ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY
Fig. 113

Frontispiece
ART PRINCIPLES
IN
PORTRAIT PHOTOGRAPHY

COMPOSITION, TREATMENT OF BACKGROUNDS,
AND THE PROCESSES INVOLVED IN
MANIPULATING THE PLATE

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THE BAKER & TAYLOR COMPANY
PUBLISHERS
To
MRS. J. B. THRESHER
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>9</td>
</tr>
<tr>
<td>I. Art and Photography</td>
<td>15</td>
</tr>
<tr>
<td>II. Art versus Nature</td>
<td>23</td>
</tr>
<tr>
<td>III. Theory of Spots</td>
<td>40</td>
</tr>
<tr>
<td>IV. Beauty through Spot Arrangement</td>
<td>60</td>
</tr>
<tr>
<td>V. Lines</td>
<td>70</td>
</tr>
<tr>
<td>VI. Power and Force of Lines.—Movement of Lines</td>
<td>98</td>
</tr>
<tr>
<td>VII. Character and Nature of Lines</td>
<td>121</td>
</tr>
<tr>
<td>VIII. Stability</td>
<td>144</td>
</tr>
<tr>
<td>IX. Backgrounds</td>
<td>160</td>
</tr>
<tr>
<td>X. Character in Portraiture</td>
<td>168</td>
</tr>
<tr>
<td>XI. The Foil</td>
<td>171</td>
</tr>
<tr>
<td>XII. Tone, Color</td>
<td>184</td>
</tr>
<tr>
<td>XIII. Light and Shade</td>
<td>188</td>
</tr>
<tr>
<td>XIV. Lighting</td>
<td>207</td>
</tr>
<tr>
<td>XV. Processes</td>
<td>229</td>
</tr>
</tbody>
</table>
PREFACE

THE author believes that art in America cannot make its way to the people without a medium that will educate. Illustration has done its part. It is a popular art and a popular language, and its influence continues.

Painting cannot become a vital feature in our country for a long time, owing to the absence of tradition and the comparatively slight opportunity afforded the majority for seeing the work of strong painters. Nor could the product of the talented few be other than limited in its influence even though it were to become far more accessible, for we must not lose sight of the truth that merely seeing or possessing pictures does not disclose the secret of their construction or necessarily impart to us wholesome impulses and deeper insight. Our limitations continue until we try to produce a creative work, and in the effort we gradually learn the pictorial language.

What is needed is an art so simple and in its first stages so nearly a mechanical operation that all may practise it.
PREFACE

Photography has touched the life of every one. It has supplanted to a large extent the use of the pencil and the brush, as it overcomes the average person's inability to draw with accuracy the objects before him. The exact and forceful lens of the camera renders nature sufficiently well to hold the interest and gratify the scientific wish for a clear reproduction. To this extent photography is a convenience, but as yet it is a tool almost uninfluenced by the mind of the operator. The processes inherited from Daguerre remain practically unchanged to-day. Their results are known popularly as "good straight photography," and as now practised they are singularly unsuited to artistic work and wholly impossible for the expression of pictorial thought.

Enslaved by commercialism, this plain photography has run into a lifeless groove. It has established a realism tending to preclude that nourishment and refreshing mental influence found in suggestion and in the creative powers resulting in beauty. Its direct result has been to instill in the public a taste for literalism chilling in its effect upon every form of art.

Art in photography is possible only in an extension of the methods known and in the employment of new processes to effect a manipulation of the photo-image. When the tool is made so pliable that it records more than the surface appearance of things, when the per-
sonal element enters to give life to the accurate records, the present limitations of impersonal representation are removed from photography, and its large true sphere of influence opens. Not the subject merely, but the quality attained in the treatment of the subject, will become our chief source of delight.

Several methods are used at the present time to modify the lens record. In some instances the printing paper is worked upon in such a manner as to leave undeveloped the less desirable definitions of form contained in the negative. A certain resemblance to creative work results, and much beauty has often been attained, but “picture unity” and “picture expression” have rarely been reached. Certain other factors are required to produce them. If creative work is to enter into photography, it must be possible to make on the negative a line of any character and to control the light and shade with the facility of one who paints.

The illustrations of this book show that those powerful resources of the graphic arts, light lines and dark lines, lines having sharpness and lines having soft margins, can be made on the negative as readily as on paper or canvas. The new processes involved are especially rich in the control of the light and shade effects. Thus fitted out, photography becomes a medium to be taken seriously in art educational work.
Suddenly a great change is wrought in the very aim of the profession. Whereas by plain photography the operator's attention was directed to the head and figure of the person portrayed and the background was a haphazard and illogical factor, the new photography aims to establish the right relation of the background to the figure, in order that the likeness may be raised into portraiture through a completeness of pictorial expression.

The photographer's sole reliance upon "lighting" accounts for the peculiar and fatal limitations of plain photography. Lighting exists to give roundness to the forms of head and body. In painting we speak of it as "modelling." It is not an element of construction as arrangement is, it only makes more effective the well placed parts; but before it is considered other points must be thoroughly understood. The art-aspirant in photography is destined to meet the same difficulties that would confront him in painting. When he holds in his hand a negative, he will be puzzled to know what to do with the background or how to modify the figure. A few principles will help him to think pictorially, — for art is not structureless, — and he will arrive at an understanding of what constitutes the difference between nature and art, how beauty is to be secured, and what factors combine to regulate expression. He can then indulge his love for invention by
manipulating the photographic plate and creating beauty through the study and practice of composition.

In the following treatise the author offers an explanation of the principles and processes that will remove photography from its limited conventionalities and place it among the free arts. Released from its bonds of custom, it may advance continually into new realms and become to the people an "art" in its true and vital sense. We shall then have attained that wholesome condition where there will be intelligent intercourse upon all art matters.

This preface would not be complete without an expression of gratitude to Mr. J. M. Appleton, for his most valuable assistance in the development of the processes and for his kindness in granting me the use of his New York studio where the photo-plates contained in this book were made.

I also take pleasure in publicly acknowledging the encouragement afforded me by the endorsement of my manuscript by the Photographers' Association of America at its annual convention at Buffalo, and by a similar endorsement on the part of the Associations of New England and Ohio and Michigan.
ART PRINCIPLES
IN PORTRAIT PHOTOGRAPHY

CHAPTER I

ART AND PHOTOGRAPHY

MODERN artists the world over, in defining art in the simplest words, agree that "Art is arrangement." We may add that its study is not a matter of asking for recipes from this or that school, this or that national or racial art, this or that period, classical, renaissance, or modern. On the contrary it is the acquiring of certain simple principles that underly all art of all times. By applying these principles growth comes, insuring insight into more complex methods of reasoning and bringing the power to execute difficult problems.

Photography enters the field of art guided by the pictorial principle. Photo-portraiture should strive to attain the depths, the tactile quality, the logic and the completeness of balance that delight us in masterpieces of drawing or painting in monochrome. Compared with the free art of painting, photography will always have limitations, one of which is to be found in the temperamental differences of the workers in each profession. Art in photography would be undeservedly
exalted were we to maintain that the mental and emotional expenditure in its production rivals or even approaches the output that is attendant upon picture painting. The more mechanical our tool, the more calculating do we find ourselves when working out the problem; the more unhampered and direct our touch in its record of the seen or unseen world, the higher is the form of expression.

Composition in photography is the easiest study found in any art, because it does not require several years to gain a power over the medium and because colors are eliminated. When the chemical and technical sides are under control, experiments are made with rapidity and results are gained in hours that in any other art require days, weeks, or months; experiences crowd and insight is rapid. If early experiments prove failures, new efforts can quickly follow until the mind and heart are satisfied. Is there such a thing as complete mastery owing to this rapid growth? Possibly not, because photography has difficulties to meet that painting does not know. The lens overwhelms us with detail and every photographer finds himself confronted with the question, "How may I suppress unessential and disturbing accessories?" With the introduction of new processes comes the further demand, "How may I supplement and balance the chief interest in my representation?" The field is large and the
rules expand with the growing insight of the artist. He can never say all that he would; he cannot work long enough or live long enough for that. But he can do superior and individual work during his lifetime.

Art being a growth, we must consider whether with the young it is not a natural growth, while in the case of the mature photographer it may mean that he should throw aside his preconceived ideas and his prejudices against the phases and possibilities into which he has not yet penetrated. Certain views held by a portion of the profession are harmful to development. For instance, this paragraph occurred in a photographic magazine some time ago:

"What is the difference between a good photograph and an artistic photograph? It is commonly understood that a good photograph is merely a print from a good negative, whilst an artistic photograph must have been carefully selected as to subject, composition, and lighting."

In reality there is no difference between a good and an artistic photograph. Artistic in itself embodies "good"; artistic as a quality is above the question of means or method, it deals only with result. The word is derived from art, and art is arrangement to produce beauty and logic, or "truth" as we more often express it. Subject and lighting, lens and paper, are only means to an end. The profession must seek to avoid
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

weakening its forward movement by controversies of this kind. It must strike at the foundation of the whole question, and this is and always will be art. When pursuing it, we are "space-fillers," men who control lines and light and dark to convey the meaning we have within us. We cannot transcribe all nature that is about us, because nature has innumerable truths called phases. The camera as well as the brush can treat only certain of these truths to which the mind is open or sensitive. And the more we practise the more we see to interpret; in the same ratio do we learn to make our tool—the camera or the brush—record the newly grasped truths and newly felt sentiments. The only limit to progress in the artist and his art, either in photography or painting, is in the limit of his mental and soulful range.

The greatest obstacle the modern photographer encounters is his adherence to an idea that the camera "holds a mirror up to nature," that it is "true to nature." If that were so, photography would be for all times contained among the sciences and debarred from art. For nature is never art, nor does nature as a whole ever affect us as art. In art we are dealing strictly with the mental and emotional faculties more or less developed in each individual. These faculties respond when, on a flat surface such as paper, we find certain emotional and intellectual records of things we have
ART AND PHOTOGRAPHY

seen or experienced in nature. And it is the manner in which these records are made that affects us as art. Every stroke, touch, spot, and patch of light and dark governed by the mind and hand of the artist interprets first an emotion, second a meaning. In this lies the province of art. The "mirror of nature," as expressed by photography, is a cold, impersonal, undesirable tracing of certain facts reproduced by pure science — heartless, uninteresting. Its value is wholly scientific, and it deals with only one kind of truth. There is nothing impressionable or impressive about it. Pictorial art is strongly emotional. It exists to give pleasure and at the same time knowledge; not such knowledge as the dissecting sciences impart, but the kind inherent in music, poetry, literature, religion.

Nature in itself has nothing to do with art; it is only the quarry, the reservoir out of which material for art can be taken. It is plain, then, that "true to nature" cannot refer to the comprehensive truth, but that of necessity selection of truths must be resorted to in any event. This being so, the phrase "holding a mirror up to nature" is evidently meaningless from the standpoint of art, and "true to nature" must be understood as referring to a phase of nature of which we have become conscious.

When photography aims at art and not at science the personality of the photographer becomes at once
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

a factor. His mental state will record itself in his work. If he boasts acquaintance with nature only, it will be seen; if he shows inclination to penetrate into the laws of art his first steps will reveal themselves, being evident in this, that his new efforts will betray a control of his camera results, an elimination of a certain undesirable truth and the setting forth of one that in his judgment is worthy of attention. The process of removing a stifling mass of "truths" will have taken place. Next it will be found that in thus selecting he has unconsciously developed a "motive." A motive is something felt; it differs from a subject in that a subject is anything in nature deemed desirable to reproduce; its definition begins and ends here. A motive grows in this wise,—it presupposes a subject analyzed and is the conception of the artistic possibilities contained in that subject. It embodies a study of the inherent beauty and the harmonious meaning offered by the subject. With this the artist-photographer begins his career and separates himself forever from the purely scientific worker.

Having discovered his motive, his further advance toward art is manifest in his struggles to express it. He feels rather than reasons that "beauty" is always a matter of arrangement, that "meaning" comes only with a certain use of lines and light and dark placed to define form or indicate action. He will discover
that certain rules will help him on his way, but that every rule is expansive and wonderfully adaptable to his personality, his needs and his ideas. He finds himself not one of a multitude enlisted in a scientific process, but a free individual, growing freer as he advances in knowledge gained by study and practice. A new life opens, unclosed to him by the treasures of art. Where he was able only to see nature and to experience a vague longing to interpret her, he now gains a fuller understanding as he succeeds more and more in picturing her phases in the true art spirit. Here lies for him an unbounded source of study and inspiration; he learns to aim at being an individuality as each of the masters was and is, and his art life has truly begun.

We quote again from a photographic magazine:

"If mere fidelity to nature be the qualification for acknowledgment as art, then the merest photographic tyro of but one week's experience would be greater than all the artists of any time. For in no art of any kind has detail been obtained in the overwhelming way the camera gives it. At no time has there been recorded in picture form so much truth to physical fact."

Verily so full of detail is the literal photograph that unless we look for it the very detail is lost. We find ourselves gazing at the photograph, not feeling strongly a large truth, receiving a large impression, but growing
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

coldly critical, examining the given detail and hunting for more. Our interest in such work is soon exhausted, while a photograph of real pictorial quality holds us increasingly the longer we look at it. It is food for a lifetime because it continues to suggest to us and it may do the same for generations to come, even as the true art works of the past speak to us to-day.

The great basic principles and truths remain ever the same, although each new generation demands a mode of expression consistent with its cravings, thoughts, strivings. Art must keep abreast of its time, and must not only reflect our age for the future but must at this time project itself into the future with helpful resource-fulness. We have a wide horizon, the arts of many centuries are open to our gaze and we feel increasingly their influence. Growth continues; we must all aid in promoting, not retarding, the advance.
CHAPTER II

ART VERSUS NATURE

HISTORIES of art abound with declarations that art revivals were coincident with a "return to nature." Students of drawing and painting are urged to "go to nature." Our academic courses are arranged not without some confusion as to this precept, the usual series of studies comprising drawing from plaster casts, possibly from still life, finally from the human figure. Thoroughness of draughtsmanship and acceptable painting of the nude are the aim. Most academic instruction does not seriously go beyond these exercises in rendering form.

There is a remarkable similarity in the situations of the art student and the photographer in that neither advances far enough to understand where art really begins. It is generally acknowledged that in no previous time in our history has there been so much art study and so little art as in our day. And this may be attributed, at least in part, to lack of insight concerning the relation of nature to art. The skilfully drawn human figure and the photographically well rendered
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

likeness are too nearly nature imitation. They are only the raw material to be used in the process of picture-making, but they are in no sense the completed picture. We must arrive at considerable maturity in art before we are able to grasp the significance that underlies this statement, yet it is possible to gain insight into that which is essential, even at the outset.

There is also a similarity between the work assigned to the art pupil and the methods employed by the photographer. In the class-room a model is usually posed against an indifferent background and the student centres his energies upon rendering this model without making any special use of the resources to be found in the background. This accounts for the wearisome study-head displays at our annual academic exhibitions and is equally responsible for the immaturity of art students when they have finished their courses of study. The photographer's efforts at pictorial work fail for the same reasons, although his methods are different. He too centres all his interest upon the face and figure. His backgrounds are usually bought "ready-made" and have no meaning, fitness, or relation to the sitter. In Fig. 1 we have an example and from an art point of view it is hopeless photography. What we condemn in it is the belief of the photographer that he has produced a portrait when the focus upon the woman is right, and that she will be made picturesque by the
introduction of fantastic accessories. These accessories are a collection of lines, spots, lights and darks, that lead nowhere, that have no discernible purpose. They are supposed to be beautiful because they are unusual, — not found in our homes or our daily life. Examined for their own sake they are to say the least not artistic. As objects to be used with a figure in portraiture they are an obstruction, useless because unreal, ugly and senseless in form. The human figure offers wealth of beauty; all the charm inherent therein should be exhausted before we think of employing accessories. If the character of the representation requires it, articles of furniture may be used to balance the figure, but the more simple such objects the easier it is to control them, to subordinate them to the main thing, which is of course the human interest.

The mistake made by photographers who are addicted to the use of "ornamental" studio property in their portrait work is based upon their belief that anything unusual or, according to their ideas, beautiful can be placed in a picture to advantage. Education must help us to understand what is beautiful in furniture and in architectural forms; it must aid us in reading nature in order that we may use nature's forms intelligently in pictorial work. For instance, we will photograph some grasses, "a bit of nature," — Fig. 2. We speak of them by that term. We designate in the
same way a chair, vase, rug, drapery, bird, or any animate or inanimate object. Some people have the impression that when dealing with art the term "nature" is understood to designate either human nature or the landscape as a generality, whereas the word is applied to any visible thing in which we find an emotional pleasure tempting us to reproduce its appearance or such a part of it as will serve to convey the impression that has been made upon us.

If we take in our hands the bunch of grasses and look at it, does it give us pleasure? It hardly produces the same enjoyment that we feel when we see it growing in the field where it is in its natural place and lives in the wind and the light. In our hand it is but a specimen. If we wish to make it beautiful now, we must treat it as the Japanese flower arrangers do: we must select, reject, and rearrange the parts of this bunch until the lines and masses again establish a condition of beauty.

The same is true in the representation of an individual. In a snap-shot of a person on the street as he stands or walks, we have again a fragment of nature that is material to work upon, but is thus far untouched by our thought or feeling. We must fuse ourselves into it before it can have beauty or meaning; that is where art begins. A bit of nature taken from its natural place and made a fragment by our action is not beauti-
ART VERSUS NATURE

ful until our feeling, crystallized into thought and treatment, raises it to art.

The grasses then being such a fragment must be made “art” before they can lose their character of “specimens.” We must so treat them that they are changed to something emotional — our emotion.

In order to create emotion in that which is endowed with form we must make of that object a “unit.” And a unit is something that has consistency, it is free from unreasoning contradictions; for instance, Fig. 2 is a mass of lines and movements so puzzling to the eye that it simply looks and is worried, it studies. In that condition the mind does not permit any emotion to arise. These lines and movements must be ordered, made intelligible, governed by reason, controlled by intellect, if they are to create emotion.

Let us take a single blade of grass; it will give problems difficult enough for the mind. It is as much “nature” as any other of the innumerable waving things that make up the meadow. We have drawn it as it was found in the field, — Fig. 3, where it was beautiful because it was part of the whole; here it is not beautiful in its detached form but it contains elements of beauty, and our art can realize them and thus insure a pleasurable emotion to the beholder. One reason why it is not beautiful here is that it contains a contradiction and the mind is worried, for the suggestion
is conveyed that the eye shall look in two directions at the same time. That being a physical impossibility, the attempt is a strain resulting in failure and disappointment. Making out of Fig. 3 arrows as in Fig. 4, we find that the eye surely cannot follow both at once. There is a "pulling apart" and not a "unit," but unity can be produced simply by twisting the stem. Thus in Fig. 5 the fragment has been turned until the leaf points along the line of its chief support, bringing itself into harmony with the main intent, which is upward movement. Figure 6 emphasizes the same point.

The result may be obtained in another way. If we cut the stem short, — Fig. 7, we find that line A no longer points independently outward as in Figs. 3 and 4, but rather forms a starting-point for the eye, directing it upward with a circular sweep as is shown in the dotted line in Fig. 8, thus again creating one movement. Here we learn that certain divisions of space form the basis of this principle of obtaining beauty, and controlling the meaning by directing the observer's attention according to the artist's will. For instance, in Fig. 3, re-copied in Fig. 9, the leaf II is central between I and III. When we are walking through an unknown country and come to an interesting cross-road, we are puzzled as to which path to take, — Fig. 10. The mind is alike troubled in Fig. 3 and Fig. 9 and knows not whither to turn
ART VERSUS NATURE
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 7

Fig. 8

Fig. 9

Fig. 10
ART VERSUS NATURE

But if the road terminates as at A in Fig. 11, and continues toward B, it will not require an unpleasant mental effort to choose the way. Quite the same sensations are produced in Fig. 7. There is no puzzle, no contradiction, nothing to worry the mind; it easily follows the indicated direction and the "oneness," a "unit," is created. Thus freedom from strain or effort is a first condition for sense of pleasure.

Fig. 11

There are still other ways of producing "oneness," but they need not now claim our attention. We have seen enough to understand that everything we wish to picture is of necessity but a fragment amputated from nature as a whole, and to that extent it is either unnatural or "dead" until our mind again manipulates it.
and makes of it a thing living in art, that is, a thing capable of being grasped by the mind and touching the emotion. Herein lies the difference between science and art. The scientist does not look at the grass as does the man endowed with artistic susceptibilities. The former notes the growth, dissects the plant, and carries with him a number of facts relative to this dissection, for classification. The process is largely intellectual. The artist studies the shapes and spaces with a view of discovering a harmony that is to be preserved in the mind or on paper for a lasting pleasure, chiefly emotional. But the artist goes still further; his office is to perpetuate beauty, to create emotion out of shapes he sees in nature, and that emotion is to be expressed upon a flat surface, paper or canvas. This brings with it new conditions.

In Figs. 2 through 11, we were considering a bit of nature held in the hand and we discovered certain laws of beauty in it. When we try to reproduce this fragment on a flat surface, we at once meet with the question of proportion. It would be senseless to represent this blade of grass, Fig. 3, on the wall of a room. The space would not only be too large but there would be no apparent limit to it. When the eye looks at any object, it demands that the object should have relation to something. Now of necessity a drawing of a blade of grass is a stationary thing, and it would be opposed
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 12

Fig. 13

Fig. 14

Fig. 15
to natural law to make it appear detached in a vast space that is blank. If the grass is blown through the air by the wind, it is at least moving, never suspended motionless.

As soon as we make a reasonable boundary to the space in which the grass is to be represented, this incongruity is obviated. Such a limit must necessarily be an artificial one; it is commonly called a frame. In Fig. 12 we have such a frame containing the grass stalk. The eye can at the same time see the grass and be conscious of the frame, for a relation is established between the two; but as it here stands no one will say that the result is beautiful or impressive. Therefore we have to face another principle. A logical relation must be established between the motive (which in this case is the grass), the frame, and the full area bounded by the frame. The motive should always hold our interest, therefore it must dominate the space. When this blade of grass is impressively placed upon the picture plane, it causes certain space divisions, and it is the character of these divisions that makes or prevents beauty. Contrasting Fig. 13 with Fig. 12, the space-dominating character of the grass in Fig. 13 seems logical and impressive as compared to its condition in Fig. 12. Figure 13 is faulty, however, in one essential, namely, its sameness of space division, which in Fig. 14 is exposed. The grass cuts the picture space so that
C–D and A–B are the same in length; the space G resembles closely Gx, the latter being inverted. The only element having variety in this arrangement is the small blade I as shown in Fig. 15, the space above being larger than that below. This blade of grass by creating an unequal division preserves the "unit" of the surface area. As here drawn it affects us as a line, not as a leaf, thereby removing the necessity of accounting for its floating.

A motive submits to being arranged upon the frame-bound surface.

Do we not now begin to understand the law that art is not nature, not direct copying of nature, not even arrangement of nature in her concrete forms? Art in its highest sense reduces nature to abstract form. Nature furnishes us with shapes; we accept the lines, spots, masses, etc., furnished by these shapes, and we make art by breaking up a surface with them and creating beautiful arrangement. Whether the lines, spots, etc., are formed by one blade of grass or by many, by trees, drapery, or a person's face and figure, they must be considered and treated in their abstract quality before the perfect space-filling can be attained.

Referring again to the photograph heading this chapter, we find that the woman, like the bunch of grass, is simply a fragment of nature presented to us with accessories that hardly remind us of the objects
with which she is constantly associated. We must confess, therefore, that there is less naturalness in the picture than in the bunch of grasses. There is something repulsive in this affectation, it is destructive of the sense of reality we would have when representing human beings pictorially. Art is not "make believe," it is not artificiality, it deals in its healthiest state with truth. When making a picture of this woman we need not sacrifice her distinct character in order to make her attractive. We shall see in a later chapter how a desirable result has been attained.

Art takes its material from realities, but art consists not of the realities. It is more nearly the impression of the realities and of the most vital truths, physical and spiritual. Art is from within.
CHAPTER III
THEORY OF SPOTS

THE first thing that gives evidence of a desire for expression in black and white art is the placing of a dot or spot upon paper. It is a means of expression because it betrays a purpose. If to that dot or spot is added a second, there is more than an expression, there is evident intention, and the mind looks from one to the other, wishing to understand the significance of these two placings. If a third spot is added there is increased significance.

Dots placed as in Figures 16 and 17 convey the idea of something enumerated, they have no art significance, no picture meaning. If, however, they are in a given space enclosed by boundary lines such as a square, oblong or oval, they assume an art meaning, — a meaning that lies at the foundation of all art. For instance, where in Fig. 18 the dot emphasizes the centre of a picture surface, all attention in the square plane is drawn to the one spot. But in pictures we should be interested in more than the mere centre; in Chapter II we learned that the whole space became important,
THEORY OF SPOTS

Fig. 16

Fig. 17

Fig. 18

Fig. 19
that everything between the boundary lines should be of interest. As a step toward accomplishing this we introduce a second spot to lead away from the centre, — Fig. 19. Now our attention is no longer limited to one place but is directed upward, and we perceive the first evidence of controlled art intention. There is a conscious method employed of leading the attention of the observer in the direction the artist desires. We find in Fig. 19 that something is still lacking, that the picture plane as a whole is not felt; there is merely an upward movement and the lower part is empty. Whatever may be put below the central dot will direct the attention downward just as the spot above drew the interest upward. Thus in Fig. 20 the picture plane has reached a development that makes us perceive a "space-filling" of the entire square. We note again
THEORY OF SPOTS

Fig. 21

Fig. 22

Fig. 23
Fig. 24
THEORY OF SPOTS

the principle that whatever is placed upon the surface made by four bounding lines or by the circle is a means of expression, and to so use this means that it will accomplish what we intend is to employ the art language.

Let us analyze further. The eye is so created that it can focus upon only one spot at a time. For instance, if a boy is shown two apples of equal size, color, and shape, and is asked to choose, his eye will wander from one to the other. In the effort to see both he would have to look at a point between them; he would then be conscious of the one to the right and the other to the left, but he would not see them directly. So the mind when dealing with two spots alike in size does not linger on either, the attention is equally distributed, —Fig. 21. If, however, we make one large and the other small,—Fig. 22, the mind accepts the large one as a kind of accent or evidence of strength, and the smaller as an accessory, or if two small ones are grouped,—Fig. 23, they assume the relation to a third small one that the large spot held to the smaller, the mind going from the latter to the former. The same principle holds when a third, fourth, fifth or other spot is used, provided no other factor is called into play.

To make this applicable at once we will show three spots from a work arranged pictorially,—Fig. 24. The largest is composed of a well-lighted head, the second
in size is made by the hand, and the third shows only part of the hand. These spots being of unequal size, the mind is directed from one to the other, the eye passing from the frame limit by way of the small spot on the right, thence to the other hand and then to the head, where it rests; or it may be that the attention is drawn in from the frame line at the top, fastens upon the large spot forming the head, and though virtually held there is attracted downward by the lesser spots of the hands and is made conscious of the whole picture surface. This is a successful expression of the artist's wish, his desire being to paint a portrait in which, of course, the head holds the chief interest.

Let us suppose that our picture plan must conform, not to a portrait, but to an illustration in which a newspaper held in the hand is to receive a preponderance of interest. We can draw notice away from the face to the newspaper and the hand by the principle shown in Fig. 25. Here again the largest spot gains and holds our attention. But if inexperience has led us to plan a portrait as sketched in Fig. 25, we may still be able to draw the observer's thought from the newspaper and most comfortably establish it upon the face by the simple device illustrated in Fig. 26, — the introduction of a window possessing such characteristics that the right portrait-balance is established.

The photographer who has long cherished marginal
sharpness everywhere will doubtless feel perplexed when he first tries to think of nature in the abstract and endeavors to apply the principle. Figure 27 is an instance in which the coat, hands, face, and background have been rendered with equal mechanical exactness, although the photographer was no doubt impressed with the intellectuality of the man. This literalism debars him from the realization of his otherwise rightly executed plan in which by his three-spot arrangement he has succeeded in leading our attention from the hands to the face. The same negative has yielded Fig. 28, where unessential facts of form have been suppressed and the largest spot of light has had its definitions emphasized until the face holds us with a heightened interest found only in portraiture and always absent in the mere likeness. It will be seen that no principle of art is independently active and we must try to discover the place of each in the interrelation of things pictorial. For instance, it is interesting to discover that in Fig. 28 a white patch of linen has helped to make the whole head more effective. It is so placed that it breaks the directness of the triangle formed by the hands and head and gives the composition of the spots the grace of the letter S. The background, too, has been relieved of its metallic impenetrable quality by soft gradations of light adding to the effect of depth. The mood created by
these added and changed effects is continued through the picture by the treatment of the hands and the coat; the inert folds, the materialism confronting us in the cloth texture in Fig. 27, have been pervaded in Fig. 28 with an emotional quality singularly in harmony with the rendering of this man's personality.

The spot arrangement of Fig. 25 is reproduced in the pose of the figure in Fig. 29. Notice that although the face is full of character and naturally sympathetic, it does not hold our gaze because the newspaper constantly pulls our interest downward and forces us to divide our attention. Since in portraiture we endeavor to establish a truly live relationship between the one pictured and ourselves, we cannot, without utter destruction to the portrait element, permit such inconsistencies to occur. The distribution of the spots should be so well directed and all else should so contribute to their support that the eye would sift vitality from the whole picture area and we would have the consciousness of a personality whose presence would permeate every part. Under these conditions the eyes of the sitter become very effective as a means of direct communication with us. Illustration 30 has the subtlety of treatment that, refusing to be disturbed by the aggressiveness of the newspaper and harsh line of the cuff, establishes through "balance" the dominating interest about and in the face,
THEORY OF SPOTS

the eyes gaining in expression. How much more real, plastic, healthy, restful is the face pictured in Fig. 30, and yet both are printed from the same negative, Fig. 29 before manipulation, Fig. 30 afterward.

Character, physical strength, dignity, soulfulness, beauty are gained in art through "treatment," as is witnessed in the transformation of Fig. 29 into Fig. 30. Over the head in Fig. 30 there is a circular light that lifts the figure into space, giving it erectness, strength of character. In Fig. 31 this light is missing, certain movements of the darks weigh down the forms and introduce a depression. Figure 29 can be pictorially developed by other means than the one we have chosen; in fact every touch upon the negative will change the character of the person portrayed. No other medium is so well calculated to help us to realize how facial and picture expression comes into being. Notice that the eyes, hair, ear, collar, background, coat, hands, cuff, are all immobile in Fig. 29, but the slight changes in Fig. 30 have brought the quiver, the liveliness, the life-likeness, into all the parts.

Facial expression is not a fixed thing. It is dependent upon the treatment of its surroundings.
CHAPTER IV

BEAUTY THROUGH SPOT ARRANGEMENT

The question naturally arises: can one not see the face better when it is placed in the centre as in Fig. 18 and Fig. 32? It certainly is seen suddenly,

[Diagram of a head in the centre of a square]

Fig. 32

but the mind does not remain with it, for the attention jumps to the four boundary lines and the picture is made restless, or else the head gathers in all the strength as a whirlpool sucks in the water, perpetually draining the visible plain where there should be a sustaining of all the parts. Unless modified, the picture is
BEAUTY THROUGH SPOT ARRANGEMENT

not good for that reason. We should be made to feel the surface as a whole. It may be inferred from this that beauty is very much a matter of relation, for feeling comes with certain conditions. To establish conditions for pleasurable sensations is the artist's problem.

![Fig. 33](image)

There are two kinds of beauty; one is shown in pictorial, one in conventional art. With the latter we have nothing to do as it belongs to architecture, the applied arts, etc. Its law is repetition; for instance, in the panel,—Fig. 33, the design on one side is repeated in reverse on the other. Border patterns repeat the same form indefinitely.

Pictorial art, dealt with in portraiture, in the figure and in landscape, is based on the law of variety. Let us illustrate with spots again. When we have a spot in the centre unrelieved, it is not a pictorial element but
BEAUTY THROUGH SPOT ARRANGEMENT

a conventional one,—Fig. 34; a line extending from the frame to the spot has always its duplicate on the opposite side. If a second spot is added as in Fig. 35, the conventional characteristics are not destroyed although we are aiming at the pictorial. It is not always easy to place the second dot so that the result will be free from the conventional. We find in Fig. 36 the distance from A to B is exactly the same as from C to D;

![Fig. 38](image1.png)  ![Fig. 39](image2.png)

that A to C and C to E are the same. We have repetition, conventionality. If in Fig. 37 we change the position of the second spot, we avoid the repetition of Fig. 35; the distances from the side frame lines vary, A to B being longer than B to C, but we still have an error, for the distances from B to D and B to E are the same. Figure 38 is no better. In Fig. 39 there is an improvement; we have irregular distances created
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 40

Fig. 41

Fig. 42

Fig. 43
BEAUTY THROUGH SPOT ARRANGEMENT

by the spots. But there is a fault in the sameness of their direction. The horizontal character of the frame is emphasized, as in Fig. 36 we had an emphasis upon the vertical, both leaning toward the conventional and therefore dangerous to the principle we are considering. In Fig. 40 we secure the pictorial element in the placing of this spot.

![Fig. 44][1]

![Fig. 45][2]

It is still more difficult to place a third spot correctly. In Fig. 41 the repetition is aggravated; we are tempted to count three. It would be harmful to place another dot in Fig. 37 so as to make Fig. 42, even though some of the distances are irregular, for the plane is evenly divided into two parts, therefore unpictorial, —Fig. 43. To elucidate Fig. 41 by means of a picture, imagine the light striking three objects, the face, feather in the hat, and one hand, thus placed,—Fig. 44. The result is painful. Figure 45 gives us the head and

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[1]: https://example.com/fig44.png
[2]: https://example.com/fig45.png
BEAUTY THROUGH SPOT ARRANGEMENT

hands very conventional and hence bad for pictorial purposes. To improve it we have but to move one of the hands.

After this explanation there can be no difficulty in understanding why Fig. 47 offers better opportunity for pictorial qualities than Fig. 32. Fig. 48 is an improvement over Fig. 47, avoiding as it does every geometric tendency. Fig. 49 may be equally satisfactory if carefully worked out. It calls to mind some of the interesting problems from Rembrandt’s brush.

From the standpoint of beauty, Figs. 24 and 28 demonstrate the successful placing of three spots forming the head and hands, and Figures 26 and 30 show
examples of satisfactory placing of head, hands, and the accessories required for balance. The rounder the head, the greater the disadvantage in the central placing, but when the full face effect is made irregular by the extension of the luminous flesh mass into such connecting lights as may be furnished by the sitter’s costume, a decentralization is of itself effected and the problem of balance becomes easier. A three-quarter view or a profile,—Fig. 46, has this same advantage, as the lighted flesh portion is irregular.

An oblong frame is often advisable in portraiture, as with it we can better escape our natural tendency to conventionalize. We instinctively place the head
BEAUTY THROUGH SPOT ARRANGEMENT

above the centre, though we may still be tempted to maintain the middle distance between the uprights.

Beauty in pictorial art is found in a perfectly balanced irregularity; it is the outcome of a plan, a mental picture realized in black and white.
CHAPTER V

LINES

To those who have seen Van Dyck's portrait of William of Nassau in the Hermitage at St. Petersburg, reproduced in illustration 51, our rendering of the same subject in Fig. 50 must seem like a travesty. When a human being has lost his background, in other words, when from his memory vanish all traces of his past, his mind becomes, relatively speaking, a blank. Who will not say upon comparing Fig. 50 with Fig. 51 that the mental state of Fig. 50 is largely due to the "blank" background? There are portraits by the great masters in which the background is kept very simple, but it is not blank. On the contrary, the translucent medium—the oil mixed with the colors—is productive of depth and is suggestive. The photographic print does not in the least share those qualities. It presents a background hard, metallic, impenetrable, unassimilative. Art students whose study of the old masters is confined to "half tones" should take into consideration the quality in the printer's ink that falsifies the effect of the originals, sometimes reducing
the simple oil background to the barrenness of a photographic print.

We must consider the resources of the medium at our command. Whereas oil painting gives us pulsating life, even in monotone backgrounds, photography forces us to create that quality through gradation, or we may cut the surface with form-margins called lines.

In Fig. 50 the tightness of texture suppresses life, the density is an impenetrable wall confronting our intellect. This dead flat background, however, is less offensive than the devices used by photographers in the past to "set off" the figure. We can all recall a ghastly array of scenic nonsense that occupied a corner of every photographic studio. See what significance is everywhere manifest in Fig. 51. The picture lives and our imagination is stimulated by it. In Fig. 50 the figure is like the grasses plucked from the field, it has become a specimen and has little relation to anything. Plainly, it is impossible in an unmanipulated photograph to make the figure seem other than central, isolated, "glued on," because of this nakedness in its surroundings.

In learning how to establish a relation of the three factors, figure, background and frame, we come to consideration of beauty gained through the placing of lines. In Fig. 52 we have the picture plane on which a line is to be placed. In Fig. 53 the line is drawn
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 52

Fig. 53

Fig. 54

Fig. 55
LINES

through the horizontal centre, thus giving us two surfaces of equal spacing instead of one, and thereby violating the law that demands of a picture that it should always impress us as a whole, should retain its entirety, its "oneness." Placing the second line in the hope of realizing this "oneness" by adding a vertical, we aggravate the trouble by making four picture surfaces,—Fig. 54. To illustrate by means of a landscape, if we were to imagine the central line of Fig. 53 the horizon, the upper part sky, the lower section the ocean, we would in its present state see neither sky nor water. If, however, we were to drop the line we should see the sky and be conscious of the ocean,—Fig. 55; or if we were to make the line higher we would see the water and feel the presence of the sky,—Fig. 56. In Figs. 55 and 56 we create by the use of the line not two pictures but one whole impression. We have accomplished this through irregularity of divisions.

The laws are the same when we make use of the figure. Its forms, each bounded and defined by lines that produce a pleasant variety, offer limitless opportunities for beautiful plac-
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

ing on the picture plane. As we work toward this end we combine a delightful exercise with excellent training and the development of our appreciative powers.

Figure 57 presents an extremely conventional pose. We should waste our time in trying to make the pictorial out of it. Its spot arrangement—face and hands—is on the plan of the drawing, Fig. 45, that was found to possess no pictorial qualities. If we study the drawing, Fig. 60, we shall see how far the photograph, Fig. 57, departs from the attainment of a pictorial ensemble. In Fig. 60 a line from A to B shows an equal division of the picture plane; the face and body of the sitter are also divided symmetrically. Æsthetically considered, monotony is made more prevalent by the exact horizontal repetition of the features, as the series of lines marked G shows. Observe the lower frame line. On it points C are each equally distant from the uprights, their distance to points D are the same, and the spaces between D and A do not vary.

The change effected in Fig. 58 will appeal to us all. Several pictorial concessions are made, the chief one being in the lines from the shoulders and the way they meet the frame. The conventional has vanished and one element of the pictorial has been secured. See Fig. 61. The frame line shows variety in the spacings. The distance from A to B is nowhere repeated on the four sides, nor is the space formed by
Fig. 57
LINES

Fig. 60

Fig. 61

Fig. 62

Fig. 63
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

B–C, duplicated. D–E stands the same test. A study of inverted photographs is to be recommended highly for the purpose of minimizing the personal element and emphasizing the abstract quality of lines and spaces. In Fig. 62 we find that each space on one side has its exact duplicate upon the other. The shapes of spaces in Fig. 63 offer a refreshing variety. The area of the space A is large and irregular, B is not like D, nor is C similar, while E differs from all the others. This test shows our picture plan to have undergone a great improvement.

Returning to a consideration of our photograph, we find that in Fig. 58 there is present such a maze of detail, such a conglomeration of smaller lines, that the effectiveness of the structural lines is reduced. Moreover, no mere pose will satisfy our longing for completeness of pictorial expression. In this print the impression made upon us is that we have in some sense a caged man. Certainly the largeness of his personality is not embodied in the representation.

In Fig. 59 a suppression of the annoying details is partially effected and they are made even less troublesome by a balancing feature thrown into the background,—the vertical line and tone extending from the shoulder to the upper frame. Notice how it has promoted variety in the spacings. The man seems more natural, we come into nearer relationship with
LINES

him. In Fig. 64 the picture effect has gained in expression until we feel the sitter as a real presence. "Space-filling" and "treatment" have effected these results.

After this analysis it is comparatively easy to find the cause for monotony in other prints. In Fig. 65, for example, we notice at once the repetition of the distances marked A, B, C, D, in Fig. 67. The same motive has been pictorially rendered in Fig. 66 where the whole space is beautifully broken into irregular divisions.

If considered as a specimen of childhood, the little girl represented in print 114 is beautiful, but from the pictorial standpoint the photograph cannot justly lay claim to so strong an adjective. The child seems forcefully detained in an environment to which she is not accustomed. She has no relation to this curtain or floor. Pictorial treatment will help us to love her, to enter into her life and to enjoy it with her. And the pictorial means for accomplishing this are simple. Certain changes in the masses of light and dark perform the miracle. We have advanced sufficiently in the study of art to understand that when in Fig. 68 space A is as wide as B or C, one becomes as interesting as the other and claims our attention about as much. We may conclude that when a background clamors so forcibly to be seen it has lost its place.

89
LINES

To make this little girl a real child we must draw attention to whatever holds her interest. The principle of leading the eye set forth in Chapter III will help us to do this. In the plain photograph, Fig. 114, the rectangular shape of the white gown claims our attention because it is the chief accent. The hands holding the apple, and the pretty face with its eager interest, are thereby made trivial. In the manipulated photograph, Fig. 115, the despotic lower line of the dress is properly subdued; other lines and parts of the frock are shaded into softness and, as they retire, additional forms of light are needed to invade the space C and extend toward the lower frame line, thus making a very irregular shape of the dress. A sash has given this necessary mass of light. Intentionally we change the floor line, whose cold indifference to the child is destructive to the picture's life. We cast upon it a shadow, thus creating depth of space, and we increase this depth by adding a sharp touch of light accent and a softly graded light in the background. By this treatment the spaces that in Fig. 114 were monotonous and self-centring have been broken into, made irregular, and are now so controlled that by a circular movement our eye is led through the picture to the main interest, namely, the hand holding the apple and the eager face. But to keep the interest there we were forced to carry light above the hat.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

One principle helps another, logic and beauty advance together.

It will be observed that the white sash, the white spot in the hat, and the white on the floor line, also the shadow extending from the feet back into the picture, have all been made, not photographed; they are the outcome of photographic processes, convenient and practical.

Though the reason for each change in this picture's development as set forth in the text may be comprehended, the art aspirant will find his problem in original work somewhat puzzling. As an encouragement to him it may be stated that art has a scientific basis and that with the aid of principles we learn through much practice to reason out the problems. But even more valuable than reasoning is the development of feeling that results from constant practice and that instinctively points out the defects and their remedy. In lifting the attention to this child's face we follow an impulse to make a light spot in the upper rim of the hat. We "feel" the need of that spot; later we "reason" that it may be developed into an appropriate hat embellishment. The inclination of beginners in art is rather to pursue the opposite course, to give way to their fancy in elaborate laces, feathers, or trimmings, in an effort to add to the reality of things represented, and they fail to see the abstract value of the spotting.
Thus they frequently add to the confusion and the pictorial result is not attained.

It may be said as an encouragement to those who are making their first efforts away from plain photography that almost any modification on the background of a "good straight" photograph will prove beneficial. Comparing Fig. 50 with Fig. 69, we find that the light mass introduced in the latter takes from the figure, as shown in Fig. 50, the appearance of being pasted on a surface, a feature so inseparable from plain photography. In Fig. 69 something is taking place in the background. The broken tones create a movement, a certain amount of atmospheric effect that extends throughout the space enveloping the head. It is noticeable that the upper portion is alive, the eyes, the features are mobile, while the lower part of the figure, flanked by the even dense background, is inert in comparison. By attempting modifications and observing the result we gain some art knowledge intuitively. In this case we object to the direction of the lines in the background. Aided by a line of the cuirass and arm, they make an X, that, according to illustration 43, is too geometric. The clash of lines against the figure is also painful and their point of intersection centres the interest below the collar instead of upon the face. Turning to Van Dyck's masterpiece, Fig. 51, we see to what height of expression the fertile mind of a gifted
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

man may reach. From the standpoint of arrangement for beauty our examination of this reproduction shows us how carefully the figure itself has been studied. Its lines yield abundantly the rhythms, the harmonious flow expressive of the lovable nature of the artist.

The background re-enforces and strengthens certain effective lines of the figure, as for instance, where the projecting hand is touched by a line that makes a restful termination for it in the frame's upright, see
LINES

line A, Fig. 70. Line C "foils" this, above the hand; B relieves the two and quiets the obtrusiveness of the "royal staff" by sending a movement upward to the top frame; D contributes to the dignity of the figure. Many are the modifications that have been made, each having its purpose and each realizing an expression of the artist's thought. How we enjoy the workmanship, the perfection of the composition, the tenderness of expression, the healthy grasp of nature, and the lofty intentions and aspirations.

Photographers have sincerely tried to understand beauty, but failing to discover its relation to the pictorial their efforts have been misdirected. They have usually sought a fine type of man or woman, relying for their effects upon the character of the one and the grace and loveliness of the other. The truth that beauty is born of treatment cannot be grasped at once, nor is it easy to understand that the plainest sitter affords material as rich for pictorial beauty as does the physically perfect face or form.
CHAPTER VI

POWER AND FORCE OF LINES

MOVEMENT OF LINES

The peculiar physical and mental character of an artist is a determining factor in his choice of direction in art. Some men are strongly emotional, others are distinguished as intellectual. The emotional painter excels in the color quality of his pictures and the intenseness of his stroke, but few having this temperament are natural composers. The intellectual artist constructs well; Puvis de Chavannes stands for this class. His decorations in the Boston Public Library will surely be a great influence in developing the art of our country. They are readily analyzed and reveal a wonderful science, each line and tone being the result of deliberation and conveying an expression of the artist's thought, while each is kept subservient to the decorative scheme as a whole.

Among painters of easel pictures, F. F. Henner compares favorable with Chavannes in the intellectual field. An analysis of his "Fabiola," Fig. 71, will
FIG. 71
POWER AND FORCE OF LINES

help us to realize this. By his mastery the rigid, almost uncompromising lines of the geometric oblong into which he has composed his picture have been made to carry the tender vision of a girl of dreams. Figure 72 gives the line whose strength can cope best with the geometric frame. This line also serves the law of beauty because of the agreeable irregularity produced by its placing.

Beauty in lines, secured by the irregular placing on the picture plane, attains a passive quality appealing to and satisfying our feeling. To this is often added a certain mental action, something that engages our reasoning powers as well. We must make the irregular arrangement of lines a means of expressing our ideas and also the degree of our feeling. This new element, so intimately interlaced with "beauty in lines," is what we designate as "power and force of line," culminating in "movement."

As in a monarchy there is always a leader in the person of a king or emperor, in a republic a president, in the army a chief officer, as wherever organization exists there is a head or directing element,—so in a picture where of necessity many lines are used there is a main or leading line, followed by a secondary, then a third, and so on. There never can be two leading lines; the duplication of the first would be a negation, each has its place according to its use. The
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 73

Fig. 74

Fig. 75
relation of each to the others and to the frame establishes the weight of their statement and the degree of their intensity or force. That which establishes the weight of their statement is largely intellectual and appeals to our reasoning. It is the province of definition and drawing. That which establishes the degree of intensity or force affects our emotions. We speak of it as accentuation. To elucidate, if we remove the line in Fig. 72 and free it from all relation to a frame and to any other line,—Fig. 73, we are simply curious to know why it is there; we note its peculiarities, but further than that it means nothing. In Fig. 74 this same line placed upon a picture plane is to our intellect an intention, and to our emotional nature a movement. It vigorously infringes upon a given territory and divides it into parts: it is very decided, it has "power," as we say in art. As soon as we find we have a means of expressing power, the natural deduction is that if we were to make a second line equally powerful on the picture surface one would annul the other. We must make a second one stronger or weaker than the first. It would be illogical to make it stronger, for an unbroken picture plane demands that the first line be the most forceful one since the strongest line is best able to cope with the sum of power contained in the picture space. The second should support the first,—Fig. 75, and should break the larger of the two
uneven spaces created by line No. I; the third should make it its duty to effect division of the larger space that now remains,—Fig. 76, but it should do more. It should be so placed that it will not injure the other two lines by making them appear as units. Instead it must help to quiet, to unify them to the degree of producing harmonious action among all three factors. By doing this it also establishes the much coveted quality of stability. Every additional line should further the same end.

How carefully the master has built up his picture from the frame inward, how its "power" has been controlled to protect that delicate face. The broken soft lines of the profile rest safely in the network previously constructed. If line I had been weak and the profile had been emphasized the outcome would have been the loss of the saint and the probable creation of the peasant type. How sensitively dependent expression is upon construction may be realized when we study Fig. 77. The face lacks an element of kindness that is peculiar to the original and that is restored to our drawing when line V is introduced,—Fig. 78. The absence of this line serves to increase the strength of the first three lines out of their due proportion, with the effect that the entire facial character undergoes the change mentioned.

In dealing with power as expressed in lines, it is
our duty to consider carefully the subject before us, to analyze the lines it offers and choose out of the number one that is essentially descriptive. Then that so carefully chosen line should be placed on the picture surface in such a manner that it will convey to others the degree of forcefulness we feel. In Fig. 58 the plain photograph of a man puzzles us when we try to discover the leading line. Every contour being equally sharp there is an absence of accent; the usual infinitesimal rendering of detail so destructive to picture quality is forced upon us. Compare it with Fig. 59. Here the detail being somewhat suppressed permits us to give attention to the contour. In Fig. 79, line A, no longer monotonously crude and unrestrained as in Fig. 58, is transformed into the leading line merely by introducing in the background a vertical to connect the upper frame with the other shoulder. B has a diversion in line C and is thereby made secondary to line A. Notice the effect upon the personality of the sitter; in Fig. 58 the head is alone in a meaningless space, it asserts itself vulgarly, feels posed and concealed. In Fig. 59 the figure has animation and life, the face is full of interest, the background is no longer a vague emptiness, but explains itself. It has become useful. If line C were to appear above the other shoulder,—Fig. 80, its introduction would change the facial expression. Under certain circumstances this
change might prove useful. The placing of these lines is aided by feeling; their subtle influences so puzzling to the inexperienced prove fascinating to maturer workers.

Turn to illustration 93. What is the leading line? All are prominent, each practically unrestrained; if the eye becomes engaged with line B, — Fig. 81, it finds D disputing with it, — the latter having more forcefulness. At the same time A is strong enough to receive a large share of our interest, and between these contentions our feeling dies and our thought is dulled. In Fig. 82, B and D have been modified by the new line E, our interest has been drawn from the frame inward, and is now engaged with the figure. This point having been reached, we are made to feel a main line A. It is well chosen as it points to the height of the figure, giving a majestic quality to the pose. B is now an accompaniment to A; it supports without disputing. Thus controlled, B is made very effective as a picture element and expressive of dignified movement in the figure. In this way the warring interests are brought into some harmony, — Fig. 94.

Fig. 1 and Fig. 83, when compared, will show the great difference between the results of plain photography with its artificial background and of camera work pictorially treated by the correct use of lines. In Fig. 1 the woman has evidently retreated to the wall and is at a
POWER AND FORCE OF LINES

Fig. 81

Fig. 82

109
standstill mentally and physically; the background protrudes itself at her expense. The same figure, absolutely unchanged, is transformed into a refined picture in Fig. 83. The woman has character. We do not question her action, pose or surroundings; she is a presence, intimate and yet reserved. There is a suggestion of plentiful space, of air and light. The background in no way obtrudes itself, it is sympathetic, supporting her by its lines, playing with the tones of her figure. What chiefly characterizes this picture above its "plain" ancestor is the embodiment of "movement," the selection of lines for "power." In the pen sketch, —Fig. 84, line A is too despotic, B as accented by contrasting light and shade, is wooden and stolid. Together with D (also a too rigid line) it makes a structure more fitted to uphold an inert concrete mass than the frail delicate form of the human being. Line C is accented in a manner that makes it impossible for our attention to rest with the head. The ornamental curves marked G have no influence for good upon the lines of the figure, nor is there any cohesion between the frame and the inner line-happenings.

A very different problem presents itself for analysis in Fig. 85. Here all is so managed that our eye, noting the rich sweep of the gown, is carried by "movement," steadily and pleasantly to the face. Line B does not dominate but is here subordinated, giving to line L the
POWER AND FORCE OF LINES

Fig. 84

Fig. 85

113
leading interest. There is such difference of accentuation between L and A that they move harmoniously upward. The strong accent on the outline of the well-lighted sleeve is a powerful factor in causing a due subordination of B, L, and A, while this line of the sleeve, in order to be under control, is approached, but not touched, by line P. P and J also extend toward A, and restrict its power by diversion. The means of effectually subduing line B is found in F and E, two verticals drawing the overcharged interest of the figure toward the left and upward. The frame-line M has come into the thorough planning of this structure, for it foils and quiets the long lines E and F. C is introduced to give the figure height, K and D to add to the movement.

Compared with the foregoing elaborate composition, Fig. 86 is easily solved. The problem presented is frequently tried by camera workers who, not understanding the power and force of lines, seek force by the single factor of extreme contrasting tones. In this picture there are practically no lines that have any power when compared with the white mass forming the face, beard, etc. Nothing prepares us for this exhibition of force, yet forcefulness is not attained. That quality comes by restraining the pictorial elements,—the light masses, dark masses and lines,—and causing them to act in unison. Compare it with the charming
way in which Fig. 87 has led up to the climax. In Fig.
86 our greatest energy is expended in the oval outline
of the beard, hair, forehead, cheek. So emphasized is
this, owing to the lack of a check to stop the rotating

![Fig. 88](image)

action of the eyes, that the features sink into obscurity.
In Fig. 87 the line of the shoulder (see line A, in Fig. 88)
has firmness and leads toward the face. The line made
by the forehead and hat is the most forceful and is well
chosen as it draws the attention upward, throwing the
emphasis near the eye socket, round which the interest is made to circle by rhythmic movement. Line C prevents B from becoming too powerful and pressing too heavily and sharply upon the face. D further lifts the interest upward into a space that must be vitalized if it is not to become a dead member in the picture construction. Left blank or weak, the upper and dark portions would assume such prominence that character-rendering in the face could end only in caricature. Observe how line D leads off from C with some firmness, then subsides into a gentle curving movement that draws the eye around and back to the face, accomplishing two offices, first, making vital, luminous, and intelligible the upper part of the picture, second, bringing the interest back to its centre. After leaving line D the eye considers the form of the features and rests with that section holding the mass of light. Other elements of diversion are found in the tones of the beard and the deflections in the background that keep the interest from being overcharged.
CHAPTER VII
THE CHARACTER AND NATURE OF LINES

In order to understand more fully power and force in lines when placed on a picture plane, we will analyze the "nature of lines."

When we have a dot, we have a perfectly stationary effect.

When the dot is extended into line, we have "movement."

Movement is an element having both direction and a degree of rapidity.

Its direction explains itself.

Its rapidity will increase in direct ratio to its length from the dot forming the starting-point.

This long line conveys the sense of rapidity. If we wish to make it slower we can make it shorter, because the momentum gained is not so great.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

A second method of making it slower is to place another line parallel to it.

The effort of the mind to read two lines at once causes slower reading than when the eye deals with only one line. If the distance between the two is increased, the mind has greater difficulty in reading them simultaneously, — resulting in their greater slowness.

If we make one broad line of the two, the effect is a similar degree of slowness.

A fast line can be made slow by placing an opposition on it.
This opposing line at I checks the impetus gained from the starting-point Y. The mind’s reading is arrested at X, — the junction of the long line with line I. From here it must start anew, and the impetus therefore is not so great as if it had been unchecked from the point Y.*

By placing more oppositions on a fast line, we may make it as slow as we desire.

By placing a line at a slant, not at right angles we retard the long line more gently, as there is no direct opposition. Instead there is a yielding quality, a slight diversion, having the effect of kindliness.

Its variations will produce the sense of quiet, stillness, hush. As employed by the Egyptians, it suggests the soul leaving the body.

* For fuller exposition of this principle, see article by Endell, in Dekorative Kunst, Vol. II, pages 119 to 125.
Another method of controlling the "fastness" of the line is to threaten a check, thus:

I

|    |
|    |
|    |
|    |
|    |
| II |

The mind while reading line I is diverted by line II, — a vertical striving from below toward the horizontal and threatening opposition.

A circular line is always slower than a straight one, because it is constantly changing its direction and is therefore more difficult to read. Difficult reading is also slow reading. The complete circle does not gain momentum.
If we apply these observations to the shapes of frames, the square, made of four equal lines, all having the same "swiftness" and checking one another alike, gives the effect of something stationary, fixed.

The four lines have neutralized one another, have created a certain monotony for themselves, and are of no interest to us except that they are useful in forming a space, and because of their neutral quality they direct all attention into the space they form. A picture in such a frame has the advantage of effecting a complete concentration upon itself.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

The upright rectangle has verticals that are faster, that have more impetus and are more powerful than its horizontal. The character of this frame is such that it strives upward, — at least has an upward intention.

When we compare the square with the upright rectangle, we notice that the square suggests nothing high, vast, or extended, but is stolid and self-contained.

The upright rectangle, by the nature of its shape, will lend itself to the expression of pride, and in some of its forms it assumes religious significance. When combined with certain curves it becomes expressive of the spiritual — in the Gothic window, for example.

In the horizontal rectangle the greater rapidity is in the horizontal lines. The frame therefore has a running character, something tending toward continuance. It is "spreading," and suitable for landscape where the horizon is to be much used, also where the flat foreground is of special interest, because the frame-shape suggests width and expanding powers. In figure work it would suggest a story-telling picture.
CHARACTER AND NATURE OF LINES

E. A. Abbey employed several of these long horizontal frame-shapes in his rendering of the story of Sir Galahad, in the Boston Library.

Of the circle it may be said as of the square, that it is not capable of expansion. It is well adapted to concentrate interest on whatever is placed within its limit.

Where the oblong is crowned by a portion of the circle, we find a gentleness together with loftiness, that at once suggests a religious picture.

The three panels grouped on the opposite page form a combination in which we have a perfect condition for the embodiment of religious thought.

The shape below them suggests more worldliness, more substance. The fast and the slow are so combined that we think of something cheerful and complacent in the space.

If lines have meaning when quite isolated, do we not now see that their combination in a frame conveys
a more definite meaning? When we place them on a picture-surface we have a language as complete as any that is uttered in speech or music. Let it be our care to so control this language that it will utter our thought with exactness, and we must be equally watchful lest it express what we do not wish.

The lines in the Henner head are all considered with reference to their fastness and slowness. Their power in the picture space is as much due to their measure of velocity as to their manner of breaking up
that surface. The former assists the latter. In the accompanying sketch, Fig. 89, 1 is the longest straight line on the picture surface, it therefore is the fastest and has the greatest force; 2 is slower, therefore well calculated to be an assistant to 1; 3 is slower than 2, because of its curved character. By its slowness and its position it is a check to the upward force of 1. Its expression is kind, yielding, binding the first lines with the frame. 4, the constantly interrupted line of the face, is slowest, and therefore well calculated as a resting-point for our eyes.

Our study of the nature of lines has increased our respect for their value. We can now consider combinations that produce "quality." For instance, it would be interesting to know what constitutes a graceful line, what is the "line of beauty."

"Grace" is a partly impetuous movement terminating with that which is affectionate, caressing. In the following cut we find the long line impetuous. Associ-
It is the curve at $x$ that gives the affectionate, graceful ending.

This line of beauty occurs everywhere in nature and is natural to art in its various branches.

We see it in the golden rod, in reeds and weeds, in the swan's neck, in the limbs of trees. The wave is made up of its shapes.

In the human form we find it in most charming variation, in woman's arm for instance, or in man's arm or hand, or in any part of the body when analyzed for line quality.

When attempting the portraits of women we should look for the lines of grace and beauty in dress and in the form revealed through dress.

In illustration 90 trivial lines have everywhere been omitted or subdued: the essential form-rendering, movement-bearing lines dominate and are made spiritual through grace and beauty.

Applying the theory of velocity to these contours, we begin to understand why this portrait is strongly emotional.

The lines of Fig. 91 owing to their selection and placing have beauty and express strong feeling; their tempo is wonderfully controlled and they are individually and intrinsically beautiful because of their grace. Lines A, B, C in Fig. 91 (see drawing 92) should receive our special study. They supply the impetus for
the upward movement that is so pronounced in this picture. In them lies spirit, mentality, energy, æsthetic truth. Without them the facial expression could not be rendered so satisfactorily.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Illustrations 93, 94, 95, and 96, studied for their grade of velocity in lines, will be helpful. In the plain photograph 93 the frame lines are not affected by anything in the picture, their indifference is absolute. They are rapid, overpowering and self-assertive. Lines F and G in the drawing 97 are feeble when compared with the frame lines, yet in the figure they have most velocity. Unbalanced, unchecked, they hurriedly ascend the triangular form of the skirt. Our eye reads the tiresome effect instantly, finds no further resources, and we have lost our interest in the production. In Fig. 94 the introduction of D has changed the tempo of H, causing it to vary from L. (Refer always to Fig. 97 for designation of lines.) D, by its nearness, has moderated the speed of K and lessened the eagerness of G. Still more modifications come into the picture in the stage of development found in Fig. 95, where the folds marked A, B, C have all been made into useful lines, serving to balance D and to modify F and G. Emphasis laid upon these folds also proves that in photography we may strengthen lines that are not marginal quite as well as Gandara has done in his oil painting, — Fig. 91. The finished picture, — 96, shows many more modifications, such as the line E, that affects by its "checking" propensities all the uprights, quieting them. We also find the lines A, B, C strengthened by the emphasis of white. Just how emotion has crept
in and permeated Fig. 96 it is not possible to put into words, but we have followed the process by stages. The practice of art will bring the light. This analysis does not, however, exhaust the structural secrets of Fig. 96. We still have the matter of "stability" to consider.
CHAPTER VIII
STABILITY

UNSCHOOLED in the laws that make pictorial art, the photographer has tried to emulate the sculptor. Forgetful that all his effects are confined to the surface of paper, he has tried to make a round thing on this paper, he has wanted his representation to "stand out," as he is accustomed to express it. Not photography but sculpture in high relief is adapted to such forceful methods. In photography and painting the paper or canvas is felt through the print or painting and is a part of the picture, just as in a Gobelin the design is woven into the fabric of the canvas. A person represented should not "stand out" but should "stay in" the space. This does not mean that the figure is to seem shut into an enclosure, fenced about, imprisoned with a perpetuated expression, but something is meant to the effect that the surface, being the means of an artistic expression, should be utilized as one whole field, every portion of it being a vital part of the entire intricate fabric. For instance, in Figures 57, 65, 86, 112, or in any plain photograph, the central
STABILITY

portion or the place occupied by the figure is overburdened, congested with material, while all about is a space saying nothing. The image is not fully "alive," it is "posed," conventional, unnatural, certainly not touched by art. It reminds us of the photographs of statuary made to suggest the originals in museums. Such photographs aim at nothing more than to give a scientifically correct idea of the originals for us to analyze, study, and enjoy. But let not the photographer think he is making a picture when he reproduces such a statue. It can never be a picture because the subject is not nature but a work of art. There is, therefore, nothing for the photographer to "treat"; he cannot intensify its beauty, he can only awaken in us by his reproduction a desire to see the original with its direct and inexhaustible loveliness. His photograph in this instance is only the reminder, as a photograph of a machine is a reminder in the advertisements of to-day. What should be done in such a case is to render the whole as clearly as possible, but that is not the office of the photographer when dealing with the portrayal of the human being. Such a portrait should not be a reminder but a direct conveyer of enjoyment. The person must appear to live in our presence. If its office were only to remind us of some one, the portrait and the tombstone would be of like nature, but they are, in truth, of opposite intent. The person lives in
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

the picture and the creative nature of the artist has brought this about. It is this that gives to art its lofty character; we speak of "undying art," "perpetuating in art." It is this that makes the kings of Egypt and Assyria, the gods of Greece and Rome, the most living things in the past, while the pyramids are the expression of regret, heavy heart-burnings and perpetual sadness of a race.

We should, therefore, distinguish sharply between the imitative faculty employed when we photograph a statue, and the creative power brought into play when we take a subject from nature and make out of it a picture.

In Fig. 51 the frame, background, and figure are woven together as in a Gobelin; their sum of expression produces the masterly portrait. Analyzing the pen sketch, 98, we find that the spaces marked 1, 2, 3 are light, 4, 5, 6, 7, 8, 9, 10 are dark, 11, 12, 13, 14, 15 are intermediate tones. All of these light and dark spaces represent respectively face, hands, linen, cuirass, cloth, hair, rock, sky, and shadow, but they are first of all spaces, each important. None can be omitted, neither can any portion be treated without consideration of the part it is to play in the ensemble, for the expression of the face, the character of the figure itself, can be changed by such apparently (and only apparently) minor features as make up the background. Hence
when the photographer tries to obtain beauty by utilizing a sculpturesque attitude, tries to convey the sense of reality by attempting to make the figure free from all influences such as background and frame, tries to make it "stand out" as in Fig. 50, he fails in his effort toward art.

The geometric lines bounding a representation and forming its frame are the "staying" factors of the picture. Any figure within their limit will have stability when its lines and the lines of the background are so
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 99

Fig. 100

Fig. 101

Fig. 102
STABILITY

controlled with relation to the frame that they affect vitally the whole picture surface. We may compare a picture to a spider's web,—Fig. 99. The latter is constructed to sustain the weight of the spider, and in order to be equal to its task its delicate threads reach out to various points for support. How necessary these points of attachments are. In Fig. 100 we have the frame of the picture with a spot located centrally. This spot has the shape of a head and a vignetted bust. It suggests weight made gross by its position and the lack of supporting lines. A weight unsustained is incongruous; the spot must throw out lines for its support. Thus lines in pictorial representation exist not only for beauty but quite as much for use.

The deficiencies of all vignetted plain photographs are the same as those of Fig. 100, but even in this kind of pictorial representation the relation of frame, background, and figure must be maintained. Suppose the frame and the object in the centre of Fig. 100 to be made of wood; the central mass having no support would fall. To prevent this it would be necessary to tie it to the upper frame with one or more supports — Figures 101, 102. We thus have the first "staying-in" element. We know, however, that it would still be likely to swing in and out,—Fig. 103, whereas it should be absolutely firm. If we place pieces of wood below, the condition is somewhat ameliorated,—Fig. 149.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 103

Fig. 104

Fig. 105
STABILITY

104, but to convey the impression that the object is perfectly secured, it should also be attached above or on the side as in Fig. 105, where the centre is made to stay in the frame firmly. In all of the masterly vignetted portraits painted by Franz von Lenbach, the lines of the figure reach out toward the frame, they sustain the figure. The direct downward lines found in photo-vignettes are not seen in his work.

Figure 106 is also deficient in stability. The figure is not held in the frame nor made to rest upon the surface. We have the feeling that the woman is swaying in the effort to balance herself upon the lower edge, as suggested in Figures 107 and 108. Useless space on either side adds to the instability. By cutting off this unnecessary width we receive a greater sense of firmness, as we should feel safer in looking from an upper window if we knew it was narrow enough to enable us quickly to make use of the jambs in case we began to fall. Too much empty space would be a source of discomfort to us; the same is true of the picture.

In this sense Fig. 50 is without stability. The drawing 98 shows how the background lines in the original painting 51 attach themselves to the figure and the frame at many points, and prove their value in securing the quality under discussion.

Applying this principle to our photographs, we readily perceive that the figure in 65 suffers from too
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 106

Fig. 107

Fig. 108

152
much space or from want of background lines to connect it with its geometric enclosure. In Fig. 66 the lost feeling and the insecurity of Fig. 65 have given way to stability. The woman seems to belong where she stands. The steps by which this is accomplished are shown in the following pen drawings. In Fig. 109 a vertical from the shoulder to the upper frame line brings about some feeling of firmness; in Fig. 110 a low, oblique line adds to the security. The picture plan is realized in Fig. 111, where the oblique line is extended to the opposite frame, effecting the necessary stability in the picture.

A more complex problem confronts us in Fig. 112 where in spite of the empty wall space we feel that the girl has not room enough in which to make her courtesy; there is danger that she may fall face forward out of the frame. In solving this problem a composer's best ability is called into play. (See frontispiece, Fig. 113.) That the figure might "keep its place" foreground was added and the space increased on either side and above. Into this area a line was thrust playing from the feet back into the picture and to the upper frame. On the same side of the figure a line giving the effect of a curtain connects the shoulder with the upper frame. Less distinct lines emerge in the background from the skirt and play upward and outward to the right. The combined effect is to hold the figure in its place satisfactorily.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Fig. 111

Fig. 110

Fig. 109

154
STABILITY

Figures 90 and 91 are examples of stability attained without the slightest aid of background accessories. The originals are both oil paintings. The background so black in Fig. 91 and so incapable of atmospheric diffusion, has in the original a soft, transparent quality. The women in both paintings appear with a largeness of impression attained in the masterpieces of space-filling. In Fig. 90 we notice that the drapery touches the frame line only at the bottom, but that the lines of the figure invade and fill each vital section of the picture area, creating in the mass of light a dominating note that perfectly balances and rules the background. When we study the frame closely we perceive subtle influences extending to it from the figure. The elbow of the arm resting on the hip approaches the frame with a soft contour; the gentle effect upon the interrelation of these lines is like the instant drop of well-sustained orchestral music to a piano softness. The upper frame is rendered enjoyable by that other influence waving through the lines of the figure, forming the sleeves, shoulders, and differently accented lines of the head. Played between them is the face, made radiant in light and tender in expression by the music of the varied cadences of line. The firmest accent in the picture, the face, has between it and the geometric horizontal above it the softness of modulated tone. The left frame with its cutting downward movement is opposed by an
impetuous accent, a culmination, vitalizing the whole composition. It matters not what the lines are made to define, — whether sleeve, dress, folds, hair, face, it is rather what they sing, what light they kindle within us.

In Fig. 91 the frame is touched at three points and approached with studied purpose at others. A lesson may be derived from a simple experiment that all can make who desire to know upon what stability depends. By taking a piece of black paper and covering a section of either arm in Fig. 90, or obliterating the fan in Fig. 91, we discover an absence of stability. Both figures sway, the perfection of their arrangement has been disturbed and they become irresponsible.

The application of the principle of stability has produced in Fig. 96 a quality not attained in plain photography, where the human figure seems as unsubstantial as the paper upon which it is printed. Arrangement has brought this result, — that the figure in print 96 seems to have the weight possessed by the living being. It is healthy and all the more beautiful and true for that quality. The figure in the pictorially treated photograph 83 also appears pleasingly substantial, though that quality is not identified with Fig. 1. Notice how lines have been used in Fig. 83 to create an impression of space, a suggestion of a world outside. The woman is not caged in as in Fig. 1, or
STABILITY

jostled by a wall, is not self-conscious or "making her last stand."

The logical study of the principle of stability forces from us again the conclusion that a background is a creation, not a procurable commodity.
CHAPTER IX

BACKGROUNDS

Professional photographers may be discouraged when confronted with the necessity of creating backgrounds on the negative instead of buying them as hitherto in the form of screens to be placed behind the sitter. There is no occasion for alarm, however. The principles of art as compiled in a textbook may seem formidable, but the usual problems of the studio are not often complex and after a little practice it is therefore easy in photographic portrait work to make the simple changes that give the greater satisfaction.

The average person rejects the scenic background; practically all people of good taste decline to have themselves pictured with too great realism. A small photo-likeness receives preference over a larger one, because in the smaller work the physical presence is less obtrusive and the picture as a whole is capable of more technical refinement. Members of the profession have tried to lessen the people's grievance by trimming the prints only to find a second evil confronting them, — the figure crowded and unduly cramped. The plain
black or light background with its dry dead tone is proving itself an affliction. The over-ornamented chair, stucco relief-work, simple or strongly designed draperies, are discovered to be obstacles because they enter into competition with the head or figure in seeking our attention. In studio language, we refer to them as "loud" backgrounds, and in the use of the term we give evidence of their harmful nature, for a background should recede, produce quiet, and allow prominence to a main interest.

No one will now question the statement that in Fig. 1 the assertive, restless, worrying forms of the rococo ornament are "noisy," without sense or value, and in every conceivable way destructive to the figure. There is absolutely no portrait or picture quality. The photographer doubtless reasoned thus: This woman has an elaborate gown of very rich material. I must seek to make her unusual and my only means of doing so is to employ one of a number of backgrounds that I have in stock. The one with the rococo ornament that I produce on special occasions like this I will employ again. It is the height of my powers of expression, in fact the background is my expression. The woman shall stand before it as a hundred others have done, the only difference will be in her pose and possibly in the angle of light under the skylight.

The barrenness of such thought is fully disclosed.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

The real artist would have tried to reveal the woman's character, to make her what he conceived her to be, while this photographer had no conception of her; he allowed his background to testify to his lack of resources. Only a background fully thought out can make the true portrait; any other method will destroy what good there may be in the sitter. Landscape should be introduced not for its intrinsic beauty but because its series of movements and masses are an aid and support to the figure. Architectural features may play a part if the lines they offer are of service in the picture-upbuilding; no other merit can justify their introduction.

Figure 114 is a photograph having all the refinements that excellent workmanship, good lighting, the clean plate and superior printing can give. The realism is not so oppressive as in Fig. 1, yet the photographer was unable to free himself from mere fact rendering. The face, dress, floor, hat, curtain, are all equally literal. Compare it with Fig. 115. A transformation has taken place that makes this example a portrait while the other is the posed child. Here we have enveloped the child with feeling, with loving lines and tones, we have treated her in the picture as we would treat her in life, with the same lavish care. In the good straight photograph the child seems abandoned and forgotten.
BACKGROUNDS

Do we not become more and more conscious of the nakedness of the plain photographs when we compare them with those that have been pictorially developed?

In the Van Dyck, Fig. 51, the rock, foliage, clouds have grown out of the purely abstract in arrangement, assuming in their development semblance to natural forms, yet this is not realism for its own sake. To test this truth we have but to add one realistic form, one leaf, rock or grass blade, or to shift the shapes that exist, and we destroy that balance so necessary to the portrait quality. In Figures 30, 31, and 83 architectural forms are used with the figure, but in each the attempt made is not to depict a realistic window or wall, but only to obtain lines that produce certain results.

In Fig. 66 the flowers are placed, not as nature would have them grow, but according to the needs of the figure and its surroundings. These flowers are impossible if we demand realism, and yet they are satisfactory as space-fillers, while realistic blossoms would be totally out of place.

The created background in photography is a civilizing agent.
CHAPTER X

CHARACTER IN PORTRAITURE

ABILITY to read character grows out of our interest in and sympathy for man. It is by no means confined to artists, but their intuition is usually strong and they have the ability to interpret character because of their training in art. The first stroke of an artist's pencil is indicative of a fine observation, and he values not least among his resources his power of right selection from the complex subject-matter offered by his sitter.

In contrast, observe the photographic methods. Lenses producing softness of outline are used by only a few. The large body of photographers still bestow their favor upon the lens that gives "all over" microscopic detail. Are not the methods of the trained artist and those of the photographer seen to be radically different? Yet both aim at the same result. Guide-books in European cities direct us to galleries of paintings replete with masterpieces in portraiture. As yet no nation seems to have been impelled to collect and house photo-likenesses. Is it because the photog-
raper has used the same methods in picturing the
statesman, the business man, the clergy, the farmer, in
fact all types including the rogue? Is it that the same-

ness of result fails to impress? Does not the great

weakness in the photographer's position lie in this, —
that he has placed all reliance upon lighting and the

pose?

Lighting in photography as well as in painting

is important. The pose should be studied in both

branches of art because through it a certain character

is revealed and picturesqueness is attained, but only

manipulation of the photographic plate and possibly

of the printing paper will so eliminate on the one hand

and supplement on the other as to make the picture

an expression of the mental vision of the artist-

photographer. Large possibilities will then open and

the worker will sharply distinguish between the many

kinds of portraits. For instance, some people lend

themselves best to "character-head portraiture"; with

these the face is to be so treated that the inherent

traits of strong character shall be revealed. There are

portraits for the extraordinary beauty of the face or a

part of it;

Portraits to show the eyes especially;

Portraits for fine carriage of a head on a well-shaped

neck and shoulders;

Portraits setting off jewels, fine laces, etc.;
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Portraits expressing the inwardness of the sitter's nature, as Whistler's Mother, or his Carlyle;

Portraits revealing such traits of character as intellectuality (Lenbach); as "soul" (Van Dyck); as aristocratic nature (Van Dyck);

Portraits of types, viz., the musician, the artist, the man of the church, the scholar, the business man, the warrior;

Portraits where the whole figure is to impress us by its fine form and carriage or its elaborate costume;

Portraits where the figure is chiefly an excuse for the beauty an artist can infuse by his handling of light and shade or his decorative treatment;

Portraits for pomp and authority, regal;

Portraits of children with playthings or animal pets;

Portraits in the open air.

It is possible to depict any or all of these when the artist or artist-photographer builds up his picture scheme from the foundation. Facial expression without this basis is without substance or enduring interest.
CHAPTER XI

THE FOIL

WITHOUT suggestion appreciation for the beautiful cannot come. Beauty without emotion is inconceivable. In art emotion expresses itself, as we have found, through the power, force, and movement of lines. Extending line to tone we have the added factors of crescendo and diminuendo of light and shade. The more spontaneous the handling of these elements the higher is the art expression.

There is one other agent that stimulates the imagination. It is present in beauty and is the silence of emotion. It is the foil.

Over-concentration on any object means that all other parts of a picture do not receive their due share of attention. A foil is something introduced to prevent over-accentuation or harmful weakening of the main intent, it is a means of spreading the interest to the other sections of the picture. It is a balancing feature but it is more, it is a life-giving and picture-making force the merits of which have never been sufficiently rated. The absence of the foil in plain
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

photography is largely the reason for its lack of picture quality.

A foil is a difficult thing to describe for it changes its character with every picture in which it is used. When we have a heavily accented face the foil is the presence of something within easy vision of the eye, strong enough to detract attention somewhat from the face and to keep it from being vulgarly near. It gives the reserve quality that we call refinement. But the foil is not visibly present as such in all pictures. In a masterly oval picture, for instance, when the frame closely fits the figure portrayed, the very nearness of that frame creates the "consciousness beside the face" that acts as a foil. Whenever the frame is close to the figure the need for an especial foil is lessened or removed, but the necessity for it is great where the figure is surrounded by much space. We sometimes find that it is a mere form or tint breaking the monotony of a large surface. This in itself shows how carefully weighed must be everything we introduce in a picture, for each part has more than one office to perform.

In Fig. 28 the background forms gradation of tone lightest at the shoulder, where the accent formed by the shoulder lines is the foil to the face. With the introduction of the successful foil, we see the face less, but feel it more. To look directly at the chief interest in a picture, as in Fig. 86, without feeling any gentle alle-
viating factor, is to experience a sense of displeasure at the first glance. If what we are to gaze upon is not thrust at us, but has treatment of refinement all through and about it, comes playfully forward, offers itself with reserve, we are fascinated.

Comparing Figures 116 and 117 these qualities are found to exist in Fig. 116. Each playful line and tone sings away the material rendering of the plain photo-likeness and makes the picture alive with merriment. Nature forms a smile with curves. What artist would not take the hint from this expressive face and bring the other shapes into harmony with it? The hat, for instance, in Fig. 117, is as expressionless as any still life, not a form is lifted out of inertia and yet a touch of the hand will make these lines laugh with the face. The treatment in Fig. 116 shows an enlargement of curve into curve, all so made that their natural centre would be the eyes. In Fig. 117 the face is separated from its background by a density of tone inconsistently serious. It is further made matter-of-fact by the obtrusiveness of its margins. In Fig. 116 both objectionable conditions have been removed; the face holds some of the light of the picture and the background softly supports its forms with tones. All about the head are introduced foils in the shape of curved lines of varying strength. They are measured to fit the expression. Seriousness is manifest in the forms of the body in Fig.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

117. In Fig. 116 the sleeves have been outlined with an emotional stroke, the margins of the dress have impetuous lines, and spirited touches have modified the laces over the bust. In perfect harmony with these has been the life-giving characterization imparted to the background. Notice the effect of a low horizon, what depth it gives the picture, what loftiness and lightness to the figure. Compared with it Fig. 117 feels heavy, without movement. Figure 117 is the subject; in Fig. 116 the subject has been analyzed, the smile was found to be the motive and treatment has made the picture. Its value lies in the quality attained.

In Fig. 30 the lines, lights, and darks introduced behind the head are to the uninitiated merely a window and landscape, while to the art student they form the satisfactory foil.

Sometimes the diversion is an apparently meaningless spot or abstract line or wilful shadow. In Fig. 115 it is the light line on the floor, in Fig. 119 it is the sudden light touching the hat and bringing expression into the eyes. The added charm is felt when we compare the picture with the plain photograph, Fig. 118.

There is a lesson for us in a study of the prints 57, 58, 59, 64. Both Figures 57 and 58 are the photographic facts of nature; Fig. 59 brings the introduction of suggestion. Its vertical line in the background stimulates thought and directs our eye to the face, yet
THE FOIL

it prevents over-concentration upon that face; it is the foil. Very different is the problem in Fig. 64 where lines have lost decision and the illusion sifts through the tone. Here the foil to the face is a shape of white linen speaking through the quality of color. Further decentralization is brought by the delicate accents of light in the background. Nothing in this picture is overcharged and it consequently holds our interest better than its predecessors.

Often the foil is more vigorous, as in Fig. 51, where the upright line of rock makes the face less personal and the attitude more dignified. A foil successfully used causes the workmanship to become less apparent. The tender spiritual quality of the foil cannot exist where there is no picture plan.
CHAPTER XII

TONE, COLOR

NUMEROUS as are the elements at play in a picture, they are brought into "oneness" by tone. Tone may be defined as the running together of well-arranged masses and spots so that their edges are a means of fusion rather than separation. Let us imagine a room dimly lighted by a gas jet covered with a warmly tinted globe. Into this room a number of persons enter. If one is dressed in white and another in black, the white and dark will be influenced by the dim red glow. The white garment will be affected by the light with mellowness; that is, the whiteness will take upon itself the dimness of the faintly issuing light, the black will be far from black for the atmosphere of the room will bathe or tone it, and both white and black will have lost their strength of contrast in the dimness. These figures will be "in tone." Again, if they proceed to an adjoining room lighted by a goodly number of gas jets all incased in creamy globes, the radiance of the room will affect their appearance, their costumes and their "flesh values," so that they are quite other.
TONE, COLOR

than they were in the dim room but they are still "in tone." Again, if there is but a single gas jet lowered to emit only the faintest light and a man steps up to it to read a letter, his head, figure, hand and letter will all be affected by the faint illumination in which he stands. He also will be "in tone."

Tone is the presence of atmosphere affected by some light that, pouring over figure and object, subjects all to its own quality. This is not less true in pictures. There, too, black and white change to meet the quality of the atmosphere introduced, and all intermediate lights and darks are influenced by the same spell. Tone is an enchanter, everything is at the mercy of its mystic charm. When it is present, figures and objects in a picture do not affront us; they play back into the enveloping quality of the prevailing picture-light. This light-affected air in the picture constitutes the motive; the figure and objects are only played upon by it and are the subject. When objects are not submerged in a prevailing tone we speak of them as being "out of tone." This expression applies to the hat and waist of Fig. 120. Considerable tone quality is present in the face and hair, but they are not in the same atmosphere with the laces and linen. The even dark background is the very negation of tone. In Fig. 123 the tone effect is consistent throughout.

In Fig. 28 we have the presence of tone. In it the
flesh, body, and background are suffused, nothing departs from that atmospheric effect. Note by contrast the hard contours everywhere prevalent in Fig. 27, the emptiness of the flesh. Although the forms are more sharply defined, they are less real than in the pictorial rendering, Fig. 28. Tone never permits two whites to jerk our sight over black abysses as in Fig. 118. Tone is gentle, it is the mystic conveyer of the senses, ethereal.

COLOR

We speak of color in photography when we really mean the color sense; it does not imply the presence of actual colors or even the printing of the negative in sepia. Colors do not necessarily make color even in painting. It is a quality of combinations that makes color, either in painting or photography. When it is present the means of expression in black and white art or in painting are so richly combined, so imbued with thought and feeling, so heightened in their juxtaposition and interposition of strength-giving contrasts, that the combinations act upon the senses with a fulness equaled perhaps by no other element in art. It may be said to be an intensification of the quality found in tone. Nothing shows the strong emotional nature of an artist as does the sense of color in his work. His pictures may be graceful, large in effect, decorative, earnest, and still not possess this beautiful element.
TONE, COLOR

In fine reproductions of Rembrandt's portraits there is color. We do not so readily find it in prints from the works by Franz Hals, Rubens, and Van Dyck. Among early English painters Gainsborough is the colorist from the black and white standpoint. Whistler represents that quality strongly among the moderns. Portrait artists of the present Scotch school strive for and admirably express it.

Figure 115 has attained to much color; it is found to some extent in Fig. 113 and is not absent from Fig. 123.
CHAPTER XIII
LIGHT AND SHADE

The minute analysis of what constitutes the difference between "light and dark" and "light and shade" is necessary for two reasons. First, if pictorial art in our country is ever to attain to that development that is the very flower of European civilization the young must be taught to understand it and not judge it from decorative standards only. Second, photography emerging from science into pictorial art should be supplied with principles unmistakable and direct.

A wide-spread re-awakened interest in the Arts and Crafts has resulted in the upbuilding of several systems for teaching composition in which the decorative principle is made to dominate in all representation. Pictorial art thereby suffers misinterpretation. The Arts and Crafts movement was revived by William Morris, who in turn had been stimulated by the writings of John Ruskin. Morris's ideas were mediaeval and Gothic. Followers of this movement abroad and in our own country came later under the spell of Japanese art and were fascinated by the beauty resulting from its pure decorative quality. Its influence soon began
LIGHT AND SHADE

to be felt and attempts were made to harmonize our traditional pictorial art with the principles revealed in the work of the Japanese. While certain qualities of this oriental art can enrich, we go to destructive lengths when we make its foundations a basis for our pictorial art. Not until the Occident is willing to dispense with the tactile quality, to expunge perspective, anatomy, and shadows, to surrender its own idea of a finished work, can it accept that pure abstract beauty composing Japanese and Chinese art, nor will the oriental idea avail us so long as we use oil colors.

A translucent quality is possessed by the oil and when mixed with pigment it has a natural depth which it always maintains. A simple even tone in the background, for instance, will retain a mystery, suggestiveness, receptiveness, and richness in an oil painting not known to any other medium.

The difference between the decorative and pictorial principle is this: In decoration we seek to retain the feeling of the surface, whatever the elaboration may be, while in pictorial work an illusion is created on any surface, that we are looking into a space much as we would gaze through a window. The gulf between the oriental art based on decoration, and the occidental founded upon the pictorial principle, widens in many ways. For instance, in applying colors Japanese art is brought into being by an emotional touch
with the water-color brush characterized by spontaneity. The stroke is at once complete. Oil colors, the medium that to us is most responsive, allow deliberation, correction, growth, and in working with them we acquire a habit of "going into" the material, seeking greater depth through superposition of colors. Not least effective in this technique is the glaze, by means of which the under painting is made richer, more lustrous, and possessed of a mysterious quality resulting from its being revealed beneath the transparent film. With this technique an occidental artist may labor over his work indefinitely. Some famous pictures now in European galleries have required from four to five, others even ten years for completion.

The occidental artist is bound to his model, is unable to paint seriously without nature before him. Occidental art may be said to come nearer to an imitation of nature than oriental art. In producing their pictures the Japanese work from a memory of things observed, from suggestion, and the work is considered worthless when labored. It can be readily seen that our oil pigment is not suited to oriental needs, nor is their method of using water colors serviceable to us in rendering the more compact phenomena of nature.

All our mediums, such as the pen and ink, pencil, etching needle and water colors, are used with a deliberate intention of getting the plastic effects to which
LIGHT AND SHADE

we have become endeared through our exploitation of oil painting. In the use of each we wish to direct the gaze into the picture, whereas in decorative work the effort is more nearly to direct the gaze at the picture.

To prepare oil colors for use in pictorial (mural) decoration the oil is frequently mixed with wax to cause it to lose its depth; it then becomes flat or "dead," attaining surface quality.

These differences in the technique and conception of art are racial. There is no doubt that occidental decoration can be improved by infusion of Japanese principles, but our pictorial art is based upon so different a foundation that it amounts to misleading a nation when the pictorial is spoken of as being cast in the same mould with the decorative principle. For several centuries there prevailed in occidental art a mistaken view as to the relation of the pictorial principle to decoration. That branch known as mural painting, which being based upon architectural conditions is fundamentally decorative, has been overpowered by the pictorial principle. It remained for Puvis de Chavannes in his mural work to re-establish right relations.

A decoration is always identified with the object it embellishes, while a pictorial representation is as mobile as a leaf. Expected to be beautiful in itself, it can be hung wherever the good taste of its owner impels him to place it. Though one branch of art pro-
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

jects itself into another, its fundamental principle is to be kept intact. To take a panel painted by Cha- vannes from its place in the Boston Public Library and, framing it, incorporate it in another building would be to injure the painting, to entirely pervert its meaning and purpose and to weaken its beauty.

An easel picture may and often should possess decorative qualities, thus fusing sobering science with the more emotional pictorial element. Figures 90 and 91 are examples.

The pictorial photograph shares with the easel picture these qualities. Like any well-blanced pictorial composition it may be placed upon the wall and it will "hold" at any distance. The artistic photographic rendering,—Fig. 96, will be pleasingly effective upon the wall, but its plain prototype,—Fig. 93, would be a strain to our vision if seen at a distance. Whatever value it has lies in its detail in the fineness of its texture, inviting close study.

To understand still better the difference between the decorative and the pictorial principles we will examine the elements that compose each.

The panel A represents light and dark; all the tints are flat. Placed in a picture they maintain their flatness and through their agency decoration is brought about.

In panel B a gradation of tone called "light and
shade,” or “shading,” creates a feeling as of penetration into space. When a figure is placed in a picture and enveloped in this grading of tones, the illusion is created that it is surrounded by atmosphere. The effect is pictorial.

When light and shade fall upon an object they model form; when they appear in space they produce depth.

We are indebted to the action of light and shade for the “thickness” of things rendered and for the feeling of substance. To understand the development of light and shade and the place that they hold in our pictorial language, the period of art immediately embracing the activity of the Van Eyck brothers should be studied. They introduced oil colors into European art and caused the wonderful development of painting that resulted in the easel picture.

We are not discussing the question whether Japanese or Chinese art is more desirable than our own, nor are we called upon to decide whether the easel picture is of more or less value than decoration. We have not the power even had we the desire to cast out the effect of traditions inherited from Greek sculpture and Renaissance art, from our literature, philosophy, and religion. The determining factor is always the public need and art must not attempt to overstep our civilization.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

There is a similarity of terms used in teaching decorative and pictorial art that is quite confusing. For instance, in pictorial art we speak of light spots and dark spots, light masses and dark masses, and though the words sound like the decorative terms "light and dark" they are never disassociated from gradation. For example, Fig. 118 is a plain photograph having pictorial possibilities. We find the physical portion modelled by the agency of frontal lighting. All through the flesh there is gradation of tone, but we may speak of it as a "mass of white." Gradation is also present in the hair and in the hat, forming broken masses of dark. The background and the dress are flat and are in a manner possessed of the decorative elements that characterize the Japanese print, yet how is it possible to develop this picture on the decorative principle? Is not satisfaction to be gained rather by increasing the impression of modelling and by producing atmospheric conditions in the background? Light and shade have been employed in Fig. 119 to bring about the beauty that conforms with the occidental ideas of the human figure. We want the evidences of health, of cheerful conditions, we want life in its fulness; life itself is plastic.

The ethereal grace of a Japanese rendering of the same subject, conceived and carried out in lines, light and dark, would be a product unacceptable to our
LIGHT AND SHADE

people. Photography with its imitation of the round forms of nature does not lend itself easily to other than the pictorial treatment.

Notice the pictorial development of Fig. 118. In decorative art the background space above the hat would be made as beautiful as any other part of the picture; its degree of importance would not be secondary to the face or figure. In pictorial art such background portions should be only relatively beautiful because they are supporting elements. In portraiture we seek entrance into the portrayed one's personality through his eyes. Light and shade must animate the light spots or dark spots that will lead our interest to that point of attraction. In Fig. 118 the eyes are less prominent than the lace, and no more animated. Turning to the portrait Fig. 119 we meet at once the woman's gaze and are held by it, though we are conscious of the rich setting of the entire picture. How this is accomplished is explained in Fig. 20 and its principle. In Fig. 118 the flesh is an irregular light mass in which the neck and shoulders outweigh the head. In our effort to draw attention to the eyes we must counteract the large light effect below the head and carry the interest upward by placing a balancing light above. This is done in the hat, Fig. 119. Then we play a delicate light circle-wise from this spot, still making use of the hat, around to the eyes. The result is an expression of composure.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY
desirable in portraiture. This success we will follow
by robbing the lace of its sharp contours, thus taking
from it its obtrusiveness and forcing the interest into
the luminous flesh. In Fig. 119 a half-tone has been
introduced throughout the dress to tie together the
three isolated light spots of flesh, softening and enrich-
ing each. This half-tone is also made to invade the
uniformly dark background, breaking its surface and
creating space around the figure. Thus "light and
shade" permeates all and "light and dark" does not
exist.

Photographically considered, the lighting of Fig. 120
is successful, the face being well modelled, the detail
well defined. From a pictorial standpoint, the material
is in rather a crude state, the face is overpowered by
the white mass of the hat, by the larger white mass of
the waist, as well as by the protruding dark of the back-
ground. In each of the light masses there is a mul-
tiplicity of margins refusing to subordinate themselves
to the main interest. We improve conditions by giving
our first attention to the arrangement for beauty.
We feel that the line structure is not a happy one. The
sketch 121 shows the general plan to be too symmetrical.
The shoulder line C is half-way between A and B, and
the hat line D is midway between C and B; the width
of the body is approximately the same as that of the
hat. We must do something to make this regularity
FIG. 120
LIGHT AND SHADE

Fig. 121

Fig. 122

201
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

less apparent. In Fig. 123 a great variety in the shapes has resulted from the introduction of a series of lines. Thus in Fig. 122 space 11 is different from space 13. This again varies from 14, from 12, from 8, etc. Questioning the line formations of Fig. 120 with reference to stability, we find the sections of this picture disjointed. Line A, Fig. 122, has been introduced to tie together the shoulder, the hat, and the upper frame; line B, on the other side, starts lower, beginning at the scarf, slightly touches the hat, and ends in the upper frame. Line C invades the empty field to the right, connecting the arm with the right vertical frame-line, and D, which in Fig. 120 is too obscure, is in Fig. 123 made firm and touches the frame. Their united action establishes the figure's firmness.

Considering the velocity of the lines, the hat-rim (E, Fig. 122) shows a sameness of speed in Fig. 120. By changing its accents from hard to soft, varying the degrees of intensity, we attain pleasing, sympathetic results. The upper frame is checked by lines A and B, the right frame by C and D, and the left is modified in velocity by the nearness of B. Thus the tempo of the frame has been brought into harmony with the mood of the picture. Similar modifications have occurred in the body, where the minute definitions of form in Fig. 120 have given way to playful tones in Fig. 123.

It is of interest to notice the difference in the charac-
LIGHT AND SHADE

ter of lines A and B. Their lengths have been unequally broken. B has been over-cut by leaf forms to modify its strength. These lines, A and B, the leaves, the dark spaces on either side, all act as a foil to the face, giving Fig. 123 the self-contained look so absent in Fig. 120, where the expression is self-conscious. The factors enumerated also direct our gaze to the eyes in the picture and it rests there, the expression gaining in soulfulness.

205
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

Although there are other principles important in picture construction, these are indispensable in the practice of this new art. Their application is varied in each problem. For instance, in Fig. 117, where the background is light and the figure offers the dark note, we find an uncomfortable state of affairs in that the black of the hair despotically claims our attention, the arm visible on the right is almost equally obtrusive, and the bow at the belt is impertinent. Composition does not condemn these factors excepting when they are left unharmonized. It is our duty to learn to make use of them. The drawing 124 shows how the points 1, 2, 3, that in Fig. 117 are unsatisfactory, are linked in Fig. 116 as by an invisible chain to 5, 6, 7, 8, 4, encircling the figure, touching the frame line, breaking meaningless empty spaces, throwing depth into the background, and withal centring our attention upon the face.

Where masses and vigorous spots of light interlace with similar masses and spots of dark against a common half-tone ground the problem becomes truly complex, and requires the deeper knowledge of composition that comes only with long study. A master handling these factors is Carolus Duran. A study of his pictures would help to solve the problem, and will be of special interest to those whose nature demands an expression of the color sense embodied with the portrait.
CHAPTER XIV

LIGHTING

IT has been the aim of all photographers to bring about pictorial quality in their work through the agency of lighting.

We have learned in our analysis of the pictures in this book that the true sphere of lighting is the modelling of form, that, however effective lighting may be made, it alone does not bring the representation beyond the imitation of nature. Considering lighting as understood by the profession, we find that many systems have been invented, advertised, and practised without bringing a clarified view of the subject to the worker or satisfying him as to the results of his efforts.

Some of these systems have rested upon minute directions as to studio fixtures, the angle of sky-light, the exact placing of the sitter, and the relative position of the camera.

It may be seen that such systems would tend to make all photographs alike, — an end which if attained must bring portrait-photography into disfavor because of the weariness of repetition. Individuality in man
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

has been too great a force to be submerged by any prescribed rules, and each photographer has found a way of lighting that fits his conception of a portrait. This he should continue to use undisturbed, while pursuing the art now opened to him.

It may be said that lighting must yield the third dimension.

The human figure gives the same impression of roundness out of doors as in doors, in a room with many windows as in the atelier of but one light.

Modern schools of painting are experimenting in all kinds of light, and photographers will invigorate their art by doing the same, but there is a practical side to photographic portraiture that limits our analysis to what the north light single window will give.

We may investigate frontal, side, and marginal lighting as being of special service. (See Figures 126, 127, 128.) In Fig. 126 the light strikes the object in front from above; in 127 it is on the side, and in 128 the margin is illuminated. All three drawings have the gradation explained in the previous chapter and they seem round. Fig. 125 is a white geometric oblong that presents no "body." If we were to introduce tint repetition, as in Fig. 129, the result would be not plastic, but flat; nor does the use of a more vigorous tint help us to obtain the round. (See Fig. 130.)

Frontal lighting is obtained by throwing the light
centrally on an object and grading the tones from the highest light softly to the edges.

Side lighting gives us the highest light on one side, a soft graded tone extending to the near frame edge, and an ever increasing depth of tone toward the other border, modified on the contour by a reflex light.

Marginal lighting throws its high light on the edge, and next to this is the strongest dark, from which a diminuendo of tone reaches to the other side.

When a plaster cast is placed under the light corresponding to the foregoing examples, we have the effective modelling shown in Figs. 131, 132, 133.

The frontal lighting of Fig. 131 is always a temptation to great portrait painters, inviting a subtle technique in the rendering of the hardly seen yet thoroughly felt gradations that it presents.

Photographers, in essaying the same problem, usually tend to flatness or thinness of effect. When well done, every part of the head will have gradation of tone; the highest light will be where the light strikes the nearest plane.

This high light is most effective on the breadth of the forehead with its slowly curving surface. It will differ from the light on the nose, where the bone and cartilage reflect it sharp and keen.

In Fig. 132 the lighting principle is the same as in Fig. 127. Photographers will profit by repeatedly
examining these drawings, as the eye will read and the memory retain many laws clearly shown in them. We discover that nearest the highest lights in abrupt forms we usually have the deepest darks; the shadow thrown by the nose is deeper than the one on the side of the cheek.

The crescendo of shading in Fig. 133 is an interesting study, as is also the great contrast of tones on the edge.

Comparing it with Fig. 134, we find the former pictorially sound, and the latter decorative. Several factors enter to make Fig. 134 representative of photographers' failures in lighting.

In the diagram of flat tones, page 193, in the chapter on Light and Shade, the spaces marked 1 and 2 have the same degree of dark, a condition found in Fig. 134, the shadow on the nose being the same in degree as a section of the background. Again, in the diagram the spaces 3–4 have the same degree of white, and in the drawing of the plaster cast the forehead and a section of the background have equal whiteness.

These tones fall into one another and cause the planes to be on a level. The black on the nose is as far back as the black in the background; or reversed, the black background comes forward to a level with the shadow of the nose. The same can be said of the whites just examined.
LIGHTING

Photographers are given to these errors, especially in their half-tones where repetition is frequent.

One other consideration is of importance in modelling. The outline of the head in Fig. 134 has the marginal sharpness so destructive to pictorial effect in photography. The mechanical sameness of its strength weakens the shading and destroys the sense of "body."

A wholesome lesson is learned by the analysis of the outline in Fig. 133. We find it continuously changing from the soft to the firm, from the sharp back to the soft, the delicate, the interrupted. This kind of a line models form quite as much as does gradation in tone.

It can be said of the outline in Fig. 134 that the sensitive forms of the head are bounded by it but not described.

Applying the lesson to an example, we discover that the flat background in Fig. 50 flattens the lighting in the face and lessens the "body" sense of all the forms, while the background in Fig. 51, having depth, adds to the lighting obtained on the figure.

The same is true of the photo-prints, when we set side by side the plain and the pictorially developed pictures. Photographers often obtain effects in lighting that are not acceptable to their patrons, as for instance Fig. 135. Here the flesh tones have lost their luminous quality and seem spotty. The problem pre-
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

presented is not a discouraging one to art. Composition will rectify the faults. Notice how in Fig. 136 the balance of darks, half-tones and lights effect a pleasing portrait, full of life and interest and without objectionable overshading of the flesh forms.

The trimming of print 137 was the outcome of the photographer’s decision that the lighting was not strong enough for the background and the draperies. Yet this same lighting can be made to hold against a large area. The real trouble seems to lie in the circumstance that the picture, attempting an action, is without movement; further, that the arm and hand have become too obtrusive for the good effect of the face. By throwing the emphasis where it belongs we have produced action, and the proper tempo. In Fig. 138 an unusual and satisfactory pictorial rendering is the outcome.

The lighting need not give anxiety to the experienced photographer, but composition should be the object of his earnest search.
Fig. 137
CHAPTER XV

PROCESSES

THE great portrait painter of Germany, Franz von Lenbach, made it a practise to have his subjects photographed. He considered these photographs a convenience, as they gave him a record of the exact form upon which he could build his wonderful treatment.

The true value of the plain negative should be to the photographer what it was to this artist. That is, it should procure for him a likeness. Having secured this in his usual way, he may raise it to portraiture by the chemical treatment of the plate.

Our object is to get a negative in which the lighting and detail give a satisfactory rendering of the person, but the negative's background is to be empty of form.

We therefore relinquish screens having pattern or scenic painting. These are to be replaced by the artist's inventions worked on the plate.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

The most easily worked background is the one having a tone half-way between the extremes of black and white. There is an advantage in having it flat, but soft gradations of tone are no great obstacle.

The Half-Tone Background.

A useful screen is one painted a modified white, and flat. It is effective with flesh tones, is sympathetic and tenderly supports white or light-colored gowns.

White Background Screen.

The sombre black screen is well placed behind men and it helps the portraits of women wearing black or dark gowns.

Black Background Screen.

It is not necessary to confine ourselves to the use of painted backgrounds, as any even-toned texture such as raw linen, silk, velure, or burlap will yield rich results. Burlaps may be recommended when one has in mind landscape characteristics as a support to the figure.

This texture yields a quality of depth and atmosphere that is very pleasing.

An excellent screen may be made in the following way: After linen has been placed on a stretcher, it is gone over with one coat of glue, applied very thin. When this has dried, it is painted over with lampblack, a little burnt sienna and as much flake white as is wanted, and these are mixed with caseine, a sort of glue.

230
This medium is better than distemper painting, as it easily produces evenness of tint. The tone of this caseine painting may be altered at any time by spraying the surface with water and painting into it the tone desired. The common window shade having an oil ground is well adapted to the medium.

When placing the model before the background, we should not be hampered by the feeling that there is not sufficient material behind him to allow for the accidents that come during these operations. It would be well, therefore, to have the background of large dimensions, giving much space above the head of the sitter, and ample room on the sides. It should also be brought forward on the floor quite far to the foreground. The usual floor line is eliminated by shaping the material curvewise forward from the wall to the floor.

PROCESS NO. 1

It is the varying densities of the film that cause the image to appear to us, when we hold the negative to the light. Our art begins with the alterations we produce in these densities to harmonize the parts. We should be able to produce at will, dark or light lines, sharp or soft lines, also tones of any degree of light or dark. Medium A will produce the dark.
Dissolve one part Red Prussiate of Potash in fifteen parts of water. Wrap the bottle in yellow paper to protect the solution from decomposition by light. Prepare a solution of one ounce of Hyposulphite of Soda in fifteen ounces of water. These two items are from the Cramer Reducing Formula. It is not our object in artistic photography to subject the whole negative to a bath of a combination of the prussiate and the soda, for that would reduce the plate evenly, producing no change in the artistic arrangement. Our principle is based on local reduction, and it is important that the reducer be so mixed as to attain its greatest strength. By taking six parts of the dissolved Red Prussiate of Potash to eight parts of the solution of Hyposulphite of Soda the limit of strength is attained. If more prussiate is used the soda will not have the power to remove it, and the etching ceases. The negative when fixed and thoroughly cleansed may be worked upon with this mixture.

Washing the negative with the hand will not clean it. Pour some of the solution of hyposulphite upon the film of the negative, and with the aid of cotton rub it gently, then subject the plate to running water. The plate is clean if the water remains evenly upon the surface when it is held horizontally.

In illustration 59 there is an architectural line extending from the shoulder to the upper frame. It is
sharp and straight. The hand cannot easily attain to this precision and accuracy, therefore, taking a broad rubber band, we will stretch it over the negative at the place desired. It will adhere firmly to the film. A large camel's-hair brush is dipped in the reducing solution and passed over the plate along the edge of the rubber band. The solution gathers along the line of the rubber and at its edge acts most vigorously, making a sharp line, not unlike that produced by a pen. By the use of rubber bands varying in size, architectural lines of any width may be made.

Procure a sable brush having a fine point. It should be large enough to make a line of any breadth. Charge this brush well with the reducer and pass it lightly over the film in any direction. By holding the plate to the light we can guide the brush perfectly, making a freehand stroke. Care should be taken to apply the royal blotter quickly, to prevent excessive biting. The blotter is an improvement over the use of water in checking the activity of the reducer, as it absorbs the liquid, and the film area remains in condition for protracted work.

A number of sable and camel’s-hair brushes should be kept in vessels of clear water. Taking one of these brushes, play the water over the surface of the film near the intended line. Remove the excessive moisture with the blotter. Now make the

Artistic Lines with one sharp and one soft Edge.
line with the reducer and immediately tap the one side of it with a brush holding water. This connects it with the moist area, blending it. A great variety of lines can be made in this way.

With a brush rather long and thin, such as the Impulsive Japanese use, the most graceful lines can be etched over a medium dark ground or over a film of considerable density. Such lines can be made to represent grasses, foliage, tree trunks, in fact any form, if the hand is skilful.

In light backgrounds small spots of dark are often advantageously placed as a foundation to the light flowers to be painted over them with Medium B. We can make these dark shapes by using the brush strongly charged, then quickly applying the royal blotter.

A certain Rembrandtesque depth results from the following treatment: Take a plate having a well-lighted head, reduce all of the picture with the exception of the forehead, mouth, and chin. The royal blotter and the pure water brush must be skilfully used with the full strength reducer to get rich results. This yields an effect not unlike that of a painting in which the lights are put on thickly to produce the appearance of substance and plasticity in the flesh.

Procure finely ground oil colors in tubes. Mix with
flake white enough ivory black to make a light gray, add to this a little yellow ochre. A piece of Medium B, glass will serve as a palette, and a palette knife is required for the mixing of the colors. Short, flat, wide camel’s-hair brushes, some pieces of linen, and a silk pad stuffed with cotton are necessary for the work.

This medium is applied upon the glass side of the negative. It makes “light.” Considerable experience is necessary to read the densities correctly, when the medium is painted upon the negative. Applied over portions of the negative that are already dense or “light,” as we say, it will act more forcefully than where the film is thin. Therefore, in dark places, Medium B can be painted with considerable body. It is most effective for bringing life and movement into bust portraits. For instance, the original plain dark background of Fig. 64 has been changed from the inert to a series of delicate movements, sympathetically supporting the head. By painting over the area of the coat, its objectionable rigidity gives place to a more subtle quality. Medium B has also helped to model the face, — give it force and character — while to the hair it has added lustre.

In painting over the flesh portions of the head, neck, and bust, the medium is spread with our finger tips. Over forms of body and accessory draperies, it is spread with the palm of the hand by gentle pattings. Fre-
quently a soft bristle brush will help to play out the gradations satisfactorily.

If strong blacks are desired in such passages, a cloth dipped in alcohol may be passed over the spot, removing the medium entirely. The same method will increase the depth of the eyes. For instance, if over the face, hair, and other parts of the picture Medium B is applied, causing a greater general density, and if the eyes are touched by a brush dipped in alcohol to clear away the pigment, the print will show eyes possessed of greater depth, but not in the least changed in the drawing.

In applying Medium B the brush stroke should have decision. If perchance too much medium has been used, we do not alter the shape of the stroke, but remove the surplus by pressing on it the royal blotter; when this is lifted it carries with it the excess of paint. We can add to the delicacy of stroke by patting it with the palm of our hands, as already described. In that way its margins keep their character and the intention is preserved.

When it is desired to have the whole area lighter, we paint with the brush such gradations as are wanted, then we arrive at the right densities by using a silk pad and patting the surface. Velvet is preferable at times.

A clean flat camel's-hair brush will soften the edges of the stroke, and a clean flat bristle brush can be used
to drag over thin passages to add character to it. When thinness and delicacy of tracery in one's design is the aim, Medium B can be thinned with linseed oil or turpentine. Practice along the line of these suggestions will reveal a rich field of possibilities.

In a Portrait of an Old Man, Fig. 28, Medium A was used to reduce almost to clear glass the background and the forms of the body, and the treatment was extended, though less violently, over the hands and most of the head. The photographic image is not lost in this extreme reduction, indeed it persistently holds and may be brought back to whatever degree of accent we desire, by the use of Medium B. Sometimes we may wish certain definitions of form to remain practically obliterated, and then to invent by means of the brush-stroke new forms of more pictorial value. As an instance, we notice that the complicated lines in the coat of Fig. 27 have not been considered essential to the picture expression. They have been replaced by lines and tones representing very possible drapery and creating movement from the lower interests of the picture indirectly toward the head. The emotional quality possessed by these lines greatly affects the facial expression. As balancing features, vigorous brush thrusts have penetrated the background, and sections of it have received a tender tone made with elaborate care.
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

The flesh quality and picture value of the hands have been brought back by the skilful use of Medium B, and the life-giving accents appear in the face. Medium B has also created the white touch representing the linen.

By reducing to blackness the full area of the shapes of the flowers in Fig. 66, a condition was prepared for the application of Medium B, by which means the creating of the light and shade of the complicated flower forms was fully in our power. We may facilitate our painting of flowers by adding pure linseed oil or turpentine, and we may obtain crispness in the petals by touching the Medium B in thin solution on the film side. The combined use of these mediums will soon show that while Medium A is fine in gradations, it also brings a certain dead quality into the print, which is counteracted by the life introduced by Medium B.

A still greater refinement of the technique is possible when we use Medium B on the film side wholly. It is applied thinly, having been rendered rather liquid by the admixture of turpentine. After the proper effect has been attained, the medium is allowed to dry; a quick-drying varnish is then poured over the film side of the plate. The varnish prevents the oil from adhering to the printing paper.

238
It is necessary in illustration 29 to produce lights above and around the head and to re-enforce the lighting of the face. The shape of a window with landscape effect offers an excuse for these lights,—Fig. 30. Delicate toned gradations are needed to render them. The process by which this is accomplished is as follows:

Upon the glass side of the negative a very delicate tone is laid with Medium B, extending over the face and all the section to be occupied by the window. The thickness of the application is varied in the face and the hair, in the woodwork of the sill, in the sky and wherever there is light. Using a piece of soft wood, dark lines were made by scraping away the medium, and the eyes were treated in a similar manner.

From this negative a positive was made, and the outcome of our manipulations showed a beautifully engraved plate, that was photographic yet delightfully alive, combining the accuracy of a negative with the artistic work by the trained hand. Who would venture to place a limit to the pictorial inventions made practicable by this method? For instance, the positive is as well adapted to modifications as is the negative. The positive, therefore, must be carefully studied, that we may read the densities correctly. Referring back to photograph 29, with the intention of
working out the pictorial problem, we find by the densities in the positive that the ear, collar, certain portions of the background, and some parts of the figure would print too light. We thereupon apply thinly Medium B. The pictorial effect now being satisfactory, a final negative is made from our positive. It will be noticed that the use of Medium B on the positive produced darks in the second negative,—a result to be gained on the original negative only by the use of Medium A. Indeed there is a characteristic in the darks produced by Medium B on the positive that makes it a peculiarly facile method for artistic expression. By its use, form-rich background delineations easily flow from our brush points. How great a range for control of the artistic effects is offered in this second method becomes evident when we find that on a second negative we are still empowered to change the light and dark, if we find alterations advisable, simply by again using Process No. I. In the hands of a trained artist, Process No. II should be productive of fine results.

Photograph 118 was developed into the portrait 119 by manipulation as follows: The starved conditions in the plain negative were overcome by playing a very thin oily touch in a somewhat circular movement over the background. This destroyed the metallic quality of the photograph, giving it some effect of color. Medium B was then applied more thickly...
near the flesh and worked over into the face and bust. The stroke faithfully followed the modelling of these forms and was thoroughly studied for its densities. The hair was re-enforced in movements in harmony with the fine flow of its forms, and the hat received elaborate brush work. In the draperies, the effect of ermine grew out of the brush stroke, thus; after the section had been covered with Medium B, a small brush was cleaned and applied dry, thereby removing enough of the medium to produce the spots of black. With another brush high lights were added by using more of the paint. The positive made from this negative is very complete; however, a little roundness was given to the shoulders, neck, and face by painting lightly on the glass side of the positive, then, turning to the film side, a very fine-pointed brush was charged with Medium B and accents were given to the lines of the mouth, nose, the pupil of the eye, its lashes and eye-brows, in the hair and about the hat. The negative made from this positive is very vigorous.

Transformation of Fig. 112 into an artistic work requires the elimination of the floor line. The retention of this line resulted from a desire to help the photographer in overcoming frequent annoying problems common to the operating room. The energetic application of Medium A on the negative obliterated the line. The obstruction being removed, the
ART PRINCIPLES IN PORTRAIT PHOTOGRAPHY

foreground was made light by Medium B, and the medium was applied in the area from the shoulder upward to the right, producing the effect of a curtain hung immediately behind the figure. The positive from this negative foretold that the final result would be too gray. It was thought desirable to repress all light except in the face and neck. The method pursued on the positive was to cover the whole glass side rather thickly with Medium B, leaving clear glass in the face only. The final negative showed the effects of this reduction admirably. To soften the extreme blacks, we resorted to Medium B on the second negative.

The pictorial quality of Fig. 115 has been attained through the use of Medium B. Applied thickly on the first negative it formed the sash. On the positive made from this negative, the sash appeared as a blank irregular mass into which delicate painting brought definition. By applying Medium B upon this positive, the dress was toned, the edges softened, and folds were created in sympathy with the general effect. A very complete ensemble resulted, leaving no balancing to be done on the second negative.

The negative, positive, and second negative used to make Fig. 123 contained brush work of considerable skill. The monotony of the dark in the first negative's background was lifted by a generous use of Medium B. Some oil mixed with the pigment
added delicacy and flow in the darks, while in the light parts the medium was used rather dry. It will be observed that every stroke was made to convey its full quota of meaning, and care was taken to maintain the character of each, although modifications were admitted. The leaf forms at the right of the sitter's shoulder were created by wiping out the Medium B. The positive made from this negative is a beautiful and exceedingly emotional engraving. The plate is noteworthy for the quality of the lines, their accenting and their breaking. Notice how these affect the expression of the face. Medium B, worked upon the positive, is especially adapted for reducing such glaring whites as those of the dress and hat. The crisp touches of light and the modelling of the face were brought about by treatment with Medium B on the second negative.

The results reached in Fig. 123 show that photography has resources for expression rivalling those of the graphic arts. Practice will soon point to the desirability of keeping much space about the figure, thus offering an opportunity for rich background inventions. These balancing features will add dignity and importance to the figure and will make an impressive whole composition.

The first impulse of the conservative photographer, whether professional or amateur, may be to reject the processes set forth in this treatise, putting them under
the ban of "illegitimate." If we examine into these very possible and even probable doubts, naturally entertained by men unaccustomed to invention, we can allay the distrust awakened by the facts that the formula for reducing has been a favorite one, and the pigment for making "light" has been employed in one form or another for a considerable time. That a new use of either of these customary helps has been found effective in carrying photography over the line of the purely mechanical into the domain of reason, harmony, beauty,—in short, into the creative field, is certainly no cause for alarm. The mediums by animating the whole picture surface intensify the effect from likeness to life-likeness.

The processes as here given cover the problems contained in the book, but it can easily be perceived that they may be extended, and that their most effective field is to be disclosed when more subtle problems shall be demanded by the profession and the public.
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