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Other derivative works appear in a variety of publications and course material. Recent editorial and technical updates do not affect the value of earlier editions.

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About the Author

The author's writing career includes instructional materials written for online workshops and the City of Tempe Parks and Recreation department, technical manuals for Walsh America, product reviews for various publications, travel features for Camping & RV Magazine, a family activities column for Camping & RV Magazine and the Warner Wrangler newspaper, plus frequent pet care articles and photos for Loving Pets Magazine. Her work also appears in Cup of Comfort for Mothers & Sons and The Healing Touch of Horses.

Her second passion is photography. The challenge of competing in photography and poetry contests provides ongoing inspiration to grow and explore new ideas. Penny's explorations paid off when she won first place for Adult Rhyming Poetry in the 2003 Prairie Hill Writing Contest.

Penny and her husband live in Texas. She shares her assignments with rotating office assistants, which include six grandchildren and several four-legged editorial consultants. Antique rose gardening is her favorite outdoor activity. She says the annual explosion of color and fragrance inspires a fresh exploration of poetry every spring.

About the Contributing Photographer

Angela Giles Klocke is a writer, photographer, blogger, and mother. When she isn't busy caring for four children, she still finds time to volunteer and work outside of her home office.

You can read more about Angela and see more of her photography at <http://www.angelagilesklocke.com>.

Angela is a talented, self-taught, photographer who donated photographs from AGK Photography to this publication.

Thank you, Angela.

Table of Contents

COPYRIGHT NOTICE.....	3
ABOUT THE AUTHOR	4
ABOUT THE CONTRIBUTING PHOTOGRAPHER	5
ABOUT THIS BOOK.....	9
WHY DO PHOTOS SELL WRITING?.....	10
Why are photos important?	11
What do publishers require?	12
Do you need an expensive camera?	13
Where do you find ready-to-use photos?	14
How do you present a package?	16
How do you learn to take photos that sell?	18
PHOTO IMPROVEMENT	20
Aperture.....	20
Shutter Speed	21
Controlling composition	23
Motion	23
Framing	23
Cropping.....	24
Point of view.....	24
Silhouetting	24
Diagonals	25

Lighting.....	25
Film	27
Film Speed.....	30
PHOTO ENLARGEMENT	32
CHECKLIST TO IMPROVE YOUR STORY.....	33
TECHNIQUES TO IMPROVE YOUR WRITING.....	34
WEB AND EMAIL WRITING TIPS.....	35
NEWS STORY TIPS	36
INTERVIEW TIPS.....	38
PHOTOGRAPHY PLANNING OUTLINE	39
Basic Photography Equipment	39
Choosing Equipment.....	40
Subject Selection and Composition.....	43
Subject Selection	43
Learn to see	43
Composition Elements	45
Techniques for controlling composition	47
Motion	47
Framing.....	47
Cropping.....	47
POV – Point of View.....	48
Foreground/background.....	48

Silhouetting	48
Diagonals	48
Lighting.....	48
CONTINUED LEARNING PHOTO SHOOT EXERCISE	50
RESOURCES.....	51
TERMINOLOGY AND TECHNOLOGY	57
TECHNICAL TIPS	63
FOR TECHNICAL GURUS	68
Bits and Bytes	68
Reducing File Sizes.....	69
Image Processing Information.....	71
BASIC PHOTOGRAPHY GLOSSARY	74
WEBSITES FOR WRITING JOBS	85
PHOTOGRAPHY WEBSITES.....	87
PHOTOGRAPHY EXAMPLES.....	90
PARTING WORDS.....	108
MEET THE AUTHOR & PHOTOGRAPHERS	109

About This Book

All photos are intentionally placed in the back of the book. While this arrangement means more navigation (or page turning, if you print the entire book), some people don't have a color printer; some use text readers for assistance; and others can't afford the ink to print a full color book.

Wide margins give you room to make notes if you print this material for use as a workbook.

The large font allows easy reading on your computer screen, when using PDF features that shrink the page, and in print.

We hope you appreciate our efforts to accommodate all levels of experience, physical abilities, and income, and to make this book a pleasant experience, as well as a learning tool.

Why Do Photos Sell Writing?

Today, editors need quality writing, great photos, and one-stop shopping. You don't even have to own a camera to submit a great package; yet, two editors I know pass up articles due to the lack of photos every day. Writers take note—if you write travel, news, sports, interviews, crafts, nostalgia, or memoirs, adding photos can secure sales and increase pay. Of course, photos may be included in fiction and multi-media work too.

Publishing, like most businesses, endures staff and budget cuts when the economy slows. Publishers must also find ways to compete with television, the Internet, and video games, for their audience. In a society that spends hours every day using visual media, good photos become a key competitive feature. The reality is that writers must now compete in this arena, too.

One way publishers stretch their budget is to purchase freelance material from writers who include photos. All of the markets listed above use photos; and because these stories deal with a specific person, place, or event, the editor can't easily pull a stock photo to fill the gap. So let's explore how you can take advantage of this opportunity.

Why are photos important?

[Dramatic travel photos](#) showcase exciting scenery and attractions. They encourage readers to book a trip, recommend the destination, or read books about an unfamiliar location. Any travel article needs photos for maximum effect.

News and sports publications show winners and losers emotions. Because photos reveal [humanity and reality](#), readers can share in the triumph and the tragedy of the moment. In other words, people like to see people.

Likewise, when writers pen [nostalgia](#) or memoirs, nothing tugs at readers' emotions like photos of an old Victrola next to the family matriarch as a young bride. In these cases, a photo can also visually preserve history for future generations.

When writing about crafts, photos spark the reader's desire to buy the kit, sign up for a class, or purchase instructions. Well-selected photos [clarify instructions](#), and describe sequences, that may be difficult to follow through written instruction alone.

What do publishers require?

Publishers offer guidelines for photographers, just as they do for writers. The next time you request writers' guidelines and a sample copy, request photo guidelines too. Read the guidelines carefully. Do they accept digital photos, prints, or slides? Next, analyze the publication.

Are all photos in color? Are they large or small? Do they illustrate the story, or do they add new information? Does each photo include people? How many photos accompany the type of article you are writing?

Many publishers are working to incorporate the Internet and digital photography into publishing. The transition is especially difficult for small publications that lack computer savvy staff, extensive software, and the time to learn the nuances of a technology that changes daily. Therefore, not all publishers accept all photographic media yet. The good news is that you only have to learn to ask questions that define which resources to use in order to produce appropriate photos for your publishers.

The end use of the photos, online or print, is the most important factor in the guidelines. Take the guidelines, and your film or digital media, to a photography store for expert help. They can scan photos, copy photos, or burn photos, onto a CD. Be sure to have an extra copy made for your files and future use.

Local colleges and universities are wonderful sources of assistance. Technically savvy journalism and photography students love to see their name listed as photographer under your byline. Find a partner and help each other.

Another convenient resource may be your local drugstore. Many stores offer CDs with film processing, and most have kiosks that print photos or CDs directly from the memory media in digital cameras. The machines are easy to use and allow you to make a variety of adjustments to any photo from any media.

Do you need an expensive camera?

No. Any type of camera and film works, even disposable cameras. However, if you have a digital camera, take pictures with film too. Film converts to digital easily and cheaply; but digital to film conversion is not cheap, and most writers can't justify paying for the reverse conversion.

A cheap two-mega-pixel digital camera produces acceptable e-zine and Website material, but digital photos for print work require at least a three-mega-pixel camera. However, if your goal is to shoot cover art, you need to invest in lessons and a professional quality digital camera.

When you shoot digital pictures for publication, select the best quality setting on the camera. You can't store as many images, but high quality shots can be manipulated to suit editorial requirements. Do not edit in the camera, and do not use the LCD screen. You'll get better pictures and a lot more mileage from your batteries.

Where do you find ready-to-use photos?

Local tourism offices, state tourist bureaus, and Chamber of Commerce offices, offer free photos of local attractions for publication use. For news and sports events, there may be school photographers taking photos, or your neighbor may be shooting snapshots because their child stars in the game. In my experience, offering to mention their name, as photographer, usually nets all the photos you want.

Likewise, contact clubs and organizations for photos of special projects, historic club events, or to connect with someone who may already possess high-quality photos of specialized items. Clubs and organizations may also have photos available for publication, as long as you mention their name and/or the photograph's name.

When you need photos of people, check the archives of newspapers, libraries, and museums. These sources may, or may not, charge a fee for photos. Of course, you should credit the original photographer, if the information is available, as well as the source.

High profile individuals, who get frequent publicity, have professionally prepared publicity photos they hand out. In fact, some personalities are adamant about approving all photos for publication. On the other hand, friends and neighbors often enjoy seeing almost any photo published with their memoirs and nostalgia stories.

Anytime you take photos, or use photos others provide, obtain a signed release giving you permission to use the photo. If there are any questions about your right to use the work, or their right to sign a release, clarify the terms of the release

before publication. Photography reference books such as *Photographer's Market*, which is updated and published annually by *Writer's Digest*, provide business advice and sample release forms. Check local laws, and regional publications, for proper procedure outside the US.

How do you present a package?

First, obtain carriers to organize and ship photographic material. Carriers are sheets of photo-safe plastic with pockets sized for photographic material. Carriers for slides, diskettes, CDs, and photos, are available at camera stores and online.

After obtaining carriers, type a list of the pictures. Assign a number and caption to each. Then, include the same information on the back of each photo by attaching a typed self-stick note, or by creating self-adhesive address labels on your computer and affixing a label. To avoid damaging your pictures, never write on them—not even for home use.

Important:

Always send duplicates of any media. Keep your originals safely at home.

If you submit slides, use slide labels. Most word processing programs have settings for self-adhesive slide labels, which are available through office supply stores. Never label the narrow edges of slides.

Next, when you send diskettes or CDs, enclose a typed list detailing the contents and affix a diskette or CD label stating the name of the corresponding article and photos. Again, commercial labels are available, and word processing programs offer preset format selections for most.

Electronic submissions require a separate document file, listing the photos and captions. In the cover email, state the names of the files containing the article and photos. Next, list the photos and indicate how many items are in each file. Last, indicate the number of e-mail messages the recipient should expect, if large files must be sent separately.

When you mail photo-writing packages, use sturdy envelopes that do not require folding the contents. A file folder slipped into a sturdy envelope provides excellent protection without adding excess weight. To prepare the package for mailing, type the article title on a label and affix it to the file folder. Next, type two address labels. Type one with your return address, and one

with the destination address. Last, be sure to include a self-addressed stamped envelope large enough to return the photographic media (use the return address label) and stamped with adequate postage.

How do you learn to take photos that sell?

The cost of training depends on how much you want to invest and whether you enjoy photography. Initially, concentrate on learning to shoot simple compositions that portray the subject well and compliment your written topic. Be sure the focus is perfect, and the light is balanced. Most libraries offer a variety of basic photography books for beginners who are motivated to study on their own. Many famous photographers are self-taught.

City recreation departments and local clubs may offer inexpensive photography classes, and some companies host employee photography groups. Also, watch neighborhood newspapers to find local photographers who teach classes.

Some large photo stores may also offer lessons; but they hope class members will "love" with the latest camera, so expect a sales pitch too. The major camera makers, such as Fuji and Nikon, offer excellent seminars throughout the US as well.

Academic courses are available at colleges, universities, and online at schools such as New York Institute of Photography (NYIP). Although most writers don't want to make a second career out of photography, the NYIP site is a great self-teaching tool and reference guide.

Here are a few basic composition tips to help get you started:

[Know the subject](#). Then, clearly, obviously feature your subject.

[Do not center](#) the subject; move off to one side slightly.

[Move in as close](#) as possible.

[Use flash when the subject is in shade](#) or shadow.

Keep picture [composition simple](#).

Now, grab a roll of film, add photos to your work, and soon you'll see an increase in your sales and your income.

Photo Improvement

[Simple composition](#) is most effective. There are many ways to vary results and dramatically change the same photo. Aperture, shutter speed, and light, are among the easiest and most common ways to improve your photo results. As you work through this section, read the descriptions of terms in the Basic Photography Glossary.

Techniques are a means to control the image and to achieve the result you desire.

Aperture

Aperture describes how much light the lens allows into the camera. Your aperture setting affects your photos by allowing you to control the depth-of-field, the smaller the opening, the greater the [depth-of-field](#).

A very clear subject with a [muted, unfocused background](#) may be the effect you want, if you want to spotlight your subject without other distractions, or if there is an unattractive

background you do not want to show. On the other hand, you may want to [clearly show everything](#) when capturing a landscape or special event.

Aperture selection may not be possible with telephoto lenses, and most of today's lenses don't have a depth-of-field scale. If you are using a digital camera, try using manual settings—if you have that option.

When shooting with any camera that offers a variety of automatic modes, compare the results against the manual options. If you don't see a substantial difference, use whichever method you prefer. Many photographers, even pros, use automatic settings when they find a camera that gives reliable results. You don't have to use the most difficult process to produce professional work.

Shutter Speed

Shutter speed is expressed in seconds or fractions of one second.

250 is 1/250 of one second

The brighter the light the less time the light needs to hit the film.

Over-exposure is letting too much light get to the film. Under-exposure is letting too little light get to the film. Many photography teachers recommend erring to the side of overexposure, when you are in doubt. The reason is that the information is recorded, and can often be recovered, even though you can't see it. When film is underexposed, the information simply is not on the film. This does make sense. Think about it as you work through this information.

Shutter speeds can be varied due to light, film speed, and equipment such as filters. Shutter speed and f-stop settings (aperture) work together to affect your presentation of the subject. Try different combinations to see what works best for your subjects.

At settings slower than 1/60, it will be difficult to hold the camera steady by using your hands. Steady the camera with a tripod, prop it on your knee, or use an available prop, such as a wall or table. If you are forced to attempt a slow shutter speed without a tripod, inhale and hold your breath to reduce normal body movement that transfers to the camera. There are a number of techniques to help you brace the camera by

adjusting your body position. Some positions are very uncomfortable though, and I've never found pain to be helpful when trying to concentrate on my photography.

Controlling composition

Motion

There are two basic beginner methods to achieve [motion](#) control. Of course, there are also more sophisticated methods that are beyond the scope of this book.

Slow film, slow shutter, and time release, allow blur

Fast film, and fast shutter speed, stop action

Framing

[Framing](#) is an easy technique. The frame may consist of tree branches or the edges of a concrete tunnel on a playground. Anything that surrounds your subject becomes a frame.

Cropping

Cropping is also an easy technique, and one that can be employed after the photo is developed. It is also a technique that can be varied according to the use of the photo and what you want to emphasize. You can crop photos yourself using a computer program, or you can have them professionally cropped at a photo store.

Never physically crop the negative or slide.

Point of view

The point of view refers to the perspective of the viewer. Try to [vary the point of view](#). Experiment with your subjects by taking photos from above, below, in profile, and so on. Get close and move further away.

Silhouetting

Shooting a [silhouette](#) is more difficult than other photography techniques. First, you must be careful not to face directly into the sun during daytime shooting. Next, it is hard to judge how dark the subject will appear, but it is a technique worth practicing because the effects are dramatic and beautiful.

Diagonals

[Diagonal emphasis](#) can be dramatic and catch the viewer's eye quickly. However, it must not be overdone either. There is no rule for when this technique works best. Try it, and practice, until you develop an eye for the line and form that works with a diagonal photo. Make a cardboard frame and try turning some of your photos diagonally behind the frame to test this technique without wasting film. Then, analyze your photos and look carefully at those where the change in orientation feels right as opposed to the diagonal angles causing a disorienting effect.

Lighting

[Fill flash](#) eliminates shadows in shade, indoors, and at night. It illuminates a subject and still catches background lights.

Have the subject look [offside, above, or below the flash](#), to minimize red eye. Use the red-eye flash setting, when the delay won't present a problem. If you are using a fixed flash or point and shoot with the flash located in the corner, position the flash at the BOTTOM of the camera for subjects where red-eye is common. It isn't guaranteed, but it works surprisingly often.

Shoot at right angles to the sun for the best sky color, and adjust your polarizing filter before shooting sky or water.

Light creates or enhances the mood reflected in photos, and natural light qualities vary as the time of day changes.

Changing the time of day when you shoot is a simple and effective means of achieving the desired effect.

[Dawn](#) – soft, dramatic; usually clear

Noon – intense color, bright light, harsh shadows, no mood; can also cause everything to look washed out

Mid-afternoon – warmer, texture highlighted; sun angle depends on location and season

Late afternoon – only the lower end of the light spectrum gets through; warm glow, intense reds and oranges, emphasizes architectural details (good for faces side-lit through windows and interesting reflections from windows)

[Sunset](#) – boring without another element, great on buildings, short-lived: work fast, sunset-reflected-light spotlights some subjects nicely

Dusk – remnants of daylight begin to blend with artificial light requiring a tripod and longer exposures; dusk light changes quickly and doesn't last long

Safety must be a consideration when shooting in any location at any time of day. However, extra care should be taken shooting at night in unfamiliar areas. Photography equipment is visible, making you a target for theft. Please, remember not to get so involved in the photography that you forget to pay attention to your surroundings.

Film

Film is another means of changing the results you obtain when you take photographs. Even if you use a digital camera, you should practice with film and get to know a film camera. We haven't come to the time when digital is universally acceptable. Due to the potential for technical errors, backup photos are always recommended.

I've been known to travel with three cameras. One set up with print film. One set up with B&W film, and one set up with slide film. This year, I added a digital camera to the selection.

Usually, I pick two to use for each assignment--three, if I am where I can't return to the location easily.

Negative – The C-41 developing process represents the subject in reversed tones. This is the film that develops into prints, and it yields the best results for amateur photographers. In general, it is the cheapest and easily available: although, it is less saturated than slide film

Transparency (slide, positive film, or reversal film) – The original film is cut in strips or mounted into plastic or cardboard frames. It damages easily, and unlike print film, you have no backup copy. The results are hard to view and evaluate, due to the small size and the need for a viewer. Prints from slides are a bit more expensive than prints from negatives too. Some publishers still prefer slides, due to greater saturation and rich color. However, many contests no longer accept slides, and they are not easy to store and view for home use.

Infrared – Infrared film is fun for art and special effects. It is a sensitized film that detects invisible infrared rays. It requires a red filter, and the built-in exposure readings on cameras do not apply because the light affects it differently. If you want to

experiment with infrared, you'll need to find a source of instructions at your local library or online.

Daylight film – This is a more specialized print film that is balanced for proper color rendition when exposed in daylight. Shooting under clouds or in shade results in a bluish color. Dawn and dusk shots result in reddish color.

Note: Most consumer film produces excellent results.

Tungsten – Again, this is a specialized film designed to compensate for the odd colors in artificial lighting and render proper colors when exposed under tungsten light (standard indoor light bulbs). This film needs a color conversion filter to be used with a flash or in normal daylight. It is generally easier to get a filter that adjusts the film you use most often. There are also special films for florescent lighting compensation too.

Black & White – Commonly referred to as B&W, black and white film is now available for C-41 processing. I've seen no problem with the results I get using this new film. It has been out for years and can be developed anyplace that develops consumer photos—even the one-hour photo marts in drug and grocery stores. A red filter helps enhance color (similar to

polarizing on color film). If you use the older type B&W film, it must be specially processed, which involves days to weeks of waiting time, and sometimes requires the lab to ship it out of town.

Film Speed

Film manufacturers assign ISO numbers based on International Standards Org. (See Glossary).

ASA refers to the American Standards Association (replaced with ISO).

In ASA/ISO film series, each higher number is 1/3 faster than the preceding one.

200, 250, 320, 400, 500, 650, 800, 1000, 1250, 1600, 2000, 2500, 3200

Faster film uses less light. It is best for no flash and low light situations, where flash is undesirable.

Faster freezes action best in cameras with minimal settings, such as point and shoot cameras. Check your camera manual to see which ISO speeds your camera supports.

Slower film has greater density and smaller grain for enlargements. While the film speed is not as important as it used to be, 800 is now as good as the older 200-400, some publishers still specify which film speeds they accept. Most publishers want 100-200 for print photos, and 100 may be tops for cover work. A few diehards want 50. Those are publications best left to pros and medium format shooters. It is possible with 35mm, but acceptable results are quite difficult for beginners to obtain.

Photo Enlargement

Enlarging or reducing photos does not always translate to seeing 100% of the original photo. All 35mm negatives, whatever the film type, are the same size. When you order enlargements or prints, the size you order may crop the photo. Without going into actual calculations (There is a proportion ratio formula.), the two sizes below are the only two print sizes that reproduce 100% of the original photo. If you must have an alternate size, take the film to a camera lab where you can specify which area to crop, so the most important area of your photo is not affected.

Digital cameras are also designed to duplicate 35mm format. You need to consider the same size factors when you print digital images without adjusting the file and/or image sizes.

4x6 = 100% of negative - slide or print

8x12 = 100% of negative - slide or print

All other sizes (normally printed) crop the original photo.

Checklist to Improve Your Story

- Is the title intriguing?
- Did you use an active voice?
- Are the verbs active?
- Is the punctuation correct?
- Is the sentence structure correct?
- Will the introduction hook the reader?
- Did you overuse adjectives and adverbs?
- Does it have a pleasing cadence when read aloud?
- Are the transitions smooth?
- Is your information credible?
- Is the flow logical?
- Does the conclusion make sense?
- Does the story entertain or enlighten?
- Is your style consistent?

Techniques to Improve Your Writing

Write positively. Keep it simple. Be specific.

Write to the reader.

Tell stories to illustrate – Show don't tell

Know your subject.

WIFM – What's in it for me?

Appeal to what your audience wants.

Paint pictures. However, don't be pretentious.

Read and write extensively.

Present tense, second person is best for business and many articles.

Unless the publication says otherwise, use "you".

Make readers feel you're talking to them.

Web and Email Writing Tips

Keep lines to 60-65 characters.

Break material into paragraphs of no more than six lines.

Don't use all caps.

Online caps are considered shouting and very rude.

It is hard to read on computer screens.

Articles are usually much shorter than print work.

Pay is less, but due to fast turnover, there is a constant demand.

News Story Tips

Straight news is direct, clear, and current.

Analysis/Background

Put events in perspective.

Help readers understand what is happening and why.

Enlighten readers about a concern or social situation.

Investigative

Usually involves info someone wants to hide

Human Interest

Centers on people or a group

An event or human situation

Opinion Pieces

Political commentary

Movie reviews

Writer's opinions on a specific topic
Persuade or provoke
Bring to public attention
Promote controversy

Sources and Ethics

Verify your information with at least two credible sources.
If you find yourself facing a dangerous or delicate situation, consult professional media counsel. This class does not deal with confidentiality laws or other legal concerns of reporting.

Read the [American Society of Newspaper Editors Statement of Principles](#) and develop a reputation for adhering to ethical standards

Accuracy – Remember, an article can be accurate and still be untrue in the sense of misleading the reader by omission of critical information.

Interview Tips

Be polite and respectful

Do your research and be prepared

Know your purpose and your questions

Be prompt

Be friendly

Be businesslike

Listen to what's actually being said

Check the answers

If possible, use a recorder so you concentrate on the interview

Be polite, but ask hard questions when necessary

Photography Planning Outline

Review the proper grip and support of a camera while taking photographs. Your camera manual should include an illustration, or clear description, of the proper hand positions. Any professional camera store can also help you refine your grip technique, and basic photography books in the library provide additional illustrations.

Basic Photography Equipment

A good basic starter set includes:

- One SLR camera body

- Or 3.0+ mega-pixel Digital camera

 - (See digital info sheet for more)

- One versatile lens, 35-135, 28-200, 28-300

- Or a standard 50mm lens

- Flash attachment

- Polarizing filter

- Cable release

- Lightproof cloth

- Pencil flashlight

- Lightweight tripod

Camera bag or backpack

A compact P&S (Point and Shoot) camera,
backup or pocket camera

Spare batteries for the camera, the flash unit, and the
pocket camera

Choosing Equipment

Size and weight

Is the unit you want comfortable to carry and easy to use?

Does it fit your hand well?

Appearance influences everyone to some degree

What do you like about the look of each unit?

Features you use most often

Are your favorite features easy to find?

Are the settings simple to use?

Could you operate this unit in the dark with practice?

Are you confident of your ability to know what features you need?

Accessories

Are lenses, filters, cables, and other accessories, readily available?

Are accessories available from other manufacturers?

Are the accessories for your favorite unit priced competitively?

Price

Can you afford the unit you want, or are you compromising?

Will the unit you can afford serve your needs for at least 3-5 years?

Do you know the market? Will the unit you prefer be obsolete in a year?

If the camera is on sale, is it being discontinued? Will you be able to get service and parts? How long? Is it a major brand item?

If you are buying used, check the unit carefully? Many cameras sold, or traded, in the U.S. are of foreign origin. Know what you are getting.

When in doubt, write down the information and take it to a reputable camera store for consultation or contact the manufacturer online.

Before you buy used, consider whether you can afford repairs, and whether you can afford to throw the camera away, if something breaks that can't be repaired. Cameras are not like cars. They become obsolete quickly.

Consider renting equipment, if you are in doubt about investing in a purchase.

Subject Selection and Composition

Subject Selection

Know the [subject](#) - clearly define the subject

What do you want to say?

Select [people](#) or objects that illustrate your message

What is the purpose of the photo?

Newspaper, magazine, web site

Learn to see

What [elements](#) in the picture tell the story?

Focus on those elements

Who, or what, is the most important element?

Simplify and eliminate distractions

What do the important elements say to viewers?

Vertical – strong

Often represents strength of purpose, [balance](#), and support

If subject is taller than it is wide, consider [vertical](#) format

Many publications prefer vertical, learn to make it work by thinking creatively

Horizontal – [restful and passive](#)

Echoes the parallels of the photographic frame

If you hope to sell and resell, consider shooting the same scene vertically and horizontally

Diagonal – creates movement

[Sliding](#), [climbing](#), falling

Adds dynamic tension

Composition Elements

There are two schools of thought on the definition of composition. Either approach improves your work. Both are valid ways to view compositions of art and [color](#).

Shape, line, [texture](#), value, direction, and proportion

[Contrast](#), repetition, balance, cohesion, climax

Rule of Thirds

Divide the frame into [thirds](#) each way, think tic-tac-toe grid

Position main elements at an intersection for pleasing visual effect

Horizon

[Never in the middle!](#) Well, almost...

Foreground/background

What do you want to [show or hide](#)?

Reveal scale or make the subject blend in?

Line, shape and form

Which [angles](#), and components, add visual interest?

Soft curves or straight lines suggest mood and feeling

Background/foreground elements

[Match or contrast](#) for harmony or tension

[Guide viewer](#), make a statement or stress a point

Help show [depth and texture](#)

[People](#) can add interest or serve as the main subject

Interact and try to get action and natural behavior

Ask permission (if publishing get a release)

Respect cultural traditions and beliefs

Techniques for controlling composition

Motion

Panning, [freezing with fast film and shutter speed](#), using long exposure

Framing

Use [trees](#) and objects to form natural frames

Cropping

It is easier to remove unnecessary items later, don't miss the shot

POV – Point of View

Unusual is good – Move above, below, upside down, and [diagonally](#), don't forget to try a profile

Foreground/background

What you want to [show](#) or hide determines the [depth-of-field](#)

Silhouetting

This technique creates mood. The [degree of darkness](#) can vary and must be controlled with practice. Use extreme caution when shooting on sunny days. Try different angles, and times of day, and never look into the sun.

Diagonals

[Diagonal](#) compositions are effective and easy. Turn the camera, rotate the picture later or create the [diagonal](#) effect through the composition within the picture.

Lighting

You will have to decide when to use natural light and when to use flash or room lighting (artificial).

Consider the shadows and reflections

Convey the [mood](#)

Emphasize the [subject](#)

Add light with reflectors or [fill flash](#)

Maximize natural light by carefully selecting the time of day ([early morning](#) and [late afternoon](#) magic) when you take photographs.

Continued Learning Photo Shoot Exercise

Take one set of six photos that tell an entire story in pictures (only 6 photos per story). Use what you learned about subject selection and composition. Up to four stories fit on one roll of film. Show the photos to friends or family and ask them what story they see. You will soon learn whether you are successfully conveying your story without words.

Note:

Please read your manual before dry-shooting your camera. Some cameras say NOT to practice shoot without film. What this means is you should not press the shutter button all the way down. You can still practice finding settings and learning your controls.

Resources

Equipment Rentals

Check your local camera stores.

Film and Digital Services

EZPrints

<http://www.ezprints.com>

Similar to Snapfish and Ofoto

I have used Snapfish. Therefore, I've described them in more detail. However, this is not an endorsement for any specific company. As far as I know, the quality and service are similar. I haven't checked the prices.

Kodak Gallery

<http://www.kodakgallery.com/Welcome.jsp>

Snapfish

<http://www.snapfish.com>

Snapfish offers mail order developing, digital downloading, and storage. Prints and reprints are available, as well as CD's, film, and gifts. Snapfish allows sharing albums with friends and

family, by giving them a password. Your personal photos are not available for unknown persons to view.

Store Photo Developing

Most major stores offer photo-developing times from thirty minutes to overnight. In addition, there are selections of photo CD's that can be ordered at the time the photos are developed. There are also kiosks (photo processing and enlargement machines) that accept photo CD's, negatives, prints, and digital media, directly from your digital camera. These machines allow you to make prints and arrange multiple prints of the same image. Some image editing capabilities are available too. You don't need software or a computer to take out red-eye when you have a photo that is wonderful, except for the red-eye on the blue-eyed baby, or a cat with eyes that look like he should be in a horror movie. You can use one of these machines.

Software

Adobe Photoshop is one of the most popular packages. It is essential to learn for anyone who plans on go pro. However, it is also one of the most complicated for the novice. A person can literally use this package for years and still be finding new features. There are also many ways to do the same thing,

which is handy for the pros but confuses non-professional users.

Corel Painter is another image-editing program with lots of features. It isn't as popular as the other two, but it rates well among users who spend time learning it.

Jasc Paint Shop Pro does a nice job of handling more image editing than most scanners allow while keeping the features simple enough it doesn't take a pro to use them. Jasc also offers a Photo Album package designed for creation of online photo displays.

In addition, there are numerous programs for editing images that are very basic, but useful. Some are easier than others, and each of the smaller programs offer different features. You may find something easy to use with all the tools you need in one of the programs packaged with a photo CD or digital cameras.

Scanners

Scanners are one of the easiest ways to get high quality photos onto your computer hard drive. The prices are low and the quality is high. Most users find a flatbed scanner to be all they

need. The scanners that process negatives and slides are only necessary for photographers who shoot various types of film and need the ability to archive copies and electronically submit high quality photos directly to publishers or photo services.

One added advantage to scanning your own photos is that you select the images to keep, instead of purchasing a CD when the film is developed. The CD that is made when the film is developed contains every image, good or bad, and you pay for wasted space on each CD. If you have a CD burner, you can create your own CDs, to save space on your hard drive or to send photos to relatives.

Photo Printers and Other Printers

Most major brands of inkjet printers produce high quality photo prints. If you plan to do extensive photo printing, you will appreciate the value of printers that are highly rated for image reproduction. Canon bubblejet printers are among the top-of-the-line printers that produce high quality prints.

Online Technical Support

Free technical help with a phone call is seldom available. It has been replaced with pay per minute phone assistance that is structured in levels and often comes from a untrained operators

reading a prepared script. Sometimes an instructional CD is enclosed with electronic products, but most times you are left on your own. However, almost all imaging products are supported online. Tech-support sites include websites maintained by manufacturers, as well as quality sites that are independent of the manufacturer. Several good sites are listed below.

Computer Help:

5 Star Support <http://www.5starsupport.com>

Photo Equipment:

How Stuff Works <http://www.howstuffworks.com>

Printers:

Fix Your Own Printer <http://fixyourownprinter.com>

A word of caution is warranted regarding information on the Web. Remember that anyone can set up a website, online "ezine" or "blog", and it can appear professional. Read the information about who supports and maintains the site, and whenever possible, check your facts with another site or business agency. Look for signs of authenticity, such as registrations and trademarks. Then, follow-up and check your

facts before making major purchases. Most copyrights and trademarks can be verified online at no cost to the consumer.

Lessons and Online Tutorials

The **Adobe** (www.adobe.com) web site features an Expert Center with information and articles about digital imaging, including easy lessons. The site also includes a user-to-user forum to allow customers to share experience.

New York Institute of Photography (www.nyip.com) offers lessons at the school in New York, and they offer distance education in professional photography and digital photography. The site contains a great many resources and contests.

These two resources are often listed, and recommended, by publications and professional resource lists. While there are other sites, I have not ascertained the quality of all sites. Please read the information carefully and check with the appropriate agencies, such as the Better Business Bureau or other references listed on the site, before making a purchase.

Terminology and Technology

Pixel Trivia – The word originates from combining the words picture and element.

Mega = Million

K or Kilo = Thousand

DPI – Dots per inch is the term used for output density when printing images on paper.

Pixel – Pixel is a term used to describe the density on a computer screen.

There is no fixed size for a dot or a pixel. The sizes of both are variable and change when the density is changed. For example, when you select an output of 200 dots per inch, the dots are larger than when you select an output of 300 dpi.

Digital zoom crops your photo in the camera. Do not go beyond optical zoom for publication work unless you have at least a 5 mega-pixel camera. If you have 5+ mega-pixels, use the best quality setting and zoom as little as possible. You need an original file that can be enlarged without interpolation. As you zoom further out, lens stability becomes a problem too.

Interpolation – The computer is “guessing” what belongs between the dots to enlarge a photo. Interpolation can take place on input or output.

I'll explain the details of file sizes, input and output options, and what you need to ask the publisher, after a quick overview of digital technology. For the writer who does not want to become a professional photographer, digital photography for publication requires an absolute minimum of 2 mega-pixels. A 2 mega-pixel camera will produce publishable photos in the 4” x 6” (300 dpi) to 6” x 9” (200 dpi) range.

A 3 mega-pixel camera will handle publication work better, and they are no longer expensive. If you plan to specialize in a field needing many photos, such as travel, sports or entertainment, you will need to move up to at least 4 mega-pixels to produce competitive quality work in larger print sizes.

Digital cameras come with two types of technology. To read more, and see an excellent visual description of these components, read the article *It's Not the Fiddle, But The Fiddler*, by Fred Wertheimer at NYIP.com, if it's still available online. Their link to it is gone, but a search may find it.

CCD – This chip produces a mosaic pattern of square pixels with one color on each that are side by side. It has been used since the 1970s. There are variations produced by different manufacturers. The SuperCCD uses octagonal photodiodes set up in a honeycomb pattern. A company named Leaf produces a chip called C-Most, which uses larger pixels that are supposed to produce greater color depth.

CMOS – The first CMOS chip for cameras arrived in 1997. However, this technology did not become available commercially until recently. CMOS improves the color quality by allowing all of the colors to be recorded on one chip producing a solid pattern instead of a mosaic. Different colors penetrate to different depths through layers of the chip material.

Digital Math

Let's start with an example of how the digital math works.

We'll begin with a 2.1 mega-pixel camera. A picture taken at the best quality setting yields an image file 1800 x 1200 pixels. This is the original file.

1800 (pixels wide) x 1200 (pixels high) = 2,160,000
or 2.1 (total mega-pixels)

Never edit the original file.

Save it and make a copy to resize and/or edit.

If an editor wants a photo to print at a minimum of 200 dpi, your file produces a photo that prints out a 6" x 9" picture at 200 dpi. This is how you arrive at that information. Divide 200 dpi into 1800 and divide 200 dpi into 1200.

If the same editor decides he want a better quality print and resets his equipment to print at 300 dpi, your file produces a print that is 6" x 4" at 300 dpi. Again, divide 300 dpi into 1800 and divide 300 dpi into 1200.

Let's imagine this same editor suddenly wants a very dense output of 600 dpi for a glossy sidebar in National Geographic. The same file we used in the previous examples now produces a print of only 2" x 3". Divide 600 dpi into 1200 and divide 600 dpi into 1800.

Sometimes the size of the print is not an issue, and the editor is willing to work with whatever size is presented that is of

satisfactory quality. Other times, the editor requires an image file of a specific size and density, such as when doing a magazine cover. Then, the calculations become a bit more complicated. Unless you own a professional grade digital camera, you won't be producing digital files as large as those required for high-quality magazine cover art.

To print at 300 dpi an 8" x 10" magazine cover requires a camera capable of producing an original image file of 7.2 mega-pixels. This is how you calculate this information. Multiply 8" times 300, which equals 2400. Then, multiply 10" x 300, which equals 3000. Finally, multiply 2400 by 3000. The result is 7,200,000 or 7.2 mega-pixels.

A camera capable of producing this file is still costly.

However, you can figure out whether your equipment can meet the requirements of any publication's guidelines by using the calculations we used in the above examples.

You can also transmit your file electronically to a professional processor who can adjust the image and return the file in the format you request. This option is best for pros earning enough compensation to make it worth the expense. The cheapest

option for producing high-quality files from film is scanning. Very inexpensive equipment produces excellent quality at home, or your film processor can produce a CD with a high-resolution image you can transmit electronically.

Technical Tips

Optical zoom is an actual enlargement; like looking through a magnifying glass.

Digital zoom is the equivalent of cropping a photo inside the camera before you shoot the picture. You may need to use it to see what you are shooting, but photos taken using the digital zoom produce a reduced file size, which limits later enlargement.

Black and white digital work is best done in color and later changed to grayscale. You get better detail and nice crisp black and white photos.

Digital enthusiasts may decide to invest in a calibration program to do professional level work. The accuracy of printer and screen colors varies. These programs are designed to improve the accuracy of input and output. Investigate thoroughly and know what you are getting before you make a purchase. Cost and compatibility vary, and the value of calibration programs with new equipment is highly debated. Some image experts, and some technical experts, swear that the current technology eliminates the need for such software. All I can say is try

processing your images on your computer and printer to see if you are satisfied with the results. The one place a difference is noticeable is on a laptop (LCD) screen versus a regular (CRT) monitor. In this case, a calibration program won't help. Detailed photo work is best done with a CRT monitor, due to technical differences, but high-end LCDs may give satisfactory results.

Batteries are a major expense of digital photography. The present recommendations consistently state that NIMH rechargeable batteries are worthwhile. They last longer, recharge quickly, and don't have memory problems. The recovery time seems to be improving too. You need two sets and a charger.

Note: Using the LCD screen runs batteries down very quickly

Many popular digital cameras (2.1, 3.2, and 3.0 mega-pixels) image files emulate the 2:3 ratio used by 35mm cameras for film images. Low mega-pixel cameras (1.3) may use a 4:5 ratio, and high mega-pixel cameras (4 and 5.1) may use 4:3 ratio. To complicate the issue further, some non-DSLR cameras use a 4:3 ratio, like a television. If you own a DSLR digital camera, your aspect ratio will be 3:2; the same ratio used for 35mm film. Check your manuals because these things will change as

technology changes. In general, beginners seldom use the information provided in these calculations.

Listed below are calculation numbers for the "best quality" file settings in the popular brands of digital cameras purchased by consumers and novice photographers.

$1024 \times 1280 = 1.3$ mega-pixels

Use for email, web or home albums

$1200 \times 1800 = 2.1$ mega-pixels

Use for newsprint, web, email, home, and small photos

$1450 \times 2100 = 3.0$ mega-pixels

Useful for all of the above up to mid-size quality photos

$1704 \times 2272 = 4.0$ mega-pixels

This is the beginning of what is termed prosumer cameras (pro+consumer). Essentially, this is the crossover point into higher quality and larger prints. Not all cameras offering 4 mega-pixels include a wide range of technical options.

$2592 \times 1944 = 5.1$ mega-pixels

Again, cameras with 5.1 mega-pixels may be point and shoot basics or sophisticated, full-featured models capable of many types of professional work.

4048 x 3040 = 6.3

Most cameras of this level offer at least basic professional features, and many are SLR digitals offering choices in lenses and other equipment. At this level, digital technology begins to present considerations unique to digital technology.

3264 x 2176 = 8 mega-pixels in the 3:2 ratio format

At this level, you also often have a choice of shooting in RAW mode, which will give you different file sizes, but that format is beyond the technical scope of this e-book. Some folks love RAW format and other hate it. There is no universal standard for RAW, and users must purchase software (bridging programs) that allows other programs to work with whichever version of RAW is used by that manufacturer. You should consider professional help to coordinate this type of equipment and software.

For web display, set the file size to 800 pixels x 600 pixels. The result is the size that currently displays well on most computer screens and in the most popular browser programs. Web work

should always be aimed at working for the majority of the most popular systems. If you do web publishing, check the statistics at least every six months to stay up to date on this information.

The old VGA size is 640 x 480. Many people still use this size for web work, and it displays quite well in email and on personal websites. Due to larger computer screens and improved detail, the 640 x 480 size may not be suitable for online commercial publications.

Digital Workflow

1. Take Pictures
2. Organize Pictures
3. Fix Pictures
4. Print Pictures
5. Back up pictures on electronic storage system

Develop a consistent system of managing and organizing digital files, whether from digital cameras or scanned film photos, just as you do paper files.

For Technical Gurus

Bits and Bytes

A bit is a 0 or a 1. Think binary – anyone remember math class or computer basics? A byte is 8 bits. What does this have to do with digital cameras? It helps you understand the terminology of the editing programs and color adjustment controls you may want to learn later.

Bit – 0 or 1

Two colors can be represented with one bit
(Off=black, On=White)

2 Bits = 4 colors

8 bits = 1 byte = 256 discrete values or colors

16 bits = 2 bytes = 65K (65,000) colors

24 bits = 3 bytes = 16M (16 million) colors

These numbers tell you whether the image editing program you purchase is able to do basic work or professional work.

Reducing File Sizes

Sometimes publishers and contest guidelines specify a maximum file size they accept by electronic transmission. You must decide how to reduce your file size while maintaining the quality of your work.

First, you need a program such as Adobe, Corel or Paint Shop, to do editing work. Your camera software may do minor adjustments, but don't count on it for more extensive work. You'll need a program you can learn and continue to use to manage your image files over time.

Next, you need to understand that if your program says your image file has 16 million colors, it is using 24 bits to represent those colors. If the original picture is taken with a 2 mega-pixel camera set for the best quality, your file with 16 million colors contains three times the number of mega-pixels stored in the original photo file. This means there are many pixels you can omit, if you know how, without damaging your original file.

Listed below are five common ways to reduce your file size.

1. Reduce the resolution from 300 dpi to 200 dpi. However, this may not always be an option.
2. Reduce the number of colors from 16 million to 64K. Using the above example, you can reduce your file size from three times the number of bits necessary to represent that file to only two times the number of bits (a 6 megabyte file becomes a 4 megabyte file) without any impact on the original image file.
3. Reduce the size and maintain the density. For instance, change a 4 x 6 photo to a 3 x 5 photo.
4. There are more complicated methods that allow the photographer to reduce the image file to the point it contains only the actual colors used in the image file and nothing extra. These techniques are beyond the scope of this class.
5. Crop the photo to include only the essential information. Many times getting the right shot does not allow time for careful composition, and the photo needs cropping to

eliminate distractions and irrelevant information. The crop also reduces the file size by eliminating unnecessary data in the image file.

Image Processing Information

Be sure you understand how your image program operates. Many editing programs are not intuitively obvious in their operation. There can be a steep learning curve before you successfully complete any type of editing without damaging your files.

Most digital cameras, especially 3 mega-pixel and above, feature settings that allow you to vary the quality of the photos. Match the camera settings as closely as possible to your editorial requirements to avoid editing headaches.

When in doubt about the final use of the photo, choose the highest setting, in case the editor decides to use a larger final print. **NEVER EDIT USING THE CAMERA LCD.**

If possible, take more than one shot on various settings. Again, you can delete later; but you have the photos, and you minimize the need to edit.

Most low-cost digital cameras capture images in JPEG (JPG) format. Cameras with professional features may offer TIFF or RAW formats. TIFF is the best long-term storage format. Most image editing programs allow you to download a JPG original and save it in TIFF format. The reason for selecting TIFF is that the format does not degrade every time it is saved. JPG degrades with every “save”.

1. Save the original downloaded image file in TIFF. (Yes, it takes more space.)
2. Make a copy of the original TIFF file.
3. Label each copy of the image file clearly, with a unique name.

NEVER EDIT THE ORIGINAL

4. Edit and/or crop the TIFF copy.
5. Then, save your changes, still in TIFF format.
6. Finally, save a copy of the completed work as a JPG file.
7. Email or transmit the JPG file, unless TIFF is requested.

The JPG file will not degrade once the editing is complete because you open, close, and transmit, files without

“saving”. JPG files are smaller, and they are generally the preferred finished format.

8. If you need to save hard drive space, burn the TIFF files to a CD.

Basic Photography Glossary

Acid free

The harmful acids that cause disintegration of photos have been removed from acid free albums and display products. These products help preserve your photos.

Aperture

The aperture is the size or area of the opening in the lens through which light travels. Aperture numbers (see f-number) are not random. Each number is the previous number multiplied by the square root of two (1.4). Each numerical stop higher allows one-half the amount of light to reach the film as the f-number preceding it.

When referring to the relative speed of a lens, the lower the f-number the “faster” the lens. For example, an f/1.4 is twice as fast as an f/2, because twice as much light passes through the f/1.4 lens in a given amount of time.

Bounce light

Bouncing light from a flash by aiming it at a reflecting (wall or ceiling) surface illuminates the subject with reflected light that is diffused. Bounce light eliminates the harsh shadows direct light

may cause. Although, some loss in the brightness of the illumination may occur, the reflective surface should be a neutral color (white, silver, etc), or the picture may take on the color cast of the reflective surface.

Bracketing

Bracketing is the technique of taking a series of photos with exposures over and under the ideal settings to allow for variations in light, film, and other considerations. The effect of bracketing is more obvious on slide (transparency) film. Print film requires a substantial change in exposure to produce noticeable changes.

Catchlight

The reflection of a light source in a subject's eyes is called a catchlight. Small catchlights, intentionally created, give a subject a more vivid alive look. When the flash reflects off the back of the eye, the result is red-eye, green-eye, or yellow-eye, which is not a desirable result. Blue eyes, and animals' eyes, are the most challenging.

Crop

Cropping is cutting, or trimming, a photograph to remove unnecessary objects or people. Some photographers believe it is always necessary to crop to achieve the most effective composition. Other photographers believe firmly in challenging themselves to compose photos that are as close to perfect as possible without cropping. In reality, it often depends on the type of photography whether or not cropping is practical. For instance: when shooting news stories and fast action, it is more important to get the shot.

Depth of field

The [depth of field](#) is determined by the aperture setting used and refers to the area of the image that is in focus between the nearest and farthest parts. [Depth of field varies](#) with shooting distance, acceptable circle of confusion, aperture, and focal length.

Depth of field scale

The depth of field scale is a series of numbers printed on the lens that coincide with the apertures available on the lens. Each number is printed twice, once on the left of the center position and once on the right. Many of today's lenses no longer offer this feature.

Diaphragm

The diaphragm is the mechanical control that regulates the size of the opening.

Exposure

$E = It$, exposure is the product of the intensity (I) of the light and the amount of time (t) the light strikes the film.

EV = Exposure Value

EV is a number representing the available combinations of shutter speed and aperture offering the same exposure effect when the brightness remains the same. For additional detail, I recommend a photographer's technical manual.

F-number

The f-number is a value representing the quantity of light passing through the diaphragm when a lens is focused at infinity. F is an abbreviation for the term "factor" which describes a mathematical ratio. These are also referred to as "stops".

Fill Flash or Fill-in Flash

Flashlight illumination used in daylight to remove shadows and reduce contrast.

Filter factor

The filter factor is the amount of increased exposure necessary to compensate for the extra light absorbed by a filter.

Florescent

Florescent light tends to add a green tinge to the photos when not color corrected with a filter. This is less of a problem with the newer daylight florescent bulbs, but many industrial and commercial settings do not use daylight bulbs.

Focal length

The distance from the optical center of the lens to the film when the lens is focused at infinity is the *focal length*. The focal length determines the magnification and angle of view, or how much of that area appears in the photograph.

Focal point

The focal point is the spot in a design or photo where lines converge and where the eye is naturally drawn.

Grain

Clumping together of particles in the film's emulsion causes grain. The size of the grain is usually larger, and more discernable, in faster films—especially print films.

Gray-card

A gray-card is a piece of cardboard colored a precise tone that reflects 18% of the light striking it. The tone is 18% gray. All regular film is formulated to produce the best exposure when exposed to 18% gray light. If you read the light falling on it, you should come up with the “correct” exposure.

ISO

The name is French and is actually Organisation Internationale de Normalization. Because “International Organization for Standardization” would have different abbreviations in different languages, the term ISO is derived from the Greek isos, which means “equal”. Whatever the country, whatever the language, the short form of the name is always ISO. Without the use of a common abbreviation, the abbreviated form would be IOS in English, OIN in French, and so on.

Infinity

In photography, the term refers to a distance great enough to be unaffected by finite variations. In practice, this means any area beyond 1000 meters, or the horizon, in landscape terms.

Inverse square law

Light diminishes by the distance squared: in simple English, very quickly. This means your average on-camera flash won't light an area, or subject, more than approximately 8 feet away.

Lignin free

The woody fiber that binds paper together causes deterioration of paper products, which means it causes photographic prints to deteriorate. Use only scrapbook products and mounting products that are labeled lignin free.

Matrix Metering

Matrix metering is a light metering system using a multi-segment sensor and computer. It works based on an algorithm derived from extensive shooting data. Matrix metered cameras are often very good at determining correct exposure for most lighting situations, including scenes with sun and backlit subjects.

PVC free

PVC is the abbreviation for polyvinyl chloride, which is harmful to photographs. Look for products labeled PVC free when purchasing scrapbook or photo mounting supplies.

Perspective

Perspective is the relationship of objects to one another. Photos only have two dimensions, length and width. Dimension of depth is suggested by size and the position of objects.

Refraction

Lenses focus by bending light. This is called *refraction*.

Rule of Thirds

The Rule of Thirds is a formula dividing a frame into thirds vertically and horizontally to obtain a visually pleasing composition. The invisible lines become a guide to placement of the horizon and the subject. For example, one third of the frame is below the horizon; two thirds of the frame is above the horizon; and the subject is one third of the way left or right, up or down.

SLR

SLR is the abbreviation for the words single lens reflex. This type of camera allows you to view the photo you will get on film through the lens. This is the camera version of WYSIWYG.

Sunny 16 Rule

Any film can be exposed under sunny conditions by setting your camera to f/16 and using a shutter speed that is the reciprocal of the ISO. (The reciprocal is the number over a given number in a fraction.) The shutter speed is adjusted to compensate for variations in the light and environment.

The one caveat is that manual cameras do not offer a shutter speed of 400 when you use 400-speed film. So the exposure of 1/400 at f/16 has to be adjusted to either 1/250 or 1/500, depending on the brightness.

This chart shows six basic exposures using 400-speed film outdoors on a sunny day.

F/16 @ 1/250

Bright sun, or even, direct sunlight on a subject inside

F/22 @ 1/250

Bright sun, and an extremely bright setting—sand, snow, water

F/11 @ 1/250

Light cloud layer, overcast sunlight

F/8 @ 1/250

Subject is in open shade, or overcast light is not bright

F/5.6 @ 1/250

Subject is in deep shade, or storm clouds are darkening sky

F/4 @ 1/250

May be starting to rain, light is muted, or it may be snowing

F/2.8 @ 1/30

Indoor at night with normal illumination

To modify the setting, double one setting, and cut the other setting in half.

For example: in open shade, you could adapt the setting 1/250 @ F/8 as follows:

1/500 @ F/5.6, 1/1000 @ F/4, 1/2000 @ F/2.8

Or, go the other way; use 1/125 @ F/11, 1/60 @ F/16

All of these combinations yield the same exposure when used with film having the same ISO number (or when using the same digital ISO setting).

This means, if you load your camera with a roll of film that has an ISO of 400 and use the settings listed above, the exposure will be the same in each picture. However, the effect may not be the same. A slower shutter speed causes a blurred effect when the subject is moving: whereas, faster shutter speeds freeze the action.

TTL

TTL simply means through the lens. The camera's light sensor measures flash light through the lens, reflected by the subject on the film, and then, shuts off the flash when the correct exposure is indicated.

Tungsten

Light from a standard indoor incandescent (not florescent) light bulb is tungsten light. Tungsten balanced film offsets the unnatural coloring (yellow) indoor lighting may cause on some film.

Many terms and technical definitions in photography are not included in this list. For our purposes, this list attempts to cover the terms a beginner needs to know to understand basic techniques and purchase entry-level equipment.

Websites For Writing Jobs

Some sites duplicate listings found on other sites, but all have varied features.

FreelanceBBS

<http://www.freelancebbs.com>

Freelance Venue

<http://www.freelancevenue.com/category/job-offers-requests>

SunOasis

<http://www.sunoasis.com/>

Freelance Writing Gigs

<http://www.freelancewritinggigs.com/>

travelwriters.com

<http://main.travelwriters.com>

Advice, guidelines, and writing opportunities for travel specialists

Writers Digest

www.writersdigest.com

Offers articles and links from the magazine, including contests, expert advice, current rate information, and market guidelines

Writers Market

www.writersmarket.com

Information on markets, contests, guidelines, and writing advice, including workshops

WritersWeekly

http://www.writersweekly.com/markets_and_jobs.php

Writers Write Paying Markets

<http://www.writerswrite.com/paying/>

Writing for Dollars

www.writingfordollars.com

Lists employment ads for writers.

Photography Websites

Adorama

<http://www.adorama.com>

You can find new and used equipment, collectable camera items, and you can obtain appraisals from this store.

B&H

<http://www.bhphotovideo.com>

This store offers a very complete online source of supplies in all price ranges.

BetterPhoto.com

<http://www.betterphoto.com>

Critique groups, Q&A forums, galleries for selling, lessons, and a lot more. This is a great site with reasonable prices.

George Lepp & Associates

<http://www.leppphoto.com/learn/index.htm>

George Lepp produces Tech Tips for Outdoor Photographer magazine. His site includes online learning resources and lists

of publications, as well as in-depth material on digital and nature photography.

KEH

<http://www.keh.com/hmpg/index.cfm>

This is a nice source for new and used equipment. It is also a very good place to check prices before shopping when you are considering buying used.

New York Institute of Photography

<http://www.nyip.com>

This site offers lessons, advice, contests, and paid courses.

Photoalley.com

<http://www.photoalley.com>

Live help is rare, and this site even makes it easy to find their live help button. As an added feature, they archive photo lessons from NYIP.

Photographic magazine

<http://www.photographic.com>

Each issue provides at least one photography lesson for amateurs.

Photowow.com

<http://www.photowow.com>

This site offers products you can make with your photos for gifts, businesses, and special events, such as weddings and parties.

Photography Examples

These examples are only as a starting point. They do not demonstrate every technique discussed in this book. However, I hope they help you begin to understand composition and easy techniques to improve the photos you want to sell with your stories.

You'll also notice a difference in the photography styles selected for this book. The author's photos are mainly travel and documentary photos. Angela's photos show a distinct artistic flair, which also lends itself to travel and documentary work. However, her artistic photos lean toward the style often used for greeting cards or as background for framed and mounted poetry.

In this case, the style difference was created intentionally by selecting specific photos. Every photographer eventually develops a personal style. Look for consistent signature variations in the work of several photographers whose work you see often.

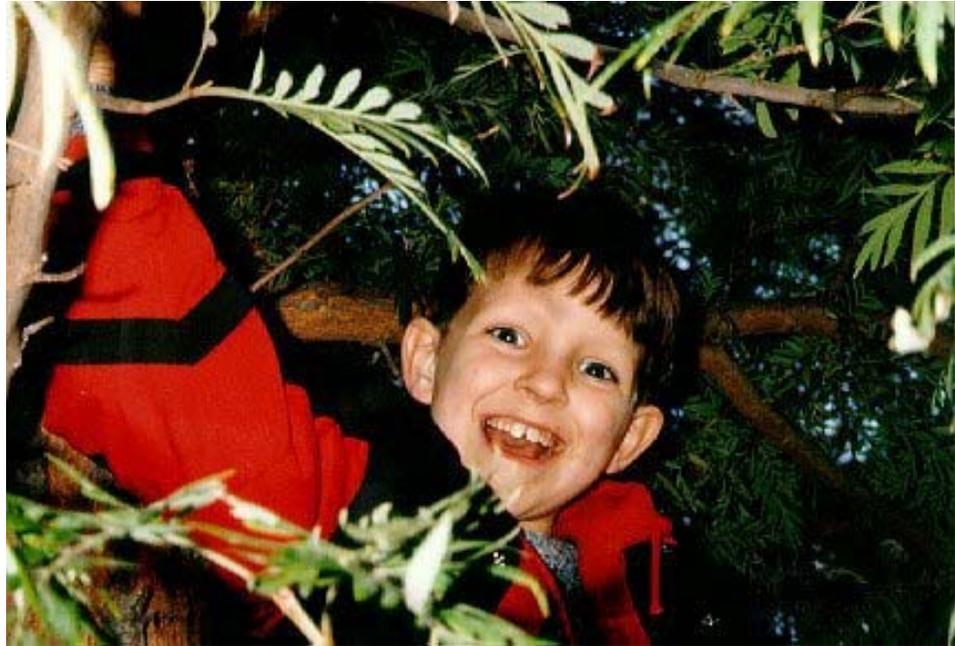


Figure 1 Boy In Tree (PJL)

Try different angles and catch [people](#) engaged in natural activities, like this boy in a tree. This photo uses a technique called [framing](#). Notice how the tree surrounds the subject, and the red jacket in the green tree creates a perfect color combination. The subject is also leaning in a subtle diagonal direction.



Figure 2 Christmas Mail Box (PJL)

This mailbox, adorned with a holiday ribbon and frosted with snow, reminds readers of the special communications that take place between friends and loved ones during the holidays. The snow falling, and the trees behind the wooden fence, in the background add a touch of nostalgia.



Figure 3 Huguenot Cemetery (MDL)

A long (or deep) [depth of field](#) allows the viewer to see details clearly along the entire length of this Huguenot cemetery path in Ireland (taken by my husband, Michael, on a business trip). The angles lead the viewer's eye to the path first and then, the path leads the viewer to the door in the ancient chapel wall.



Figure 4 Shenandoah Valley (PJL)

The lines formed by clouds and geography radiate from a single point behind the tree in this landscape photo, making the viewer feel the image is expanding or moving, which works well for this view of the Shenandoah Valley from Skyline Drive. Notice the subtle diagonal lines in this photo do not create tension. The lines are soft and do not distract the reader from the tranquility of the image.



Figure 5 Kids In Swing without Fill Flash (PJL)

A photo shot on a bright day without fill flash. Bright light and reflective surfaces can "confuse" the metering systems in automatic cameras.



Figure 6 Kids In Swing with Fill Flash (PJL)

A photo shot on a bright day with fill flash. Notice that even the background has better color and detail now.



Figure 7 Blowin In The Wind (AGK)

This photo shows the use of color and movement, as well as [depth of field](#). The color and detail are rich. The subject is obvious, and the movement keeps it from being another ho-hum flower photo. When using movement, movement that flows toward the right, diagonally from left to right, and bottom to top, feels more natural to the eye and is used most in U.S. publications. I can't speak to current trends in publications offered in geographical areas where the readers don't read from left to right.



Figure 8 Leafy Detail (AGK)

Diagonals and patterns are presented in an unusual way in this close-up photo of a leaf. Rich color and sharp detail display the artistic effects nature provides in everyday subjects.



Figure 9 Brian - Toddler At Play (AGK)

A great portrait and action shot that actually emphasizes the subject more because it is black and white. Using an action mode, fast film, and/or a fast shutter speed, freezes the action. Usually, there is more than one technique that produces essentially the same effect. The choice of technique will vary with the shooting conditions and your equipment. You can learn to vary your results, and to use different techniques, by practicing. A photo like this could require several attempts to get the perfect shot, even for an experienced photographer.



Figure 10 Callie (AGK)

Portraits don't have to show the entire subject to be descriptive and revealing. Creative angles add to the impact, as well as avoiding the red-eye and green-eye problem often seen in animal photos taken by amateurs.



Figure 11 Emptiness (AGK)

[Symbolic](#) photos are a great way to supplement poetry or provide an illustration for a [theme](#), such as Easter or religion. This presentation is striking in black and white, but color could be effective too, if carefully matched to the topic.



Figure 12 Framed (AGK)

Black and white doesn't have to be boring. When you think about techniques, apply the term broadly. This great portrait shot takes a [creative approach to the use of framing.](#)



Figure 13 Grillin Out (AGK)

Shots such as this are an especially good way to provide photos that imply a mood or represent an activity or [season](#) when other photos are not available. Think in terms of [symbolism](#), association with familiar cultural icons and mood.



Figure 14 Yum (AGK)

Primary colors with eye-pleasing depth and texture enhance food photos.

Hint: There is an art to food photography. Many foods are specially prepared, or artificially represented, when used in photos.



Figure 15 Red Morning (AGK)

The magic of the "time of day" shows dramatically in this photo. Dawn can be as vivid as [sunset](#). Notice how the silhouettes and low horizon emphasize the sky, while the tree silhouettes lead the viewer's eye toward the rising sun.



Figure 16Southern Sunset (AGK)

Are you surprised that the red sky is the dawn, and the gray-blue coloring is the sunset? The clouds and texture add moody drama. Notice there is barely a horizon in the photo, but if you eliminated it, you'd lose the impact.



Figure 17 L'il Ballerina (AGK)

This portrait tells you a lot about the person without ever seeing her face. Not all portraits need to be close-ups of a person's face. Well-composed shots matched with the mood and activity may express more and have greater impact when the face is not seen.

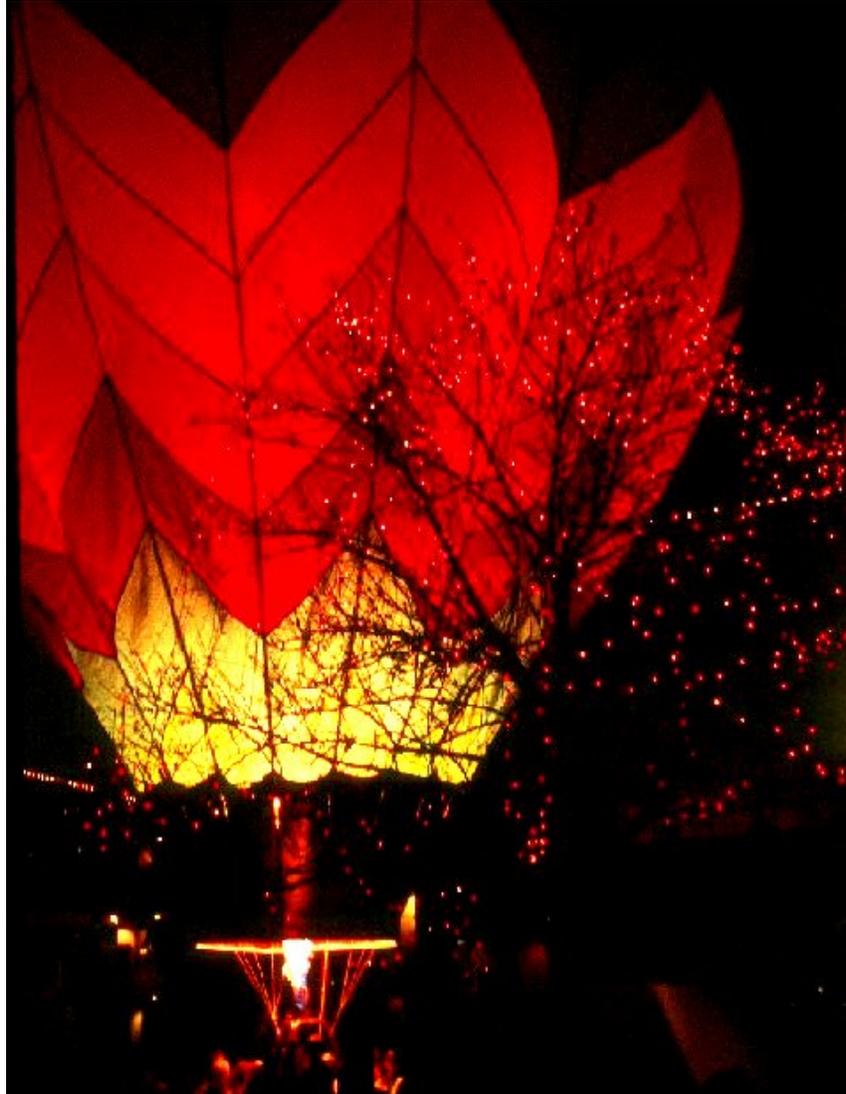


Figure 18 Balloon Glow (PJL)

This photo was taken on ISO 400 film with a point and shoot camera that was hand held. Shots like this are a matter of practice and taking risks to try an idea, even when it isn't supposed to work. Try everything. You'll surprise yourself with your ability to create.

Parting Words

You can do everything in this book without special training or equipment. Every professional photographer will tell you: keep practicing. Even pros take thirty photos (digital or film) to get three they use or sell. On the other hand, how many manuscripts do you toss or rewrite? Don't give up. It's normal.

Just as perfecting your writing means writing daily and studying your craft; photography requires taking many photos and developing your knowledge and skills. A number of famous photographers were self-taught. The cost of technology is dropping, and the need to learn numerous sophisticated formulas is fading into the past. You can produce quality work that sells, if you practice and study the photos in the magazines, books, and e-zines, you target.

Meet the Author & Photographers



Penny J. Leisch

We want to thank our readers for choosing to share their time with us.

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Keep Writing.
Keep Dreaming.
Keep Growing.

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