OUTDOOR PORTRAITURE

by WILLIAM MORTENSEN


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William Mortensen

OUTDOOR PORTRAITURE

Problems of Face and Figure

In Natural Environment

by

WILLIAM MORTENSEN

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Introduction

Outdoor portraiture is in most cases the first problem that the average amateur tackles. It seems like a simple matter. He has his camera, and has learned how to load it and what buttons to push. The sun provides large amounts of inexpensive illumination. For subjects, friends and family are readily available. For setting, there is the garden or the front steps. Very simple: just get all these items together—and there you are. So our amateur leads his wife, little sister or grandmother out into the sunlight and pots away.

What does he get? Probably something very much like Figure 1. He is vaguely disappointed because he rather fancied a result more along the lines of Figure 2 or something he had seen in last week's *Life*. But, as it bears a sufficiently close resemblance to the wife (or little sister or grandmother) to satisfy him, he goes on making variants of Figure 1. However, there eventually comes a time when he sees the shortcomings of his work and desires to make a really pleasing and effective presentation of his material. This book endeavors to help him to do that thing.

And he really needs the help. For outdoor portraiture, although it is usually one of the first projects undertaken by the hopeful amateur, is really one of the most difficult of pictorial problems. But it is a problem worth the trouble: a good outdoor portrait has a directness and sincerity that is rarely achieved in the studio product. It is an excellent field for photographic training for the

amateur who goes about it correctly. To one who has really mastered the technical difficulties involved in outdoor portraiture, the controlled conditions in the studio will seem like child's play.

Definition

Let us take note beforehand as to what we mean by our title, "Outdoor Portraiture." The word "portraiture" shows that we are principally concerned with the presentation of *personality*. Personality, of course, is most conventionally revealed in terms of facial lineaments. So, in this book, we will give most of our time to consideration of the problems of representing the human face in an outdoor setting.

However, the outdoor setting offers many opportunities for the pictorial rather than psychological use of the human element. There are many who are more interested in pictures than in mere personality. For these, the use of the human element—as indicated in our sub-title—involves the presentation of the figure, clothed or nude, in an outdoor setting. Special problems concerning the full figure, therefore, are included.

Finally, there are some to whom the human figure is most interesting pictorially when used merely as a decorative factor in a landscape. Properly speaking, this treatment of the human element entirely removes it from the field of portraiture. But, since it is still concerned with the human element in a natural setting, this problem is also given brief consideration.*

The Negative Approach

In approaching the problems of outdoor portraiture, we will find that the best and most useful advice stresses the "do nots" rather than the "dos." Therefore, in this book I will follow the general scheme adopted in my earlier work, The Model,** and will devote considerable space to identifying and analyzing the various errors that we fall into and the mistakes that trip us up when we first try to make portraits out of doors.

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* Chapter Six.

** Camera Craft Pub. Co., $3.00.

Figure 1.

The beginner gets this . . .

Until these errors are understood and cleared up, little useful advice or instruction of a positive kind can be offered. Indeed, in the arts, most instruction is necessarily negative. The pupil must find his own individual way: the teacher can only warn him what not to do. In the pictorial arts, in particular, the way to salvation is through elimination. The trouble with many an amateur's pictures is not so much with the things that he has put into them as the things that he has failed to leave out. This is the particular curse of the photographer, of course. The poet has mentioned that "the world is full of a number of things," and has cited this fact as a particular reason for rejoicing. But the photographer frequently has cause to deprecate the excessive numerousness of things in the world. Pictorially speaking, the world is full of unnecessary excrescences. We can see in a single casual glance a number of things

Figure 2.

. . . when he hoped for this.

that it would take us half an hour to enumerate. Lift your eyes from this page and note the huge number of separate items that you see. There is quite probably a picture (or even several pictures) in what you see, but hopelessly cluttered by unorganized numerousness. Only by intelligent elimination can we get down to the basic picture material.

Note that I say "*intelligent elimination.*" Obviously, it is possible to carry elimination to a point where it begins to encroach on your picture. The average amateur shot may be likened (let us say) to a recipe for a perfect apple pie, to which there has been added, casually and accidentally, a handful of carpet tacks, a pound of hamburger and a dash of hydroquinone. Now, carpet tacks, hamburger and hydroquinone are all very admirable and useful in their respective fields; but they are quite incongruous and extraneous to apple pie. Only by elimination of these foreign ingredients can we

produce the perfect pie. But, in our passion for elimination it is conceivable that we might be led into recklessly doing away with the shortening and nutmeg, which are essential elements in the original recipe. And, from that point, we might even try eliminating the apples as well. So, we must not only eliminate, but must know *what* to eliminate and *how far* to proceed with the elimination.

Two Methods

When, in the set-up for a picture, we are confronted with items that are foreign to the picture, there are two possible ways of dealing with them. We can either:

(1) Eliminate them, or

(2) Use them (by fitting them into the picture).

Under no condition should we merely *tolerate* them. This lazy toleration of things that we (in our honest moments) realize should not be in the picture, is a very prevalent photographic philosophy, and is the principal reason that there are so many bad pictures in the world.

The second method mentioned above, that of coping with items foreign to the picture by adapting them to the pictorial scheme, has very frequent application in outdoor portraiture. Out of doors, the various pictorial factors are, of course, not subject to such immediate physical control as they are in the studio. Consequently, numerous compromises must be resorted to. It should be noted that adapting a recalcitrant item to pictorial use is logically equivalent to eliminating it, for when it is fitted into the pictorial scheme it forthwith ceases to be foreign and extraneous.

Possibly, lest there be any misunderstanding, it is well to mention that no direct or drastic physical action is necessarily implied by the word "eliminate." A telephone pole, for example, may be a very disturbing element in the set-up for an outdoor portrait. But we do not take an axe to the pole. Instead, we take a step to the right or left—and thereby eliminate the pole as far as the picture is concerned. Note how the desert, and the whole town of Palm Springs, are "eliminated" in Figures 3 and 4.

Figure 3.
Excessive numerousness of excrescences . . .

Figure 4.
. . . "eliminated" by shift in angle.

Sentiment and Criticism

Outdoor portraiture, we have seen, is in many cases the first pictorial problem that the amateur attempts. And, in most of these cases, it turns out badly. This is not due, as a rule, to any lack of honest effort on the amateur's part. Usually the subject of these abhortive efforts at portraiture is someone of personal sentimental concern to the would-be pictorialist—a child, a mother or girl friend. So he puts forth his best efforts, but he doesn't know enough to do his subject justice.

Unfortunately, this very sentimental interest in the subject is apt to keep him from appreciating how bad his results really are. Tillie is a wonderful girl, and anything that reminds him of her, even remotely, is wonderful also.

Eventually the time comes, however, when he tumbles to the fact that he has not been doing right by Tillie. And *when* that hor-

rifying moment of self-appraisal comes, he stands in great need of some systematic basis of self-criticism to straighten him out. And that basis of self-criticism is precisely what this book endeavors to supply, in order that the amateur may be enabled to give a worthy pictorial rendering of the persons and things that he cares most about.

So long as there are cameras and people to use them on, we shall undoubtedly have records of Sister (age three months) in her bath, Junior on his first bicycle, Father and Mother and Towser on the front steps, Grandma on her eightieth birthday, the backyard of the old house and the front yard of the new one, the family in the mountains, the family at the beach, and so on and so on—each one a tiny morsel snatched from the jaws of devouring timé.

Accidental in their conception and casual in their arrangement though they are, there is no reason why such records should not be given more effective pictorial presentation. Those precious moments that we clutch at while existence races past us are certainly deserving of the best possible setting that we can give them. This in no wise detracts from their value as records, but definitely enhances it. A photograph to which some care has been given to make it a good picture as well as a record preserves, much more truly than the casual snapshot, the vital essence of that moment or event which made it worth saving. All too often the snapshot conceals or distorts the real meaning of the moment that it preserves from oblivion. The snapshots of Sister (age three months) in her bath may be amusing, but they have been known to become tragically embarrassing to Sister when, seventeen years later, they fell into the hands of her boy friend. Telephone poles encroach on the beautiful prospect: it was not the telephone poles that endeared the view to us, but there they are, as large as life and a great deal more conspicuous. Nor did this young lady once fill us with ineffable thrills and strange longings because she squinted when she looked at the sun and was apparently dislocated at one hip; yet these are the facts that the snapshot seems to have recorded.

Fundamental is the human longing to perpetuate moments that

have pleased us. All things are fleeting in this world: existence slips from under our feet, day by day the face of the world alters, and yesterday's infant is today graduating from college. No wonder we are all possessed with this insatiable desire to grasp a few grains of solid reality amid this elusive flow. It is a pathetic but definite protest against the immutable law of change.

More clearly than anything else, pictorial records of events and persons seem to halt for a moment the relentless ravages of time. Just for an instant, as we look at an old picture, the irrevocable years exist again, and today and that day are one.

Chapter One

Equipment for Outdoor Portraiture

For just any sort of result in outdoor portraiture, of course any sort of equipment will do. But, if one wishes to do really good work, certain standards in equipment must be complied with. The required equipment is not necessarily expensive, but it must be wisely selected and adapted to its job.

Camera

One should not undertake serious work in outdoor portraiture with a box-type or rigid, fixed-focus camera. This type does not provide for sufficient variation in shutter speed or diaphragm setting. Nor is it possible, with this sort of camera, to come sufficiently close to the subject to secure a dominating portrait head.

It is true that there are available, for cameras of this type, portrait attachments that make it possible to work closer to the model. But these attachments are open to serious objections. In the first place, focus is very critical, making it impossible to secure the depth of field demanded of good outdoor portraits. Secondly, even within the shallow plane of focus, the definition is not of the best. The direct, sincere quality of sunlight and the out-of-doors demands sharp focus and clean definition.

The essential attributes of a good camera for this purpose may be briefly summed up:

1. The lens should be of reasonably short focal length. This means about a fifty millimeter lens for 35 mm. cameras, a five inch lens for 2¼x3¼ and a six or seven inch lens for 3¼x4¼.
2. The focusing adjustment must be such that it will permit the camera being brought in so close to the subject that a head will fill the picture space.
3. The shutter speeds must range at least from a twenty-fifth of a second to a hundredth. There also should be a setting for "bulb" exposures.
4. There must be an iris type diaphragm with a range of apertures at least as wide as f:4.5 to f:11 or f:16.
5. The camera must be equipped with a screw plate for attaching to a tripod.

The Matter of Focal Length

From the very early days of photography the superstition has prevailed that the only proper lens for portraiture was one of long focal length. Those readers who are past a certain age will no doubt remember, among the more vivid episodes of their childhood, their experience in a portrait studio—the photographer hiding his head ostrich-like, the camera huge and hulking as a beer truck, and the lens on front of it that transfixed them with its unwinking malific glare. Very probably this lens was a Verito of at least fourteen inches focal length. For in those days a portrait photographer without a long focal length lens was unthinkable. To take a portrait with a short focal length lens—well, it simply wasn't done. For a portraitist to function without a lens of fourteen inch, sixteen inch, or twenty inch focal length (if he wanted to do the thing up properly) would not merely have been unprecedented—it would have been a grave social error.

Nowadays, although photographers are gradually adopting equipment of less heroic dimensions, the impression still persists that a

Figure 5.

Bad effect of lens of short focal length due to bad arrangement of material.

portrait (even an outdoor portrait) demands the use of long focal length. Many amateurs earnestly believe that a long focal length lens produces truer drawing and truer perspective than one of short focal length. This is, of course, entirely false. A lens can no more change perspective than it can see around a corner. Set up a tripod in front of the facade of a building or of a human countenance, and attach to the tripod in succession a camera with a pinhole, a short focal length lens, and a long focal length lens, and finally look at the object from the same viewpoint, and all three cameras will record the object in exactly the same drawing and perspective as your eye sees it. The only difference will be in the size of the image. The lens of long focal length, in opera-glass fashion, moves a distant object into a nearer plane of vision. This operation of bringing an object seen twenty feet away up into the very front plane of vision is what the advocates of long focal length humorously call "correcting the perspective."

Figure 6.

Correction achieved by slight readjustment of material. Same lens as Figure 5.

It is when an amateur, seeking to get a larger image, recklessly and inexpertly moves up on his subject that unpleasant perspectives are obtained with short focal lengths. Only by unexpert handling, or by malice aforethought, is it possible to obtain such monstrosities as we have all seen exhibited as though they were typical products of this sort of lens. Feet projected toward the camera so that the rest of the body is barely visible, an automobile photographed head-on so that it is Cadillac in front and Austin behind, a schnozzle that looms from the face like the Matterhorn—such things are not the fault of the lens, but of the arrangement of the material.

It is not perspectives that need correcting, but arrangements, and sometimes also the artistic ideals of the photographer. If he is guided by good sense and an appreciation of the limitations of his medium, he will not go astray. Compare Figures 5 and 6. Certainly in Figure 5 the nose juts out in a very arrogant and displeasing manner (although there is no actual "distortion," and your eye

would have seen the same thing—had it been in the same place that the lens was). Note, in Figure 6, the improvement affected by a very slight readjustment of the subject. Both pictures were made by the same lens.

For large character heads that are to give a "face-to-face" impression, the short focal length is absolutely logical. A person would naturally be met and talked to at about the camera distance of the short focal length lens.

Camera Size

What size of camera? Provided it can fulfill the above qualifications, any size or type, from 35 mm. on up, can be successfully employed for outdoor portraiture.

However, for a number of reasons, the 35 mm. miniature type of camera, comes nearest to being the ideal instrument for this purpose. Among the special advantages of the minicam, we may mention the following:

1. Extreme portability. Those who specialize in outdoor portraiture often go far afield in their search for "locations." Compact equipment is an obvious advantage if one is scrambling through sage-brush or crawling over boulders.
2. Speed of operation. Miniature equipment not only may be set up quickly, but a large number of exposures may be taken in a short time. This is of great advantage outdoors when one must cope with rapidly changing light conditions.
3. Many exposures in a single roll.
4. Economical operation. If you load your own magazines, the cost of film runs less than a cent per exposure. In outdoor portraiture the film casualty is apt to be high, and a saving in film price is a very real consideration.
5. Depth of field. This is a particularly outstanding characteristic of the miniature camera, and is an absolute requirement of good outdoor portraiture.

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* The majority of the illustrations in this book were made from miniature negatives.

Of these five advantages, the final one is most important in qualifying the miniature camera for this type of work.

The conditions imposed by the size of the camera, rather than the actual focal length of the lens are the determining factor in deciding the depth of field. Imagine the following situation: Three cameras are set up in a row, equi-distant from the subject. Camera A is a 35 mm. miniature, camera B is 3¼x4¼, camera C is 8x10. But they are all equipped with identical 135 mm. lenses. For the miniature, 135 mm. would rate as a very *long* focal length; for the 3¼x4¼, 135 mm. would be about normal; and, for the 8x10, 135 mm. would be extremely *short.*

Let us further assume that all these lenses are set at the same aperture: let us say F:8. We would have, therefore, on the three plates, three images identical in size and depth of field.

Making one more assumption, let us suppose that the image is of such size that the subject just nicely fills the plate of Camera B. In camera C, then, the subject would occupy only a small spot in the center of the plate, while, in camera A, the image of the subject would be too large to be accommodated, and would lop over on all four sides.

Now, in order to make the size of the image conform reasonably to the size of the plate, it would be necessary to move camera C much closer to the subject. For the same reason, it would be necessary to move camera A (35 mm.) considerably further back. But moving camera C closer in would materially *reduce* its depth of field, since depth of field varies as the square of the object distance (at one-half the distance, depth of field would be one-quarter as much). And moving camera A further away would, in the same fashion, *increase* its depth of field (at twice the distance, depth of field would be four times as great).

Here we have an instance of a relatively "long" focal length yielding much greater depth of field than relatively "short" focal length. Obviously, then, the size of the camera and the conditions imposed by it are of much more importance than simple focal lengths in the matter of depth of field.

It should be noted, however, that the miniature is not a convenient type of camera for those whose eyesight is defective. This is owing to the small size of the image in the finder. Those who wear glasses encounter considerable difficulty in getting the glasses and the finder simultaneously into focus. For persons so handicapped, a camera of the reflex type, which shows the image in the actual dimensions of the negative, is undoubtedly the best equipment.

After the miniature type, the reflex or Graflex type of camera is most desirable for purposes of outdoor portraiture, although it is necessarily much less portable and has a considerably higher operating cost. Reflex types are available in sizes from $2\frac{1}{4}$x$3\frac{1}{4}$ on up, but 4x5 is about the largest practicable size for outdoor use.

Whatever type or make of camera you select, let it be your study to get the best possible use out of *that* camera. After you have made your choice, stick to it. The camera is your instrument of expression, and only by hanging on until you master its peculiar quirks and idiosyncrasies can you expect to accomplish anything photographically worthwhile. Any one camera intelligently used is ten times better than ten cameras used in rotation.

Tripod

When you buy a tripod, make up your mind to spend enough money to get a good one. A cheap and flimsy article is worth absolutely nothing, and is in fact a definite liability. And don't be led astray by considerations of excessive compactness and lightness. The job of a tripod is to hold the camera absolutely immobile and firm, and it can't do this with spindly legs and weak joints. So choose a tripod that is a little heavier and a little stronger than seems entirely necessary.

A good tripod should be capable of being adjusted at any intermediate height in its range of extension.

The tripod should be equipped with a swivel head, or, for miniature cameras, a ball-and-socket head.

Accessories

I mention here all the accessories that are required for outdoor

portraiture. It is not well for you to cumber yourself with any others.

A *hood* for the lens is required at all times in outdoor work.

A *cable release* is also a necessary item.

Filters are made in hundreds of shades and hues. Out of this collection there is only one that you need to own—the Wratten K2, which is a medium yellow in color. There is also occasional use for the Wratten "G"—which is a dark yellow filter. To possess any others is merely to weigh yourself down with unnecessary and confusing side-issues.

A valuable accessory which many amateurs fail to avail themselves of is the *blue-gray structure filter* or *viewing glass.* This device, of course, is not used in front of the lens as other filters are, but is simply held before the eye to assist one in checking on the photographic qualities of the subject matter. By its use one is enabled to see the subject in a nearly monochromatic scale of values, freed from distracting or misleading influences of color. It is also of use in checking on lighting and in revealing excessive contrasts. A glass of medium blue-gray tone is most useful for this purpose, but a two inch square of blue "Pot Glass" is nearly as good.

A Light Meter?

This is an optional matter. A good light meter, of the photo-cell type, if used correctly and discreetly, may be a worthwhile item of equipment, and may in time enable you to effect a considerable saving in film. But it is far from indispensable. Indeed, if one becomes too dependent on it, it may prove to be more of a handicap than a help. So, unless you can well afford it, it is wiser to forego a meter and to spend the additional money on more essential parts of your equipment.

A procedure will be suggested in Chapter Three for securing good exposures without the use of a meter.

Lighting Control

A reflector is necessary at most times for good photography out-

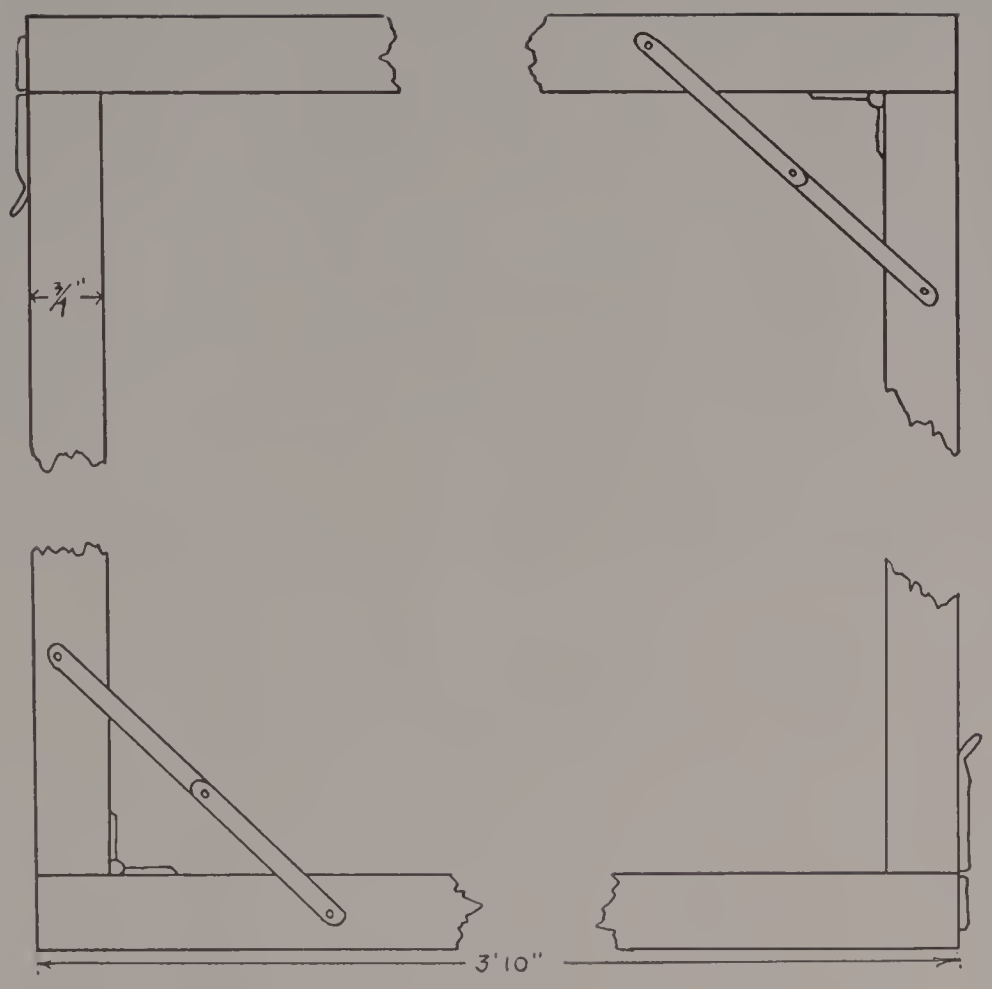

Figure 7.

Construction of folding reflector.

doors. Much can be done by taking advantage of natural sources of reflection—sand, water, stucco walls, etc.—but there is also need of a good-sized artificial reflector.

A reflector of adequate size, preferably not smaller than four feet square, is awkward to transport unless it is constructed so that it can be folded into reasonably small compass. The construction of such a reflector is shown in Figure 7. The frame, of 1″x2″ white pine, is built in two halves. Each half is hinged with a 1½″x1½″ butt, and each of these corners is stiffened with a desk lid hinge (Figure 8). The two halves of the frame are joined by a pair of suitcase catches (Figure 9).* The frame is covered with white muslin, which is attached along two opposite edges only.

By loosening the catches, the frame separates into its two halves, each of which may be folded together. The cloth is then rolled up on the folded frame and the whole makes a compact bundle. (Figure 10).

* The butts, desk lid hinges and suitcase catches are standard items that may be obtained at any hardware store.

Figure 8. Detail of reflector.

Figure 9. Detail of reflector.

Figure 10. Reflector rolled up.

Carrying Case

Not only should the camera have a case of its own, but you should have a sturdy case large enough to accommodate all your smaller and more fragile accessories, including spare and exposed film.

Never carry film magazines or filters loose in your pockets. The filters are liable to scratching or other damage, and dust and lint are sure to work their way into your film.

Carry a small *screw driver* in your case. Occasions frequently arise when it is needed to make adjustments on the camera or tripod. Keep *lens tissue* at hand and use it frequently.

Choice of Film

With artificial light in the studio, ortho emulsions are definitely preferable for portraiture. Outdoors, ortho is subject to some quirks that make it harder to use, but it is still to be preferred in many instances. At its best (even outdoors) ortho yields a brilliance of rendering and a delicacy of half-tone gradation that cannot be duplicated by any other type of emulsion.

Ortho's immoderate sensitivity to blue and green make it unsuited for portraiture when sky or foliage are involved, the sky being rendered completely white and foliage much lighter than flesh

tones. However, with the addition of a K2 filter, it is possible with ortho to secure a fairly substantial tone in the sky. (This was the combination in the Frontispiece.) Indeed, when ortho is used outdoors, it is best to keep to the K2 filter in all cases.

Ortho is not recommended, however, for a set-up with foliage in the background, or for a background of sky with clouds. In these cases, use pan film with the K2 filter. This combination gives luminosity to flesh tones seen against a background of foliage. For melodramatic "over-corrected" skies, such as that in Figure 37, one requires pan film with a G filter.

We are not here concerned with pedantic "accuracy" in color rendering; these recommendations are based solely on effectiveness of presentation.

Except under special conditions that really demand them (as suggested in Chapter Seven) steer clear of super-sensitive, ultra-speed emulsions. Extra speed is gained only by the sacrifice of other far more essential photographic qualities—notably, fine grain and gradation.

Always carry plenty of negative material with you. To lose a magnificent lighting or an unduplicatable composition because you stinted on film is a very unwise economy.

Equipment for Location Trips

When one takes a model and goes "on location" in the foothills or at the beach, a few additional items of equipment are required.

(1) Costume and "costume elements." (See Chapter Six.)
(2) Make-up material and hand mirror.
(3) A few safety pins and hairpins.
(4) Lunches and canteen of water. (If you are going far afield.)
(5) Small first-aid kit, or at least a bottle of iodine.
(6) A couple of baskets to pack these things in. The baskets may sometimes serve as "props" in pictures. (Note Figure 57.)
(7) A piece of straw matting, about six feet square, upon

which the model may dress and spread costumes.

(8) Finally, and extremely important, you should protect yourself with some sort of liability insurance in case the model breaks her leg or sits on a cactus. Accidents—unlikely as it may seem—*do* happen on these occasions, and it is expedient to be protected.

Summary of Equipment

Here, in brief, is the equipment for outdoor portraiture.

Required equipment.

Camera—which must meet the following specifications:

1. Lens of short focal length.
2. Focuses with model close in.
3. Full range of shutter speeds.
4. Iris diaphragm with full range of settings.
5. Facilities for attaching to tripod.

A strong tripod.
Lens hood.
Cable release.
Wratten K2 filter.
Structure filter.
Folding reflector.
Case for camera and small accessories.
Small screw driver.
Plenty of film (ortho and pan).
Lens tissue.

Optional equipment.

Light meter (of photocell type).
Wratten "G" filter.

Special equipment for field trips.

As outlined above.

Chapter Two

The General Problems of Outdoor Portraiture

We have remarked on the fact that outdoor portraiture is apt to be the first problem that the amateur essays with his new equipment. We have also noted that the problem is not so easy as it looks, and that the ambitious and hopeful experimenter often goes sadly haywire. For better understanding of the general problem, it will prove instructive to us to go along with such an amateur on one of his first expeditions and observe what he does. From examination of his results we will be able to derive a basis for self-criticism useful to those desirous of substantially improving *their* procedure and results.

A Sample of Procedure

These are the usual ingredients: the amateur and his new camera. When to these are added the stimulus of a girl friend and soft spring weather, the urge to try some outdoor portraits is well-nigh irresistible. So the date is set, a picnic somewhere with the camera and the girl friend.

When the day arrives, he notices with dismay that there are a few clouds threatening to mask the bright spring sunshine. So, at the appointed ten o'clock, he bundles the girl and his camera into his car and leaves for the picnic grounds in some haste. On the

way, he allows himself to dream a little, and imagines in some detail the numerous beautiful pictures he is going to get. The girl at his side is a creature of mystery and glamour; Birch Park, for which they are heading, is a beautiful spot and the day is sunny and bright. What better omens could there be for some swell pictures?

There is a film of cloud over the sun when they arrive. So they dawdle a bit in picking a spot for lunch and unloading the car, and the cloud passes over—to his great relief.

Without further delay, he unpacks his camera and looks around for the brightest sunshine he can find. Then he leads Genevieve out into the glare and turns her so she gets the most light possible on her face. He is a little in doubt, when it comes to this point, as to how to pose her. But she has been reading numerous film magazines, and has been rehearsing charm and allure in her mirror. So she goes through her repertoire of expressions and postures, and he clicks his camera at them all, with increasing amazement and delight, confident that masterpieces are piling up by the dozens.

Along about two-thirty or three o'clock in the afternoon, because the light seems to be losing some of its brilliancy, they desist from their picture taking and presently head for home. On the way, he stops at the corner drug-store and leaves his precious films to be developed and printed.

The Results

And when, the next day, he picks up his films and the glossy contact prints—what does he find? Something, unfortunately, very much like the pictures displayed in Figures 11 to 14. It is Genevieve undubitably, what has happened to her? What has become of the many delightful and amazing portraits that he seemed to see in front of his camera? Just what has gone wrong?

Let us examine these pictures candidly and see if we can't discover the sources of the failures and disappointments that consistently dog the footsteps of the amateur in outdoor portraiture. And while we are looking these over, you might be checking up on *your* pictures also; for, unless you have advanced to a stage of excellence

Figure 11.
What's wrong with this picture?

Figure 12.
And this?

where you no longer require this book, your pictures will reveal some of the self-same errors.

Look first at Figure 11. (This, incidentally is one of my own juvenile efforts along this line, taken some twenty-odd years ago). The following faults are obvious:

1. There is considerable over-exposure, leading to blank areas in the foreground and poor gradation in the face.
2. Lighting is contrasty and bad in angle, with black empty shadows.
3. Background is contrasty and confused, attracting much more attention than the subject.
4. Arrangement of figure is hunched and awkward.

Turn now to Figure 12, a fairly typical example. Notice the following outstanding faults:

1. Drastic over-exposure of background.
2. Violent and contrasty light.
3. Background more strongly illuminated than subject.
4. Background contrasty and confused.

Figure 13.
And this?

Figure 14.
And this?

5. Awkward stance of figure, clumsily over-balanced.

In Figure 13, note the following faults:

1. Camera not level. Note sloping roof line.
2. High position of camera emphasizing background and twisted arrangement of body.
3. Lighting too harsh and contrasty for subject, bad cast shadows, no relieving reflection.
4. Utterly confused background full of contrast and meaningless clutter.
5. Slumped arrangement of body, "collapsed abdomen," fore-shortened arm.

Figure 14 has the best pictorial possibilities of the lot. It might readily have been an excellent picture, had it not been for a few readily corrected errors.

1. Camera too high, emphasizing beach rather than figure.
2. Over-exposure, burning out gradations in light areas.

3. Sordid, messy and incongruous background.
4. Arrangement of figure much better than in Figure 13, but still marred by the squashed upper arm.

The Four Sources of Error

From the basis of these four pictures, we note that the errors, numerous and varied as they are, fall into *four* general classes.

1. Errors in camera manipulation. For the inexperienced amateur—and even to the more advanced amateur (who should know better), mechanical and technical blunders are a very prolific source of disappointment.
2. Errors in lighting. This is another very common source of trouble in outdoor portraiture. Lightings have a way of looking much different to the camera than they do to the eye.
3. Errors in the background. A background that is badly chosen or awkwardly treated will spoil your picture, no matter how attractive and well-photographed the subject in front of it may be.
4. Errors in the arrangement of material (human or otherwise). The posing of the people in front of your camera, and the arrangement of costumes and properties in relation to them, will often lead you into startling mistakes and errors in judgment.

These, then, are the four general sources of errors in outdoor portraiture. Among them you will find the reason why your last batch of pictures didn't turn out so well.

1. Manipulation of the camera
2. Lighting
3. Backgrounds
4. Arrangement of material before the camera.

Detailed analysis of these four sources of error, and consideration of means whereby you can eliminate them from your work, will form the basis of the next four chapters.

Chapter Three

Handling the Camera

In this chapter we deal with the first source of errors in outdoor portraiture: faulty manipulation of the camera. Some of these mistakes that I shall mention may seem to be of an obvious and elementary nature—nothing that anyone in possession of their faculties and a knowledge of which is the front end of the camera would be likely to indulge in. But these mistakes happen so often that there is obviously need of mentioning them. Indeed, it is barely possible that *you* may have fallen into some of these errors yourself.

For some errors there is really no excuse. Ignorance, sloppiness, carelessness are at the root of these. Yet we all, in our less inspired moments, are apt to fall into them. It is well to mention them so that we may guard ourselves against them.

Other errors involve more technical things—necessary but involved matters that most of us never fully get the hang of. I mention them all together, the infantile errors and the erudite failings, for such is the peculiar nature of photography that the talented beginner may produce a stunning picture while the old timer commits a flagrant and nit-witted boner.

Double Exposure

Failure to advance the film between exposures spoils two poten-

tial pictures and wastes film as well. This fault is sheer absent-mindedness, and should be tolerated only in the very elderly. Happily, the ingenious mechanism of the higher priced minicams renders this error impossible. For those not so protected, it is essential that they make the advancing of the film part of an invariable, instinctive routine.

Dirty Lens

This is a commoner error than you would think, and is a frequent cause of imperfect definition. Dust collects rapidly, and opening the camera or adjusting the diaphragm will often leave a finger-print on the lens. Use lens tissue for cleaning it, rather than your handkerchief or sleeve. It is well to check on the condition of the lens several times during a sitting.

Out of Focus

Sharp and clean focus is an absolute requirement for good work in outdoor portraiture. The direct and sincere quality of sunlight and the out-of-doors demand such presentation. Hence any failing in this respect is particularly noticeable.

Lack of good clean definition in outdoor portraiture depends on two adjustments: (1) the focusing adjustment, and (2) the diaphragm setting. For the moment we are concerned with the former source of trouble.

Figure 15 is a typical instance, not too exaggerated, of what happens when one is careless in this matter. The unpleasantness and slipshod impression are obvious.

Focus on some small and clearly defined detail in the subject. The "bead" or bright highlight in the eye is generally chosen for this purpose in portraiture. When using a camera of either the reflex or view type, be sure to open the diaphragm to the largest stop during the focusing operation.

Having once secured focus, *check on it constantly*. Every time the camera or the subject is moved at all, check up on your focus.*

* Except when using the "fixed range" system for certain types of subject matter. See Chapter Seven.

Figure 15. Camera out of focus

Figure 16. Camera movement.

A favorite mental lapse of photographers consists of focusing with excruciating and microscopic care—and then changing the set-up and shooting without focusing again. Practice eternal vigilance in this matter. Even during a series of exposures of an unchanged set-up it is best to interrupt yourself to check on the focus, as the adjustment may be disturbed by the operations of resetting the shutter or turning up the film.

It really should not be necessary to speak of such things as soft-focus lenses and diffusing filters. These are merely devices for spoiling focus, and represent the perverse aberrations of taste of a pictorial period now happily outgrown. The wishy-washy weakness and fuzzy futility of the Cotton-Wool period of photography are now plainly evident to everyone. Particularly objectionable is the application of this technique to outdoor portraiture, for it is uttterly opposed to all the implications of the outdoor setting—directness, cleanness and sincerity.

Lack of Depth of Field

This is another common fault somewhat allied in effect to the foregoing, though due to a different cause. Like poor focus, it leads to lack of clearness and sharpness, but, unlike Figure 15, this lack of clearness is apparent in only *one plane*. Very familiar are such pictures as Figure 52, in which only the foreground is clearly rendered, while the background is badly fuzzed. Less common, but even more distressing, is the opposite condition, with the background sharp and near objects blurred.

This focusing in one plane only (or "lack of depth of field") is caused by too large an aperture. If you shoot out of doors with your lens at the largest possible aperture (or "wide open"), the lack of depth of field is bound to be very noticeable in your picture. This fault is particularly apparent with larger cameras with lenses of long focal length. A miniature camera with a lens of fairly short focal length (50 millimeters) is freest of this fault.

As we have seen, the whole implication of sunlight and the out-of-doors calls for the utmost cleanness and directness of presentation. Therefore, any *obvious* absence of depth of field is felt to be wrong in outdoor portraiture. Such a situation as that mentioned above, where the background is sharp and the principal image is unclear, is, of course, inexcusable. The opposite condition where the principal image is sharp and the background slightly out of focus, is sometimes pleasing (Figure 57), but is only permissible when the background is not sufficiently blurred to draw attention to itself or when it has no direct relationship to the image.

With a close up head there is less need for extreme sharpness, provided that fantastic smears and "gall-stones" (see Chapter Five) are avoided. But with full length (or nearly full length) figures, there is need of reasonably good definition of the background.

To make the most efficient use of your lens in these cases, and to secure depth of field without too much loss of speed, it is necessary to take advantage of the optical phenomenon known as "hyperfocal" distance.

Now, the depth of field of a lens at a given aperture varies

directly as the square of the distance of the object focused upon. At F:8 for example, an object twenty feet away from the lens would have sixteen times the depth of field that it would have at five feet. Depth of field thus increases enormously as the distance of the object increases.

Depth of field is, of course, a zone of definition that extends both in front of and behind the point focused on. When the object is very near the lens, the front plane of definition is only slightly closer to the point of focus than the rear plane. As the object moves further away from the camera, the depth of field of course increases, but it increases much more rapidly behind the object than it does in front of it. So as the object distance grows, the depth behind grows by leaps and bounds. Finally, as a certain distance is reached, the rear plane reaches infinity, and, as far as the eye can detect, everything beyond the object is in sharp definition. This distance is called the "hyperfocal" distance for the given lens and aperture.

Now, it is a curious fact that, when the hyperfocal distance is reached, the front plane of definition is located at just one-half this distance. That is, if the hyperfocal distance for a given aperture is 40 feet—with everything beyond sharply defined—then everything would also be in focus down to 20 feet of the camera. So the actual depth of field would extend from 20 feet to infinity.

In this situation, if there are no noticeable foreground elements to get out of focus, the reasonable procedure to get full depth with a figure would be to place it just within the range of the front plane of definition—say 23 feet away—and focus on the 40 foot hyperfocal distance. Focusing on the figure itself would require, in order to get full depth, a much smaller aperture and almost four times the exposure.

So, by taking practical advantage of this phenomenon of hyperfocal distance, it is possible to secure the same effective depth of field with about one-quarter the exposure that would be required in focusing directly on the subject.

The actual hyperfocal distance for a given aperture and lens is

obtained by use of a rather complicated formula.* There are also available numerous tables of hyperfocal distances. Of course, neither formula nor tables are of any use to the photographer in the field. There are, fortunately, various useful means of approximation. With a reflex camera, it is practicable (if the subject is not too close to the camera) to proceed as follows: Focus, with lens wide open, on some object about twice as far away as the principal subject. Then close down until the principal subject is sharp. The whole background will then be sharp also. This procedure is feasible only when there is no need to close down beyond F:16. Beyond this point, the image is too faint to be useful.

Many view cameras and those of the "Kodak" type, as well as all the good miniatures, have depth of field scales. Intelligent use of these scales will enable you to secure the added speed that comes from taking advantage of hyperfocal distance. First, secure your distance from your range finder. Say the distance is 15 feet. Then set your focus at a little less than twice this distance, say 25 feet. Note on your scale the F: number standing opposite the infinity sign (∞) and set your aperture for this number. This will bring everything into focus down to $12\frac{1}{2}$ feet.

Take note of the following general rules for focus and depth of field:

1. For close up heads, focus on the "bead" in the eye and then close down to F:6.3 or F:8. This will give reasonable sharpness for the background.
2. If the head is placed against open sky, a larger aperture may be used, F:4.5 or thereabouts.
3. For a full length figure, with no significant foreground in front of it, but with wide reaches of landscape behind it, make use (if speed is necessary) of the principle of hyperfocal distance.
4. If the foreground material is important, it will be necessary to sacrifice speed and focus on the principal figure.

* $H = (F/ne + 1)\ F$, to be specific.

or even a little in front of it, closing down to a correspondingly smaller stop.

Bad Framing

Inaccurate "aiming" of the camera will result in the subject being badly placed in the picture space. A picture that is crowded at one side or the top will not allow of sufficient adjustment to make a presentable composition when the projection print is made. Note that many "finders," particularly on cheaper cameras, are thoroughly inaccurate when working close in. In these cases, you must learn to make allowances (and remember to make them) for the peculiarities of your particular camera.

Camera Not Level

Sloped horizons and leaning towers are familiar earmarks of the work of tyros. In others, such flaws can only be indications of extreme haste or excessive carelessness.

Camera Movement

Hand held cameras on long exposures always betray some traces of movement. For all exposures of more than 1/25 of a second, the tripod should be used. You may think *your* hand is steady enough to hold the camera for exposures of 1/10 or 1/5, but definition will always be inferior in these cases.

Indeed, it is best, except for angle shots, to use the tripod at all times. There is something about the mere act of setting up the tripod that induces a little more careful consideration of the material before the camera—and so leads to better pictures.

Bad Camera Angle

Camera angle is a tremendously important matter. Note, in Figures 17 and 18, the change wrought by a shift in angle.

Although the choice of the camera angle is, strictly speaking, a matter of mere camera manipulation, it has repercussions in all the other phases of outdoor portraiture—lighting, backgrounds and ar-

Figure 17.

Change in angle . .

rangement of subject matter. In these particular applications, angle will be dealt with in the next three chapters.

Light in the Lens

Direct light falling on the lens produces smears and halations that destroy the picture. It is safest to use a lens hood at all times outdoors. Even though you think you don't need it, you may discover too late that a series of slight shifts of position has put the sun smack in your lens.

The Matter of Exposure

A perennial source of worry to beginner and professional alike is this matter of exposure. Indeed, the beginner is apt to be less worried than the professional, for he hasn't had time to make so many bad exposures.

Owing to the variety of subject material and the wide range of

Figure 18. . . . makes the picture.

light intensities there prevalent, errors in exposure are particularly common in outdoor portraiture. These errors run all the way from the pale bleakness of over-exposure (Figure 12) to the murky gloom of under-exposure. (Figure 19.) Indoors or out, accurate exposure is extremely important, for it is the very beginning of good photographic quality.

Closely related to exposure, and of equally fundamental importance, is the matter of development. Good negatives are only to be secured by the happy collaboration of these two factors.

In two previous books,* I have outlined an inter-related system of exposure and development for securing the best possible negative quality for pictorial projection purposes. The system was sum-

* New Projection Control, Chapter Three; Pictorial Lighting, Chapter Four.

marized in the formula: "The minimum of exposure with the maximum of development." This formula implied (1) an exposure based on the light-area of the subject (an exposure slightly under the prescribed "normal"), and (2) the fullest possible development, short only of fogging (development to "gamma infinity"). With proper emulsions and developers, it was possible to extend development to forty-five minutes upwards to an hour and a half.

This procedure yielded a negative with a crisp and full rendition of the half-tones in the light-area, full-bodied but thin enough for projection.

For purposes of outdoor portraiture, we need to note certain necessary qualifications of the original formula.

1. New emulsions, particularly of the ultra-hypersuperspeed type, will not stand up under extended development. Nor will all developers lend themselves to the procedure. The following films and developers are recommended as a few that are amenable to "development to gamma infinity."

   Films:

   Agfa Plenachrome and Finopan
   Dupont Superior
   Defender Portrait
   Eastman Verichrome

   Developers:

   Borax-Metol
   Agfa D-6
   Glycin
   Pyrocatechin

2. The formula "minimum exposure with maximum development" is postulated on subject material of *low contrast*, the type of material that lends itself to the finest photographic rendering. With outdoor lighting, however, this low contrast is not always available. To adapt procedure to circumstance, the following adjustment is suggested: with lighting of low contrast (Type A or B*), use the

* See Chapter Four.

"Windy Day" — *William Mortensen*

Figure 19. Under-exposure.

next *higher* Weston rating and (film emulsion permitting) give full development (to "gamma infinity"). With lighting of high contrast (sometimes Type D and always Type E*), use the next *lower* Weston rating and give slightly abbreviated development.

Use of Meter

There is no royal road to perfect exposure. He who thinks he has it is kidding himself and will presently come a cropper. The photocell meter is the closest thing to a scientific certainty in the field, but even it will lead one into grotesque aberrations. For no clearly defined reason, one goes through periods of consistent under-exposure and then presently expiates for it by periods of equally consistent over-exposure. And, during these periods, he will find that he makes about the same error whether he uses the meter or just guesses at it.

Many complicating factors enter to upset the verdict of the meter. Within its field, the photocell is as a rule fairly accurate. But its field is a very restricted one. The meter reading can only tell you the amount of light falling on the photocell. It can't tell you whether

* See Chapter Four.

"Mildred" *William Mortensen*

you have your meter aimed right, or whether your shutter is sluggish or precipitate. Nor can it tell you whether your emulsion rating is accurately stated.

The best method that I have been able to find to insure a fair percentage of good exposures, is to depend on the meter only to establish a norm. Working from the basis of the meter reading, one should make three exposures of each set up—the exposure dictated by the meter and also half and double this exposure. If the meter says one-half second, make exposures also at one-quarter second and one second. It will take a little more film this way, but it is better to put a bit of trust in the laws of chance than to run the risk of a spoiled batch of film—all over-exposed or all under-exposed according to strict scientific procedure.

In making use of a meter, it is advisable to take high speed ratings with some reservation. In my own experience, speed is never so high nor grain so fine, as we are told it is.

Chapter Four

Lighting

Lighting problems, as found out of doors, differ from those of the studio largely in the absence of handy means of control. Much effort is expended in increasing the flexibility of indoor artificial lighting. In the studio one juggles with lighting units, moving them to right or left of the subject, pulling them closer in or further back, turning on additional units or dimming them up or down with rheostats.

None of these shennanigans, so dear to the heart of the studio photographer, are available to the one who takes his pictures outdoors. Daylight is there and you take it or leave it. This makes matters a bit harder, but in many ways it helps rather than hinders the photographer. As a compensation for the rather dubious advantage of flexibility, daylight provides the photographer with a dependable and unified source of illumination. Use of daylight automatically elminates much of the notorious fakery and foolishness of studio lighting. Only in the studio, with artificial lighting would it be possible to arrive at such an effect as Figure 20.

Aside from such merely mechanical flexibility, daylight actually has a variety of moods that is far beyond the reach of the most complex of lighting systems. The light of the sun is never exactly the

same on any two days, and varies from minute to minute. The outdoor photographer must be a thorough-going opportunist who takes appropriate advantage of what the moment offers.

There are four ways in which daylight may change, all of which are important to the photographer. These four modes of change are:

1. Change in angle.
2. Change in intensity.
3. Change in color.
4. Change in quality.

1. The *angle* of daylight may alter either horizontally or vertically. One secures a relative change in the horizontal angle of illumination by moving to the right or the left of the subject. The vertical angle is, of course, determined by the elevation of the sun.
2. According to W. Abney, the actinic power of the sun, from dawn to midday, increases about 50,000 times. The sun thus offers a huge range of *intensities* and of contrast between shadow and light areas.
3. The light of the sun is commonly regarded as white in color. White light is the result of the balanced mixture of the primaries. Any condition that results in partial absorption of any of the primaries results in a tinted light with a preponderance of one tone. Since the photographic medium is so curiously sensitive to color, color changes in the light source constitute an important factor in lighting.
4. *Quality* is chosen as a term to describe the degree of softness or harshness of light. Variations in light quality are many, and are due to the interaction of two factors:

a. *Diffusion* of the source, reducing the sharpness of definition between light and shadow areas. Such things as fog, smoke or atmosphere serve as natural diffusing elements, and may considerably alter the effect of sunlight. They not only reduce the intensity of the sunlight, but also *spread* it. In terms of studio equipment, atmospheric

Figure 20. Studio criss-cross lighting.

Figure 21. Over-head contrasty light.

diffusing agents convert the sun from a spot-light into a "broad." The degree of diffusion may vary widely—from the slight softening induced by the atmosphere at sunrise or sunset to the extreme diffusion of a heavily overcast day, when the light has scarcely any apparent direction and contrasts are reduced to a minimum. (Figure 22.)

b. *Reflection* into the shadow areas, resulting in reduced gross contrast. Natural reflecting elements are provided by such things as clouds, water, sandy beach, stucco walls, etc. Artificial reflectors are also frequently employed in outdoor portraiture. Reflecting elements serve in a different manner to accomplish the same end as that served by the diffusing elements—i.e., reduction of the gross contrast of daylight. They do this by projecting additional illumination into the shadowed areas of the subject. Reflection produces a sort of natural cross illumination, but a sort that never rivals or detracts from the principal

source of illumination—which is just what artificial cross-lighting is apt to do. (Note Figure 20.)

For the pictorialist and the maker of portraits, proper appreciation of this variation of quality is extremely important.

The conditions that may cause these changes to take place are very numerous. Generally speaking, however, these conditions fall into four classes.

1. *Time of day.* Change in the time of day causes the sunlight to vary in all four ways: in angle, in intensity, in quality and in color. In early morning or late afternoon, for example, the *angle* of the sun is low, giving an almost horizontal illumination to the subject (Figure 26). The *intensity* is slight, owing to the thick layers of atmosphere and mist encountered by the low sun. The *quality* of the light is soft, owing to diffusion by the thick atmosphere and the considerable reflection from the opposite quarter of the sky. These thick layers of atmosphere also alter the *color* of the sunlight, filtering out much of the blue and ultra-violet and emphasizing the red. All these things—low angle, slight intensity, soft quality, restrained ultra-violet and blue—make for the best of pictorial and portrait rendering.

Towards midday, the description is different in every particular. The *angle* of the sun is high, leading to awkward illumination of subject matter (Figure 21). The *intensity* is at the maximum, leading to strong contrasts. Under usual conditions, the midday quality is harsh.

This harshness is exaggerated by the color of the light, with maximum emphasis on the blue and ultra-violet—the most actinically active parts of the spectrum. All these things in midday illumination—high angle, maximum intensity, harsh quality, emphasis on the blue and ultra-violet—tend toward hard and contrasty representation, unsuited for most pictorial and portrait work.

2. *Weather conditions.* This is the second of the general conditions that produce changes in daylight. Fog and clouds modify sunlight in various ways. They reduce its *intensity* in varying degrees.

"Gleaner of the Sands" *William Mortensen*

Figure 22. Extreme diffusion of overcast day.

They change its *quality* by reflection and diffusion. A low sun with brilliant white cumulus cloud masses opposite, for example, will yield brilliance without harshness. A sun veiled by thin clouds or traces of fog is softened in quality without losing brilliance. Thicker clouds or fog may soften the light quality to an undesirable degree. (Note the "dead" Type A light hereafter described.) When the sun is softened by fog or clouds, its angle becomes less important. Much higher angles may be tolerated under these conditions. Indeed, with the proper amount of clouds, an excellent light for pictorial purposes may be secured with the source almost directly overhead. (Figure 57.) Clouds and fog also alter the *color* of light, reducing the amount of the violently actinic blue and ultra-violet.

3. *Surroundings.* The peculiarities of the setting constitute the third of the conditions producing changes in daylight. Surroundings variously affect the light of the sun. If they furnish shade, they obviously affect the *intensity* as well as the *quality* of the light. Often the setting (in a patio, for example) will afford extensive reflecting surfaces which further alter the quality (Figure 31). Such locations as the beach will offer other problems in reflection. *Color* also is affected: in the shadow of foliage, for instance, there is often a preponderance of green, which adversely affects the representation of flesh tones—particularly with ortho emulsions.

4. *Mechanical controls.* Offhand, we would think of daylight as being susceptible to no control whatever. Of course, it has none of the handy flexibility of studio lighting. Nevertheless, daylight is capable of a surprising amount of control. These mechanical means of control may effect changes in sunlight along all four of the modes that we have described.

a. Control of *angle.* Obviously, no absolute control over the angle of the sun is possible to mortal man. But relative control is readily attained through control of the *camera angle.* For example, the effect of horizontal illumination may vary greatly according to the angle of the camera relative to the angle of the light. The horizontal light may be made to yield a flat front illumination (Figure 26)

Figure 23. Against the sun.

or a strongly marked cross-light (Figure 27) according to the choice of camera angle. There are an infinite number of possible combinations of these two factors. Not only may the camera shoot parallel with the direction of the light (as in Figure 26); or at nearly right angles to it (as in Figure 27); it may also shoot in opposition to the direction of the light (as in Figure 23). Each of these combinations has distinctly different characteristics, and there are possible an infinite number of intermediate combinations.

In all cases, the effect of the angle of the light is largely dependent on the relative angle of the camera. Even a direct overhead light may be given the aspect of a horizontal light if the camera is placed so as to shoot down on the subject. (Imagine, for example, your subject lying

on the beach with your camera shooting from above). Such a freakish situation is not apt to occur frequently in outdoor portraiture, to be sure, but bear in mind that it is impossible to generalize broadly about the effect of various lighting angles without taking camera angles into account also. It is the *interaction* of these two factors that is important.

b. Control of *intensity*. Direct control of the sun's intensity is not to be achieved. But the same end is attained by the simple expedient of moving the subject from the light into the shade.

c. Control of *quality*. Both factors of quality may be artificially altered.

   1. Artificial *diffusion*. In the old days of motion pictures, when they were all made by daylight, considerable use was made of artificial means of diffusion. These devices, consisting of large screens of translucent muslin or scrim, are available to the maker of outdoor portraits, but are much too bulky for convenient use by the amateur.

   2. *Artificial reflection*. Some sort of artificial reflector, similar to that described in Chapter One, is necessary to deal with the more contrasty phases of daylight.

d. Control of *color*. Direct control of the color of sunlight is, of course, not possible. But the same end may be handily achieved photographically by controlling the color of the light that is permitted to reach the emulsion. This is done by the use of filters which, as their name suggests, act by straining out the undesired components of sunlight. For pictorial work out of doors, the undesirable items are the excessive blues and ultra-violets. The yellow filters, K2 and G, restrain these colors. When blue sky is the background, these filters indirectly give the same control of background tone as is attained indoors

by adjustment of the rear lighting unit.*

Protean Variety of Daylight

The constantly varying interrelationships of these four types of changes make daylight a thing absolutely incapable of accurate definition. Every minute of the day, daylight changes in intensity and quality. Nor is it any two days the same.

1. Change in angle.
2. Change in intensity.
3. Change in quality.
4. Change in color.

But in all these infinite variations, there is no such thing as an intrinsically bad light or an intrinsically good one. There are only good and bad *uses of light.* If the light in your outdoor picture seems bad, don't blame the light but blame your ineptness that used the light wrongly and applied it to the wrong kind of subject matter.

There are, to be sure, certain qualities of sunlight that are more generally useful for purposes of outdoor portraiture, and most of the best average examples will be found to employ them. But this is not because this light is *better* than any other: it is simply because it better fits the average type of subject matter. With the wrong kind of subject matter, this average type of light can be made to seem bad. There is, in short, no possible variant of sunlight that, given the right subject matter, might not be used for outdoor portraiture.

Basic Limitation of Daylight

One limitation of daylight determines its use and application. The limitation is simply this: daylight is derived from a *single dominant source.*

This may appear to be much too obvious a fact to require such emphasis. But a realization of it will do much to help one to the correct use of outdoor light. This fact simplifies one's problem and enforces the use of a certain amount of good taste. Only man, work-

* See PICTORIAL LIGHTING.

ing with artificial light in a studio, can produce such a monstrosity of lighting as that shown in Figure 20, several competing light sources shining from several directions.

What Light Does

Reduced to simplest terms, daylight (or any other light) does just two things:

1. It illuminates.
2. It casts shadows.

In its illuminating capacity, light reveals the differences in local tone or coloration in the object it shines upon. It shows the blue eyes, the red lips, the brown hair of your portrait subject. Photographically, these differences are converted into various tones of gray.

In its shadow casting capacity, light reveals protuberances on the illuminated surface. It thus reveals texture and larger plastic elements.

In the transitions between light as an illuminant and as a caster of shadows, modelling is revealed. Modelling consists of gradual deviations in the direction of planes. Photographically, modelling appears in half-tones, in gradations between light and shadow.

The nature of the subject matter will determine whether light should be employed as an illuminant (revealing local tone and color), as a caster of shadows (revealing texture), or in the intermediate phase (revealing modelling and gradation).

Modelling is the essence of the human face, since the latter consists not only of the simple basic structural planes, but of innumerable subtle transitions and modulations from one plane to another. These transitions can be realized only in terms of gradation and half-tone. Therefore, for most portraiture (whether indoor or outdoor) the best sort of light will be found in the intermediate types that reveal modelling and gradation, rather than mere texture or mere local tone.

Figure 24. Type A.

Figure 25. Type E.

The Five Basic Types of Light

On the basis of this dual function of light, we may roughly divide light as applied to outdoor portraiture into *five basic types.*

Let us first note the two extreme types (Type A and Type E).

The first of these Type A—displays light *solely as an illuminant* (Figure 24). It is the type of light that may be encountered in the early morning (half an hour before sunrise), in the evenings (half an hour after sunset), or on very gray and heavily overcast days. There is the fullest possible amount of diffusion and reflection, so that the illumination is almost equally strong from all quarters of the sky. There is, therefore, the minimum of shadow and modelling: but all differences in local tone or coloration are fully displayed.

The other extreme type—Type E—displays light principally as a *caster of shadows* (Figure 25). It is the direct light of the sun from a cloudless sky during the middle part of the day. There is practically no diffusion or reflection, so that the shadows are black and empty of any detail. Nothing is revealed of the subject except

Figure 26. Type B.

Figure 27. Type D.

its textures and protuberances. Owing to the harsh contrasts, there is practically no modelling or gradation and little differentiation of local tone.

As we shall see, the extreme types are very limited in application. Much more useful to average workers are Types B, C and D.

Type B is the more useful form of Type A. Like Type A, it emphasizes differences of local tone. But it lacks the extreme degree of diffusion of Type A and has, therefore, well marked *direction.* So Type B displays not only the differences in local tone in the subject but also exhibits an extreme amount of gradation and modelling (Figure 26). This type of light is encountered rather early in the morning or late in the afternoon, when there is a softly overcast sky that diffuses the light but does not destroy its direction. Among the studio lightings described in *Pictorial Lighting*, Type B corresponds most closely to the so-called "Basic Light."

Type D is the more useful form of Type E. Like Type E, it emphasizes the shadows and the textures revealed thereby. But Type

Figure 28. Type C.

D also utilizes a considerable amount of reflection—either by taking advantage of natural sources of reflection or by employing artificial reflectors—to break into the blackness of the shadows and suggest the presence of detail in them (Figure 27). Various circumstances may produce this sort of light: when the direct light of the sun is reflected from large white cloud masses in the opposite quarter of the sky; when light from a fairly high sun is reflected from water or sandy beach; or when direct sunlight is modified by artificial reflectors. Among the light types mentioned in *Pictorial Lighting*, Type D corresponds in most particulars to the "Dynamic Light."

Type C (Figure 28) designates the numerous variants intermediate between Types B and D. It displays, in the light areas, the full modelling and gradation characteristic of Type B, but also has ample areas of rather soft shadows characteristic of Type D. Type C is encountered when a low angled sun is slightly diffused by thin mist or clouds and also undergoes reflection by cloud masses in the opposite part of the sky. Among the combinations described in *Pictorial Lighting*, Type C resembles somewhat both the "Plastic" and the "Modified Basic Light."

These, then, are the five general types of light that the maker of outdoor portraits is likely to have to deal with.

1. Type A. A light of extreme flatness, showing no cast shadow and practically no modelling, but revealing in full all differences in local tone.

2. Type B. A light with more "punch" than Type A, so that subtleties of modelling are indicated. Its direction is from the front, however, so that no cast shadows are in evidence. There is still ample rendering of local tone.

3. Type C. By arranging the subject in a type B light so that the soft illumination comes from the side, we secure a lighting of Type C. Shadows are clearly suggested, but owing to the diffusion of the source, they are quite luminous.

4. Type D. Light that is strongly directional, with little diffusion. Use of reflecting elements prevents shadows from becoming opaque. Stress is on the *texture* of the material rather than its local tones.

5. Type E. Extreme contrast of lighting. Dense shadows with no luminosity. Violent emphasis on protuberances and textures.

Types B, C and D are the ones most apt to be useful to the average worker. For convenience in remembering this classification, it may be worth noting that—among the studio illuminations described in *Pictorial Lighting*—Type B corresponds roughly to the *Basic* Light and Type D to the *Dynamic* Light.

These five types differ widely in their pictorial qualities. Different qualities of light imply different sorts of subject matter.

Use of Type A

A flat "dead" light, such as Type A, is very critical of the material that is displayed under it. There is no punch or excitement in the light itself, and there is little display of gradation through modelling. It is necessary, therefore, to select material for the Type A light that has pictorial interest apart from its modelling and plastic qualities. This interest may be supplied by arresting arrangement of *local tone* or by attractive *contour*.

Figure 29.

Type A. Interest supplied by tonal elements.

In Figure 29, for example, despite the flatness of the light, interest is supplied by the contrasting tonal elements of dark hair and pale flesh, by the arrangement of the figure and by the pattern of stains on the old adobe wall. In a more brilliant light these rather contrasty tonal elements would no doubt prove jumpy and confusing, but under the given conditions they serve to supply the excitement which is lacking in the light itself.

In Figure 30, we have another instance of a justifiable use of the Type A light. Although the amount of modelling and gradation on the face is slight, pictorial interest is supplied by the contrasting tones of hair and flesh and by the fine contour of the profile.

If you are confronted with a light of Type A characteristics, you are quite limited as to subject matter. In general, try to observe the following admonitions:

1. Select subject matter distinguished by rather emphatic tonal pattern or striking contour rather than by modelling or texture.
2. Choose a feminine rather than a male subject.
3. Choose a brunette rather than a blond model.
4. Pay especial attention to costume interest.
5. Choose a full figure rather than a head.
6. With a head, favor a profile rather than a full face angle.

It will be useful to note the conditions that produced the Type A lighting in Figures 29 and 30. Figure 29 was taken on a gray day, the diffuse overhead light being further softened by the overhanging cloister and stuccoed walls of the patio. Figure 30 was taken rather late in the afternoon of a heavily overcast day, when the light was so completely diffused that the illumination was almost equal from all quarters of the sky.

Use of Type B

With a light of Type B, approximating the quality of the "Basic Light," we are subject to much less severe limitation of subject matter than with Type A. More nearly than any other, Type B represents the "universal light." It is a *revealing* light rather than an *expressive* light: subtle modelling and local tone alike are shown to the full.* Since it is frontal illumination, there is no distraction by cast shadows. The subject matter, under Type B light, must stand on its own merits. For best results, it is essential that this subject matter be of intrinsically high quality.

Figure 31 is representative of material well adapted to the use of the Type B light—not too contrasty in local tone, and delicate rather than bold in modelling. A finely contoured profile, such as that shown in Figure 30, also lends itself to the Type B light.

With a light of Type B characteristics, certain restrictions must be observed in its use. It will give a full complete rendering of any sort of subject matter, but it is, of course, most effective if used appropriately.

* Provided, of course, that exposure and development are properly calibrated to the light-area of the subject. See Pictorial Lighting, Chapter Four, and New Projection Control, Chapter Three.

Figure 30. Type A. Interest supplied by contour.

1. Avoid conspicuous tonal contrast in subject matter. Blond subjects and those of medium coloring are better rendered than are extreme brunette types.

2. Choose subjects in which the modelling is delicate rather than powerful. A strongly modelled head such as Figure 35 would be weakened under a Type B light.

3. Generally speaking, the Type B light is feminine rather than masculine in its suggestion.

4. The connotation of this light is repose rather than action. Avoid, therefore, too much action or animation with the Type B light.

Figure 31, which we have chosen as representative of Type B lighting, was taken on a late summer afternoon with a sky veiled by a light high fog. Although diffused, the light still had plenty of vitality and clearly defined direction. The photographer stood with his back toward the brightest part of the sky.

Use of Type C

The same physical conditions—low sun and overcast sky—that produce the Type B light, also yield Type C. For the latter, the relative position of photographer and subject are so altered that the principal illumination comes from the side instead of from behind the photographer.

This side illumination produces soft cast shadows that are completely transparent (Figure 32 or Frontispiece). The strong overhead light from a thinly overcast sky at midday also produces a Type C illumination, but with downward cast shadows.

The general feeling of Type C is very similar to that of Type B. It has a slightly more dynamic quality, however, owing to increased emphasis on modelling and texture. Type C, therefore, permits of some degree of animation and suggested action. It is also appropriate for masculine subjects, particularly if they are not too roughhewn.

Use of Type D

The unbalanced, frequently spectacular quality of the Type D

Figure 31. Use of Type B light.

Figure 33. Use of Type D light.

Figure 34. Type D light with reflection from wall.

light necessitates much care in its use. It is perhaps the commonest type of outdoor light, but it is by no means the easiest to handle. It requires the use of additional appurtenances in the way of reflectors and clever resourcefulness in taking advantage of natural reflecting elements, as well as properly selected subject matter and skill in arranging it.

Figures 33 and 34 show fairly characteristic examples of Type D light—strong cast shadows relieved by reflection, rather powerfully modelled subject matter, dramatically presented.

D stands for "Dynamic," and this term best describes the qualities of the Type D light. It suggests movement, animation, power. It is opposed to delicacy, softness, passivity. These considerations will guide us in our selection of appropriate subject matter for the Type D light.

1. Choose subject matter that is best revealed in terms of textures and its larger plastic elements.

2. Avoid subject matter that is soft and subtle in its modelling.

Figure 32. Use of Type C light.

Figure 35. Use of Type E light.

3. Avoid subject matter that depends for its effect on its pattern of local tones.

4. Type D lighting will generally favor the masculine rather than the feminine subject.

5. Feminine subject matter, if used, should be presented in an active rather than a passive mood.

Type D lighting is much less flexible and adaptable in practice than is Type B. Once the relative position of the subject and camera is established in a Type B light, the lighting is equally good for all possible angles and adjustments of the subject. But with a Type D set-up, the angle of the subject's head must be carefully adjusted to the angle of the light in order to avoid awkward cast shadows. Probably only one or two variants of a given set-up will prove at all acceptable.

A word as to the conditions of shooting Figure 33: The time was late afternoon with a nearly clear sky. Reflected light necessary to soften the strong cast shadows was secured by a large white cloth, held just to the right of the model. The white drapery of the costume furnished another reflecting element. The wall supplied reflection in Figure 34.

Figure 36. Type C light with filter.

Use of Type E

Of all the five general types of outdoor light, Type E is at the same time the most difficult to use properly and the most limited in its application. It is seldom indeed that one finds material that is impressive enough in its gross plastic elements to justify disregard of the essentially photographic quality of *gradation.* Type E, or something like it, frequently appears in the work of amateurs, but is almost never justifiably employed. Not only must the subject matter be of unusual quality to admit of the stylized sculptural treatment characteristic of Type E light, but it must be arranged with extreme care and adjusted to the meticulously correct angle.

Only such subject matter as that shown in Figure 35—rough, primitive, with exaggerated plastic qualities—is adapted to the Type E light. Without a model of these qualifications, you will produce only a "butchery by light."*

Figure 35 was taken in late afternoon under a very bright sun. No reflector was used.

Effect of Filters

In outdoor portraiture we meet a condition that has no counterpart in the studio. This is the *color of the background* and its relationship to the color of the subject.

In the studio, the background is usually white—more rarely gray or black. In any case, relationships in tone between the light area of the subject and the background are secured by adjustments of the relative illumination.** The tonal relationship of the background is, in studio lighting, a very essential part of the effect of the various types of illumination.

A different and more difficult background problem confronts the maker of outdoor portraits. In the first place, the illumination of the background is not subject to control; second, the background is nearly always colored—usually with either the blue of the sky or the green of foliage.

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* The Model, page 49.

** See Pictorial Lighting.

Figure 37.

Type D light with filter.

The use of filters, however, takes advantage of the color of the background in order to control tone relationships.

Lightings of the more dynamic types—C, D and E—are more effective against a rather dark background. Even with panchromatic film, blue skies are apt to register unduly light. Under these conditions, there is often poor separation between flesh tone and sky tone. The use of a yellow filter will hold back the extremely actinic light of the sky and secure a better relationship of tones.

In practice, not more than two filters will be needed—a K2 filter for slight darkening of the sky and a "G" filter for "over-correction" and more pronounced deepening of the sky tone.

Used with a Type C light, a K2 filter, by darkening the background, changes the apparent quality of the light from Modified Basic to Plastic.* Note than in Figure 36, owing to the slight darkening of the sky, the background is of a tone darker than the light area of the face and lighter than the shadow area—which is the characteristic quality of the Plastic Light. Note further that, owing to the use of the filter, there is, in Figure 36, better separa-

* Pictorial Lighting: page 66 and page 112.

Figure 38. Reflector in use.

tion between the tones of the sky and flesh and also increased luminosity in the shadows.

Figure 37, was made with set-up similar to that of Figure 33, except that a "G" filter was used. By this means the bright blue sky was made quite dark, thus increasing the dramatic effect of the Type D light. A Type D light with an "over-corrected" sky closely approximates the effect of the "Dynamic Light."*

Lighting the Full Figure

The five types of outdoor light—and their uses—have been considered in terms of their application to the face only. Employment of the full figure, while not altering any of the general principles, introduces a few new considerations.

In general, the full figure will tolerate—and often requires—a little more contrasty illumination than the face by itself. There are two reasons for this:

(1) Distance tends to reduce contrast. This flattening ten-

* Pictorial Lighting: Chapter Six.

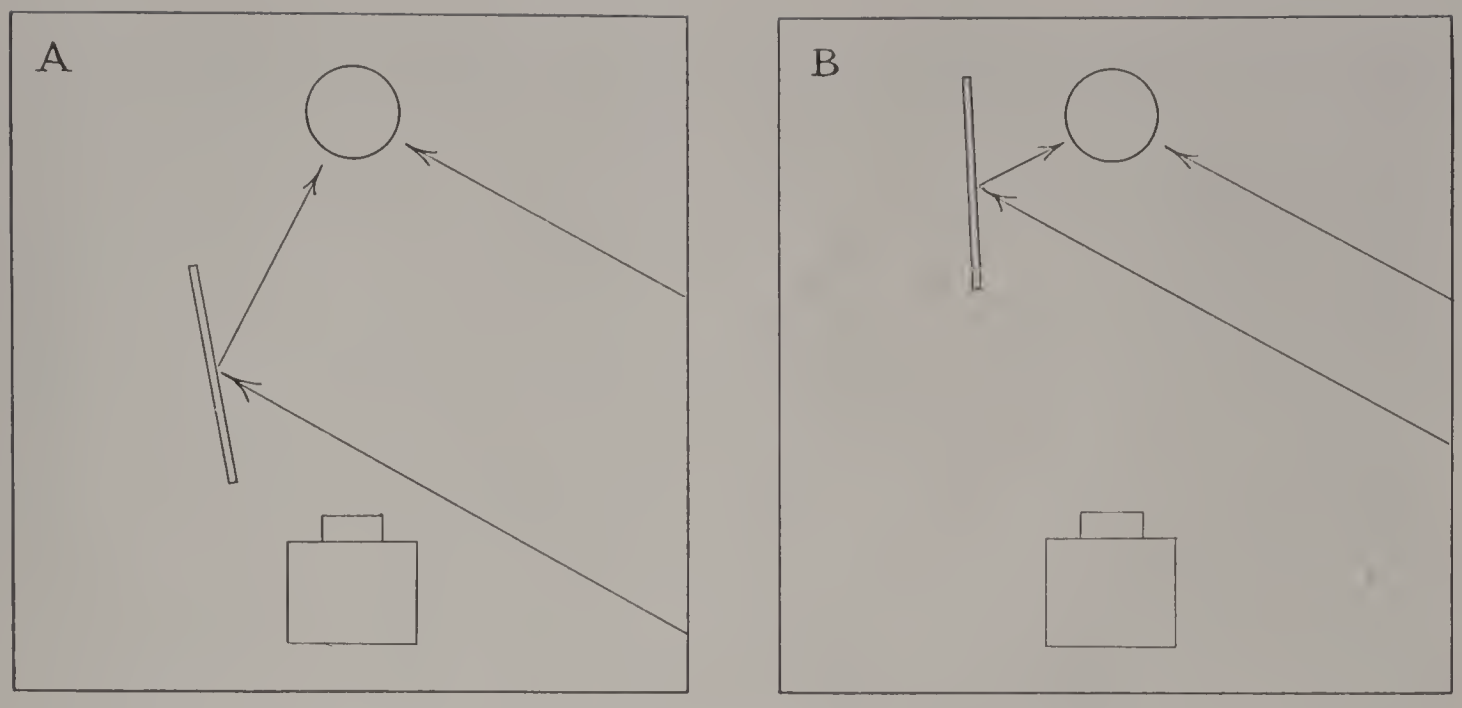

Figure 39. Right and wrong placement of reflector.

dency is apparent even when the camera distance is increased only by the extent necessary to include a full figure instead of a head study. A flat light tends to become flatter as the camera is moved back. A light, for example, that is a little on the flat side of Type B for a head study, will appear definitely as a "dead" Type A light when used for a full figure.

(2) A full figure generally suggests more drama than a head does. Consequently, increased brilliance of lighting is felt to be appropriate with the former subject matter.

In most cases, therefore, a Type C or Type D light is to be preferred with a full figure. Only when there is considerable inherent contrast and pattern interest in the subject, may Type A or B be used. With full length nudes, for example, the photographic interest lies in gradation and half-tones, which may be properly rendered outdoors only with a Type C or Type D light. (Note the use of a Type D light, helped by reflection from the sand, in Figure 71.)

Use of Reflector

Reflection is an essential part of the Type D light. Type D is simply a contrasty light with the edge taken off of it by reflected illumination in the shadow area. Type E is converted to Type D by the introduction of reflection.

Figure 40. Without reflector.

Figure 41. Reflector too near and too far toward rear of subject.

Very often, in outdoor portraiture, it is possible to secure a Type D light by taking advantage of natural sources of reflection. Among these sources may be mentioned the following:

Large mass of clouds
Sidewalk
Wall of building
Body of water
Sandy beach
White shirt or dress of model.

In planning an outdoor portrait, when the light is contrasty, look about and see if there is any such reflecting surface that can be utilized. If there is none, it will be necessary, unless you are content with a Type E light, to employ an artificial reflector. Most convenient is a readily portable, folding reflector of the type described in Chapter Two.

The operation of the reflector is simple. It is easiest when you have an assistant to handle the reflector and adjust it as needed.

Figure 42. Reflector correctly used.

but it is possible to prop it up with a stick (Figure 38) or lean it against a bush.

A few cautions need to be observed in using an artificial reflector. When there is an apparent *natural* source of reflection there is no objection in the reflected light being strong and obvious, but when an artificial reflector is used, it must not reveal its presence. Pictorially speaking, the artificial reflector is not supposed to be there. Its function is simply to make the shadow area transparent: it must not betray itself by glare or brilliant catchlight.

The position of the reflector is important. It should be placed in front of, and not too close to the subject. Figure 39A indicates the proper relative position of camera, subject and reflector. Figure 42 shows the result of this arrangement, Figure 40 being the effect without the reflector. In Figure 39B, the reflector is placed too close to the subject, and too far to the side, producing the artificial looking "hot spot" shown in Figure 41.

A blue-gray "structure filter" or viewing glass is useful in checking on the effect of reflectors. Excessive reflection, as in Figure 41, is not always apparent to the eye, but is readily noted when the viewing glass is used.

Chapter Five

Backgrounds

Many things conspire to spoil the work of the maker of outdoor portraits: lighting, exposure, depth of field, posing of the subject. Of these things, however, perhaps the most immediately apparent source of error in outdoor portraits is found in the choice and use of *backgrounds.* Figures 43 and 44 will be recognized as typical instances of pictures that would have been fairly good if it had not been for faulty backgrounds.

(For the sake of definition, it should be understood that the term "background," as used in this chapter, is taken to mean *all parts of the setting of the subject,* including even those parts that come in front of it.)

In the work of beginners, such errors usually are the result of actual failure to see the background. In their preoccupation with the subject, they fail to take any other matters into account. But the literal-minded camera is no more preoccupied with the principal subject than it is with anything else, and so it turns up all sorts of strange things in the background that the photographer has overlooked completely.

So the first thing toward improving the backgrounds in your outdoor portraiture is to learn to take notice of them, both as they

Figure 43. A typical bad background.

Figure 44. Another bad background.

are in themselves and as they relate themselves to the subject matter.

But even after getting over this preliminary background-blindness, the worker is still liable to arrive at such unfortunate results as those shown in Figures 43 and 44. Advanced amateurs, as we know, are often very fussy in selecting backgrounds for their outdoor portraits. But, despite their care, unfortunate things happen: a flowering branch seems to sprout weirdly from the girl friend's ear, and what was intended as a portrait of Aunt Emma standing in front of the Grand Canyon turns out to be a portrait of the Grand Canyon standing behind Aunt Emma. All such errors are the result of not giving enough thought to the *function* of backgrounds and their *relationship* to the subject matter.

Three Axioms

The important facts about the use of backgrounds in outdoor portraiture may be summed up in these three axioms.

Figure 45. Loss of isolation.

I. *The background should be subordinate.*
II. *The background should be appropriate.*
III. *The background should be isolated.*

The truth of the first axiom is, as they say in Euclid, self-evident. Since the picture is a portrait, all other parts of it must be subordinated to the presentation of the subject matter. But the mere recognition of this fact is not sufficient to secure proper subordination of backgrounds. Backgrounds, as we shall presently see, have numerous unexpected and subtle ways of calling attention to themselves, and we must be prepared to cope with them all.

The second axiom is perhaps not so immediately self-evident as the first one, but it is equally important. Delicate issues are raised in applying it, for appreciation of the "appropriate" involves aesthetic discrimination. To some extent, the second axiom is a corollary of the first, since a background that is definitely at odds with the subject matter becomes thereby unduly conspicuous.

The third axiom is not apparent at first glance, but it involves a basic principle in the organization of the outdoor portrait. *The background and the subject matter are two separate entities, and they must not be permitted to encroach physically on each other.* The best background for an outdoor portrait is nearly as remote and separate in effect as a painted back-drop in a theatre. A useful device for simplifying pictorial construction and securing the necessary isolation of the background is the organization of the picture into *planes.* The classic landscape, as exemplified by Claude Lorraine, was usually organized on a basis of three planes. An outdoor portrait may occasionally be presented in this manner, with the principal figure occupying the second plane; but the safest plan to follow, and the one most applicable to our present problem, is that of the 18th Century portrait painters, who commonly organized their material in two planes only.

A familiar trick of amateurs is to have the subject sit on or lean against some part of the background. (See Figure 45.) This procedure always yields a bad picture because it violates the third axiom by failing to preserve the isolation of the background.

This action of leaning against part of the background is permissible only when (as in the case of the wall in Figure 46) it is the basis of the organization of the picture, or when it serves to emphasize the plane of the subject.

Let us now look at some of the common violations of these axioms as exemplified in concrete practice.

The Seven Deadly Errors

There are seven common and deadly errors involving the use of backgrounds in outdoor portraiture. These errors result from various violations of the three preceding axioms.

Here are the seven errors:

1. The confused background.
2. The contrasty background.
3. The background violently out of focus.

Figure 46.

Wall is here basis of organization.

4. "Traps" in the background.
5. The background of wrong empathy.
6. The background that dwarfs the subject.
7. The background wrongly placed in relationship to head or picture space.

The Confused Background

The confused background (see Figure 47) violates the first axiom because its confusion draws the eye away from the subject matter. Attention that should be given to the subject matter is squandered in the effort to solve the insignificant complexities in the background. Thus, in Figure 47, the eye, which really wants to give its attention to the not unattractive center of interest, finds itself compelled against its will to explore the equivocal blobs and curlicues that surround the figure. (Note also Figures 11 to 14.) In a picture

Figure 47. Confused background.

Figure 48. Logic of background does not lessen its confusion.

with such a background, we witness the triumph of petty annoyances over major interest.

Probably a census would show that, in various modified forms, this is the commonest and most frequently encountered of these seven deadly errors. A confused background is the most likely result of casual carelessness in this matter. The frequency of the fault is increased by the fact that the worker often does not notice the confusion that appears in the background because he has simply sought (and obtained) *a logical and appropriate* background for the subject. For this reason he defends his picture against criticism: "How can the background be called confused?" he says. "It's just the setting this subject naturally would appear in." So he portrays a farmer in a farmyard which is filled with various items of farm machinery, sundry outhouses, and numerous ducks and chickens. The background is undoubtedly appropriate, but it contains so much, and is so little organized, that the subject matter is almost

Figure 49. Contrasty background.

Figure 50. A common error: background in light, subject in shadow.

overlooked in the confusion. (Figure 48.)

Note that the objectionable confusion in the confused background is not a logical confusion, but it is, in the final analysis, purely a matter of formation and design. An unconfused background is one that resolves itself at the very first glance, into a simple pattern of a few readily comprehended lines and masses.

The Contrasty Background

The photographic medium employs a scale of half-tone grays. In this scale the strongest notes of emphasis are the extremes, near-black and near-white. These elements of emphasis should be reserved for the most important part of the picture. The background should contain neither the darkest dark nor the lightest light.

A picture which places the extremes of contrast in the background (see Figure 49) violates the first axiom because it is impossible properly to subordinate the background when it contains such emphatic elements.

Excessive contrast in the background may result either from lighting or from bad arrangement of the extremes of local tone. The latter situation is met with in studio portraits made in front of a strongly patterned tapestry. In outdoor portraiture, however, lighting is the more common source of trouble. A background consisting of sparkling foliage or of broken and sharply modelled planes placed close behind the head is apt, under sunlight, to show more contrast than is revealed in the subtler modelling of the face. Amateurs frequently attempt outdoor portraits in the shade of trees or porch without taking thought of the stronger sunlight beyond. This circumstance produces backgrounds of violent contrast. (Figure 50.)

Figure 51, which might with justice be entitled "Cherchez la Femme," represents possibly the ultimate in a background that is both confused and contrasty. Only by diligent search does one discover what the picture is all about.

The best protection against falling into this error is consistent use of a dark blue viewing glass or a blue-gray "structure filter." The reduced luminosities seen through the glass reveal excessive contrasts much more clearly than the naked eye does.

Background Violently out of Focus

Figure 52 shows the third of the errors relating to the use of the background in outdoor portraiture.

Like the two preceding errors, a background violently out of focus, as this one is, constitutes a violation of the first axiom. The strangely blurred contours create a definite distraction that prevent the background from being properly subordinated. The very ambiguity of the smears exaggerates their importance: one can't help speculating whether that extraordinary object is a street car or a haystack.

Unlike the other errors, this one results, not from bad selection of material, but simply from unskillful handling of the camera. There is not enough depth of field in Figure 52. Closing down the lens a couple of stops would render the background with sufficient sharpness to prevent it from drawing attention to itself.

Figure 51. Contrast and confusion completely swamping subject matter.

Figure 52. Background badly out of focus.

A *slight* softening of contours in the background is not objectionable, and is sometimes a distinct assistance in securing subordination. It is only when it is pushed to grotesque extremes that the background out of focus becomes a hazard and liability.

"Traps" in the Background

In Figure 53 we see yet another sort of faulty background. The numerous white patches of sky all serve to catch the eye and distract the attention from the subject matter. Being surrounded by dark tones, these white areas seem by contrast, even more glaring and aggressive than they really are.

"Traps"* of this sort are particularly liable to be encountered when using foliage as a background. Be sure to chose foliage masses compact enough to prevent the appearance of patches of sky. Also avoid spots of dappled sunlight in the foreground, for they too will

* For fuller discussion of "traps," see The Model, page 58.

Figure 53. Traps in background.

Figure 54. Background of wrong empathy.

act as traps. Arches, that usual architectural feature of campus photography, are another frequent source of this error. So also are trellises and arbours.

Background of Wrong Empathy

In Figure 54 we have an example of a background that violates the second of the axioms—it is inappropriate to the subject matter placed in front of it.

"Empathy" is a word used by writers on aesthetics to express the *physical* reaction of the beholder to various lines, shapes and materials. When a figure is placed in a manifestly wrong environment, we feel actual *physical* discomfort at the discrepancy. We feel that the setting is on point of doing actual damage to the subject. For example, a picture of a girl in a fluffy dress in a setting of brambles would undoubtedly make us feel acutely uncomfortable because of its *bad empathy*.

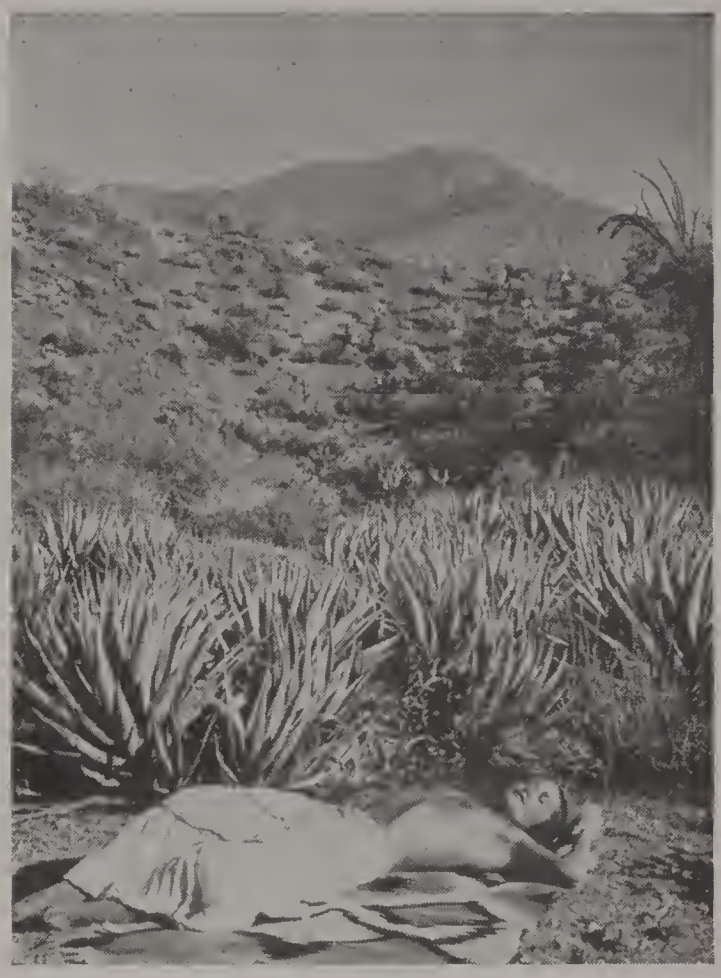

Figure 55.

Background dwarfing subject matter.

So it is with this picture, Figure 54. The total impression is very unpleasant—because of the suggestion that the model has been impaled through the neck.

Other typical examples of bad empathy would be the following:

1. Informal costume in front of a formal background. (A bathing suit in the Astor ballroom, to cite an extreme instance.)
2. An arch in the background that seems to press down on the subject's head.
3. A twig or branch that looks as though it was about to poke the subject in the eye.

As to means of avoiding bad empathy, it is of course impossible to give any adequate formula. A sense of the pictorially appropriate is purely a matter of taste—and this fact puts the issue squarely up to the individual worker.

Background that Dwarfs the Subject

In Figure 43 we see another case of an insubordinate background.

Figure 56.
Criss-cross skyline.

The principal mass in the background is here so large and imposing that it attracts an undue amount of attention.

The dwarfing of the subject may be occasioned as in Figure 43, by some single huge element in the background—a big tree. a cliff, a building—or it simply may be due to allotting disproportionate picture area to the background, so that it seems to pile up and press down heavily on the subject. (Figure 55.) In this picture there is also an element of bad empathy owing to the unpleasant suggestion of crushing weight.

Background Wrongly Placed

A background that is in itself unobjectionable may create a very unfortunate effect by being placed in wrong relationship to the subject.

Certain cases of bad empathy (which we have already referred

"Hilltop" *William Mortensen*

Figure 57.

to) grow out of wrong placement of the background. Things in the background that are not unpleasant in themselves may become so by being placed in too close proximity to the subject. The shocking empathy in Figure 54 would have been avoided with a slight alteration of the relative position of subject and tree.

A fairly constant element in outdoor portraiture is the *skyline.* The proper adjustment of the skyline is an important phase of the background problem. Only when the skyline is uncomplicated and very delicately drawn—as sometimes happens on misty days—may its placement be safely disregarded. (Figure 57). When strongly marked, however, it must be placed with care and consideration.

With full length figures, the skyline should be placed either very high or very low—in order to avoid the criss-cross effect that is evident when the skyline intersects the figure about midway. (Figure 56.) As a general rule, it may be suggested that, with a full length figure, the skyline (if strongly defined) should be placed either below the knees or above the head. (See Figures 58 and 61.) But note that, if the skyline is placed high, a comfortable amount of head-room should be allowed. A skyline that is level with the top of the head, or barely clears it, gives an oppressive, low-ceilinged suggestion. (Figure 43.)

A somewhat different problem is involved in the placement of the skyline with figures of less than full length. Under these conditions, the placing of the skyline is governed by two factors:

1. Division of the picture space.
2. The contours of the subject.

Avoid a skyline that divides the picture in half horizontally. Much more pleasing is a position that divides the picture into approximately one-third and two-thirds.

Be careful that the skyline does not relate itself in any unexpected or ludicrous fashion to the contours of the body. It should not seem to attach itself to, or sprout from, angles of the figure. Note in Figure 44, for example, how the model seems to have an absurdly shaggy coiffure because the tree contours extend the contours of the head. Nor should the skyline call attention to

"Young Fisherfolk" — *William Mortensen*

Figure 58. Use of low skyline.

Figure 59. Awkward skyline at shoulder level.

Figure 60. Equivocal change in direction of skyline contour.

any of the principal divisions or articulations of the body. In this particular it is well to follow the suggestion made in *The Model* governing the length of skirts, sleeves, etc.* A sleeve of precisely elbow length, for instance, is very ugly. Much better is a sleeve that is just a little longer or a little shorter. In a similar manner, avoid placing the skyline so that it intersects the body *precisely* at the shoulders, *precisely* at the elbow, *precisely* at the knees. (See Figure 59.) Like a garment, it should avoid these emphatic points and fall inconspicuously somewhere between.

Note that a strongly sloped skyline suggests that the head placed in front of it should be turned to a profile or three-quarter angle rather than presented in full-face. Under these conditions, the skyline should be high behind the head and low in front, as in Figure 62. The opposite arrangement (Figure 63) is ugly.

One other skyline error should be mentioned. Avoid placing the

* The Model, page 111.

"On the Shore" *William Mortensen*

Figure 61. Use of high skyline.

Figure 62. Sloped skyline should be low in front.

Figure 63. This arrangement of skyline is ugly.

figure so that it covers an abrupt change in direction in the skyline, as in Figure 60. Such an effect calls undue attention to the background, for the observer always speculates as to what vagaries the skyline indulges in behind the subject's back.

Choice of Locale

Of all the available locales for outdoor portraiture, the one which most consistently steers clear of the Seven Deadly Errors is a *hill-top*. Let us look at the advantages of the *hill-top* location.

In the first place, a "jumping off place," like that shown in Figure 64, eliminates in large measure the need of further concern about the background. The troublesome middle distance (compare Figure 65) is done away with, the material is reduced to two planes, and nothing remains but the foreground and the stylized backdrop of distant hills, which are free from distracting contrast or detail.

In the second place, the hill-top location makes it easy, without

Figure 64. Good location. No middle distance.

Figure 65. Bad location. Gradual recession without planes.

any mechanical difficulties or apparent striving after effect, to secure a low horizon or sky-line. The model simply stands on the brow of the hill with the photographer a step or so lower. The low sky-line, by bringing the subject's head against the open sky, automatically eliminates many possible sources of error. (Figure 57.)

When the sky is used for a background, its tone may be readily controlled by employing *filters*. With different filters, flesh tones may be shown either as dark against a pale sky (Figure 57) or as light against a heavy and dark sky (Figure 37). By this means, a considerable range of expression is made available. The dramatic quality of some kinds of subject matter may be greatly enhanced, for example, by the use of a "G" filter with panchromatic film. (Figure 100.)

A simple sky background has the further advantage that it requires no great depth of field. Unlike other backgrounds, the sky does not need to be in focus. Compare Figures 66 and 67. There is no noticeable difference between them, though they were made at

Figure 66. Sky out of focus.
Shot at F:4.5.

Figure 67. Sky in focus.
Shot at F:22.

F:4.5 and F:22 respectively. Thus, with the sky as a background, it is possible to work at a considerably wider aperture and take advantage of the lens' facilities for speed. And speed is often needed in outdoor portraiture—particularly when a brisk wind is moving hair or garment. Even when there are clouds in the sky, a wide aperture produces no unpleasant lack of sharpness.

From the point of view of lighting, the hill-top location has further advantages. Obviously, good light is here available more hours of the day than in any other location. After the light in the valley has grown excessively flat and dead, it is still delicately crisp on the ridge. Furthermore, the hill-top light is usually better in quality and secures good luminosity in the shadows. (See Figure 57.) It should be noted, however, that, on very gray days, the light in the canyon has a little more punch than the light further up, where there are no reflecting surfaces.

Figure 68. "Gall stones," a common by-product of foliage background.

Figure 69. Close up of "gall stone."

Typical Locations

Every background presents its own individual problems, of course, but there are certain locations so generally met with that they may be treated as typical to outdoor portraiture. Each of these types offers its own particular difficulties.

Foliage is a characteristic attribute of the outdoors that is very apt to be selected as a background. It seems at first glance a good choice, being generalized and not having too much interest in itself. Foliage, however, is actually rather difficult material to handle pictorially, and, when unadvisedly used as a background, is almost certain to lead one into several of the Deadly Errors. Unless carefully chosen, foliage is likely to be both contrasty and confused. (See Figure 11.) Foliage offers particular danger of "sky traps" (Figure 53), small, attention-holding patches of light tone. If the sky traps happen to be out of focus, we have one of the most common and offensive of amateur faults. (Figure 68.) These annoying blobs

"Desert Born" *William Mortensen*

Figure 70. Reflection from ground. Recession improved by low angle.

or smears of light have been appropriately designated by a former pupil of mine as "gall-stones." (See Figure 69 for a close-up of a "gall-stone.")

In order to avoid "gall-stones" and other kindred errors resulting from the use of a foliage background, choose your foliage masses carefully. These should be compact and not spotty in formation, lacking openings or traps as well as any too dominant or well-marked line or mass. In general, the lighter greens are preferable for backgrounds. Foliage should not be placed too close behind the head, as this proximity may cause individual leaf forms and twig details to dominate over the subject matter. (Figure 11.) The foliage should be far enough behind the head so that it may be decently defined without aggressive detail.

Desert stretches of land often recommend themselves for outdoor portraiture. Although there is violent illumination on the desert at times, excessive contrast is avoided because the reflection from the ground brings luminosity into the shadows. (Figure 70.) The weird vegetation of the desert, so often photographed, is usually detrimental when introduced into the background of a portrait. These strange shapes often suggest the human form, so that the real human figure becomes weak and ineffective among these vegetable gargoyles. Even Hedy Lamarr would run a poor second to a joshua tree.

The flatness of the desert floor is frequently a pictorial disadvantage. It offers a gradual, unaccented recession into the distance instead of a recession that is simplified into a few broad planes. Choice of a low camera angle will sometimes serve to suggest planes of distance, and thus stylize the recession. (Figure 70.)

Figure 73. Brilliant light at ocean provides requisite speed for action shots.

The *seashore* is a particularly advantageous setting for outdoor portraiture. As a background it is inherently simple and free from distracting factors. There are just three primitive elements involved —sky, sea and shore—and they form a grateful and appropriate backdrop to the human figure.

A low skyline is readily secured in this setting (Figure 58), and is probably the best combination to use for most portraits by the sea. This angle requires that the photographer shoot from an undignified sprawl or crouch. A high sky-line as in Figure 59 or 72, needs a steeply sloping beach or some other lofty point of vantage, such as a rock, to shoot from. The sky-line at the beach is usually misty enough so that it does not make an unpleasant horizontal division of the picture.

The light at the seashore is very fast but free from excessive contrast. There is ample reflection from water and sand, which gives

"The Outcasts" *William Mortensen*

Figure 74. Background of seacliff.

luminosity to shadows and renders unnecessary the use of any artificial reflector. (Figures 71 and 72.) There is always enough light to stop the motion of the incessantly restless background. Successful action shots may be secured in this brilliant light. (Figure 73.)

On certain stretches of beach, one may find, by turning his back to the ocean, interesting cliff formations that make admirable backgrounds. (Figure 74.) Against these cliffs one discovers, thanks to the brilliant reflection from the water, a very fine light, Type C or D.

It is well, incidentally, before proceeding to a location at the beach, to consult a tide table. Otherwise, after collecting models, costumes and equipment and driving twenty miles, you may discover that your carefully selected spot is three feet under water.

Figure 75.
Usual confused background of public gardens . . .

Figure 76.
. . . eliminated by change of angle.

Parks and *gardens* are often the city-dwellers' only available locations for outdoor portraiture. Unfortunately, even under the best of conditions, these situations do not furnish very good backgrounds. The planting and foliage arrangement are usually spotty and prim. And there is, in many cases, a lofty and inappropriate sky-line of electric cables, neon signs and office buildings.

To obtain passable results under these conditions, one needs much ingenuity. Foliage is probably the best background that the situation affords, but it must be selected carefully in order to avoid the common faults of foliage—spottiness, excessive detail, traps and "gall-stones." A close-up against a foliage background is usually the best formula to follow in a park. Sometimes the use of a low camera angle will eliminate distracting elements in the sky-line. Or, by taking advantage of sloping ground or the elevation of a park bench, it is possible, by means of a *high* camera angle, to isolate the subject

Figure 77. Traps—the inevitable fault of pergolas and trellises.

Figure 78. Don't include too much of a building.

from the surroundings. (Figures 75 and 76.) The edge of a park pond will afford the opportunity for this type of picture.

Trellises and arbours are familiar adjuncts of public parks, but they are of no use as backgrounds in outdoor portraiture, for they are filled with sky traps and potential "gall-stones." (Figure 77.)

Buildings sometimes may furnish good backgrounds for portraits. Careful selection is necessary, however. Rather than a large portion of the building, shown at a distance, (Figure 78) use some carefully chosen fragment placed fairly close behind the head. A doorway, a window or a bit of wall makes a good background. (Figure 79.) A soft light is essential for this sort of set-up, since without it the background will appear spotty and contrasty. A flight of steps offers interesting problems in angle shots, and may be employed as a background in several different ways.

Monuments or inscriptions should not be used as backgrounds for portraits; they have interest in themselves and create a division of attention.

Figure 79. Include only a well unified architectural fragment.

Chapter Six

Arrangement of Material

We come now to the fourth and final phase in the making of an outdoor portrait—the selection and arrangement of material before the camera. To this ultimate problem, the other three (manipulation of the camera, lighting, backgrounds) are merely tributary. Camera manipulation, attention to lighting and backgrounds, are important only as they contribute to the effective presentation of the subject. Errors in camera manipulation, in lighting and in background, may interfere with this effective presentation. but there are many common errors that grow out of the arrangement of the subject matter itself. (Note Figures 80 and 81.)

Posing the Model

The principal phase of this problem. and the source of most of the errors in arranging the material in outdoor portraiture, is found in *posing the model.*

In another book,* I have gone with considerable thoroughness into the anatomical and aesthetic complications involved in arranging the human body before the camera. All that was said in *The Model* is valid here, but some of it applies more particularly to

* THE MODEL, Camera Craft Pub. Co., $3.00.

Figure 80. Bad arrangement of material.

Figure 81. Bad arrangement of material.

controlled studio conditions. In working outdoors, certain qualifications and additions should be made.

In the first place, note should be taken that the outdoors connotes much more freedom, action and angularity than does the careful environment of the indoor studio. Consequently, in an outdoor setting there is far more tolerance of those minor imperfections of bodily arrangement that I have designated as "secondary errors."* So, such flaws as "traps," "culs-de-sac," "hyper-extended elbows," "right-angled knees," etc., may be freely indulged in. Smiles that, in their boisterous and exuberant form, become very annoying in a studio portrait, are much more pleasant in an outdoor setting. (Note Frontispiece.) Here a smile usually seems honest and spontaneous and not something concocted for the occasion.

On the other hand, there are some poses that will not do outdoors, although they are acceptable in an indoor setting. Figure 82, for example, might be permitted as a studio "glamour" portrait, but.

* The Model, page 90, seq.

seen under the light of the sun, and in natural surroundings, it seems ridiculously affected and theatrical.

Most of the "secondary errors," I have said, may be permitted in posing the figure in an outdoor setting. Not so, however, with the "primary errors." The "primary errors" are faults in arranging the human figure that seem to contradict or do violence to its anatomic structure.*

In *The Model* I have listed about thirty of these primary errors. For thorough understanding of the present chapter, reference should be made to the full analysis given in this book. There are, however, a few of these errors that should be mentioned here, because they are particularly likely to crop up in outdoor portraits.

1. *Split profile.* This error appears in three-quarter angles of the head, when the tip of the nose seems to coincide with the line of the cheek. The head should be adjusted so that the tip of the nose clearly projects beyond the cheek line, or else definitely falls short of it.
2. *Stumps.* This error appears at elbow or knee when the forearm or lower part of the leg is so tucked out of sight that the limb looks as though it had been amputated at the joint. This is a common error and easier to perpetrate than you would think.
3. *Arm from nowhere.* This is a horrible and grotesque error often resulting from too close framing of the subject. The observer is shocked by the appearance of an anonymous and unattached arm (actually belonging to the model herself) that projects into the picture and toys familiarly with the model's hair or dallies with her locket.
4. *Flipper feet.* When feet (either booted or bare) are pointed directly at the camera, the foreshortening converts them into unpleasant amphibian appendages.
5. *Collapsed abdomen.* This fault is more apparent in nude pictures, because of the tell-tale wrinkles across the midriff. But, even with clothes, the error betrays itself in faulty

* The Model, page 90.

Figure 82. Such affectation is excluded from outdoor portraiture.

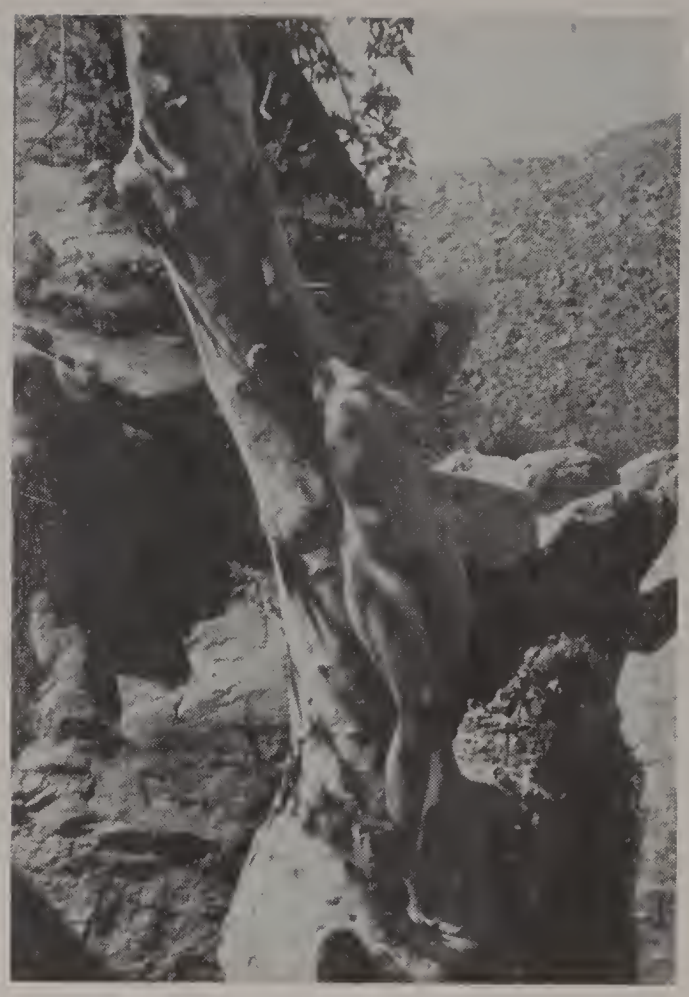

Figure 83. Blotchy shadows and butchery by light.

posture. Note the sack-of-potatoes posture of the child in Figure 103. Compare this unpleasant pose with Figure 96, in which the whole set-up is governed by the positive and firm spine of the model.

6. *Crossed arms.* Too casual or careless posing may lead to this fault (Figure 80). The cross is a harsh geometric formation, quite at variance with the human body, and establishes an X-marks-the-spot accent that is irrelevant and misleading.

7. *Flattened fanetta.* This is the term applied to the flattening of the *gluteus maximus* muscle in a sitting figure. Pictorially, this fault suggests effete softness and gross overweight. In posing the model, the fault may be avoided by having the weight placed on the "up-stage" buttock (Figure

96) leaving the pygean curve apparently smooth and uninterrupted.

8. *Head angle at variance with body.* Movement of the head calls for a balancing or compensating action of the body. When this compensation does not take place, there is obvious faulty relationship. Note in Figure 31, how the angle of the shoulders compensates for the tilted head.

9. *Butchery by light.* This term is applied to lighting that, by erratic angle or harsh contrast, does violence to the anatomy of the subject. Note, in Figure 25, how half the face is lost in shadow and a beautiful model changed into a senseless gargoyle. A milder form of this error, though very serious pictorially, places the strongest light on the part of least interest. For example, the feet may get the spotlight, while the face is left in shadow. Other variants of this fault put the strong illumination on the back of the neck or the ear of the model. Another butchery by light, typical of outdoor portraiture, disfigures the face and body with blotchy shadows, usually cast by foliage. (Figure 83.) Note also, in this connection, Figure 51, in which the background receives the light, while the model goes into total eclipse.

Coping with the Squint.

A traditional curse of outdoor photography is the squint, an involuntary protest against bright light. The characteristic expression varies in intensity from a slight crinkling of the eyelids to a terrifying contortion involving the whole face. (Figure 84.)

Many of the worst squints have their origin in the old-fashioned superstitution (still current in some circles) that an outdoor picture is possible only when the subject is exposed to the raw glare of the brightest sun. However, some persons will squint even under the modified overhead light from an overcast sky. Since squints are largely a matter of personal susceptibility, it is possible to make only the most generalized suggestions as to methods for avoiding them.

Figure 84. The ancient curse of outdoor photography.

Figure 85. Genuine "spontaneity" is not always pleasing.

In the first place, it should be noted that, with the right kind of subject matter, there is no objection to a slight wrinkling about the eyes. This is, in fact, the normal expression of those who live much in the open. Even primitive peoples, who might be supposed to be inured to the sun, habitually squint a bit when they confront it. (Look, for example, at the pictures in any *National Geographic.*) So, with a subject that is primitive in connotation, or is definitely an outdoor type, a slight squint is neither inappropriate nor unpleasant.

However, with more idealized pictorial material, such an expression is too crass and realistic. This kind of material will not, of course, be subjected to harsh and violent light—a fact which in itself eliminates much of the hazard of squint. As a precaution against squint, it is best for the model *not* to wear dark glasses while on location. In this manner the eyes are somewhat accustomed to the light. If glasses are worn, the shock of removing them will undoubt-

edly induce squint. Note also that, with a little training, a model is usually able, by making a conscious effort, to open the eyes wide and clear up the squint for a second or two—long enough for the alert photographer to make an exposure.

The Question of "Spontaneity."

We have already spoken of a certain quality of posing (in Figure 82) which, although it is on occasion permissible in the studio, is instantly spotted as false and artificial in an outdoor setting. It is sometimes said that an outdoor picture should be "spontaneous." A truer statement of the situation would be that an outdoor portrait should *appear* spontaneous. This is far from being a quibble, for true spontaneity and apparent spontaneity are quite different things. True spontaneity is seldom pleasant: it is, as a rule, either violent and uncontrolled (Figure 85) or else merely dull and vapid.

If the model has seen a few movie stills, it may be that the palpably false pose of Figure 82 is actually more nearly "spontaneous" than the direct and unaffected simplicity of Figure 86 or 36. The latter "simplicity" is, as a matter of fact, only arrived at through many exposures and extensive experimental variations in pose.

Portraiture by Improvisation.

This experimental quality should be noted. If you begin to sense the stirrings of a brand new idea and a completely different set-up from the one you have been working on, don't hesitate to follow this new lead. It is from such leads that the best pictures are derived.

This does not mean casual and "spontaneous" pot-shooting. Quite the contrary. It means careful and considered plans and a sensible effort to carry them out. But, from this planned beginning, branch out as widely and fantastically as you wish.

The general procedure may be reasonably compared to improvisation on the piano. Some musicians have amazing fertility in extempore performance. But they don't improvise by spontaneously pounding the keyboard with their fists. Rather, they make a sensible beginning, and in deviating from it, they draw upon their knowledge of harmony, thematic development, instrumental technique, etc. In

Figure 86. Effect of spontaneity achieved by careful posing.

the same fashion, the photographer's extemporization must proceed by preparation and knowledge, not by random and senseless groping.

In keeping with this extempore procedure, a certain holiday feeling is essential to good outdoor portraiture. The photographer who is capable of enjoying himself will get much better results than the dour and serious soul. The model for outdoor portraiture must likewise partake of this spirit. She must be a good sport, capable of weathering a little hardship for the fun of it. If she proves to be the complaining kind—unduly concerned about runs in her stockings, freckles on her nose and bugs down her neck—the photographer might as well take her home forthwith and start out afresh with another model.

Costume in Outdoor Portraiture.

Outdoor portraiture does not properly permit the use of formal dress or anything fussy or frilly. So plan to avoid those conventional shots of Sister in her first party frock standing on the porch steps or in front of the lawn shrubbery. The party frock, if you must have a picture of it, should be put in front of a plain white wall, preferably indoors. A semi-formal afternoon gown may with logic appear in a formal garden setting. But neither of these things should appear with a completely pastoral background.

Smartness, of course, is not out of place in an outdoor setting, but it must be the right kind of smartness. For conventional portraiture, a simple sports outfit is the best. (See Frontispiece.)

For more complicated pictorial problems, a simple shift (Figure 57), or a graceful and uncomplicated longer garment of no particular period or nation (Figure 36), is the best basis for photographically effective costume. These garments should be oyster-colored or some tone just off-white. These basic garments are capable of infinite variation by the addition of a few simple "elements"—shawls, varicolored scarves, pieces of cotton print. These elements may be used to add accents of detail and to construct headdresses, neckpieces, bodices, etc.*

* For further data on the use of "costume elements" see The Model, Part I, Chapter Seven.

Figure 87. Ortho film emphasizes make up.

Figure 88. Use of body make up.

The use of "elements" will effectively simplify the problem of costume in outdoor portraiture. It is not easy to carry a complicated and literal costume on a field trip and such a costume rarely proves worth the trouble when you get it to your destination. A literal costume is what it is and nothing more, but the "elements" are a challenge to one's ingenuity and a stimulus to the imagination.

Make-Up

Make-up outdoors presents a rather different problem than in the studio. Pictorial exaggerations may be indulged in under artificial light that would look merely foolish under the searching light of the sun. Make-up for outdoor portraiture must be simple and direct. Flamboyant or sophisticated make-up, that might be extremely effective in the studio, is just as much out of place in an outdoor setting as a backless evening gown.

Avoid, therefore, for outdoor portraiture, all fancy eyebrows. exotic eye-shadow and over-imaginative revamping of lip contours. Keep to simple "straight" make-up emphasizing lips, brows and possibly eyes—but not more heavily than on a good street make-up.

The problem is complicated by the differing requirements of ortho and pan film. Ortho is strongly sensitive on the green side and weak on the red. Lip rouge, therefore, must not be used in conjunction with the ortho film, for with it the red fails to register and the lips look like twin licorice drops (Figure 87). The normal color of the lips is darkened by ortho so that it looks about like average make-up. Brown eyebrow pencil is also darkened by the ortho rendering, and must be applied with corresponding restraint.

Pan film, on the other hand, is very sensitive on the red side. Use of it results in weak rendering of the lips, which appear almost as light as the rest of the flesh. Even with normal lip stick, there is not quite enough tone. So, with a pictorial subject such as (Figure 36), it is preferable, when pan film is employed, for the model to use the special "Panchromatic rouge." (Max Factor No. 7 for blonds, No. 8 for brunettes.)

An extremely white skin is inappropriate in an outdoor setting. A nude figure that is too white looks merely casually naked. To correct this condition, two methods are possible: (1) a two week's course in sunbaths for the model, or (2) the use of some sort of body make-up. The first method is not always practicable, although a well-tanned nude figure is beautifully effective. Until recently, the second method was very unsatisfactory. Old types of body make-up spoiled the photographic quality of the skin, giving it a flat, chalky appearance, devoid of sheen and gradation. However, recent investigation—instigated no doubt by the motion picture industry—has produced a new type of body make-up* that is free from chalkiness and adds a soft sheen to the skin. It is easily applied and is very effective with nude figures. (Note its use in Figure 88.) It does not rub off or smudge but is readily removed with warm water and soap.

No body make-up that I know of, however, is able satisfactorily

* Max Factor's "Pan-Cake Make Up." Available in a variety of shades, it may be used for both face and body. It is prepared in a flat, cake form, as its name indicates, and is applied with a wet sponge.

Figure 89. Figure as part of general decorative scheme.

Figure 90. Model as center of interest.

to obliterate bathing-suit marks. No matter how thickly it is applied, the marks will still show through. When so disfigured, a model can repair the damage only by a lengthy period of bleaching or by a briefer regimen of sun baths.

Emphasis.

In photographing the human figure in a natural setting, there are two elements which strive for our attention. These elements are, of course:

1. The human figure.
2. The setting.

Both of these things are intrinsically of great interest to us—the world we live in and the people we live with. Combining these two elements properly is a delicate problem. Since both elements are so interesting, they may be used together in only two ways:

1. By reducing the human figure to a decorative element in the setting.

2. By reducing the setting to a merely incidental back-drop for the character or personality of the model.

The first method has been used in Figure 89. Here the model is simply a part of the general decorative scheme. He is technically the center of interest, it is true, but is unmistakably subordinated to the plan of the whole. This also is the treatment in Figure 91.

In Figure 90 we see an example of the second sort of combination. The personality of the model is the engrossing interest, and the setting exists only as something against which the model may be displayed to good advantage.

Any effort to balance the two interests by giving an even break to both model and setting is certain to turn out badly. This is the basic trouble with Figure 93. The setting here is made just important enough to keep the model from predominating, and the model is given just enough emphasis to keep us from enjoying the setting. The beholder cannot make up his mind between the model and the setting, and so winds up by being annoyed with both of them.

This equivocal condition is a very frequent fault in record pictures. With Aunt Emily and the Grand Canyon before him, the photographer tries to do justice to both in the same picture. It can't be done. Either Aunt Emily must gracefully subordinate herself to the grandeurs of nature, in the manner of Figure 91, or else the landscape must be summarily treated, as in Figure 90, in order to give Aunt Emily a chance.

It is well to recall in this connection the suggestions that I have made elsewhere* as to methods for emphasizing or subordinating the figure in the landscape.

The principal methods are nine in number.

1. Lighting
2. Position
3. Size
4. Relative contrast

* The Model, page 186.

Figure 91.

5. Inherent contrast
6. Amount of detail
7. Angle of face
8. Direction of movement
9. Active or passive quality

1. Placing the figure in the brightest light emphasizes it. Placing it in the shadow subordinates it.

2. The figure is more emphatic near the center of the picture than at the edges.

3. The figure becomes more important as its size increases.

4. A figure of a tone contrary to the background (light against dark, or dark against light) is more emphatic than one of a similar tone (dark against dark, or light against light).

5. A wide range of contrast within the figure makes it more emphatic. A short range of contrast subordinates it.

6. Increasing the amount of detail in the face or figure makes it more emphatic.

7. When the face is turned toward the observer, the figure is most emphatic. Turning the face to one side reduces the emphasis.

8. An active figure is emphatic and attention-catching. A passive figure is more readily subordinated.

9. Implied movement toward the camera is emphatic because the figure seems about to step out of its setting. The contrary movement subordinates the figure, which then seems to recede into the setting.

To be completely effective, several of these methods of emphasis should be used concurrently. Mixing emphasis and subordination leads again to uncertainty and equivocation. It is bad, for example, when the *inherent contrast* of the figure emphasizes it, and at the same time its *size* and *direction of movement* suggest that it is meant to be subordinated.

So, in this matter of emphasis, note two important rules:

1. Determine clearly whether you want the figure emphatic or subordinate.
2. Having decided, emphasize it or subordinate it *unmistakably*.

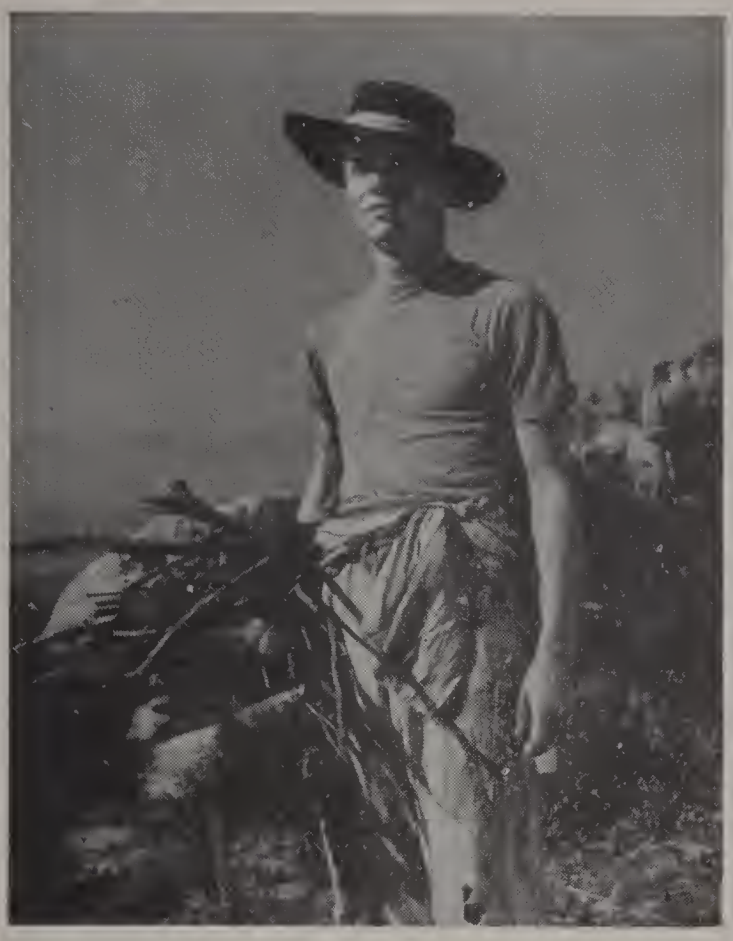

Figure 92. Unsuccessful attempt at compromise between figure and setting.

Figure 93. Figure made dominant by movement toward camera.

Angles.

Angle shots, as I pointed out in an earlier chapter, are, strictly speaking, a phase of camera manipulation. But, because angle shots are closely related to the arrangement of material and the composition of pictures, consideration of angles has been delayed to this point.

The use of angles marked a new and interesting departure in photography. It seems probable that we first became aware of the advantage and effectiveness of angle shots in certain motion pictures (*The Cabinet of Doctor Caligari*, *The Golem*, *The Last Laugh*, and others) that came out of Germany soon after the close of the last war. The American movie makers were quick to take the hint, and soon we had a surfeit of shots between the legs of the actors, shots through the backs of chairs, shots through the key-hole, and shots down the stairs. Familiar things took on slightly nightmarish aspects when seen in bird's eye or frog's eye views.

Figure 94. Miscellaneous background.

The users of the still camera in turn seized eagerly upon the device of angles, not only for its novelty, but also because it offered a relief from a very common and insidious fault of photographic rendering—a sort of stiff and supercilious objectivity. By the use of the angle shot, the camera gets *into* the setting, as it were, instead of merely standing to one side and looking at it. This *participation* (if we may call it that) of the camera gives, at best, increased intimacy and enhanced dramatic quality. At worst, it gives senseless distortion and irrelevant exaggeration to material that does not call for such treatment.

Even more than in motion pictures, we have seen in still photography an extensive over-use and mis-use of the angle shot. We have gone in for angles for angles' sake and have substituted sensationalism for good sense and a mere kick in the pants for sound composi-

Figure 95. Background simplified by high angle.

tion. But, despite all blatant abuses, angles are too valuable and interesting a device to overlook—if only we can learn to exercise a little sense and restraint in using them.

In outdoor portraiture, in particular, angles are frequently an appropriate and useful device. The outdoors generally suggests this sort of boldness of treatment, and rough terrain gives a logical basis for angle shots. If a miniature camera is used, angles are felt to be additionally appropriate, for the minicam is, of course, particularly facile in dealing with angles.

There is further occasion for employing angle shots out of doors when, as in Figures 94, 95 and 96, a low or high camera is needed to exclude undesirable material from the background.

Even in outdoor portraiture, however, there is danger of going

Figure 96. Background simplified by low angle.

Figure 97. Illogical emphasis on angle.

to unpleasant and illogical extremes in the use of angles. When, as in Figure 97, we are principally aware of the angle itself rather than the subject matter, the use of the angle defeats its own intention—which was to give the subject matter effective presentation. A more restrained and reasonable use of angle with the same subject is shown in Figure 96.

In such cases as Figures 98 and 99, in which the low angle is employed merely as a means of eliminating an undesirable background, it is frequently advisable to have the model lean slightly toward the camera. This procedure prevents excessive distortion and foreshortening.

The basic reason for the angle shot is *enhanced dramatic quality*. This implies the use of the human element. Without it, angles seem vacuous and unmotivated: this is the case with most of the angle shots

Figure 98.
Undesirable background . . .

Figure 99.
. . . eliminated by angle. Avoidance of distortion.

of mere architecture, in which distortion is used only for distortion's sake. Without the human element, the momentary impression of drama is found to be empty and unsatisfying, and eventually a little ridiculous—like a glowering Hallowe'en mask with nothing behind it.

The most dramatically significant part of the human body is, of course, the face. So it is usually best to restrict the use of angles to choke shots of the head. Half-length figures may occasionally be used, but the inclusion of torso and limbs in angle shots generally leads to ugly and dramatically irrelevant distortions.

If the extreme emphasis of angle is used, care must be taken that the other elements are of a nature that conform to the treatment. Note, in particular, two things: (1) the general import of the subject matter, and (2) the lighting. It is necessary that the subject matter itself should suggest the use of angles. It should be rugged and

Figure 100.

Extreme angle demands rough-hewn material.

rough-hewn and rather monumental in its conformation. (Figure 100.) Softness and delicacy have no place here. This limits the subject matter (for extreme angles) to masculine faces and to those feminine faces that are mature and boldly modelled. It is bad taste to employ an emphatic angle shot on a child or a *jeune fille* in an organdy dress.

The lighting also must be conformable to the use of angles. A flat or soft light does not carry enough hint of drama to justify an angle shot. A bold and contrasty lighting is needed. The Type A and Type B lights will not permit angles to be used. In general, employ angles only when the light is Type D or Type E. Type C is a border-line case and may, with the proper subject matter, admit of a very restrained use of angles.

Chapter Seven

Four Common Problems

There are certain predicaments of the maker of outdoor portraits that are so common that they are almost standardized. In this chapter we will consider four of the commonest of these. Everyone who has owned a camera has had at one time or another to take an outdoor picture of (1) a child, (2) a family group, (3) an elderly person, and (4) a pet animal. If he has no child, family, grandfather or pet of his own, he has those of other people thrust upon him.

Despite the frequency, not to say ubiquity, of these four problems, they are all hard to cope with. They all involve subject matter with sentimental over-tones, subject matter to which one would like to give the best rendering possible. But, all too often, they turn out something along the lines of Figures 101, 102, 103, or 104. Sometimes they are a little better than these, sometimes a little worse, but nine times out of ten, they are disappointing.

Let us consider briefly what can be done about improving our percentage in dealing with these common problems.

The Child

The difficulties encountered in taking an outdoor portrait of a child are numerous and harassing. Frequently, adoring relatives

Figure 101. A bad version of conventional material.

Figure 102. Another.

will congregate on the sidelines. If the child is very young, they will make goo-goo noises at it, waggle their hands, wave handkerchiefs, and perform other alarming and demoralizing acts. If the child is a little older, the relatives will address themselves more directly with helpful comments such as "Susie, pull down your dress," or "Johnnie, stop squinting." The child gets restless and wriggles exuberantly. In order to stop his movement, you move him into brighter sunlight—whereupon he squints horribly. Finally the child, harried and nervous, balks utterly and either turns his back on you in a gesture of passive resistance or else goes into a tantrum and screams his defiance of the universe and all creatures in it—particularly photographers.

Now, it may seem that I have painted an unduly black and exaggerated picture of the problem of photographing a child. As a matter of fact, no picture is too black that accurately represents the potentialities of this problem. You may expect the worst—and will

Figure 103. Another.

probably encounter it. A clear vision of the probable hazards to be met is the first requisite toward getting a good child portrait. And the second requisite is *patience* to deal with these hazards. The third and fourth requisites are additional portions of patience.

The first thing to do is to sternly banish from the scene all the well-meaning and unhelpful relatives. Some one older person to whom the child is accustomed may be permitted to remain if it seems best. Next, remove from sight all cats and dogs and other family pets.

Familiar and informal surroundings are best for photographing a child; so, if light conditions permit, the backyard is usually to be preferred to the front. In these surroundings, let the child do pretty well as he chooses. At all events, keep the amount of direction down to the minimum. A new plaything may serve to divert him from his

curiosity or apprehensions concerning the funny man with the little black box.

Plenty of speed in shooting is generally needed. Good child pictures are seldom posed, but are snatched in mid-flight. So try to get an abundance of light without excessive contrast. Take advantage, if possible, of the reflection from the side of the house or garage. A reflector such as that described in Chapter One is apt to prove too strange and distracting a gadget to use with a child. Further build up your speed by using a high-speed film (Weston 64, or thereabouts).

This increase in speed is needed not only to cope with the movement of the subject but also to secure decent depth of field under the given conditions. Never try to photograph a child with the lens wide open, or nearly so. Not only is the background thrown badly out of focus by this procedure, but the subject also, by its slightest movement, is itself put out of focus. Choose a light and film speed that will permit you to shoot at one-hundredth of a second at not less than F:8. This aperture will give sufficient depth of field to allow for plenty of displacement of the subject from the theoretical plane of focus.

Naturally, in working with such mobile subject matter, you want to be relieved of as many mechanical distractions as possible. One of these mechanical distractions is the focusing adjustment. If you changed your focus every time the child changed his position, you would probably never get around to taking any pictures. It is much simpler to work on a basis of *fixed range*. Choose a distance that yields an image about the size that you want. Focus on this distance and don't change the focus during the sitting. Close down to F:8. When the child moves, move along with him, keeping about the same distance. At F:8, any slight inaccuracy in distance will not be apparent, particularly with a miniature camera.

A restrained use of *angle* will often be found advantageous in photographing a child in a backyard locale. Shooting downward toward the lawn or upward toward the sky, it is possible to eliminate many crass or distracting details. (Figures 105 or 106.)

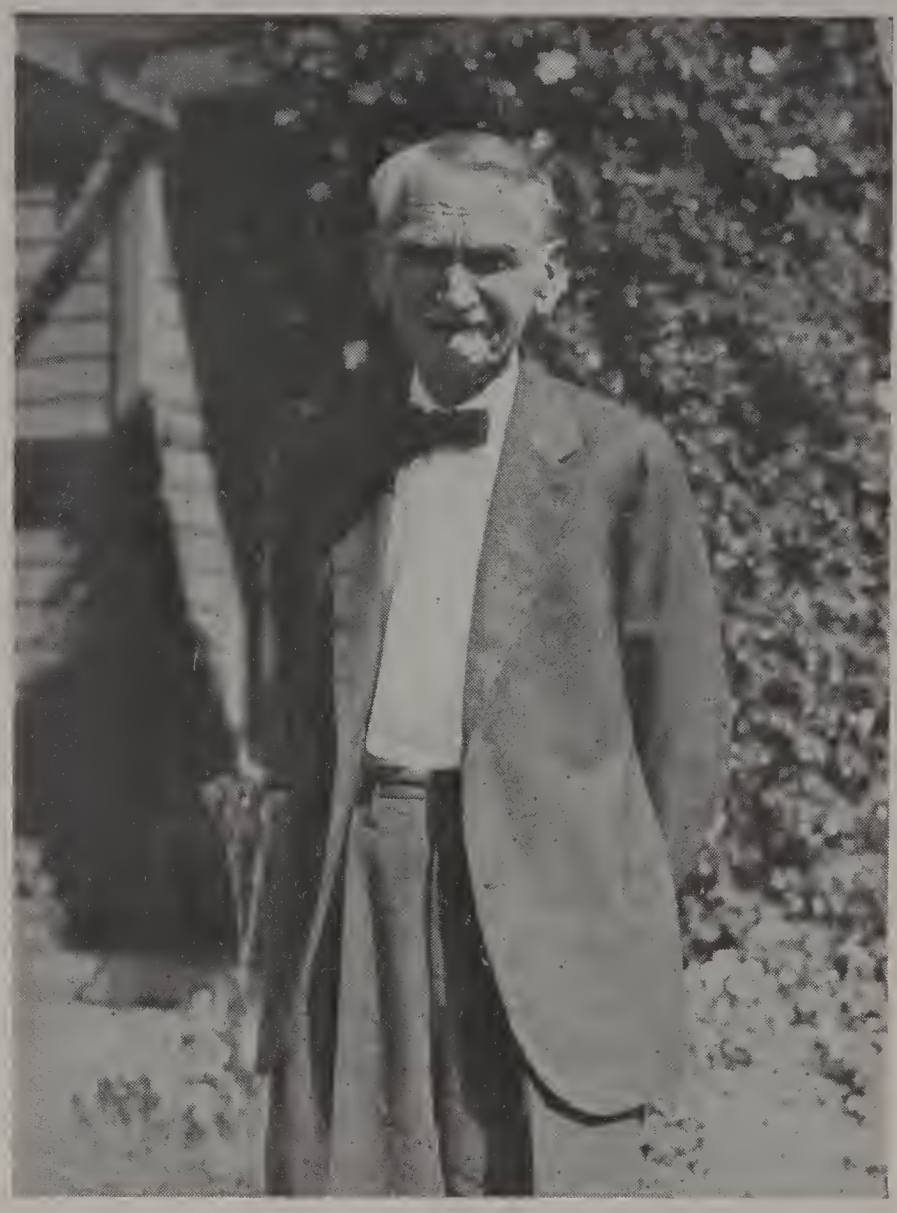

Figure 104. And another.

Try to get the child in as nearly ordinary and every-day clothes as possible. With many mothers, the presence of a camera is apt to call forth fresh and starchy clothes, together with certain ceremonies involving washrag, brush and comb. These proceedings usually result in a very disgruntled, suspicious and self-conscious subject being delivered to the photographer.

The mortality rate in pictures of children is high. To be reasonably certain of passable results, a huge number of exposures must be made. In order to be sure of these shots, vary the exposure times widely (to at least double and one-half the indicated "correct" exposure), but *don't vary the F: number or focus.*

Obviously, a miniature camera is best for this job. A larger camera, encumbered with tripod and slow in operation, is definitely out of its element. The small camera is quick and facile in adapting itself to sudden changes in set-up, and allows a multiplicity of ex-

Figure 105. Use of high angle with child.

Figure 106. Use of low angle with child.

posures that would be financially ruinous with a larger instrument.

The Family Group

There seems to be something about the combination of Sunday afternoon and a camera that calls forth the family group picture.

The conventional family group picture as a rule embodies an unusually large selection of photographic and pictorial errors—jumbled and contrasty backgrounds, harsh unflattering light, and an arrangement that suggests either military regimentation (Figure 109) or mob violence (Figure 103). Such pictures have little value aside from acting as a memorandum that such-and-such people were together in such-and-such a place in such-and-such a time. To improve this sort of picture, take note of the following points.

(1) Give a little more *thought* to the picture itself. In most cases, the procedure leading up to picture-taking is something like this: "Isn't it wonderful that we are all here together? Let's take a picture of us! Everybody get over here in the sun! Come on, Isabel, Henry's

Figure 107.

going to take a picture! Line up now. That's right. Look this way, Uncle John. Hold it." And so another family group is given to the world.

The next time this happens, and *you* are put on the spot to take the picture, stall for a bit and consider the situation before you start to work. Avoidance of a few obvious but prevalent errors will unquestionably improve the quality of the pictures.

(2) Give due consideration to the background. In general, follow the principles indicated in Chapter Five, but take note of certain typical flaws of pictures of this sort. Steer clear, in particular, of trellises, front steps, porches and corners of the garage. If some of these things need to be present, make a definite effort to *fit* them into the pictorial scheme.

(3) Avoid the customary flaw of family groups—contrasty light. Choose, if possible, a situation that provides for reflection from sidewalk or side of the house. A light of the Type B or C quality (see Chapter Four) is to be preferred in photographing groups, since it tends, as nearly as possible, to treat all faces alike and to give a fairly even break to all angles of the head.

(4) I have mentioned the instinct for tidiness that often induces a family group to line up in a neat row, or—if the group is large—in *two* neat rows. The impulse is commendable—for there must be *organization* in a group—but the result is lamentable (Figure 109). Only with a highly stylized background can such a stiff, pseudo-military arrangement be made pleasing. The outdoor background usually suggests a much looser and more accidental-seeming arrangement (but not the complete disarray of Figure 103).

Try to organize your group around some single individual, with all the others subordinated in some degree to this one. The military solution of the organization problem makes all the units equal, like so many teeth in a cog-wheel. Much more dramatic and pictorially arresting is an arrangement that has some single point of greatest interest.

We have already noted (in Chapter Six) the nine methods by

Figure 108.

Figure 109.

Unfortunate tidiness of arrangement.

which elements in a picture may be made emphatic or subordinate:

(1) Lighting
(2) Position
(3) Size
(4) Relative contrast
(5) Inherent contrast
(6) Amount of detail
(7) Angle of face
(8) Active or passive qualities
(9) Direction of movement

Theoretically, at least, these methods are all applicable to the organization and determination of emphasis in a group picture. Most important in this connection are:

Position

Figure 110. Improved arrangement of group. Emphasis on child.

Size
Inherent contrast
Angle of face
Active or passive qualities

To these methods should be added the emphasis given by the direction of the attention within the group. Our attention goes along with their attention. If the rest of the group seems to look at or listen to one member, that person is thereby made emphatic and the group is psychologically organized around him. The direction of the eyes is also important in determining emphasis. When a person looks directly at the camera, he challenges attention. At the same time, the person who looks to one side, or looks down, is subordinated by his action. Note also that one of the oldest forms for organizing a picture

—and one that is still useful—is the pyramid. The pyramidal formation may often be employed in organizing a group picture.

In group pictures, however—particularly in group pictures outdoors—too obviously studied arrangement is unpleasant. We resent arrangement when it becomes more important than the group itself.

To secure unified arrangement without apparent loss of spontaneity, proceed somewhat as follows: First, select the person around whom the group is to be organized. Usually, in every family group, there will be one person that logically suggests himself for this distinction. It may be the oldest, Great-Uncle William; it may be the latest grandchild; or it may be a newcomer, Cousin Mamie from Weetunkit, who is visiting over the weekend. At any rate, having chosen your principal character, take some care in placing or posing him—or her, as the case may be. Then let the others group themselves more or less as they choose around your central figure.* Encourage a certain amount of conversational give-and-take among the group, watching them carefully meanwhile. Whenever the set-up looks good, say "Hold it!" and make an exposure. (Figure 110.) Switch your people around freely, without substantially altering the position of your central figure. Take plenty of exposures of all variants. Only by being prodigal of film can you be sure of a reasonably good picture.

The Elderly Person

The photographer will find that, in photographing an elderly person, he will need to shift his whole procedure and method into the more deliberate tempo of old age. There is no need now of catching the fugitive fact on the wing, as there is with children. Rather, the photographer should relax along with his subject—using slow emulsions, longer exposures and fewer of them. A larger camera may be used with profit.

Spontaneity is not to be sought in pictures of old people. A certain formality and passivity are felt to be appropriate. More con-

* It is not always within the photographer's province to control the number in the group. But it should be noted that, for small groups, odd numbers lend themselves much more readily to arrangement than do even numbers. That is, three or five is to be preferred to two or four. Above five, the oddness or evenness of the number makes little difference.

Figure 111.

sidered care and deliberation may be given to the arrangement of material.

Under these conditions, there is really no excuse for a bad background. (Figure 104.) Good for this purpose is a plain wall without too much detail. (Figure 111.) Also appropriate is a dark, unpatterned mass of foliage. Or, if these are not available, choose a low angle and get the head against the sky.

Unless your subject is a very rugged type, and you want to stress the fact, don't use a contrasty light with old people. A Type C light is preferable, giving a well-modeled presentation, without unflattering emphasis on wrinkles, depressions and other tokens of age.

Quite in keeping with this deliberate and considered sort of portraiture is the use of characteristic "hand properties" or attributes. Small objects, such as a pair of spectacles held in the hand, a newspaper, a pair of pruning shears, a pipe, or a piece of knitting, give

Figure 112.

an added note of interest and help to establish verisimilitude and characterization by suggesting a favorite occupation or pastime.

Pets

We have here a problem quite analogous to that of photographing small children. Like the children, pets are disturbed by the presence of too many spectators. Like children, too, is their intolerance of any effort to hurry them up or to make them do things they don't want to do.

So, the general procedure with pets is much the same as that we have described in the preceding section on making pictures of children. Choose some quiet and secluded spot in which the animal feels at home. Other than the photographer, not more than one person should be present, someone who is familiar to the animal and can reassure it in case it grows suspicious of the proceedings.

Figure 113.

Let this person work the animal, putting it through its tricks and holding its attention while you take an abundance of exposures. (Figure 112.) As with children, it is best to use the fixed range system, thus obviating the need of incessant refocusing. Speed is an essential part of the procedure, so use fast film and all the light possible.

In photographing cats—a very tough job, by the way—a useful device is a small table or platform covered with a white cloth (unless your cat happens to be white, in which case cover the table with a dark cloth). Set your lens so that the depth of field corresponds to the width of the table. When you are ready, have your assistant plop the cat onto the table. By the time the cat has recovered from its surprise and made up its mind what to do about it, you will have had time to get in several exposures. (Figure 113.) I have had much better luck in photographing cats outdoors than in the studio. Indoors, the strange proceedings and brilliant lights put them into such a panic that a picture is practically impossible.

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