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text material for DESIGN DIRECTION

Design Direction

Title page

DESIGN DIRECTION

Mary Henry Institute of Design

in collaboration with emerson woelffer

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INSTITUTE OF DESIGN

Perhaps because I have been so long immersed in the run-of-the-mill ideology of the American art school can I more deeply appreciate the Institute of Design. To all of my teachers there and to our director, L. Moholy-Nagy, am I most grateful for the priceless way of life and art they have shown me.

EMERSON WOELFFER

Grateful, also, am I to Emerson Woelffer for his guidance through a new color and design experience; and for teaching me to see the texture of a stone, the vein of a leaf.

ARNOLD RYAN

To Arnold Ryan, my indebtedness for his help with my book design problems, without which I might still be floundering in a sea of typography.

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INTRODUCTION

There is a basic human need for man to create. Within each one of us is born a feeling for the use of line and color and space and left to our own devices we would quite naturally make use of this inner source of beauty in a creative way. Long years of associating art with a gifted few has frightened away that great mass of people who would otherwise paint and draw as easily as they butter a piece of bread and with as little inhibition.

Why has this separation of man from art accured? It was not so in the beginnings of our civilization; then every man spoke his inner secret thoughts in a way which could not be expressed in words. Some made music, others painted on stones or walls, or carved on slabs of granite. Great architectural monuments were built and fragile bits of jewely and glass fashioned into bits of beauty that still delight the eye.

There has been little change biologically, if any at all, from these early artists to the men who walk the earth today. Yet the rich feeling of living creatively no longer exists for man as a whole. Art has been locked up in an ivory tower where a chosen

few may worship at the sacred shrine and the rest may look on in mild amazement.

Since we are born with this need for creating we are also born with the necessary implements to achieve this creation. We have eyes and hands to see and feel, and we have ears and tongues to hear and speak. The possibilities of any one of these faculties is unlimited and in combination these tools can assume proportions of importance beyond the imagination.

Understanding this need for man's creating is necessary and important. Even more important is that man does not deny himself the rich happiness that comes with daubing bright blobs of color on a piece of paper or by laying a few black lines on a white square. If the results seem crude or even ugly at first it does not matter. In time the hand and eye will become firm and sure and df one is sincere no result can ever be truly unpleasant. Even a seemingly awkward line can be beautiful; nothing is wasted. Only a certain shyness toward paints and brushes and paper keeps one unsure and mistrusting. When we are children we have to learn to handle our spoon and fork through daily use of them, so

it is with the tools of art.

In children do we most clearly see the truth of our inherent need to create. They have not yet been told that they " can't draw a straight line." Their approach to paint and paper is bold and rough; great splashes of brilliant color delight them. They have not yet been told that art lives alone in an ivory tower for the enjoyment of the sacred few. So for the first few years of life they are the most truthful of all of us.

Many books on art line the shelves of libraries but mostly they are read by those already steeped in the so-called rules and regulations of art. For those who have had these laws carefully explained to them it is not too difficult to understand the many "approaches" that one finds along the shelf. But for the man or woman, unaware that he or she has already the truth within the mind and heart, the books seem too filled with involved theories and the way too long and complicated. It might be more simple and would probably do more good if one volume would just say "go home and paint". What man can dare say that one color does not go with another color ? that lines evenly spaced are monotonous ?

or that large white spaces in a painting look empty ? There are no artificial barriers in art.

The Institute of Design recognises the basic need for man's creating. It believes that art belongs to all the people, that no man is barred from its pleasure simply because he finds realistic copying from nature too difficult to enjoy. Art is not imitation; it never copies. Knowing this, the school has endeavored to find a means by which the natural way to draw and paint will be followed by the student. A complete uncovering of the normal instincts for painting is necessary before one can truthfully express onesself. It recognises the need for creating; it also acknowledges the fact that although everyone is instinctively an artist, there is a shell around the person that must first be broken and torn away.

Emerson Woelffer, teacher of painting and drawing at the Institute of Design, recognised the natural timidity in those who had not had a formal training or had had too much. The course he organised for the beginning students is one consciously planned to break down the reserve in the students who have been conditioned

all their lives by rules in painting. It is a course completely lacking in formal training as the word is understood; instead it is a direction toward an understanding of the basic human elements of design. The lessons have been planned progressively to give the student a feeling of increasing confidence in his own powers by leading him along a path of creative freedom. There are no barriers in the course for those who find representational drawing more difficult than other kinds. In many instances a complete lack of previous art training has been an advantage since there are fewer predjudices to overcome.

The course as planned by Mr. Woelffer is broken into eighteen excercises, to be worked out in the first two semesters of school. These excercises have been presented in this book in the same order and as nearly as possible with the same instructions as are given by Mr. Woelffer in class. Unfortunately, the great enthusiasm and sympathetic understanding found in his teaching cannot be projected onto these pages, nor can his pertinent and intuitive criticism follow the

completion of a painting of one who must work alone form the lessons herein outlined. In spite of these drawbacks, one can learn much by doing for onesself and it is hoped that the eighteen excercises will serve as a stimulating guide to those who wish to find a new direction in design and color.

Mary Henry

Institute of Design

DESIGN DIRECTION

photogram by arthur siegal

The Basic Parts of Design

The evolution of a successful design is a form of natural growth. The direction of the processes involved in solving the problem are dictated by the ultimate purpose which the design will serve. " Form follows function" cannot be denied in good designing. The designer must know his materials and their limitations as well as their potentialities. Much experimentation with woods, glass, plastics, metals, and so on, will give a clear understanding of their individual qualities and the use for which they are best suited. Using new materials in designing necessarily means new thinking for there is little technological progress when new elements are used in ways better suited for older materials. There is little advantage in using plastics if they are treated in the same manner as wood or metal. They have their own reasons for existing and their ownpurposes for which they are best suited.

Apart from the materials themselves is the manner in which they are used from a design standpoint. The basic parts of a design are not many and in themselves simple. They consist of the following : point, line, area, space, texture, and color. With these elemental parts all forms are made. In architecture, for example, space is of prime importance; in photography it might be texture, in advertising design, color. No one element is complete within itself - they cannot be used separately but must be combined together in different ways. The relationships existing between the different parts vary infinitely, depending on the placing

of the parts and in the amounts used. A design composed entirely of straight lines can become a compelling unit if the spaces between the lines are considered as another element and treated with the same importance as the lines. Varying the widths of the lines will add a new impact to the design and if color is used still another effect will occur.

The range of design possibilities is endless; one new discovery leads to other experiments in the same direction. Nothing is ever finished; there is always some other way in which a design problem can be solved. Using the elements in countless experiments will give one a thorough understanding of their properties just as experimentation with materials gives knowledge of their uses.

Illusion

The trompe dé l' oeil , the fooling of the eye occurs frequently through accidental means. While one looks intently at a black and white design one can suddenly become aware of a shifting in the parts of the design, that is, the eye sees one part become first positive and then negative. Perhaps the best known example of illusion is the railroad track that seems to merge to a point on the horizon line. Our mind knows that actually the tracks are parallel to one another but our eye sees them gradually come together in the distance. Intentional illusion in a design can put a point across to the observer in a more forcible way if it is treated with comprehension. Actually it adds the quality of motion to static forms, by parts seeming to move visually or to become

larger or smaller. Illusions are created in many ways; two objects of the same size placed on different backgrounds will seem to differ in size or contour. A square placed in a rectangle parallel to the sides will appear to be a diamond if it is rotated in the same rectangle.

Inner Relationships

Each part of a design is dependent on all the other parts; no one element is as entity in itself. It acts upon and is acted upon by all the othere elements. Because this is true, no one part of the design can be planned separately but must be considered in conjunction with the rest of the work. The visual balance of many parts used togehter as a single unit depends to a very fine degree in the placement of the parts in relation to one another. Moving one will destroy the equilibruim so that other parts will need to be shifted in order to regain the balance. Variety of sizes and shapes can be unified through use of colors and textures that are related. Areas close in size become monotonous unless relieved by other elements that attract the eye. The eye is a very sensitive organ and becomes bored by too many repetitions; the designer can counteract eye tiredness through inventing new contrast either in color, shape or size.

VALUE

Value is the infinite reange from lightness to darkness through any neutral or color. In the white to black range the values are shown in greys , each one becoming successively darker. Full intense colors have their own normal values. Yellow is the color lightest in value, violet the darkest. Across the color wheel yellow orange and yellow green are approximately the same in value. The same is true of red and blue. The normal value of a color can be changed by adding white to lighten it or black to darken it. Changing its value this way will also make it less intense because less pure pigment remains. Colors close together in value tend to vibrate when placed next to each other. The eye may seem to see a third color along the line where they join.

COLOR

We see color only because surfaces reflect certain light rays and absorb others; that is, we see green when the surface reflects only the green light rays from the sun and absorbs all the others. Our eye is able to detect a color spectrum or rainbow that ranges from ultra violet to infra red. Here the color band is formed into a circle with yellow at the top. On both sides of the wheel the colors become increasingly dark to violet which is the deepest in value.

INTENSITY AND COLOR RELATIONSHIPS

Color can never be considered as a separate entity since it is never isolated by itself. The effect of a single color depends upon the areas surrounding it, whether they be other colors or neutrals, A study of one color in relation to changes in its background will show a visual change in the color being observed. Surrounding areas will wither heighten or diminish the brilliancy of a color. A consciousness of the dependency of one color upon another comes only by making color experiments of one's own. One suggested excercise is shown in the illustrated strip where two colors are used together in varying degrees of intensity and value. Color is generally considered to be the most intriguing and rewarding of all the elements employed by the artist. There are no valid rules for its use; the success of its application is a personal one.

value wheel color wheel

intensity relationships by barbara siegel

This first excercise was planned to give the student a sense of freedom and play in painting and then to be able to recapture that same carefree spirit by repeating an enlarged portion in a more careful and formal style of painting.
A one inch square of the painting is enlarged six times and by observation and controlled painting the same spontaneous and playful feeling is preserved.

painting by brad hendry

Six dots are placed at random in a four inch square and through their analyzation a geometric form is derived. Straight lines are drawn from one dot to the other until a satisfactory arrangement is achieved and then the resulting planes are interpreted through black and white and grey tones. By changing the background from white to grey to black an appearance change is observed as the element shifts visually in relation to the background.

2

shapes on white background
shapes on grey background
shapes on black background

excercise by florence forst

Nine shapes are used to create first a natural visual balance and second an unnatural visual balance. There is a motion and direction through the balance of the shapes. If a line of gravity were placed through the center the forms would remain in balance.

3

In the third square the elements continue to appear in visual balance with the direction maintained even though the forms have been separated.

first solution
second solution
third solution

4

This is an excercise in the balance of space. Four squares are used. In the first square two lines are used. In the second square three lines divide the space within the square, in the third four lines and in the fourth five lines. The squares are broken up with as much variety as possible in that no area repeats its own size. In this manner more visual interest is achieved through greater variety of space.

excercise by mina gow

The second half of the exdercise treats the areas created by the lines as tonal areas through the use of different values. In this we can see the beginnings of a square treated much in the manner of Mondrian.

excercise by mina gow

5

This is essentially the same as the previous problem with the addition of applied surface treatment to the divided areas. Color, photography, type, etc., are used, balancing the amount of solid texture and pattern in each area.

collage by jean martin

6

This is a linear problem creating as much depth of space, movement and balance as possible by the manipulation of ten lines of three different width Black white and two colors are used.

In this lesson the ten lines used in the previous lesson are connected by lines drawn from the end of one line to another and by this method creating flat spaces. In this way linear elements are expanded to solid areas creating greater stability in the design. The same colors are used as in the previous problem.

7

The use of filters or transparencies in a design creates an illusion of greater depth as well as creating greater color ranges. By laying one transparenty shape over another of a different color another color as well as another shape are added to the first two. If transparent shapes are used, the design will be greatly enriched by more colors made by overlapping transparencies. Everything will show which would not be true if solid forms were used on top of one another.

8

In the previous problems all of the shapes that have been used have appeared to be flat. Now thru the medium of drawing light and dark areas, three dimensional areas will be created. There will be greater variety of shapes, flat areas will be combined with solids or volumes to give a greater visual experience.

9

painting by chon gregory

Again the problem is one using transparencies or filters. Instead of using colored filter material, paints are used to create an illusion of filtration, two colors being used in the placers where overlapping does not occur and the paint being mix ed where the two planes overlap. In this there is an effect of transparency rather than an actual transparency. As contrast, in one of the squares with the two overlapping filters, a third color may be introduced which would not normally occur through filtration.

Ten texture inventions are to be created through observation of surfaces. Everything has texture whether rough or smooth, hard or soft. The use of texture in a painting is important in that it adds to the visual interest in an otherwise flat surface. In weaving it is all-important. Texture can be free as om cotten fibers, earth, stones, bark; or it can be mechanical and repetitious as in basket weaves, woven cloth, etc.. Enlarged enough times texture becomes pattern, likewise pattern reduced to a small size becomes texture. It can be either tactile or visual, in either case a surface becomes enriched because of it. In the ten inventions pen and ink are used.

texture chart by mina gow

textured e page by mary henry

Observation of any surface to consciously create a pattern from it, for example, a piece of reptile skin, or a fabric or a rock. The surface is

12 carefully studied and then a variation of it is created by interpreting it through color and the handling of the paints. The same relationships must exist in the created pattern as exist in the original surface.

pattern

In this, texture and pattern are combined to actual surface treatments. The paintings become more tactile in quality through the use of stippling,

13 scratching, smearing and daubing the paint on the paper. Many different treatments can be applied to the same painting, thus creating greater visual and tactile interest.

patterns by jean martin

Transparencies are again used, this time in a ~~br~~ broader way. Two forms are used to create a third

14 form by overlapping. A more stimulated surface is achieved through the use of texture.

Both positive and negative parts of the design

15 are used with equal emphasis, showing that the same thing exists where the positive becomes negative and where the negative becomes positive.

positive or negative

The use of ordinary materials in an unordinary way can be of great interest. In this problem

16 a collage is made by using bits of glass, wood, paper, rubber, string, etc., which is an approach to design through the utilization of materials. The design itself is based on the previous lessons with the exception that materials other than paint are used.

designing with texture materials

In this problem the area used for the design is divided equally by using grey on one side and

17 white on the other. Elements scattered freely over the divided area retain the appearance of being united through the use of texture, color, form, and space. Great unification is necessary in order to keep the design closely knit.

painting by pat marshall

The last problem is a final experiment in the use of materials. The paint is handled very freely

18 and allowed to run over the board by tilting it. The shapes are kept organic without too much conscious effort and the whole design is created in a spirit of adventure and play.

painting by mary henry

TOWARD A NEW DESIGN

The world we live in is a vast and beautiful place, full of vital forces that work upon us and within us. Nothing is static or stationary; everything is in constant motion - there is no single second in space when time stands still. While we earth-bound creatures stand calmly before a mirror and run a comb through our hair far off planets spin dizzily in a void too immense for our imagination to encompass. We can can compute staggering figures that set our sun so many thousands of light years away but we cannot grasp the whole of the distande in a way that we ourselves can feel. The earthworm is limited to a life that is dark and colorless; he senses warmth and feels wetness or dryness but little more. The human being is more fortunate in that his nervous system is more highly complex and enables him to experience a greater amount of the world around him. He can see color and space, can feel textures and enjoy their suffaces in a purely physical way. Without realizing it, he daily comes in contact with and enjoys the elemants of visual art. Because his eyes are so equipped that color is visible to him his life is enriched beyond knowledge. Imagine the monotony of a grey world!

Perhaps in this great immensity of space and time we have our handicaps just as the earthworm does. But we can at least live up to the faculties that have been granted us; we need not live

on a one dimensional line if we are capable of experiencing three. Through the lessons in this book a new awareness of one's powers will come; these can grow and develop along lines that lead to a new understanding of the world around us.

Everything is in motion; there is a growth that never stops. Out of the past come the elements that are ours today. Out of what we have today will be the parts that make tomorrow. Looking back to where man first began we can find no dead stopping point where something old dies and another new thing began. "Nothing new under the sun " is only a cliché but it has its truth. Depending as we do on what has gone before, we cannot hope to expel completely the work of the past. We try to sift the good from the bad, to keep what is necessary for our welfare and progress and to ~~elimites~~ eliminate the rest. We go on trial and error methods too often, so that our progress may at times seem to be in reverse.

Reaching an understanding with the universe and our of responsibility toward it may not seem to be of importance to an artist at first glance but above and beyond the fact that he is an artist is the knowledge that he is of the world and the worlds beyond. No man is a unit unto himself; he cannot become an island among a million other islands. To study the parts of the world about us and to learn to translate them into synbols understandable to the rest of man so that they too may know

what one has seen beneath the outer surface is part of ones duty toward his brothers. We want to know why we exist. We want to know the answers to the questions of from whence we came and to where we go. We do not know but we keep searching. Perhaps we come close to it when we are creating something of lasting beauty. Cannot we all be eternal?

Creative living can take innumerable forms; architecture, photography, advertising design, all theseare paths by which we arrive at a closer union with our fellow man through a mutual understanding and enjoyment. Appreciation of past developments and technical skills enables the designer of today to travel faster than ever before and with increasing technological discoveries there is literally no limit to what he can achieve in the way of excellent work. He knows the qualities and special aptitudes of wood or steel, glass or plastics, and uses them in the ways best suited to their purpose. He uses the camers to aid the hand and eye in creating visual images not to displace them. Daubing color on a piece of wet paper may not seem too important; in itself it may not be, but the chain of reactions that it sets up in the painter may be of greatest consequence. There are no limitations save those we set up for ourselves.

There is a new consciousness within us of our relationship to that of the structure in which we live. The human being and architecture are related in a very intimate way; out of our need for more personal freedom from household drudgery have come splendid technological discoveries that have made it possible to fulfill all our daily needs with a minimum of effort on our part. We are of the world, a part of the soil and the trees and sky, no need to hide ourselves in a cave away from the beauty of the out doors. Because we have glass and steel we can protect ourselves from rain and heat and still have the open look of nature around us. If we wish we can build our house among the tree tops and enjoy a new sensation of space all about us. We direct architecture to our needs and desires. It does not direct us.

It is impossible to separate the design of the outside from the inside of the house. One depends directly upon the other; they are an unit and must be planned as such. Designing the interior of a home is simply finding the elements that best suit it's form of architecture and direction fo design. Simple clean-lined pieces built for a definite use without useless ornamentation create a greater feeling of harmony within a room and have a more enduring quality of beauty. Texture in fabrics and rugs can add great richness without destroying the fine simplicity of a well designed room. Color used sparingly becomes more compelling than when used in too large areas.

INDUSTRIAL DESIGN

There is always a better way to design a product. New materials and technological progress have greatly widened our scope during the last fifty years but we have not always used our knowlidge to the best advantage. Re-thinking a product is the most important and at the same time the most difficult factor. We must design from the inside outward, rather than simply adding a new skin to an old design. Streamlining has too often become a meaningless symbol for advancement. Complete understanding of tools and materials and their potentialities is necessary to create functional design.

Sculpture, being three dimensional in concept, has an added interest from two dimensional art forms in that it can be touched and enjoyed with the hands as well as with the eyes. As the clay is worked something of the mind and body of the artist goes into the making of the sculpture. The hands become sensitive organs that push and pull the clay into a form that pleases both the seeing and feeling senses. Comprehending and controling space in a creative way can only cone through the personal experience of using many materials in unnumerable ways.

The negative shapes or those parts of the sculpture that we call " holes " become as important as the solid or positive forms. Important also are the surrounding spaces that define and penetrate the form. Sculpture can take on a certain lightness of its own and become one with the air that flows through and around it.

SCULPTURE

ADVERTISING DESIGN

The designer who must help sell a product must be half artist and half psychologist; he must know how to attract the attention of a casual observer and then to be able to hold it long enough for the selling message to be digested. He must be able to make the product appear desirable and to be able to create a need for it.

A basic knowledge of the parts of a design and of the materials used in creating the design makes it possible to invent new and compelling selling ideas. Color, space, line, lettering and symbols, all these have to be used for their attention getting qualities. A fresh viewpoint comes only when the artist understands how space is treated to attract visual attention.

PHOTOGRAPHY

Lightm motion, the microscopic world - all these magic phenomena of our world can be captured in a split second and put on paper for everyone to see. The camera has a special reason for existing - it relates visually what the eye sees but cannot draw With new high speed equipment it can even record what is too speedy in motion for the eye to see. More than this it can capture a moment in time that otherwise might be lost. Historically, the camera is still young; it is still imperfect technologically but with imagination and a flexible attitude the photographer can create a vaste new world of visual beauty.

PHOTOGRAPHY

To have something to say and then to be able to say it is the prime concern of the man who would create not only for himself but for all other men. To have a concept of life is of no value to anyone if it cannot somehow be expressed. There is an urge in all men to be understood and appreciated and some of those things that lie closest to our hearts cannot be told with the word symbols but need another medium to be said. A painting can be all things to all men; the greatest value it has is that it can mean something personal to each new observer and still something else to the man who painted it.

THIS IS THE DIRECTION

painting by emerson woelffer

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