Exploring **Black and White** Photography

Second Edition

Arnold Gassan

A. J. Meek

Exploring **Black and White** Photography Second Edition

Arnold Gassan
Retired, Ohio University

A. J. Meek
Louisiana State University

Boston, Massachusetts Burr Ridge, Illinios Dubuque, Iowa
Madison, Wisconsin New York, New York San Francisco, California St. Louis, Missouri

McGraw·Hill
A Division of The McGraw·Hill Companies

Book Team

Editor *Kathleen Nietzke*
Developmental Editors *Susan J. McCormick/Deb Reinbold*
Production Editor *Jane E. Matthews*
Designer *David C. Lansdon*
Art Editor *Carla Goldhammer*
Permissions Editor *Mavis M. Oeth*
Art Processor *Brenda A. Ernzen*
Visuals/Design Developmental Consultant *Donna Slade*

Vice President and General Manager *Thomas E. Doran*
Executive Managing Editor *Ed Bartell*
Executive Editor *Edgar J. Laube*
Director of Marketing *Kathy Law Laube*
National Sales Manager *Eric Ziegler*
Marketing Manager *Carla Aspelmeier*
Advertising Manager *Jodi Rymer*
Managing Editor, Production *Vickie Putnam Caughron*
Manager of Visuals and Design *Faye M. Schilling*

Design Manager *Jac Tilton*
Art Manager *Janice Roerig*
Photo Manager *Shirley Charley*
Publishing Services Manager *Karen J. Slaght*
Permissions/Records Manager *Connie Allendorf*

Chairman Emeritus *Wm. C. Brown*
Chairman and Chief Executive Officer *Mark C. Falb*
President and Chief Operating Officer *G. Franklin Lewis*
Corporate Vice President, Operations *Beverly Kolz*
Corporate Vice President, President of WCB Manufacturing *Roger Meyer*

Cover photograph © John Running: Photographer, Inc.

Computer graphics generated by Arnold Gassan and McCullough Graphics, Dubuque, IA. Computer graphic editing by Diane Schoenbaum.

Library of Congress Catalog Card Number: 91-76863

ISBN 0-697-12523-8

Printed in the United States of America

10

This 18% gray card approximates a Zone V value.

Exploring **Black and White** Photography Second Edition

Preface

This text deals only with black-and-white photography. Silver process black-and-white photography offers more creative freedoms (and demands more control) by the photographer than does color. Black-and-white pictures excite us in ways that differ from color pictures—perhaps because black-and-white photography at its best separates us from the sensual world of color and lets our eye explore abstraction of form and discover visual analogies all too easily hidden by color.

Photographic processes and equipment are constantly changing. Electronic imaging may well overcome traditional film-based photography. As this edition goes to press, Kodak announced **Photo CD,** which is digitized compact disk storage and reproduction of filmed pictures using a TV set. This transitional print-replacement product intended for the nonprofessional combines traditional cameras and silver-based films with electronic technology to replace silver-based prints.

Manipulations of the picture through digitized reconstruction has become commonplace in advertising and editorial illustration. Yet despite these developments, the traditional *silver process* photographic black-and-white print has continuing beauty and attractiveness. Not that making good pictures is ever really easy. Annie Leibowitz, a photographer noted for her portraits in *Rolling Stone* and other magazines, said in a National Public Radio interview that "Today, if I take five photographs a year that are good—that's wonderful."

For most photographers, there is something magical about developing film in orange light, watching a special negative be enlarged until it is the size and proportion of the print you want; exposing a piece of blank, white paper to the (always mysterious) negative; immersing that blank paper gently into a clear chemical solution in a shallow tray, and watching it while a dim, ghostly image appears and becomes clear; holding the picture *you* wanted when it is fully realized.

Developing your own negatives and making your own prints means you decide how dark or light the image should be, what contrast should appear between the shadows in trees and the highlights in clouds. You decide whether the print would be better small—something to be held in the hand—or large and displayed on the wall, and exactly how it is finally proportioned.

It is gratifying to develop film and print negatives in your own darkroom, but making your own black-and-white photographs requires much more involvement with photographic materials and processes than does color slides or purchasing prints from a photofinisher. Excellence of control is gained only by personal work and time spent experimenting with materials. Besides a camera and film, you need special photographic solutions, a darkroom in which to process the film and to print the negatives, and space in which to finish the prints.

My personal belief is that the best way to learn is to take a camera and make pictures, then develop the film and make prints. When working with new photographic materials, follow the suggestions made by the manufacturer but look critically at what you have made and think hard about how you wish to change the way of seeing or the craft. Finally, start again at the beginning. When your imagination runs dry, outline a photographic project. Each step of this cycle utilizes intuition, craft, and analytical thinking.

The text has been reorganized to fit a variety of teaching methods. The first chapters deal with looking at and talking about photographs. As photography moves from silver to electromagnetic recording, it is more important than ever that photographic meaning be understood. These chapters draw upon several years of work with Minor White, graduate study of art history

and painting, twenty years experience teaching photographic art history and observing changes in that area, doctoral research in measuring how perceptions of photographs are changed by life experiences, and clinical experience.

Technical controls are important because camera and darkroom skills are used to modify content and achieve creative goals. Technical controls are a major problem faced by all beginning and intermediate photographers. Chapter 3 presents camera controls. The darkroom is discussed next and chapters 5 through 7 outline step-by-step exposing and developing film and prints. Lighting and advanced techniques follow. Possible health hazards are clearly noted in the text.

Finally, professional concerns about making a living, and some legal and ethical photographic problems, are outlined in chapter 12. Appendixes list sources of equipment, information, and chemicals. For photographers who have access to a densitometer, *parametric controls* are presented in appendix 9.

The general illustrations for the text have been chosen to provide a commentary on the text. The pictures are obtained from young photographers, from historical collections, and from the author's own files. Although most of the contemporary pictures used here are 35mm, other formats are also included.

Once, in a summer workshop, Ansel Adams said you don't make a photograph just with a camera, you bring to the act of photography all the pictures you have seen, the books you have read, the music you have heard, the people you have loved. Minor White put it a bit differently another summer, in another workshop, when he said that if you let yourself really see what is in front of your camera, and are true to yourself, something magical often results when you expose the film.

Acknowledgements

With this edition, A. J. Meek, Louisiana State University School of Art, becomes coproducer. New illustrations have been provided by graduate students from the Louisiana State University photographic arts program.

New photographs in this edition have also been provided by students from Agfa-Beseler competitions. Other illustrations for this text have been made available with the generous assistance of the Ansel Adams Publishing Trust; the Library of Congress, and the American Folk Life Center of the Library; the National Archives; the New Orleans Collection; and the University of Louisville Photographic Archives. Nikon Corporation lent me the cutaway single-lens reflex camera and zoom lens, and Wilson's Camera Shops in Athens, Ohio, lent many other pieces of equipment used to provide text illustrations.

Restructuring of the text was suggested by several advisors, and I wish to thank them for the hard work they did. Also thanks to the faculty, graduate, and undergraduate students at Ohio University who allowed me to use their pictures. The School of Visual Communication and the School of Art at Ohio University initially provided equipment, facilities, and a supportive environment.

The reviewers are Raymond J. Brooks, Winona State University; Kathleen Campbell, State University of New York; Emmette Jackson, Sam Houston State University; Michael D. Sherer, University of Nebraska; Darilyn R. Rowan, El Camino College; and Wendall A. White, Stockton State College.

Arnold Gassan

Contents

1 Looking at Photographs

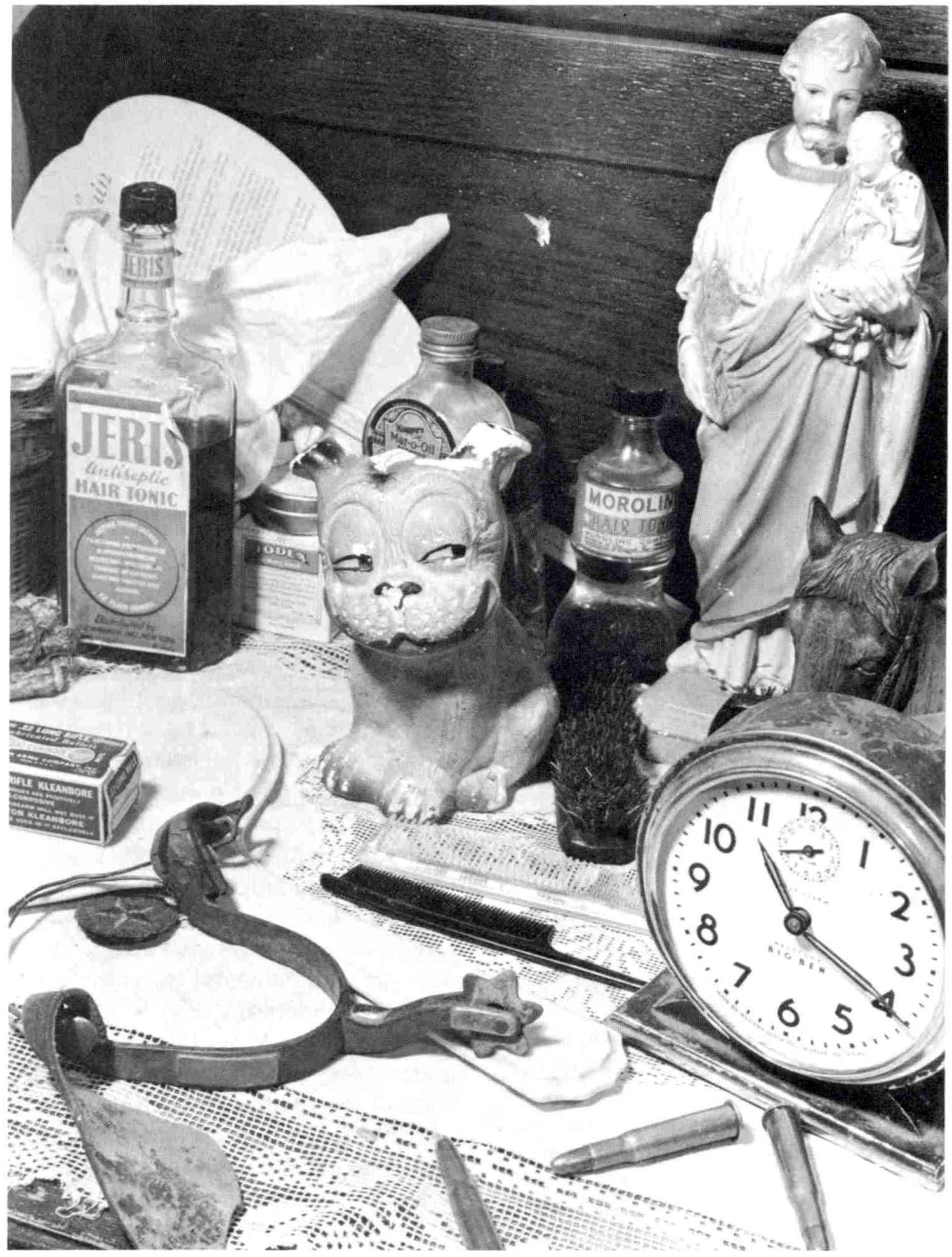


Figure 1.1
Top of Stuart Haby's Dresser. Texas, 1945. Esther Bubley. The photograph captures in an instant a cross section of a Texas rancher's life, providing a record of significant details.
Esther Bubley, University of Louisville Photographic Archives.

Begin Photography by Looking at Photographs

Photographs permit us to communicate to the world what we see that no one else might otherwise see. Figure 1.1 shows a record of details that reflect a man's entire life: three bottles of hair tonic, two very clean combs, two hair brushes, hard-worn western spurs, a religious statue, a box of small-bore cartridges and three high-velocity rifle cartridges, an alarm clock, a horse figurine, a handkerchief, a cardboard fan, a hand mirror, a lace-edged runner covering the dresser, and a battered plaster dog. Taken as they are found together, these commonplace things strongly evoke the personality of the man. The photographer has added point-of-view, selection and composition, camera controls, and light.

The things we discover and make visible in our pictures symbolize what we feel by using the elements of value, form, light, space, color, and texture. We make pictures both to describe what is there before the camera, and to make associations between what is obviously there and what might be there. The photographer is helpless to communicate if the viewer does not look carefully at the picture.

The earliest photographs widely known by the public were made by Daguerre, a painter. When his small metal plate images were first presented, another painter examined them and proclaimed that from that day, painting was dead! He meant that the painter's struggle to describe the visible world with such sufficient detail and exactitude to fool the eye was no longer the first goal for the artist.

The goal of creating a consensual optical reality was codified by Leon Battista Alberti in 1435 when he described how to create a drawing of a small bit of the world that had "correct" perspective. An Alberti drawing is a kind of "magic window" on the world that exactly resembles a photograph. What the perspective drawing (and the camera itself) ignores is what happens *outside the frame,* and that was a problem of aesthetics largely left unaddressed until late nineteenth century French painters began to look at photographs.

Photography, Science, Art, and Reality

The original purpose of photography was to describe perspective as the eye saw it. To this end, lenses were designed to produce "normal" images where straight lines in nature appeared straight on the print. The assumptions of nineteenth century art were nurtured by photographers and remained dominant in photography well into the twentieth century until other artists redefined the purpose of art.

Definitions of purpose in contemporary photography like contemporary art are torn without hope of repair. One definition of photography derives from the belief that the scientifically accurate description of the scene before the camera is adequate and appropriate. Another definition is that the purpose of the photographer is to discover "significant form," use the camera to isolate it and the controls of the process to enhance it. A third definition argues that photographs are messages without a code whose meaning is always new, for meaning is the result of interpretation based on current social, political, and aesthetic fashions. One generation interprets a photograph as viewed by Marxism, the next as viewed by feminists. What is important is that *no photographic record is unbiased and transparent.* Finally, photographic methods are used by many artists to create "new" realities—assemblage, collage, montage, overlays—that have little to do with Alberti's one-eyed vision that photography inherited.

You will inevitably bring your own concerns to any photograph. The purpose of this chapter and the next is to provide you with an introduction to tools that can be used to assess what it is you are examining when you look at a photograph. To that end, *documentary photography* is the term used in this text, with the understanding that it is the descriptive quality of the photograph that is of concern.

Popular photography dates from George Eastman's production of the Kodak system in 1889, but the true "invention" of photography dates to 1839. It was fifty years after Daguerre presented his unique copper-plate images to the public in France before George Eastman created what seemed to be an ideal way to make pictures. Figure 1.2 shows how his camera easily recorded moments of personal discovery. With the Eastman camera, you bought a photographic system: the camera was already loaded with film; you pointed it at your personal world, pressed the shutter, advanced the film, pulled a string to cock the shutter again, and when all the film was exposed, you mailed the camera back to Kodak. The film was then removed from the camera and developed, prints were made and mounted on cardboard, and the camera was reloaded and returned to you, along with the prints. This system freed photographers from photographic chemistry and darkroom tedium. The price of this freedom was that the photographer lost control of the middle steps—everything that happened between the *click* of the shutter and the excitement of the finished print. The photographer lost the magic that came with seeing his/her own pictures develop.

Photographic Composition and Art Traditions

Compositional traditions for two-dimensional representations created by painters were adapted by most early photographers. This was due in part because most early photographers were painters who had been economically displaced by the daguerreotype, which quickly became a cheap replacement for painted portraits. Yet the compositional traditions of painting have always been slightly at odds with the documentary nature of the photograph. The painter always has the capacity to select what to keep in and what to leave out as the painting is created. The photographer does this with difficulty.

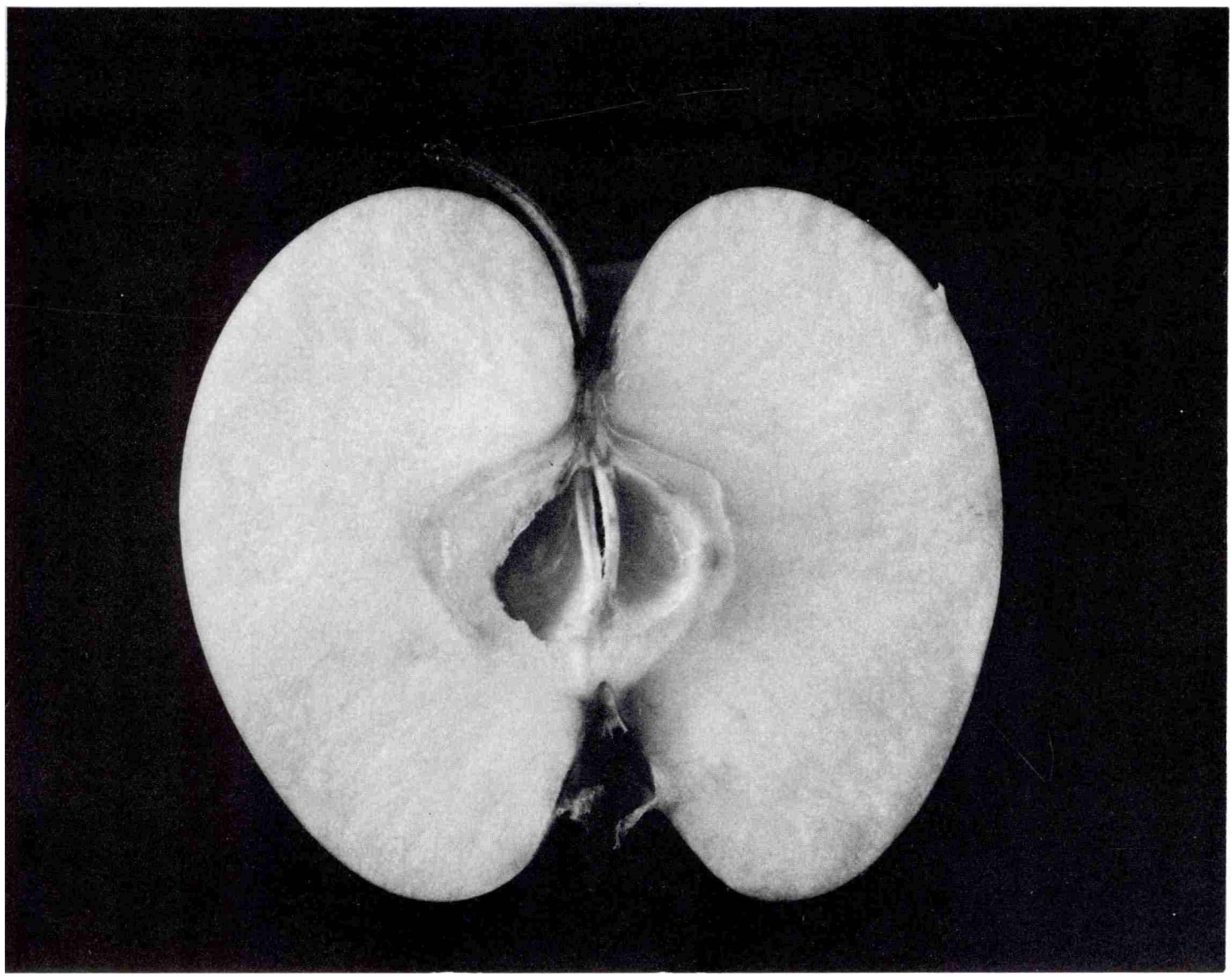


Figure 1.2
Great Mother of Big Apples. Steve Ballance. The "obvious" form of the apple is both descriptive and suggestive, and the interior figure/ground forms evoke the message of the photograph's title.
Courtesy of the photographer.

Figure and Ground

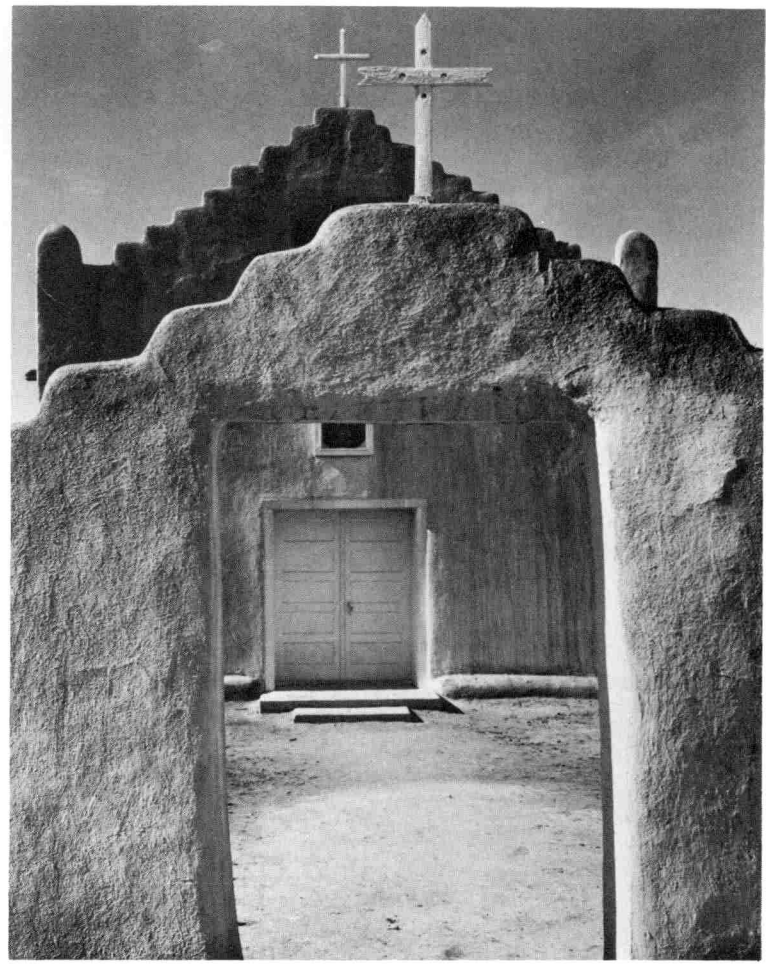
The principal subject in the picture is often referred to as the **figure,** and the surrounding frame as the **ground,** with the relationship between them being the **figure / ground** dialogue. This notation is useful when describing the obvious arrangement of shapes in the photograph.

Figure/ground relationships also define some of the content. The relationship between the figure and the ground is actually quite limited; there are really only three compositional patterns that appear repeatedly:

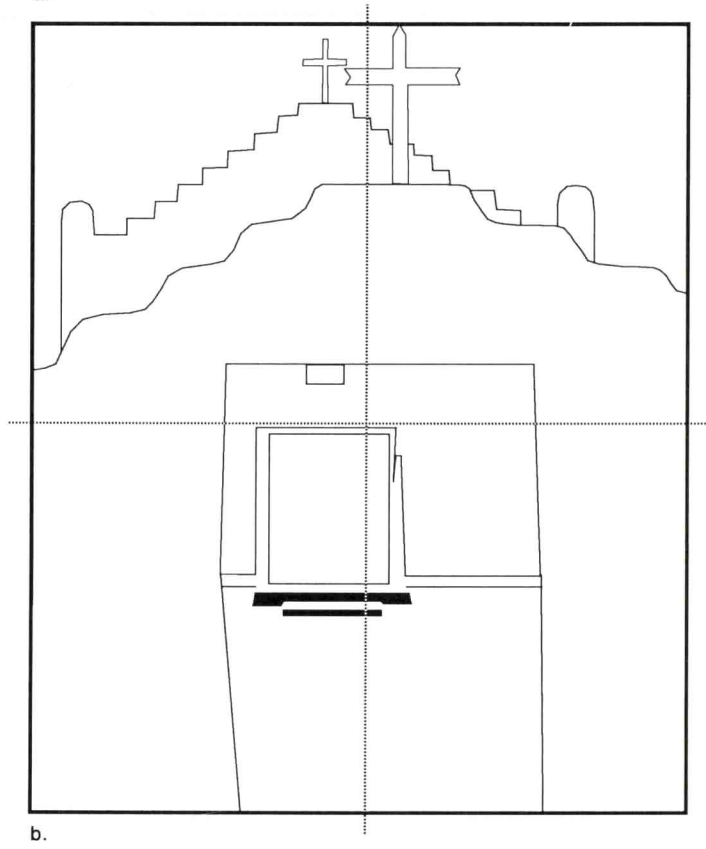
1. Closed, or simple figure/ground
2. Multiple figure/ground relationships
3. Open figure/ground

When the subject is centered, attention is automatic. Figure 1.2 is an example of a closed, superficially simple figure/ground relationship. The light shape of the apple floats in the solid black of the frame. And yet there is another figure/ground within the apple, as you discover the shadowy shape of the seed pocket within the apple itself. Rarely does one only find a single figure/ground relationship, though often one shape is dominant, as in this illustration.

Multiple figure/ground compositions often happen by default and they often weaken a picture, but creating complex figure/ground relationships can be an effective photographer's tool when used with care. Figure 1.3*A* is a photograph of an American Indian church in which a complex set of



a.



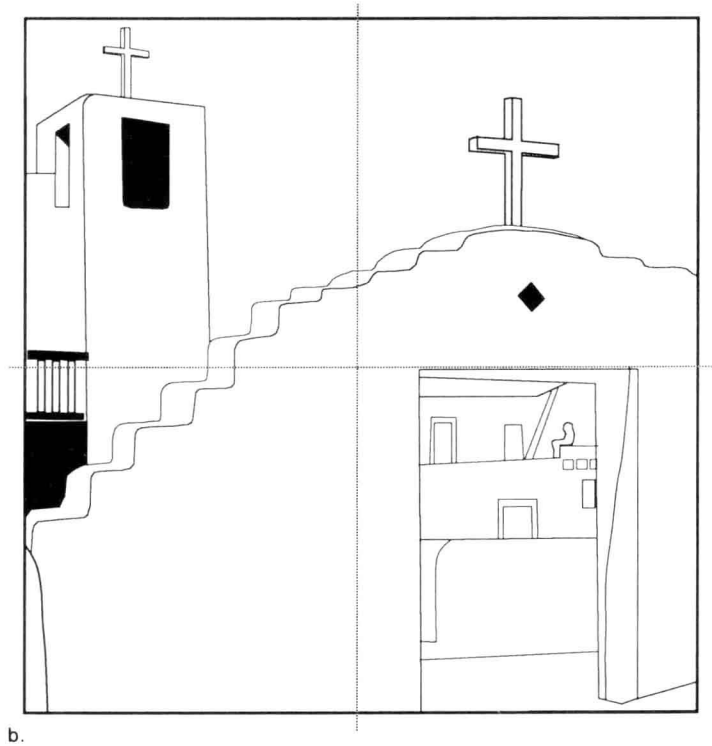
b.

Figure 1.3
a. Indian Pueblo Church, New Mexico. Ansel Adams. Nominally a documentary photograph made for the U.S. Department of the Interior, the picture became a complex photographic art statement. Framing, point of view, length of lens, and depth-of-field controls were used to reveal complex form seen by the photographer. **b.** Figure/ground analysis of Adams' photograph of the Indian pueblo church.

figure/ground relationships can be discovered. Part of the strength of this picture is in the complexity of the form relationships. One discovers rectangles within rectangles in the lower half of the picture detailed in figure 1.3*B*. All of the shapes in the lower half are also in a dialogue with the stairwell walls and the crosses in the upper half of the picture.

While a closed figure/ground composition directs our attention to the photograph itself, the broken, or open, figure/ground composition often has a more subtle impact; it suggests we look past the photograph to the real objects that were before the photographer's camera. Figure 1.4*A* is the same church photographed twenty years later from an oblique angle, and figure 1.4*B* is an analysis of that picture, which demonstrates how the open framing created by the strong diagonals interacts with the frame-within-a-frame of the doorway to produce two different photographs in one, creating a different visual complexity and energy.

a.



b.

Figure 1.4
a. Indian Pueblo Church, New Mexico. Arnold Gassan. An oblique view using the adobe patio wall to frame a portion of the pueblo residence changes the meaning of the array of crosses. The "empty" center and the angled view encourages the eye to move back and forth across the picture.
b. Figure/ground analysis of the author's photograph of the Indian pueblo church.
a. Photo by the author.

Figure 1.5*A* is an example of open forms created with curves. It is an historically early large-format, wet-plate documentary photograph of a great western valley and river. The dominant form in the picture is the loop of the river, which (as seen in fig. 1.5*B*) creates an open shape closed only by the edge of the frame.

The Centered Image

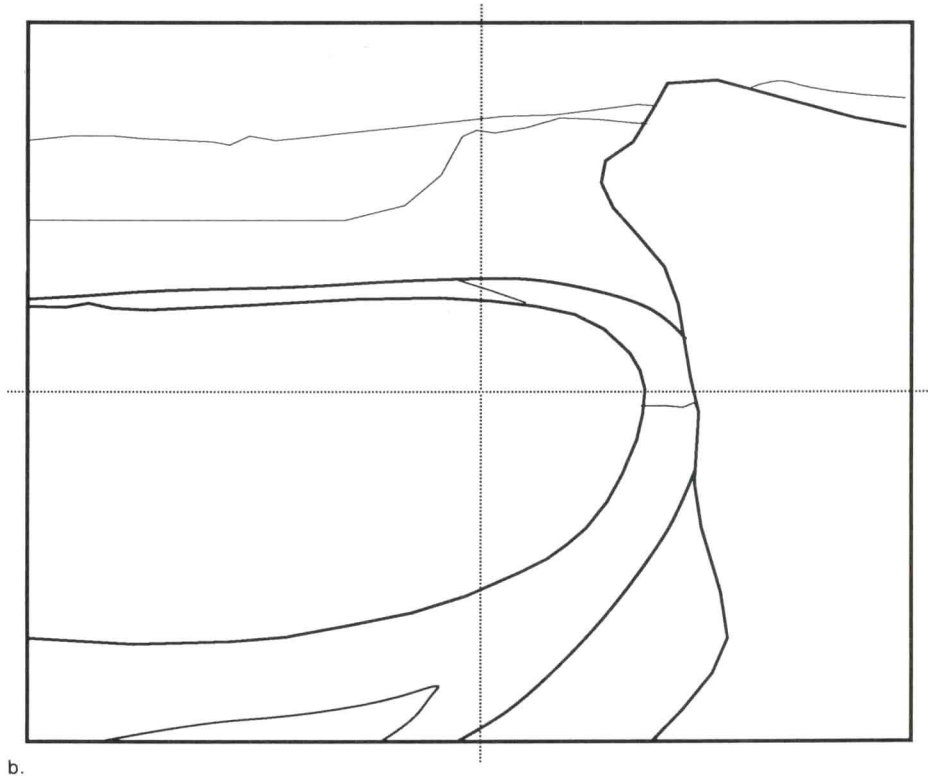
The centered image (or an image firmly tied to a corner of the frame) is considered to be stable (compared to an eccentric placement in the frame), and something special happens when the figure is centered. It seems that the subject is influenced by the boundary of the frame more than the boundary is affected by the subject, as shown in figure 1.6*A*, which is diagramed in figure 1.6*B*.

When the subject is dead center, it is not "dead" because there are tensions in all directions; to a sensitive eye, a subject in balance in the middle may sustain great tension. When the subject is dispersed, or moved away from the center, as shown in figure 1.7*A* and the diagram in figure 1.7*B*, the entire frame becomes a pattern and that, in turn, becomes the apparent subject of the photograph.

Photographs are made to describe objects and events, to reveal significant form, and to disclose personal insights. Some photographs are more powerful as documents, others are effective as visual poems, and some can hardly be described in verbal terms because they are so singularly visual and formal in content.

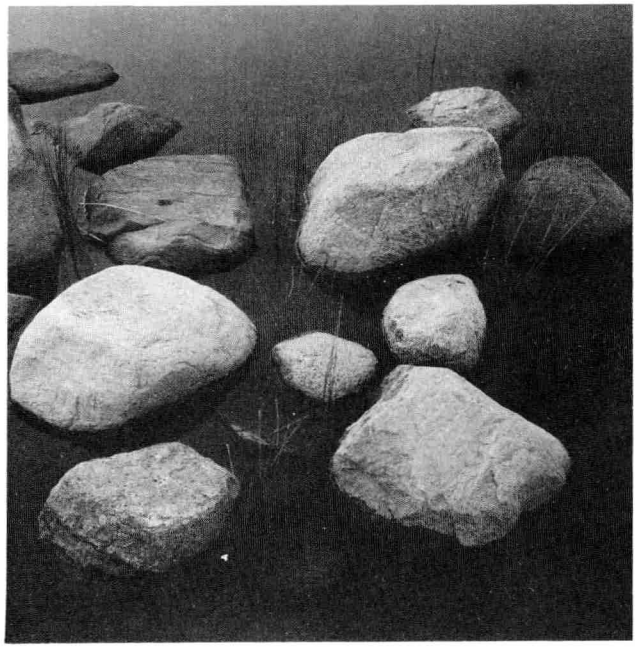
The camera does not seek out significant form. A camera thoughtlessly describes whatever is in front of the lens, and it is up to the photographer to select what the lens will record, by selecting a point of view and controlling the photographic process to produce significant form from chaotic events. The inclusiveness of the lens places great demands on the photographer; while a painter can make a scene tidy, the camera describes what is before it, and the photographer must edit what the camera might record.

a.

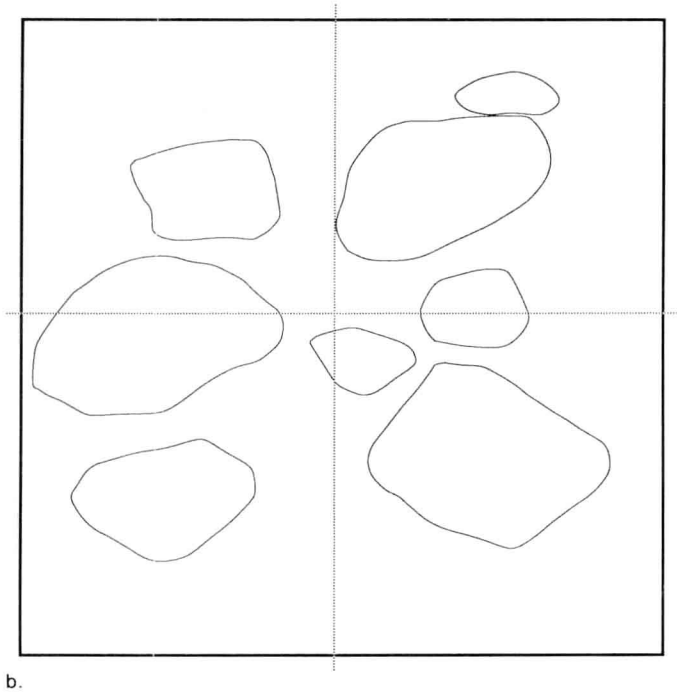


b.

Figure 1.5
a. Green River. William Henry Jackson. An early wet-plate documentary photograph. The photographer sought out significant form and combined it with accurate description of the vast spaces as well as specific geologic information. **b.** Figure/ground analysis of Jackson's landscape photograph.
a. National Archives.

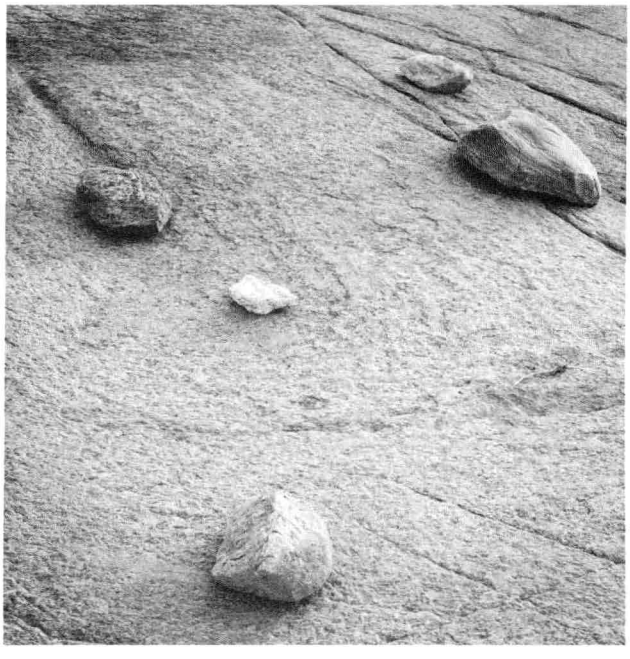


a.

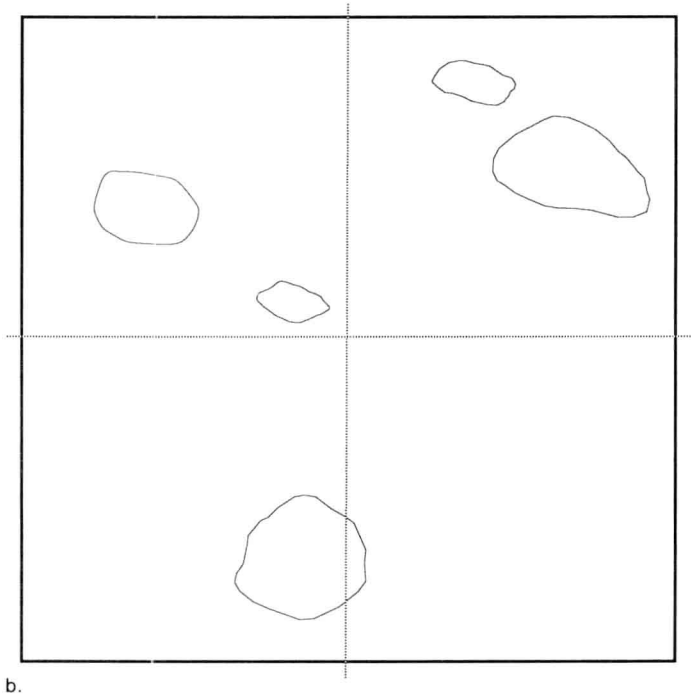


b.

Figure 1.6
a. Photograph of rocks seen as a stable central cluster form in the frame. **b.** The simplified drawing of forms (as suggested in assignment #2) shows the figure/ground relationships of **a.**



a.



b.

Figure 1.7
a. Photograph of rocks seen as a dispersed pattern within the frame. **b.** The simplified drawing of forms (as suggested in assignment #2) shows the figure/ground relationships of **a.**