. CHARCOAL. "ON THE CAMPUS," "THE VIADUCT," AND "THANKSGIVING."
All that has been said of *drawing* from Nature (pp. 51-54) applies equally to *modelling* from Nature. In an art course based upon design, modelling is a means of expressing quality of contour, planes of relief, and texture. Relief is to Sculpture what Dark-and-Light is to Painting. Space-cutting, proportions, rhythm, grouping, relations of shapes to enclosing boundary,—these are the fundamental things in sculpture. Gothic sculpture grew to such perfection because Gothic architecture offered such opportunities to enrich *spaces* with designs in line and relief.

From incised lines upon a Mound-Builder's bowl¹ to the

¹ See the works of William H. Holmes (U. S. Bureau of Ethnology); also the collection of Mound Builders' Art in the Cincinnati Museum.
pediment of a Greek temple, the structural harmony of line and space was the main thing in the mind of the designer, whether he worked in clay or marble. The motif may be a mere symbol or a complete and perfect figure in full relief,—but its shape and movement must be part of a line-scheme (design) to fill a definite space. In a single statue standing alone, like the Victory of Samothrake, the design is in the action and in the rhythms of the drapery.

The value of modelling as a training for the art industries lies (1) in that it compels the study of design, (2) in the opportunity it gives for hand-work with material, whether clay, cement, wax, wood, metal or stone.

![Clay Modelling; Incised Lines](image)

A course in modelling leading to applications in the industries, and to sculpture, could be outlined as follows:

1. Low relief—Designs in incised lines. Designs in one degree of relief. (Fig. 56) These may take the form of tiles to be glazed; of large tiles in colored cement (Fig. 59) or colored terra cotta inlaid in cement as decorations for concrete walls and floors.
2. Higher relief—Studies of animals, fruits and flowers. Original designs in panels, to be fired and glazed—or cast and afterward painted in colors. (Fig. 57)

3. Full relief—Pottery building for line and color. (Fig. 59)
   Study of Greek vases and the finer examples of pottery. Decoration of pottery involving design and color. Advanced and professional work in pottery. Modelling from life. Composition of figures or animals.
During the course the class might copy casts from the Arretine moulds, and any examples that will give an appreciation of refinement of form, delicacy and force in execution and harmony in proportions. Whatever the problem may be, the modelling is undertaken to give an experience in finer expression.

**FIG. 58.—STUDIES FOR STAINED GLASS.**

**INDUSTRIAL DESIGN AND HOUSE DECORATION**

The application of design in the industries or in house decoration requires thorough grounding in the principles of design by means of such studies and exercises as have been suggested in the foregoing pages. A house is only a larger kind of utensil whose proportions and shapes, whose location and purposes must be studied in order to develop schemes of decoration and color. The designer who has appreciation and ready invention will find little difficulty in dealing with the problem, whether he be free to choose his own style, or whether he be obliged to work within the limits of some historic style. From the synthetic standpoint, the historic style is only one way of building up a harmony. An Ionic capital may be beautiful or may not,

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1 These may be obtained from the Museum of Fine Arts, Boston.
according as the designer is interested in the harmony of its line, or in its mere Ionic-ness. The student of House Decoration must have, of course, full knowledge of styles and periods, but this should be added to his training in art structure, instead of—as is too often the case—being made the basis of instruction in Design and Decoration.

Outline of work in Industrial Design and House Decoration:¹

   Drawing from Nature.
2. Principles of design, with applications in wood, metal (Figs. II, 12), pottery (Fig. 10), stained glass (Fig. 58), furniture, wall papers, textiles and house construction (Figs. 4, 5, 7).
   Drawing and painting from Nature.
3. Color scales, with applications in both historic and original designs.
   Use of fresco colors; wall paper and carpet designing; stained glass in full color.
   Figure painting; landscape as wall decoration; color schemes for rooms.
   Designs for various manufactures.
   Apprentice work with practical designers and decorators.

Such a course is of value to others than professional designers as it involves critical study of house furnishing from the point of view of good taste.

¹ See Announcement of the School of Practical Arts, Teachers College.
Costume Design and Illustration

In this field, composition of line, and color harmony are studied in relation to the proportions and action of the human figure. As in other kinds of art work, the foundation for costume design must be art-structure—an appreciation of what is meant by space-filling, rhythm, subordination to a leading line, tone effects, and harmonious color.

This elementary composition would be followed by special studies in costume designing, drawing of finished costumes or models, drawing from life, color theory and applications, history of the textile art, history of costume; study of commercial conditions and trade requirements.

The class should have continuous practice in drawing from objects and from life, and if possible should paint from life.

1 See Announcement of the School of Practical Arts, Teachers College.
Teaching Art to Children

The theory of art teaching will have been studied in a general way in courses in art-structure and principles of design. In addition to this work the pupil must have training in educational psychology and history of education, and finally in the theory and practice of teaching art. Such a course in art-educational theory would take up, first of all, principles upon which the synthetic method is founded, then the history of art teaching—of the methods which had their beginning in the late Renaissance, and the effect of such teaching; the methods prior to the Renaissance as far as they are known, and the methods of Oriental peoples. As there are two distinct points of view which we call "Academic" and "Synthetic" respectively, it is necessary to distinguish them carefully and to know their history and practical working. Observation of expert teaching and of the conditions under which work must be done in elementary and secondary grades prepares the student for practice.

1 See Announcement of the School of Education, Teachers College.
Each member of the class should arrange tentative courses and lesson plans with illustrations describing in detail the presentation, and the way of working out each lesson in the classroom. Each student should also serve as assistant for a specified term, then undertake a definite course of lessons to be given under criticism.

The art teacher must thoroughly understand the organization of the school, and have full knowledge of the character of the curriculum and the principles followed in the general conduct of the school.

When there is a natural relation between the art lesson and some other topic the art teacher takes advantage of it. The opportunities are many to ally the art work with history, mathematics, geography, and literature. Obviously there is an intimate connection between the manual arts and the work in design and drawing; but the art course, to realize its purpose, must be a unit in its aim, through all grades. It must stand, first and last, for growth in critical judgment and appreciation of harmony.

FIG. 61.—"THE HUDSON RIVER," COLORED PAPER ARRANGEMENTS BY CHILDREN OF GRADE II.
ART COURSES FOR KINDERGARTEN, THE GRADES \textsuperscript{1} AND HIGH SCHOOL

It does not seem necessary to enter upon a discussion of the degree of aesthetic appreciation possessed by young children. If the work in space-art gives opportunity for \textit{choice} as to size, arrangement and color, it is then a beginning of something which in a later development will become appreciation. The question is what faculties will be used by and by in creating

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig62}
\caption{BRUSH-DRAWING, GRADE I.}
\end{figure}

\textsuperscript{1} See \textit{Teachers College Record}, Vol. VII, No. 4, and Vol. VIII, No. 1, for articles by Mary Chevis Upham, and Ethelwyn Miller of the Horace Mann Elementary School, and Vol. VII, No. 3, where Miss Lilla A. Nourse has given a full description of the art courses in the Horace Mann High School, illustrating with pupils' work and explaining the application of synthetic methods.
harmonies, and how much exercise can and should be given to these faculties in these early stages. If the child arranges a few units in a border (Fig. 66) or places a little picture on a page (Fig. 65), he is using a rudimentary appreciation, or judgment as to rhythm and fitness, that lays the foundation for future expression. It is no more necessary that the design should be applied, than that a song should be applied. If the child has created a little melody of line or color, complete in itself, he has taken the first step in art. Applications will easily follow, and very naturally.
The academic method introduces a large amount of work in representation, under the heading given above, carefully avoiding anything that appears like design. There is no doubt of the value of this free illustration, but it is not strictly art work. It is usually a mere record of fact put down with one purpose only—that of telling a story. This is like the picture-writing of the savage peoples and prehistoric man,—simply statements of occurrences.

Design, for young children, is sometimes objected to on the ground that it is "abstract," while the "free expression" is advocated because it is "concrete." Mr. Fenollosa has shown that just the opposite is true—the rhythmic border, being complete in itself, is concrete, while the illustration, merely giving ideas of "man," "dog," "house," etc., is pure abstraction.¹ No one would advise the introduction of pictorial composition into these lower grades. Orderly arrangement will take care of itself

¹ Lecture before the Eastern Art Teachers Association, 1906, by Ernest F. Fenollosa.
provided there is some form of exercise involving good spacing, contrast of tone and simple color scheme—in fact, design, whether it takes the form of pattern or picture.

**Upper Grades**

The children will have had experience in creating in simple ways and are now prepared to study more difficult line themes, to observe more differences of tone, and work them out in scales of three or five; to observe nature's form and colors and to appreciate color and composition in historic art. Drawing and painting of still life, of animals and figures, and of outdoor landscape should be practised. Design may have special applications in the manual arts. House decoration and room furnishing will give practical direction to studies in good form and color.

The progressive training through all grades in a perception of fine relations of space, tone and color, and the skill acquired in execution are assets alike to the one who goes on to the higher grades, and the one who leaves school to enter the ranks of wage earners. *The industries need trained minds more than trained hands.*
FIG. 66.—SHAPE AND ARRANGEMENT. CHILDREN'S WORK, ONE COLOR ON GRAY.
Art Teaching for the High School

Building upon the training in the elementary school the high-school art teacher arranges a progressive series extending over the five years, beginning with simple spacing and ending with some advanced work in full color. This is a theoretical arrangement for a school in which art is required in all years. But in fact, the art work of secondary schools is not on a satisfactory basis, owing to the disturbing element of college entrance requirements. This puts art in the elective list for the majority of high schools, and makes a consecutive series impossible. Until the college recognizes the cultural importance of art training,
this unfortunate state of things will continue. Happily there are already signs of a change.

As conditions are now, the high-school art teacher is forced to make each year a unit, or if the classes are small, to give personal or group instruction.

Three illustrations will serve to show the character of the high-school art course as a training in skill and appreciation. Fig. 67 is a set of examples from a class exercise in spacing, variation of a motif, and dark-and-light in two values. Fig. 68 shows a set of still life drawings, first year, in which the effort is for expressive and forceful line, for quality of touch, for harmony of parts and for suggestion of color. Fig. 69 is a design for a rug, fourth year, executed with wax crayons on gray paper. The first step was a study of the structure of the rug—a question of spacing and proportion. It must have a centre and a border.

As motifs for design for centre and border the teacher suggested that the pupils use forms connected with their summer experiences. The modification of a form through weaving was explained and illustrated. Then the pupils arranged the symbols

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**FIG. 68.—HIGH SCHOOL, FIRST YEAR.**
FIG. 69.—HIGH SCHOOL, FOURTH YEAR. RUG DESIGN IN COLORED CRAYONS.
of their choice in groups and rhythms. Throughout the whole lesson there was the one purpose, *to design a rug*, and the design was adapted to realize that purpose. This one problem involved observation of nature, drawing from nature, study of a process and its application in historic art, and an appreciative use of the art language, Line, Dark-and-Light, and Color.

In general: no definite statement can be made as to what kind of art lesson should be given in any grade or year, but a list is subjoined, covering in a broad way the subjects that might belong in a progressive series, starting in the kindergarten. The list is intended only as a suggestion for teachers and supervisors of art, showing growth and development upward from simple beginnings.

For lists and descriptions of courses in Fine Arts based upon a synthetic (or design) method of teaching, see Announcements of the School of Education, School of Practical Arts, and Horace Mann and Speyer Schools of Teachers College, Columbia University, New York.

For illustrations of work, see *Art and Industry in Education* (Arts and Crafts Club of Teachers College) and *Composition* by Arthur Wesley Dow (Doubleday, Page & Co.).

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**FIG. 70.—TWO VALUES. FREE BRUSH-WORK.**
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