

PHOTOGRAPHY OF HISTORIC AND PRIMITIVE ARCHITECTURE.

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THE PHOTOGRAPHY OF
HISTORIC AND PRIMITIVE ARCHITECTURE

by

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It is taken for granted that the photographer has a working knowledge of the technique of photography before embarking on such a specialized field. As a general rule, it is well to keep one's equipment as simple as possible, but the definite requirements are:

1. A view camera with swing adjustments, either a 8x7 or an 8x10. Swing adjustments are often a necessity in all forms of architectural photography.
2. A good tripod which will withstand vibrations from wind and other sources. Sometimes two tripods can be used, one supporting the rear extension of the camera.
3. Lenses of several focal lengths. A wide angle lens, a normal lens (one whose focal length is the same as the dimensions of the plate), and one or two long focal length lenses. They should be lenses corrected particularly for distortion.
4. A lens hood that will not cut corners when the lens board is raised.

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INTRODUCTION

5. Filters. A #2 and a #3 will do most work. Occasionally an A filter is needed for special effects or to cut through haze or smoke.

The photography of architecture is as old as the art of photography itself. For the past hundred years, since the days of David Octavius Hill, photographers of all countries have been making photographs of architectural subjects. Many of these are of lasting value, real works of art, interpreting great monuments of architecture, while others are merely photographic records, without pictorial value.

What are the reasons for the difference in these photographic prints? It may be said generally that one group embodies the qualities which are found in the original subjects, expressed through fine design, while the other group does not. In the first, great consideration has been given to the proportion, the spacing, the form, and the lighting of the architecture, as well as thought of its purpose, which have been expressed in the form of fine design. In the second, a mere record was made, which may be of technical excellence but without creative value. The importance of understanding architecture itself, its function, its character, its general mass as well as its smaller portions, its ornament or lack of ornament, cannot be too strongly emphasized, for it is only through such knowledge that the photographer can intelligently relate the general plan of his picture to its minor parts, and through the means of the design, give an adequate interpretation of the original. It is the purpose of this article to give an approach to the specified field of Western Historic and Primitive Architecture, and a method of obtaining satisfactory results.

EQUIPMENT.

It is taken for granted that the photographer has a working knowledge of the technique of photography before embarking on such a specialized field. As a general rule, it is well to keep one's equipment as simple as possible, but the definite requirements are:

1. A view camera with swing adjustments, either a 5x7 or an 8x10. Swing adjustments are often a necessity in all forms of architectural photography.

2. A good tripod which will withstand vibration from wind and other sources. Sometimes two tripods can be used, one supporting the rear extension of the camera.

3. Lenses of several focal lengths. A wide angle lens, a normal lens (one whose focal length is the sum of the dimensions of the plate), and one or two long focal length lenses. They should be lenses corrected particularly for distortion.

4. A lens hood that will not cut corners when the lens board is raised.

5. Filters. A K2 and a G will do most work. Occasionally an A filter is needed for special effects or to cut through haze or smoke.

6. A large light tight focusing cloth.

7. Sufficient plate holders.

8. An exposure meter.

9. A changing bag.

10. Miniature cameras can be used for rare and inaccessible shots but otherwise the large camera will do the work more easily and with greater efficiency.

DESIGN

Design, composition, organization, which ever term you prefer, is the foundation of all art. In photography, or any black and white medium, it is vital. It is by means of the design and the scale of tone values employed, and their relationship to one another, that the idea is expressed. The design must interpret the character, the lighting, the form and texture. Thus two fundamentals in photography are design or pattern, and lighting or tone values. Many enter the field of photography with the impulse to record a scene. They often fail to realize that what they wish to do is to record the emotion felt upon viewing that scene, and consequently a mere record photograph in no way reflects that emotion. ¶ In order to be creative in photography one must learn to dis-associate the reality from one's interpretation or use of that reality. The ground glass must be used as a drawing board on which the elements of a design are arranged and harmonized to fit a desired idea. It is through this process that the camera ceases to be a recording instrument and becomes a tool to express the thought and feeling of the creative artist. The photographer's pencils are rays of light, controlled not by the hand but through the camera, while the art of both are controlled by the human mind. ¶ One may well compare photography with music. One uses waves of light, composed and harmonized to express an idea; the other uses waves of sound for the same purpose. Unless sound waves are arranged to fit a pattern which contains a basic idea and which is expressed through pattern, line, harmony, and tone values, they have no meaning and are merely a confusion of sounds. The same is true of photography, even to the terms employed. An obvious example of this is to send out ten people to photograph the same object. The results will be as varied as the ten photographers. Nine of them may be ordinary recordings, good, bad, and indifferent, while the tenth may be a beautiful design, created through the use of that same object.

A photograph is composed of two elements, line and tone. (It can perhaps be more truly said that there is only tone, continuous from white to black). Line (or what appears to be line) is given us by the object, tone, by the light or absence of light. Form is expressed through light and shade, for without shadow, form is not visible. Thus, to express pure line, there should be no shadows, and to express great bulk or form, there must be deep shadows, not necessarily deep in tone but deep in drawing, to give a strong impression of the third dimension. The finished print in black and white must be visualized when studying the object on the ground glass.

The need for fine design in architectural (or any other) photography, should be obvious. Much thought should be given to proportion, that all important element, not only in the design of the picture, but also of the original. According to Mr. Webster, "proportion is harmonic relation between parts or different things of the same kind". If a building has fine proportions, then the photographic interpretation must also have equally fine proportions, if it is to convey the impression of the original. The proportions of the architecture are made out of stone, wood, or clay, assembled in form or bulk. The proportions of the photograph are made of line and tone assembled on a flat surface.

Another important point for consideration is the scale of the subject. Scale is relative dimension. Sometimes this is very difficult to express. The inclusion of an easily recognizable object will readily give this expression. The human figure can be used, but care must be taken that the figure itself maintains its relative ^{proportion} scale to the whole, for should it be ~~too~~ near the camera, it will be too large and will dwarf the building.

One of the most difficult pictures to make of any building is the "whole view". It is usually a necessary one. Here the location of the building and its setting should be well considered. If possible, the design may be bound with bits of foliage or some surrounding objects, such as cliffs, trees, or other buildings which are used only in a small part. The surroundings may often help to express the function of the building. This should be emphasized if possible.

The important facades, or large sections of the building, should be worked into fine designs. These are much less difficult, and sunlight and shadow can usually coordinate the main elements of these pictures. Details are necessary also, for they convey the knowledge of construction, material, and ornament, and complete the series. It is necessary to study the lighting at all times of day. The atmosphere of the region is also important. In a country where the sun shines brilliantly most of the time, this sunlight must be felt in the picture. This can best be done by an interesting pattern and contrast of sun and shadow. Sometimes shadows from some other unseen part of the building can be used.

The lighting best suited to show the details must be found. Sculpture needs a strong side or top lighting, especially in relief.

Searching out the aspects of a building, under various lighting conditions, finding interesting patterns, working always for the feeling of the character of the whole, is a most interesting work. To select a special historical sequence adds a still greater interest, where comparisons and relations in individual expression are found, giving greater value to the pictures.

TECHNIQUE

Little will be said here of photographic technique, as it is most adequately covered in other sections of this volume. The necessity for full exposures, in order to secure luminous shadows, may again be stressed in relation to this architectural subject. Development is relative to the kind of print chosen for the finished result. In print making, particular stress should be laid on tone values, which should have detail in the high lights, with fully developed shadow and dark tone portions. To repeat, the finished print in black and white should be visualized when studying the subject on the ground glass - the exposure - the development - the making of the print, - are all related steps in this visualization.

HISTORIC BACKGROUND

Few people realize how extensive and how fine are the architectural monuments of the Southwest and Central America. In New Mexico, Arizona, and southern Colorado, a portion of that area known as the Southwest, there are architectural remains of two distinct civilizations in addition to our own, each with its definite purpose and unique character. These are the Indian civilizations which peopled all of America, Central and South America, prior to the advent of the Spanish conquerors, and later the Spanish civilization modified from its old world origin by local adaptation. The height of the Indian civilization was reached in Central America and Mexico, while the more primitive aspect is found in the Southwest.

To the Indian cliff dweller, the function of his building was to provide a safe place in which to live, a dwelling which could be defended against a vastly superior number of nomadic, warlike raiders, and also a safe place for the storage of his precious corn on which the life of the civilization depended. Also, protection from the elements played an important part in the selection of the building site. In many parts of the Southwest area, nature has provided hundreds of great caves, many of them situated high in the rocky cliff walls of gigantic canyons, and many of them having exposure to the Southwest.

appears
And This gave the greatest possible protection from the weather. These caves offered the cliff dwellers two of their major needs, inaccessibility and invisibility, as often the caves are found in the bends of canyons where travelers, hunters, or marauders are unconscious of their presence, until they come upon the hidden recesses around rocky promontories. To add to what nature had already provided, the Indians built their houses of the same stone as that from which nature carved the caves, stone blocks, all faced with stone tools. This also gave an excellent camouflage. ¶ In photographing these dwellings, one should seek to interpret these qualities of concealment and protection. Often it will take a strong play of light and shade to make the buildings visible at all from a distance. To find and reach the proper vantage points entails many a long and arduous climb, for the cliff dwellers certainly knew how to achieve inaccessibility.

In many places in the Southwest are found also the remains of great structures on the surface of the land. Here the Indians were usually concentrated in larger numbers and evidently felt themselves safer from attack. These early American builders were an agricultural people, raising crops of corn, beans, and squash, and hunting game. They were sometimes raided by nomadic tribes of less civilized Indians who roamed the entire country. The buildings necessary to the needs of these larger groups of farmers were great communal dwellings where many people could live within a specified area, and where to some extent they could defend themselves if necessary. From this need arose the terraced pueblo, rising often to a height of five stories on a three sided enclosure. One great structure is Pueblo Bonito in New Mexico, which covers an area of six acres and contains 800 rooms. ¶ In all this ancient civilization, both cliff dweller and pueblo, the religious life centered in the Kiva, which ~~was~~ ^{is} a circular ceremonial chamber located beneath the ground. In the cliff dwellings there are the remains of many kivas, Presumably there was a kiva for each clan. In the pueblo ruins, (and in the pueblos in use today) there are also ^a number kivas. These are generally located in the plaza near the open side of the pueblo. ¶ Space does not permit here more than an outline of the functions of this 11th to 13th Century architecture in the Southwest. A certain knowledge of the lives and needs of these people is necessary to interpret adequately the remains of these ancient buildings. It is a fascinating work, one which leads to many by-paths of interest and beauty and one which creates a growing respect for our predecessors.

Far to the south, in Old Mexico, are found temples of magnificent beauty. Here we have a far higher degree of civilization than the Indians of the more northern clime. And doubtless climate had much to do with this development for it was in the valley of Mexico that the Indians discovered the wild Tiosenti grass from which they developed their perfected corn or maize.

churches a form and bulk that is unique. Here they evenly and straightly plastered with a trowel, they would lose their

Many natural wild fruits and vegetables ^{also} were grown and gathered, so that life was easier in this milder climate, and time and thought could be directed elsewhere than to the struggle for subsistence. ¶ The ancient Mayans proved themselves to be builders and artists of great attainment. One difficulty in interpreting these great temples is to retain their remarkable proportions and decorations, and the beautiful surface qualities of the material, and at the same time retain the austere and barbaric qualities which are also present. From the practices of their religion, we know that the Mayans were a barbaric people, but they had a marvelous sense of true design as is evidenced in their sculptural decorations, all of which were carved with stone tools. ¶ The landscape in which these temples are located is uninteresting. It is a flat limestone shelf, which has little natural beauty, save for the individual trees and tropical growth of plants. These, however, can be used to great advantage in the decorative treatment of the designs of the photographs. The stone from which these temples were built, is a beautiful white limestone ^{has} ~~which gathered~~ a deposit of some kind in the undercuttings, ~~and which has become~~ a rich black with the passage of time. ^{that} This gives a great contrast to some parts of the buildings in the tonal value of the material itself. Add to this an interesting play of light and shade and the photographer's palette is complete. One is often handicapped by surroundings. Trees may be in the wrong place, another building is too near or something else is in the way. However, by diligent search, some one point of vantage may be found which solves the problem. ¶ The illustrations which accompany this portion of this article are all from one comparatively small area, Chichen Itzá in Yucatan. The vast number of other temples and ruins which abound all over the Central American section, add a far greater variety and present a longer span of history.

Today one finds beside these Indian buildings, both in Old Mexico and in New, the architecture of the Spanish Conquerors. In Old Mexico it is of course strongly reminiscent of European Spain, though modified by local adaptations. In New Mexico, through the combined efforts of the Spanish priests and their Indian converts, there arose a unique form of architectural expression. In many instances the outer aspects of these churches resemble the great erosions of the desert soil in certain parts of New Mexico. The need of these builders was one of protection from the heat of summer and the winds of spring and winter. Their material was the soil on which they stood, from which they made sun-dried adobe bricks, the walls being plastered with a surface of the same clay. All the walls were plastered by hand instead of a trowel. This gave a delightful uneven surface to the walls, which is a definite part of their character. ¶ The early Spanish priests, who were architects as well as contractors, created many large and remarkable churches and missions throughout New Mexico. The fact that necessity demanded thick walls, gives these churches a form and bulk that is unique. Were they evenly and straightly plastered with a trowel, they would lose their

Domestic architecture in New Mexico also has its originality. The same necessity, thick walls for hot weather and windy days make a cool retreat from the dazzling sun of this Southwestern region. In many Spanish-American villages, in remote parts of this area, one drops back into the 16th and 17th centuries. These natives were far removed from their origin, as well as from the influence of our civilization, and they led their simple lives of farming and religious worship. Everywhere one finds churches, some of which are very small in comparison to the great Missions. There were, and still are, many carvers among these Spanish-American people who have made unique figurines of the saints and the Holy Family. These are the distinct expression of a native art. They play an important part in the churches, often having special "nichos" built in the walls for the particular patron saints.

Wherever man has lived on Earth, he had left architectre, be it a humble hut or a magnificent temple. Through his particular need he has erected his dwelling and his shrine in all parts of the earth and for all beliefs, and from the differences of these needs and beliefs due to location and to race, has come such a vast procession of architectural expressions. Photography, because of its ability to record quickly unusual and fleeting effects, and the rapidity with which ~~ixexaxbe~~ negatives can be made, is more capable than any other medium of interpreting for us much of this Architectural Procession. ~~Raixxxxxxrixax~~
~~taxaxtaxtxxxxintaxpxxtaxxx~~ It remains for photographers of the present and the future to use this wonderful medium to the utmost of its capacity, ~~and~~with skill and keen vision.