



Table of contents <b>Special effect photography</b>		Pg
<b>Chapter 1</b>	History of special effects	3
<b>Chapter 2</b>	Available Light	7
<b>Chapter 3</b>	Choose Fast Glass	8
<b>Chapter 4</b>	Painting with Light	9
<b>Chapter 5</b>	The Art of Double Exposure Effects in Photography	11
<b>Chapter 6</b>	Ambient light	13
<b>Chapter 7</b>	The magic of Light	14
<b>Chapter 8</b>	Using Film Looks	15
<b>Chapter 9</b>	LEGAL NOTICE	16
<b>Chapter 10</b>	Bio	17

## **Special effects**

### **Chapter 1 History of special effects**

Special effects (often abbreviated as SFX, F/X or simply FX) are illusions or visual tricks used to simulate an imagined event in a virtual world.

Special effects are traditionally divided into the categories of mechanical effects and optical

With the emergence of digital making a distinction between special effects and visual effects has grown,

Mechanical effects are usually accomplished during the live-action shooting with the use of mechanized props, scenery, scale models, animatronics, pyrotechnics and atmospheric effects: creating physical wind, rain, fog, snow, clouds, making a car appear to drive by itself and blowing up a building, etc.

Mechanical effects are often incorporated into set design and makeup. to make an actor look non-human

Optical effects (also called photographic effects) are the techniques in which images are created photographically, either "in-camera" using multiple exposure, . An optical effect might be used to place actors or sets against a different background.

#### **1857,**

Oscar Rejlander created the world's first "special effects" image by combining different sections of 32 negatives into a single image, making a montaged print.

#### **1895,**

Alfred Clark created the first-ever motion picture special effect. While filming a re-enactment of the beheading of Mary, Queen of Scots, Clark instructed an actor to step up to the block in Mary's costume. As the executioner brought the axe above his head, Clark stopped the camera, had all of the actors freeze, and had the person playing Mary step off the set. He placed a Mary dummy in the actor's place, restarted filming, and allowed the executioner to bring the axe down, severing the dummy's head. Techniques like these would dominate the production of special effects for a century.

## **1910 to 1920,**

The main innovations in special effects were the improvements on the matte shot by Norman Dawn. Using the original matte shot, pieces of cardboard were placed to block the exposure of the film, which would be exposed later. Dawn combined this technique with the "glass shot." Rather than using cardboard to block certain areas of the film exposure, Dawn simply painted certain areas black to prevent any light from exposing the film. From the partially exposed film, a single frame is then projected onto an easel, where the matte is then drawn. By creating the matte from an image directly from the film, it became incredibly easy to paint an image with proper respect to scale and perspective. Dawn's technique became the textbook for matte shots due to the natural images it created.

## **1920s and 1930s,**

Special effect techniques were improved and refined by the motion picture industry. These modifications of illusions from the theater (and still photography (such as double exposure Rear projection were a refinement of the painted backgrounds in the theater, substituting moving pictures to create moving backgrounds. The advances in makeup allowed for, masks which fit the actor perfectly. As the technology improved in material science horror film mask soon followed.

## **1950s and 1960s**

Sci-fi special effects milestones

Numerous new special effects were developed which dramatically increased the level of realism achievable in science fiction films.

## **1990s,**

Computer-generated imagery (CGI) is the dominant factor for special effects technology It provides filmmakers greater control, and allows many effects to be accomplished more safely and convincingly

## **1968,**

a new technique termed slit-scan

Stanley Kubrick assembled his own effects team using in-house effects such as highly detailed miniatures and carefully photographed for a realistic depth of field.

The shots of spaceships were combined through hand-drawn and careful motion-control work, ensuring that the elements were precisely combined in the camera

- Backgrounds of the African vistas Scenes
- Sets using zero-gravity environments were staged with hidden wires,
- Mirror shots, and large-scale rotating sets.
- Voyage through hallucinogenic scenery, was created by Douglas Trumbull using.

## **1970s**

Provided two profound changes in the special effects trade. The first was economic: during the industry's recession in the late 1960s and early 1970s, many studios closed down their in-house effects houses. Technicians became freelancers or founded their own effects companies, sometimes specializing on particular techniques (optics, animation, etc.).

### **1977.**

Industrial Light & Magic,

An era of science-fiction films with expensive and impressive special effects. r John Dykstra,. And crew developed many improvements in existing effects technology. They created a computer-controlled camera rig “that allowed precise repetition of camera motion,

Compositing was minimized by cameras that photographed widescreen images horizontally using far more of the film per frame, and thinner-emulsion film stocks were used in the compositing process.

That same year, Trumbull also developed techniques for creating intentional "lens flare" (the shapes created by light reflecting in camera lenses) to provide the film's undefinable shapes of flying saucers.

The success of these films, , has prompted massive studio investment in effects-heavy science-fiction films. Thus the establishment of many independent effects houses, using a refinement of existing techniques, and the development of new techniques such as computer-generated imagery (CGI).

## 1982

### Introduction of computer generated imagery (CGI )

The use of computer animation in film dates back to the early 1980s, which has changed nearly every aspect of motion picture special effects. Digital compositing allows far more control and creative freedom than optical compositing, and does not degrade the image as with analog (optical) processes. Digital imagery has enabled technicians to create detailed models, matte "paintings," and even fully realized characters with the use of computer software.

The biggest and most "spectacular" use of CGI is in the creation of photo-realistic images of science-fiction/fantasy characters, settings and objects. Images can be created in a computer using the techniques of animated cartoons and model animation. .

Planning and use must be carefully planned and choreographed in pre-production and production.

Practical effects also require significant pre-planning and co-ordination with performers and production teams. The live nature of the effects can result in situations where resetting due to an error, mistake, or safety concern incurs significant expense, or is impossible due to the destructive nature of the effect.

Live special effects are used in theatres, sporting events, concerts and corporate shows. The Types of effects used include: flying effects, laser lighting, theatrical smoke and fog, CO2 effects, and pyrotechnics. Other atmospheric effects can include flame, confetti, bubbles, and snow. And the use of a large, intricate stage that moves to supplement what's being acted on stage.

Mechanical effects use mechanical engineering. Cars being flipped and hauled over buildings are usually an effect built on specialized rigs Camera workers, stunt artists or doubles, directors and engineers collaborate to produce the proper effect as the action is recorded against a green screen. It is then edited and reviewed before final release to the public.

Visual special effects techniques a down jacket is equipped with hidden bullet hits squibs that blow open pre-scored "bullet holes" and fake blood packets to simulate gunshot wound

## **Chapter 2 Available Light**

The term refers to light sources in the surrounding environment that are present naturally or artificial lighting that already exists

Use of available light is an important factor in order not to disturb the mood.

The use of available light may pose a challenge for a photographer. The brightness and direction of the light is often not adjustable,. This will limit the selection of shutter speeds, and may require the use of shades or reflectors to manipulate the light.

### **Available Light explained**

Available light photography. It is referred to as photography in “low light”

Most photographers rely on available light photography to capture the images.

### **The Candid Feeling**

Most photographers take portrait shots that are and lack the candid feeling often found with available light photography.

Digital photography today, using available light photography provides its own characteristics to a photograph and an even better “look” than artificial light

### **Available Light is Natural and Artificial Light Too**

The difference between artificial light and available light photography is that while artificial light is a form of available light, There are so many terms for light, available, natural, ambient, fill, artificial, existing, etc., but when it comes to available light photography,

### **Pre-existing Light Is Available Light**

any light that pre-exists when you arrive to take a photograph is available light, you will need to constantly adjust your white balance, and shoot with slower shutter speeds and faster apertures to capture the photos with available light.

With digital cameras and editing software constantly improving, photographers are able to get away with a lot more today than they could in the past. Better sensors, flexible ISO ranges, raw image processing, and ever-advancing lens technologies have all contributed to a more forgiving margin of error for the photographer producing a greater creative possibility. For the portrait photographer, this means you don't have to invest in a studio's worth of gear to create compelling photographs of your sitters

Many portrait photographers love natural light.

### **Chapter 3 Choose Fast Glass**

The quality of the photograph depends on the quality of the lenses you use. The faster your lens, the brighter your images will be, and the more flexibility you will have when working under less-than-ideal lighting conditions.. Fast lenses open up wide, let in more light, and allow you to shoot at higher shutter speeds. “Slow” lenses have smaller maximum apertures, let in less light, and require you to compensate with lower shutter speeds.

Fast” lenses allow you to create portraits with shallow depth of field.

When choosing a zoom, note whether it features a constant or variable aperture. Constant aperture lenses, as the name implies, maintain the same maximum aperture across the entire zoom range. Variable aperture lenses lose brightness as you zoom from wide to tele views, making it more difficult to capture subjects in low-light settings.

#### **Shoot Raw**

If you are shooting portraits using only available light, you set your image style to raw files. When using a editing software, working from raw files greatly expands your editing possibilities. By shooting jpegs it could limit the exposure or white balance, Raw preserves all of the data from your exposure, allowing you to make dramatic changes to a file without necessarily losing detail or introducing noise.

#### **Shape Your Source**

While it is possible to create beautiful portraits using only natural light, you should be prepared to modify or supplement it when necessary, there is only one sun in our solar system, so its light must necessarily come from a single direction. a cheap and effective solution to this is a reflector.

Circular reflectors provide a quick and easy means of filling shadows. Note the extra bounce the silver surface provides compared to the white.

Simply placing diffusion between the sun and your subject can make a huge difference in your portraits.

Another scenario in which you may find yourself needing to shape ambient light is when it is too bright, such as when shooting outdoors in full sun. This is easily fixed by placing a filter between your light and subject.



## **Chapter 4 Painting with Light**

Painting has always been thought of by using a paintbrush and paint, but there are other ways to 'paint'? Light painting is defies the static rules of photography by using a moving light source while taking a long-exposure photograph.

The concept of painting with light is a photography style that employs long shutter speeds. That can range from a second or two to several minutes or more. The principles of 'correct exposure' are discarded and the goal of a unique artistic statement takes its place.

### **Light painting on a still life subject**

The technical requisites are fairly basic. Typical painting with light employs a tripod, shooting in manual mode with a mid-sized aperture and long exposure. Typically these images are acquired in a dark room or outdoors at night with few, if any, existing ambient light sources. Manual mode is a must to take full control of aperture, shutter speed, and ISO. All interchangeable lens cameras feature this mode,. Look for 'M' on your mode dial or shooting mode menu.

Light painting a room with multiple coloured lights – and the invisible people doing the painting

Once your camera is in place, you are free to apply light into your photographic frame in any number of creative ways. The use of simple light painting tools (pen lights, flashlights, cell phones, decorative lights, sparklers, etc) can be used to 'etch' light patterns into your finished frame.

Light can be applied free-form in the air to form abstract shapes and figures, or light can be 'painted' onto surfaces. The results will be almost impossible to duplicate, making a vast playground for creativity. The achieved results are limited only by your imagination and willingness to experiment.

A very unique aspect of the creation process is the idea of subject invisibility. you as the 'painter' can be completely invisible to the camera. In a room absent of light, the only light the camera will record is that which it sees from your light painting tools. So long as you do not point the light painting tools at yourself, you will remain completely invisible to your camera throughout the light painting process.

- Manual mode on your camera, camera on tripod
- ISO 100 or 200 f/8 aperture
- shutter speed of ten to twenty seconds
- Room should be completely dark when exposure begins
- a remote shutter release
- With the lights on, pre-focus on the subject you wish to paint.

- Once focus is achieved, disengage auto focus. This is essential to prevent the camera from attempting to focus when you turn the lights out and begin the exposure.

When you turn the lights out, begin your exposure by pressing the shutter button or employing a 2 or 10 second timer delay. Then, when the shutter opens, paint your subject with light using whatever patterns or methods you like.

Be aware that light is an additive element. That is, if you repeat brush strokes of light across the same surface multiple times, that area will become brighter and brighter. If painting a subject that is white, caution must be used to ensure that you don't overdo it and create blown out highlights.

Like any photographic endeavour, painting with light offers a great deal of room to grow. Once you've mastered the basics, you can explore even more exotic and creative possibilities.

## Chapter 5 The Art of Double Exposure Effects in Photography

Double exposure shots are popular in both the photography and graphic design space. It's a relatively simple technique that offers amazing results if you just spend a little time honing your skills to get it just right.

In the past, when working with film, a double exposed effect could be created by exposing one image, then capturing and exposing an additional image without advancing the frame.

Over the years, the method of creating a double exposure has changed and become even easier to achieve with editing software. With the introduction of digital photography and software, such as Photoshop, you no longer need to compose, capture and expose your double exposure manually while out in the field

Like everything in Photoshop, there are several different ways to produce this type of imaging effect,

Here are the steps to produce the effect image you see:

Choose two images to work with. Most times this will be a portrait and either a landscape or cityscape. The contrast between the two types of images and textures is what will make your final product stand out and make the effect more dynamic.

A couple of things to think about while choosing your images are contrast, colour, and shapes. That's what makes these types of projects so great. The creative freedom and options are limitless.

Shapes are important in how they complement one another in the image. You could also choose to use contrasting shapes like a cityscape, which would again produce another exciting but completely different effect.

Next, load both of your images into the same Photoshop document and place each photo on different layers. Your portrait should be above the landscape layer. If done correctly, the only thing that you should see in your document canvas at the moment is your portrait image.

Next you'll want to create a layer mask on your portrait image. If you're not familiar with layer masks, they are one of the most important tools in Photoshop that allow you to create non-destructive Photoshop documents, meaning you never alter an image in your document in a way that permanently changes it.

To create a layer mask, from the layers panel

- click on the layer you want to mask,
- in this case the portrait layer, then click the layer mask icon at the bottom of the layer panel.

- You'll notice that that adds a new white linked beside the layer thumbnail in the layer panel. This is your layer mask.
- So far you'll see no changes at all to your image.
- Next paint out sections of your portrait to let sections of the layer below show through.
- This is very similar to erasing parts of the image, except by doing that you don't have the option to bring it back whenever you want
- To start removing parts of your portrait, you'll need to first select the layer mask by clicking on it in the layers panel.
- When it's selected it should have a box around it to indicate it is active.
- \*It's extremely important to have your mask selected and not the image itself or else you will be painting upon the image itself.
- With your layer mask selected, choose the paintbrush tool from your tool palette.
- You'll notice that the colour boxes in the tools palette default back to black and white, even if you had a colour selected.
- This is because you can only paint your mask with black or white. Black to remove and white to add back in. Start painting some black onto your image. Instead of black showing you'll notice that you'll start seeing pieces of your landscape show though.
- *MAGIC*. What is happening is that when you paint black onto your layer mask it allows the image below to show though.
- if your brush opacity is at 100% you'll see 100% of the layer below where you paint.
- Go ahead and try it. If you don't like the result, you can choose white and paint that section back in.
- If you're doing this right you'll also notice your layer mask start to have greys and black in it.
- You'll notice that the most successful double exposures look blended together and not just like one image or the other.
- To achieve this you'll need to set your brush opacity lower.
- Typically 15-25%. That allows you to paint in small amounts of the image below so that it blends more with the texture in your portrait.
- play around with different effects from the brushes, and adding and subtracting from different areas of the photo until you achieve an end result you like.
- So get started, play around, try different techniques and images and just have fun with it!

## Chapter 6 Ambient light

Another factor with ambient light is the colour factor it is very critical to get the correct white balance, this will allow you to achieve the proper skin tones as seen by the human eye.

Different light sources produce a different colour effect on the subject.

When shooting in ambient light you the photographer must be more aware of shadows

There is nothing more that destroys an image is unwanted shadows. To eliminate the shadows reduce the light and use a reflector.

The best aperture setting for ambient light is f8. For sharp images always focus on the "eyes" of the subject,

As you go from area to area you will constantly need to adjust your auto white balance.

In conclusion

Ambient light has advantages

It doesn't distract from the action or mode

Produces excellent images in low light situations

It does not cause a distraction to the athletic doing a sporting event

The whole key to ambient light is experimentation, practice, having fun and staying safe.

## Chapter 7 The magic of Light

The true image is captured with the art of capturing the light when you understand how the angle intensity and quality of light affects your image you will unlock the key to an outstanding photograph.

It all depends on the subject and the situation you are in. This magical spell can only be casted by the skilled photographer that captures the right combination of shadows and lighting to make the visitors stand up and say ahhh!

Photography has no rules it is all in the photographer's eyes as how the story is to be portrayed light adds the dimensions to you image

Using natural light it all depends on the weather and time of day the early mornings and late day is when the sun produces the soft light which is evenly dispersed producing very few shadows. During the mid-day the light is Strong casting Heavy shadows. Over cast days are preferred by most photographers as the clouds act as a natural diffused and they produce their own magical image.

Know the direction of the light source and use it to your advantage. In urban areas the light can either highlight or darken a particular feature of the building, in nature heavy overcast skies produce some fantastic shots

Study the light source and arrange your angle for the best shot. Each type of light has its own colour temperature and it is always best not to mix different sources.

In conclusion natural light when used properly will produce some fantastic shots all that it takes is practice so get outside experiment with your equipment and have fun. You too will become a professional photographer used natural light

## Chapter 8 Using Film Looks

all image like is the ability to apply a “look” to their images. This can be as simplistic as using Instagram filters and as rich as taking a powerful, well edited image and making it look like it was shot on classic film.

With the growing popularity of film filters on Instagram, photographers are being asked increasingly for this same look from their clients.

Why image makers want to make their images look like they were shot on film is entirely personal, but while the majority love digital, there remains a very committed community of creatives who continue to shoot film. Because getting black and white film processed can be a challenge, and because some classic films are gone forever, using digital software to achieve this look has become very popular making the image look like it was taken about eighty years ago emulating an older sepia toning treatment, along with a coffee bath for more brown than yellow. With the texture function the digital image has the look of being produced on a coarse textured fibre paper. Disable the texture if printing on a proper fibre paper, otherwise leave the texture in for flavouring. You can see the coarse grain of the early film emulation and the effect of the texture particularly in the sky.

## **Chapter 9 LEGAL NOTICE**

The Publisher has strived to be as accurate and complete as possible in the creation of this book, notwithstanding the fact that he does not warrant or represent at any time that the contents within are accurate due to the rapidly changing nature of technology.

While all attempts have been made to verify information provided in this publication, the Publisher assumes no responsibility for errors, omissions, or contrary interpretation of the subject matter herein. Any perceived slights of specific persons, peoples, or organizations are unintentional.

In practical advice books, like anything else in life, there are no guarantees of income made. Readers are cautioned rely on their own judgment about their individual circumstances to act accordingly.

This book is not intended for use as a source of legal, business, accounting or financial advice. All readers are advised to seek services of competent professionals in legal, business, accounting, and finance field.



## Chapter 10 Bio

My name is David Wright.

I have many years experience writing procedures on how to test high tech electronic equipment. Re wrote technical manuals so that the average person could understand them.

Set up numerous training programs to train Junior techs.

My documenting skills are excellent paying attention to details satisfying the toughest ISO auditors.

I have enhanced my writing skills by successfully completing a course in Writing for Children's literature.

Completed course from AWAI in Copy writing service ,B2B copy writing, Seo management , Email marketing and web design

This has helped me write how to articles and Information Books that you will find on my website Discount E Books <http://www.discount-ebook-s.com/>

I have had a Camera in my Hand since 1965 Gone pro In 1999

Took the course from ICS in Photography

I am now at a point in life I would like to share my knowledge with the world and the best way I know how is by Print either electronically or Hard copy paper.

David Wright

Electronic service technician

Professional Photographer

Experience writer