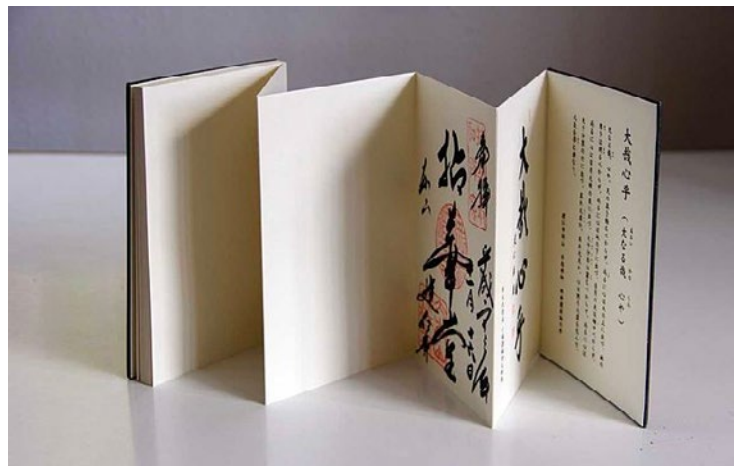


# PAPER & HANDMADE BOOKS

As soon as people began to draw and then write, they wanted a surface to work on that was more portable than a wall in a cave or other dwelling. The book as we know it took many centuries and the combined knowledge of several cultures to be born.

In the East, books are thought to have been in use as early as 3000 years ago. Bamboo, wood or palm leaves of equal length and width were fastened together with a string run through a hole in each section. These blind books resemble the venetian blinds many people use in their homes today. Eastern cultures also used a fan structure to record and store information in a specific order. The method is similar to the blind in the use of slats of equal width and length, but they are now held together at a fixed point (not along a string or cord). This point can be at the end or the middle of the grouping. The Chinese also used the scroll form.

In 105 AD the Chinese invented paper. This material was flexible and strong. A new form of book was created, the concertina or fold book. Here one sheet, or several glued into one, was folded onto itself. It could be read by flipping each fold (like pages) or opened to see the entire length. The book had hard covers on the ends to protect the paper. The Chinese also knew how to print multiple images from a single source (woodblock) and had experimented with movable type (ceramic) several hundred years before the Western world.



Orihon (Japanese) is a book style originating from the Tang dynasty (A.D. 618-908) in China and was later developed in the Heian period (A.D. 794-1185) in Japan.

In the West, clay tablets were made as early as 4000 BC in Mesopotamia. Then the Egyptians created a way to make a writing surface with the papyrus plant. These sheets were light compared to the clay, but were too brittle to be folded, and thus were rolled into scrolls for storage. The Greeks and Romans adopted the use of papyrus. The Greeks and Romans also wrote on thin pieces of wood covered with a smooth coat of wax. These surfaces were reusable by heating and smoothing the wax. The Romans drilled holes along one side of the tablets and linked them together with cord or leather. This is the birth of the Western codex, the form of most books we use everyday.

When the supply of papyrus (only available in Egypt) became scarce in Europe, a new writing surface was created in Turkey: parchment. Parchment is sheep or goat skin scraped to be smooth and thin. If calfskin is used it produces a superior product and is called vellum. This material was foldable and a new way to bind was developed. Now groups of pages were folded and nested together, holes punched through the fold, and the sections sewn together. Stiff wooden covers were used to keep the parchment from warping. Now the codex form is even closer to present day.

Paper took a long time to reach the Western world. First it came to the Arabs around 800 AD and to Egypt in 900 AD. From there the knowledge went to Spain around 1100 AD and then to Italy in the late 1200's. Wide spread use of paper was not until the 1400's.





Johannes Gutenberg (right) viewing a newly printed sheet.  
Rijksmuseum, Amsterdam, S. Emmering Bequest / public domain

With the wide spread use of paper, books became cheaper and thus more accessible. The invention of movable type made with metal and used with a press in about 1450 by Johann Gutenberg in Mainz, Germany, set the stage for the modern era. Many copies of the same work could be made easily and be affordable to people other than the rich. With the rise of public education, and thus literacy, books were in demand and now printed in the vernacular (not just classical Latin).

During the Eighteenth and Nineteenth Centuries a wave of inventions pushed the book closer to its modern production methods.

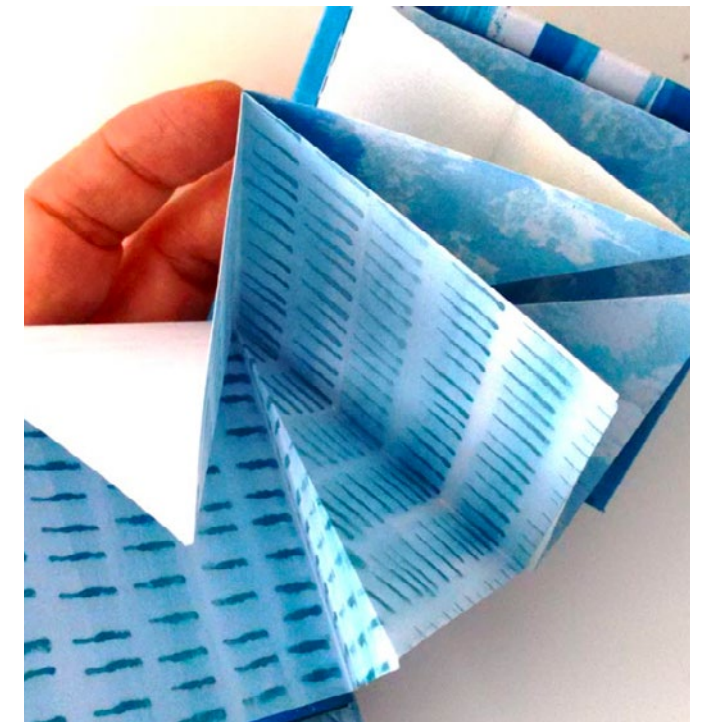
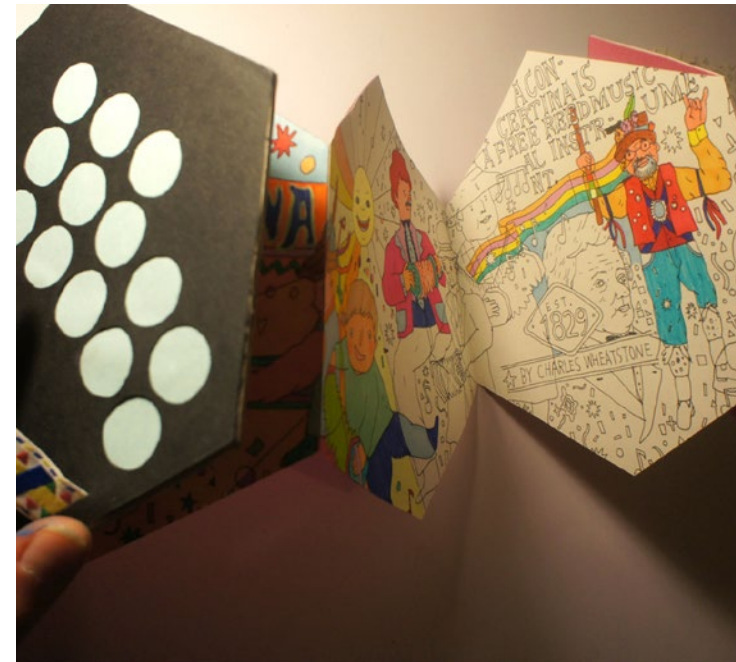
In France in the early 1700's a way to make paper from wood fibers, instead of cotton or rag, was invented. The new paper did not last as long, but was quicker to produce. The age of the machine changed book-making forever. A paper-making machine was invented around 1800. Machines that set the type as well as print it were invented and constantly improved. Then a machine that actually bound the pages and attached the cover was invented. There was no longer a need for hand craftspeople, but for those who could run and repair the machinery. The book format became about speed and the lowest cost of production.

In the late 1800's the Arts and Crafts Movement protested the cheaply made item and promoted handcrafted works. William Morris founded the Kelmscott Press in England to produce beautiful, well-crafted books as part of this movement. From here we can easily see how the livre d'artiste comes into the history of the book and leads to contemporary artists' books.

Contemporary artists' books combine the Eastern and Western traditions. Artists' books often combine several of the basic forms of the book, just as they often combine several media. The history of the book was a struggle to find the best format and materials to create a method that is cheap and easy to produce. While artists' books work to defy the codification of the book format, the experimentation throughout history can now inspire contemporary artists in their exploration of new ways to use the book.

This was only a brief run down. For further information on the history of the book and related topics:

Literary Resources -- Bibliography and History of the Book maintained by Jack Lynch.  
Is It a Book? - History by Karen Drayne, Barbara Davison, and Emily-Jane Dawson.



## Links to explore:

<https://www.flowmagazine.com/do/diy-crafts/make-concertina-booklet.html>

<http://ruinsorbooks.com/2014/06/shelby-arnold-concertina/>

<https://lizplummer.com/notable-posts/how-to-make-a-concertina-book/>

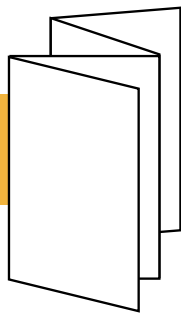
<https://guides.library.yale.edu/c.php?g=295819&p=1972528>



**Exercise #1: Concertina/Accordion Book**

Follow the demonstration in class to create a mini concertina book.

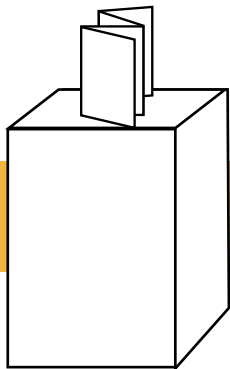
**This exercise will be to create a handmade concertina book**



**Assignment: Create a Concertina Book**

Choose a style of Concertina/Accordion bookmaking and create your own book using recycled or repurposed paper.

- Choose your recycled or repurposed paper - magazines, newspapers, old schoolwork, product packaging, etc.
- Create a concertina book using the paper you have found. Consider interesting folds for the inside of the book.
- Your book should include a sturdy cover.
- Add artwork to your book using any medium desired.



**The final book should be exhibit-ready for display.**

# COLOR

What is “the relativity of color”? Stated simply, the identity of a color depends on its situation: the light values and hue contrasts of the background and adjacent colors; the amounts, shapes, placements and boundaries of the colors.  
In Interaction of Color, Albers eloquently expresses this essential color theory principle: “a color has many faces,” and “what counts is not the what but the how.”

Reading, viewing and studying Albers’ Interaction of Color, and Johannes Itten’s The Art of Color, is an empowering experience for anyone who desires a deeper awareness of art and design. I highly recommend seeking out these books, and taking a look.



**Pioneers of Color**  
Josef and Anni Albers, lifelong artistic adventurers, were among the leading pioneers of twentieth-century modernism. Josef Albers (1888–1976) was an influential teacher, writer, painter, and color theorist—now best known for the Homages to the Square he painted between 1950 and 1976 and for his innovative 1963 publication Interaction of Color. Anni Albers (1899–1994) was a textile designer, weaver, writer, and printmaker who inspired a reconsideration of fabrics as an art form, both in their functional roles and as wall-hangings.

In his earlier career, Albers was a major figure of The Bauhaus, an influential German school of design and architecture. The Bauhaus developed out of a movement called European Constructivism, a purely abstract, geometric style that emerged shortly before the 1920s. The Bauhaus Constructivists believed that pure abstract forms, such as lines, squares and triangles were more valid than representational painting. For these artists such pure forms evoked a “universal” reality. Albers eschewed representation, in favor of the abstract and hard-edged geometric shapes he employed in his most celebrated works. He said “... art should not represent, but present,” and preferred the “anonymity of machine-like precision for personal expressiveness.”

Both artists were instrumental in the early Bauhaus works and carved a path for color education that students use today.



Josef Albers  
Golden Gate, 1965



Anni Albers  
Black White Red,  
1926/1964 cotton and silk

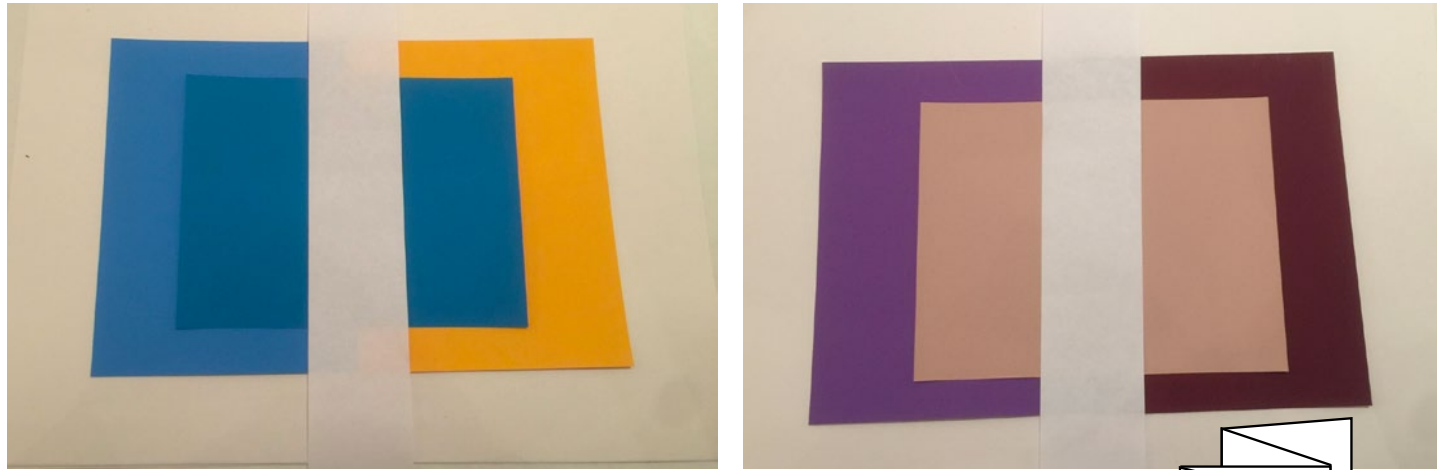
**Links to explore:**

- <https://albersfoundation.org/teaching/josef-albers/interaction-of-color/publications/#slide9>
- <http://www.artnet.com/artists/josef-albers/>
- <https://www.khanacademy.org/humanities/art-1010/post-war-american-art/postwar-abstract-art/a/albers-homage-to-the-square>
- <https://museumzero.blogspot.com/2013/09/in-josef-albers-app-colors-interact.html>

## BOOK AND PAPER ARTS

**Exercise #1: Make Three Colors Appear as Four**

Set two colors side by side. We'll call these the host colors. Then place a third color on top. This will be the sample color. With a thin strip of white paper, separate the sample color into two distinct colors. Tip: if the sample color shares qualities with one of its host colors, you are more likely to see a visible shift. Another hint: the smaller the sample color is, the more light it will absorb from its host color. Think about using light and a dark version of a similar color and complementary colors together.



**This exercise should be included in your concertina sketchbook**

**Exercise #2: Make Three Colors Appear as Two**

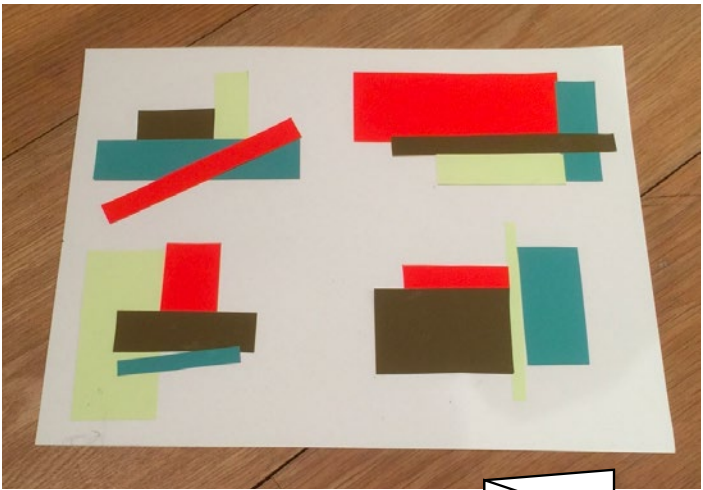
Set two host colors side by side. Then place a third color on top. The goal is to make the sample color on each side resemble the opposing host color. Tip: the more similarities all three colors shared, the easier it would be to pull off.



**This exercise should be included in your concertina sketchbook**

**Exercise #3: Make Four Compositions with Four Colors**

Choose four colors to make up your combination palette. Create 4 unique compositions using the same 4 colors. Consider the shapes you are cutting out, overlapping, and creating a dominant color in each composition.

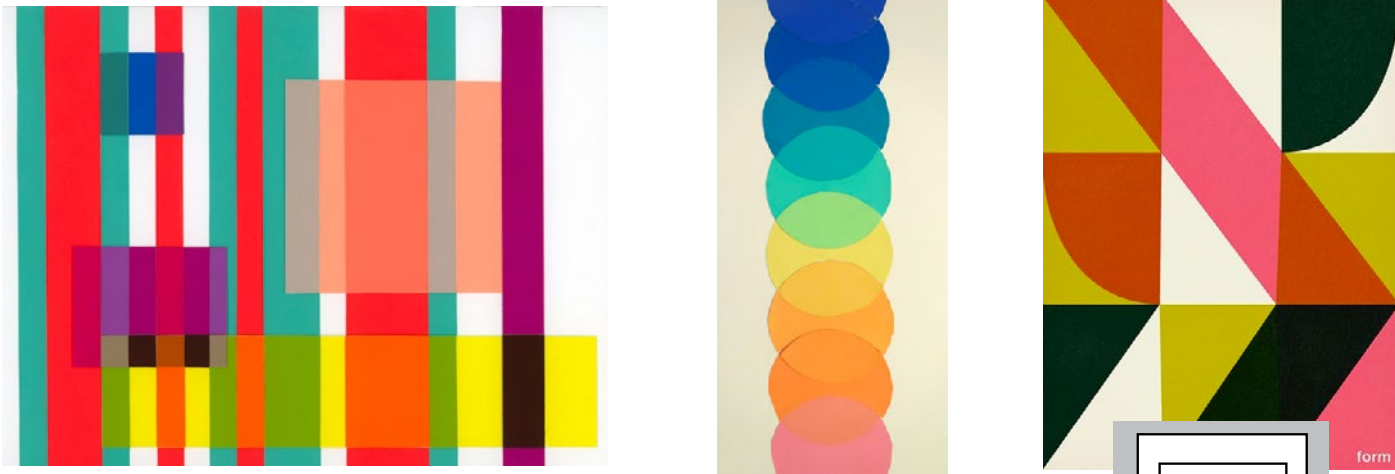


**This exercise should be included in your concertina sketchbook**

**Exercise #5: Cut-paper color compositions**

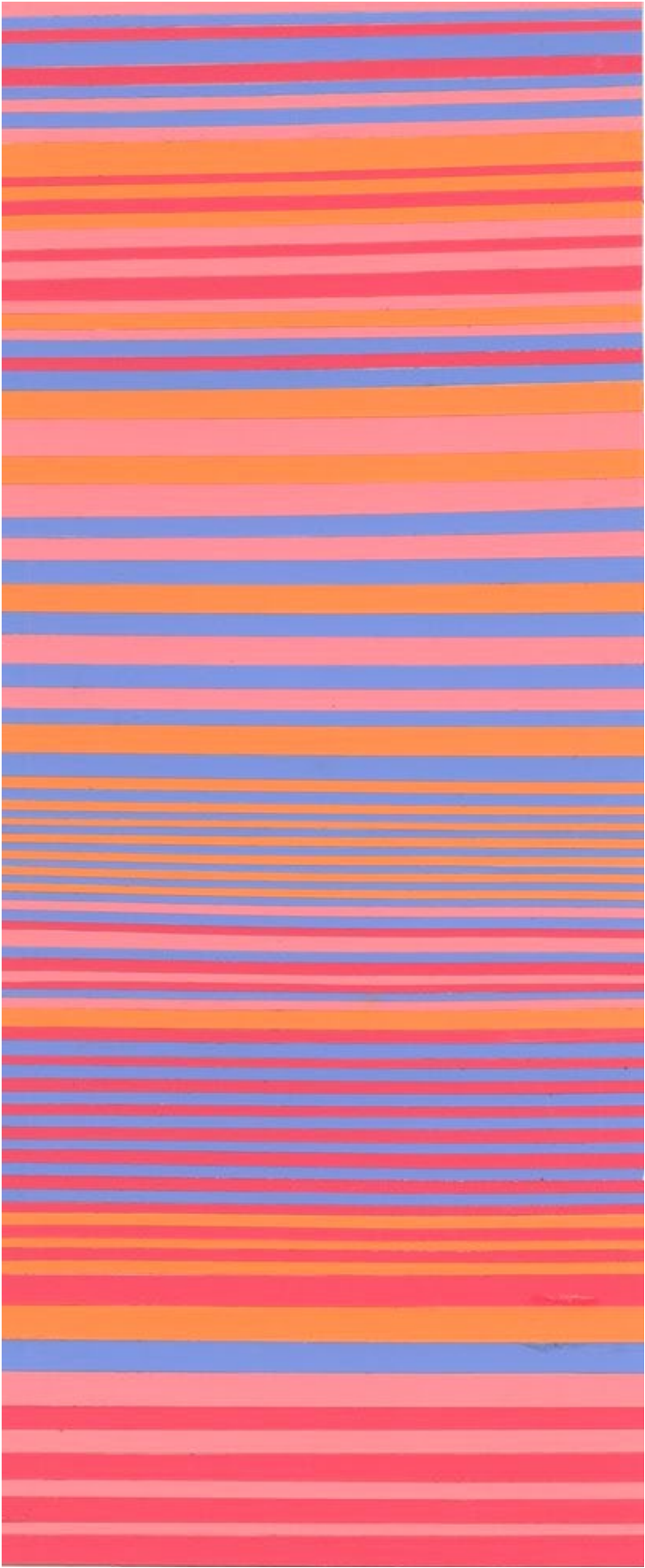
Using the color-aid sets, create a two dimensional composition. You may cut your paper as you wish and may choose to create pattern, or not. You may use any backing material that you'd like to adhere your paper to.

- First and foremost, think about color and composition.
- Plan your composition BEFORE gluing.
- Put more consideration into gluing that you'd think is necessary. Messy glue will ruin your work.
- Be careful and patient.



**The final 2-D artwork should be exhibit-ready for hanging.**







Assessment

Assignment Rubric

Concertina Sketchbook - 25%

- Your sketchbook is constructed neatly and designed according to the lesson concepts and aesthetics 5pts
- Exercise 1 - Three colors appeared as four 5pts
- Exercise 2 - Three colors appeared as two 5pts
- Exercise 3 - Your four compositions were creative and unique 5pts
- Overall strength of composition, color, and craftsmanship 5pts

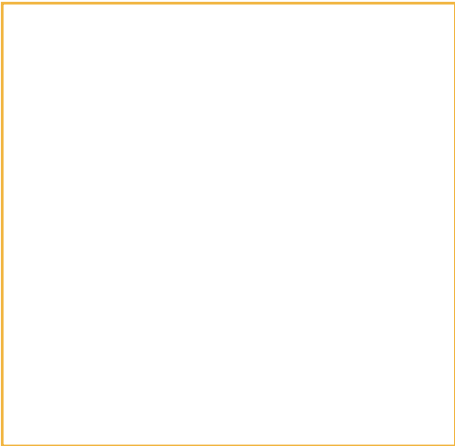


Exhibit Artwork - 75%

- You show a strong understanding of color. Your chosen colors work well together and are carefully planned according to your composition. 25pts
- Your composition is unique and aesthetically pleasing or interesting. 25pts
- You show strong craftsmanship in your artwork. The paper is carefully cut and adhered. Glue residue is not evident. Paper is fully glued so that no corners are lifted. Pencil marks are not visible. 25pts



Comments

Scherenschnitte/Kirie/  
Paper Cutting

The art of paper cutting has evolved uniquely all over the world to adapt to different cultural styles. Paper-cut art appeared during the Han dynasty in 4th century AD after the Chinese official, Cai Lun invented paper in 105 AD. The oldest surviving paper cut-out is a symmetrical circle from the 6th century found in Xinjiang China. Paper-cutting continued to be practiced during the Song and Tang Dynasties as a popular form of decorative art. In Japan, paper-cutting was named Kirie.

By the eighth or ninth century paper-cutting appeared in West Asia and in Turkey in the 16th century. The knowledge of Paper making did not reach Europe until the 13th century so paper-cutting could only have arrived after that. In Switzerland and Germany for example it was not until the 16th century that paper-cut art or scherenschnitte was established.

Paper-cutting is an art form that is rooted in history and tradition but has taken on new life in contemporary art. Some artists use the idea of cutting out forms in their conceptual work.



Kara Elizabeth Walker is an American contemporary painter, silhouettist, print-maker, installation artist, and film-maker who explores race, gender, sexuality, violence, and identity in her work. She is best known for her room-

size tableaux of black cut-paper silhouettes.



Japanese Kirie



Kara Walker’s “Virginia Lynch Mob” installed on a custom-built wall at MAM.

Links to explore:

<https://vsemart.com/silhouette-paper-cut-art/>

<https://www.youtube.com/watch?v=0sfZPMJodXM>

<https://japanobjects.com/features/kirie>

<https://www.instructables.com/id/A-Beginners-Guide-to-Paper-Cutting/>

<https://www.youtube.com/watch?v=sl2WcHgoXE0>

BOOK AND PAPER ARTS

Assignment: Create a cut-paper design

Create a piece of art using paper-cutting. This is a very open-ended project. You can use any style of paper-cutting that you'd like.

- Immerse yourself in the different styles that artists across the world use. Note the differences between traditional paper-cutting such as Kirie and Scherenschnitte as well as contemporary methods such as Kara Walker's silhouettes.
- Sketch and plan some ideas for your paper-cutting project.
- Ensure you are considering concept and idea in your work and not only the aesthetic.
- Choose your materials wisely with help from the teacher.
- Practice patience and put more effort into your craftsmanship than you'd think is necessary.
- Ensure that your project will be able to be presented in an exhibit.
- Install project for display

Assessment

Assignment Rubric

Exhibit Artwork - 100%

- You carefully designed and planned your exhibition and did suitable research or trial for its success. 25pts
- You show a strong understanding of form. 25pts
- Your composition is unique and aesthetically pleasing or interesting. 25pts
- You show strong craftsmanship in your artwork. The paper is carefully cut. There are no fly-away pieces. 25pts

Comments



FILM PHOTOGRAPHY

Photography has come a long way in its relatively short history. In almost 200 years, the camera developed from a plain box that took blurry photos to the high-tech mini computers found in today's DSLRs and smartphones.

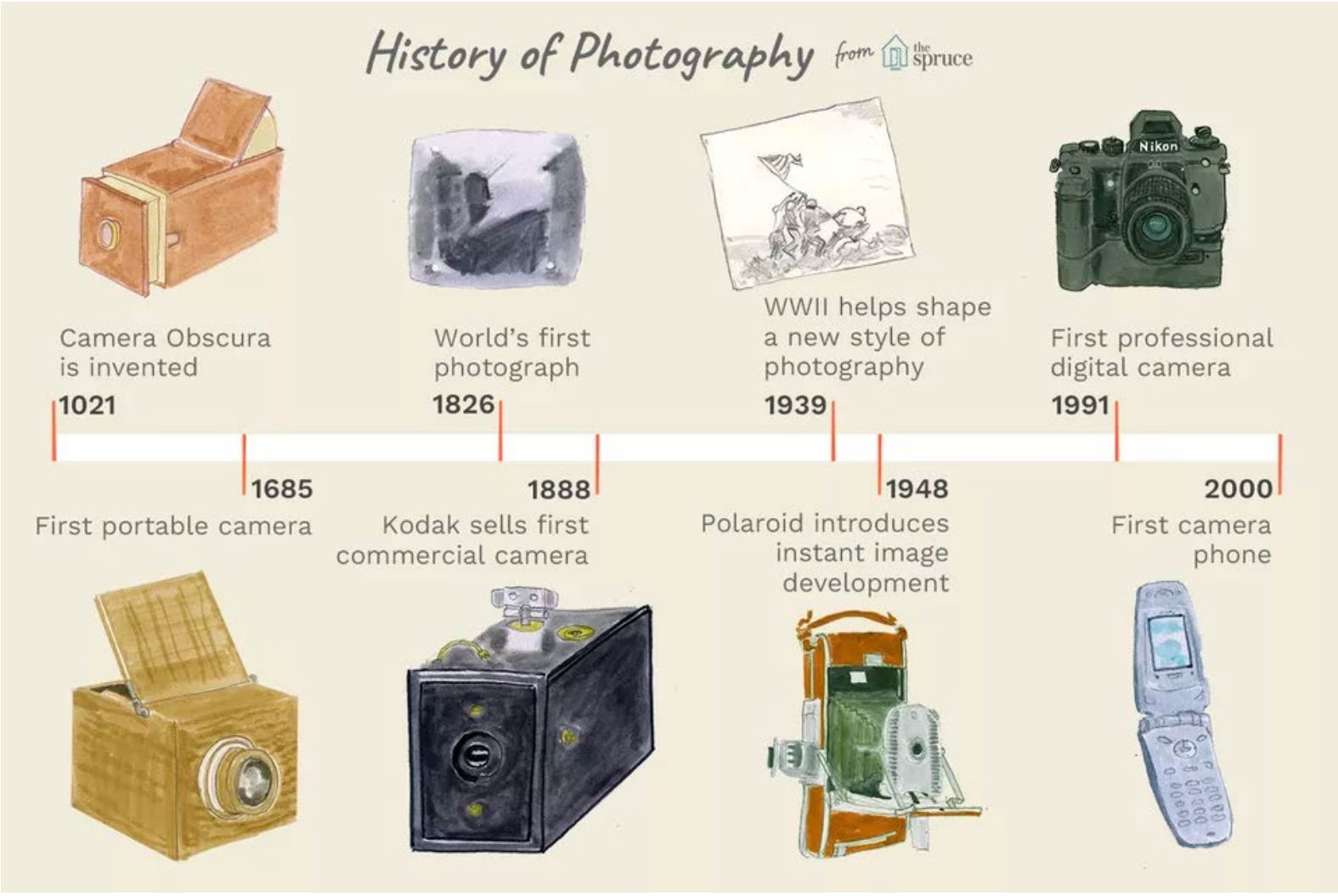
The story of photography is fascinating and it's possible to go into great detail. However, let's take a brief look at the highlights and major developments of this scientific art form.

The First Cameras

The basic concept of photography has been around since about the 5th century B.C.E. It wasn't until an Iraqi scientist developed something called the camera obscura in the 11th century that the art was born.

Even then, the camera did not actually record images, it simply projected them onto another surface. The images were also upside down, though they could be traced to create accurate drawings of real objects such as buildings.

The first camera obscura used a pinhole in a tent to project an image from outside the tent into the darkened area. It was not until the 17th century that the camera obscura became small enough to be portable. Basic lenses to focus the light were also introduced around this time.



FILM PHOTOGRAPHY

## The First Permanent Images

Photography, as we know it today, began in the late 1830s in France. Joseph Nicéphore Niépce used a portable camera obscura to expose a pewter plate coated with bitumen to light. This is the first recorded image that did not fade quickly.

Niépce’s success led to a number of other experiments and photography progressed very rapidly. Daguerreotypes, emulsion plates, and wet plates were developed almost simultaneously in the mid- to late-1800s.

With each type of emulsion, photographers experimented with different chemicals and techniques. The following are the three that were instrumental in the development of modern photography.

### Daguerreotype

Niépce’s experiment led to a collaboration with Louis Daguerre. The result was the creation of the daguerreotype, a forerunner of modern film. A copper plate was coated with silver and exposed to iodine vapor before it was exposed to light. To create the image on the plate, the early daguerreotypes had to be exposed to light for up to 15 minutes. The daguerreotype was very popular until it was replaced in the late 1850s by emulsion plates.

### Emulsion Plates

Emulsion plates, or wet plates, were less expensive than daguerreotypes and required only two or three seconds of exposure time. This made them much more suited to portrait photographs, which was the most common use of photography at the time. Many photographs from the Civil War were produced on wet plates.

These wet plates used an emulsion process called the Collodion process, rather than a simple coating on the image plate. It was during this time that bellows were added to cameras to help with focusing.

Two common types of emulsion plates were the ambrotype and the tintype. Ambrotypes used a glass plate instead of the copper plate of the daguerreotypes. Tintypes used a tin plate. While these plates were much more sensitive to light, they had to be developed quickly. Photographers needed to have chemistry on hand and many traveled in wagons that doubled as a darkroom.

### Dry Plates

In the 1870s, photography took another huge leap forward. Richard Maddox improved on a previous invention to make dry gelatine plates that were nearly equal to wet plates in speed and quality.

These dry plates could be stored rather than made as needed. This allowed photographers much more freedom in taking photographs. The process also allowed for smaller cameras that could be hand-held. As exposure times decreased, the first camera with a mechanical shutter was developed.

### Cameras for Everyone

Photography was only for professionals and the very rich until George Eastman started a company called Kodak in the 1880s.

Eastman created a flexible roll film that did not require constantly changing the solid plates. This allowed him to develop a self-contained box camera that held 100 film exposures. The camera had a small single lens with no focusing adjustment.

The consumer would take pictures and send the camera back to the factory for the film to be developed and prints made, much like modern disposable cameras. This was the first camera inexpensive enough for the average person to afford.

The film was still large in comparison to today’s 35mm film. It was not until the late 1940s that 35mm film became cheap enough for the majority of consumers to use.

## The Horrors of War

Around 1930, Henri-Cartier Bresson and other photographers began to use small 35mm cameras to capture images of life as it occurred rather than staged portraits. When World War II started in 1939, many photojournalists adopted this style.

The posed portraits of World War I soldiers gave way to graphic images of war and its aftermath. Images such as Joel Rosenthal’s photograph, Raising the Flag on Iwo Jima brought the reality of war home and helped galvanize the American people like never before. This style of capturing decisive moments shaped the face of photography forever.

### The Wonder of Instant Images

At the same time that 35mm cameras were becoming popular, Polaroid introduced the Model 95. Model 95 used a secret chemical process to develop film inside the camera in less than a minute.

This new camera was fairly expensive but the novelty of instant images caught the public’s attention. By the mid-1960s, Polaroid had many models on the market and the price had dropped so that even more people could afford it.

In 2008, Polaroid stopped making their famous instant film and took their secrets with them. Many groups such as The Impossible Project and Lomography have tried to revive instant film with limited success. As of 2018, it remains difficult to replicate the quality that was found in a Polaroid.

### Advanced Image Control

While the French introduced the permanent image, the Japanese brought easier image control to the photographer.

In the 1950s, Asahi (which later became Pentax) introduced the Asahiflex and Nikon introduced its Nikon F camera. These were both SLR-type cameras and the Nikon F allowed for interchangeable lenses and other accessories.

For the next 30 years, SLR-style cameras remained the camera of choice. Many improvements were introduced to both the cameras and the film itself.

### Introducing Smart Cameras

In the late 1970s and early 1980s, compact cameras that were capable of making image control decisions on their own were introduced. These “point and shoot” cameras calculated shutter speed, aperture, and focus, leaving photographers free to concentrate on composition.

The automatic cameras became immensely popular with casual photographers. Professionals and serious amateurs continued to prefer to make their own adjustments and enjoyed the image control available with SLR cameras.

### The Digital Age

In the 1980s and 1990s, numerous manufacturers worked on cameras that stored images electronically. The first of these were point-and-shoot cameras that used digital media instead of film.

By 1991, Kodak had produced the first digital camera that was advanced enough to be used successfully by professionals. Other manufacturers quickly followed and today Canon, Nikon, Pentax, and other manufacturers offer advanced digital SLR (DSLR) cameras.

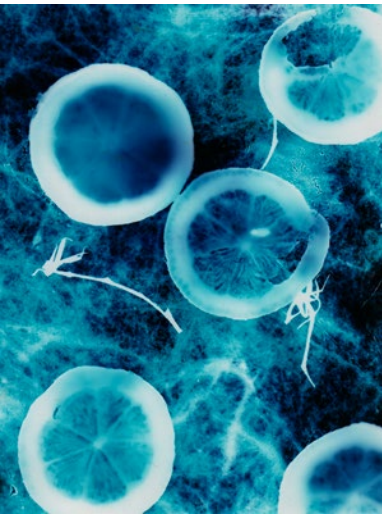
Even the most basic point-and-shoot camera now takes higher quality images than Niépce’s pewter plate, and smart-phones can easily pull off a high-quality printed photograph.



# PHOTOGRAM

Photogram, shadowlike photographic image made on paper without the use of a negative or a camera. It is made by placing objects between light-sensitive paper or film and a light source. Opaque objects lying directly on the paper produce a solid silhouette; transparent images or images that do not come in direct contact with the paper produce amorphous, mysterious images.

The artistic potential of the photogram was extensively exploited during the 1920s. The Swiss photographer Christian Schad, the Hungarian-born painter-photographer László Moholy-Nagy, and the American expatriate Surrealist Man Ray were the medium’s chief proponents. Man Ray, who called his photograms rayographs, applied the contact-exposure technique to motion-picture making as well.



**Man Ray** made his “rayographs” without a camera by placing objects-such as the thumbtacks, coil of wire, and other circular forms used here-directly on a sheet of photosensitized paper and exposing it to light. Man Ray had photographed everyday objects before, but these unique, visionary images immediately put the photographer on par with the avant-garde painters of the day. Hovering between the abstract and the representational, the rayographs revealed a new way of seeing that delighted the Dadaist poets who championed his work, and that pointed the way to the dreamlike visions of the Surrealist writers and painters who followed.



**Moholy-Nagy** played a key role at the Bauhaus in Weimar and Dessau as a painter, graphic artist, teacher, and impassioned advocate of avant-garde photography. He made this image without a camera by placing ordinary objects, including his hand and a paintbrush, on a sheet of photosensitized paper and exposing it to light. While this simple process was practiced by photography’s founders in the nineteenth century and was later popularized as a child’s amusement, avant-garde artists in the twentieth century revived the photogram technique as a means for exploring the optical and expressive properties of light. With this shadow-image of a hand and paintbrush, Moholy-Nagy ambitiously suggests that photography may incorporate, and even transcend, painting as the most vital medium of artistic expression in the modern age.



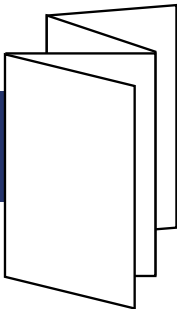
Trained as a botanist, **Anna Atkins** developed an interest in photography as a means of recording botanical specimens for a scientific reference book, *British Algae: Cyanotype Impressions*. This publication was one of the first uses of light-sensitive materials to illustrate a book. Instead of traditional letterpress printing, the book’s handwritten text and illustrations were created by the cyanotype method. Atkins printed and published Part I of *British Algae* in 1843 and in doing so established photography as an accurate medium for scientific illustration.

Atkins learned directly about the invention of photography through her correspondence with its inventor, William Henry Fox Talbot. Although she owned a camera, she used only the cameraless photogenic drawing technique to produce all of her botanical images. With the assistance of Anne Dixon, Atkins created albums of cyanotype photogenic drawings of her botanical specimens. She learned the cyanotype printing method through its inventor, the astronomer and scientist Sir John Herschel, a family friend.

## Exercise #1: Photogram in the style of Anna Atkins

Create 2-3 photograms in the style of the first woman photographer, Anna Atkins, using organic materials . Arrange objects to form a suitable/balanced composition. Safely use the chemicals and darkroom to create 2-3 prints. Make sure your print size will fit into your concertina book.

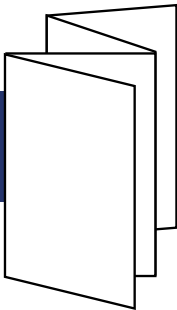
This exercise should be included in your concertina sketchbook



## Exercise #1: Photogram

Create 2-3 photograms in any style using any objects available. Think about the composition you are creating and use negative space wisely. Consider the opacity of objects and what effect layering might have. Make sure your print size will fit into your concertina book.

This exercise should be included in your concertina sketchbook





# FILM PHOTOGRAPHY

### How to load a film camera.

Rear loading cameras are the most common and super easy to use. Open up the back and slot the film canister into the chamber, which can be on the left or on the right side. Pull the film leader out and slide it into a slot of the spool on the other side of the chamber (each camera is different and might differ from this a little). Once that is done, close the back and shoot a few photos until the frame counter reaches 0. Now that the film is properly loaded you can start shooting.



### Shutter Speed, aperture and ISO/ASA?

The shutter speed is the time the film is exposed to light. A smaller fraction will lower your exposure and a larger fraction will increase it. Use the shutter speed dial to set the shutter speed. Most cameras will show this in regular increments like 1/500, 1/250 etc. A fast shutter speed like 1/500 will help you capture sharp images of fast moving objects whilst 1/60 is okay for normal shooting.

Aperture is the amount of light that enters the camera. The aperture ring, which can normally be found on the

lens, controls the small opening near the front of the lens. The increments for this are the f-stops (e.g.: f/2). The lower f/stops give higher exposure and a shallower depth of field (less is in focus), while the higher f/stops give a lower exposure and a higher depth of field.

The ISO/ASA is the level of sensitivity of your camera to available light and can be found on the ISO/ASA dial. The lower the ISO number, the less sensitive it is to the light and a higher ISO increases the sensitivity. The number on your film box tells you the ISO of the film. ISO 200 is the most common; an ISO of 100 is great for shooting outside and in good light conditions, whereas you will need a higher ISO for darker conditions.

### Autofocus is your friend but the manual mode gives you control.

Autofocus locks onto your subject when you press on the shutter button, keeping it in focus while the camera captures the image. The manual mode lets you make adjustments easily and gives you more control over the outcome of the image. A built in light meter is great here as it helps you determine the right settings for your desired exposure. There are several kinds of meters that work differently. If you have one, make sure to know how to read it correctly. Try both autofocus and manual mode, and see what you feel most comfortable with.

### How to rewind the film.

Once your film is full, it is time to rewind and change it. Normally there is a button on the base of your camera, which “locks” your film so it can’t move backwards. If you move/press the rewind release button, your film will be rewound. Once that process is finished, you can open the back and take the canister out and get your film developed.

# FILM PROCESSING

### The Tools You Need

Assembling a basic kit of black-and-white film development supplies is easy, and should take up about as much room as the proverbial breadbox. For popularity’s sake, we’ll stick with roll film for the bulk of this article, although there are unique options for sheet film photographers, as well.



### Developing Tank

A tank is the vessel used to hold your film and chemistry in place, and prevent light from exposing the film during the developing process. The Paterson tank system is an industry standard for plastic tanks, and comes with everything you need besides reels. For purists out there, stainless-steel tanks for roll film are also of a standard size, and offer increased durability and temperature retention. Whichever way you go, keep in mind that plastic reels must be matched with plastic tanks, and stainless-steel reels must be matched with stainless steel tanks.



### Reels

The second component for developing your film is a reel, or more than likely, reels. Tanks can be purchased to accommodate multiple reels simultaneously; you develop several rolls of film at once. Plastic reels are, in the author’s opinion, easier to load due to the ratcheting system used to spiral film around them. Stainless steel reels are a bit trickier to master but, when coupled with a steel tank, require less chemistry for processing.



### Chemistry

In the most basic sense, you only need developer, fixer, and water.

### Graduates

Specialized and accurate graduates, or other measuring vessels, are a must. It is essential to measure the proper amount of chemistry for developing, and equally essential to get your dilutions correct when mixing chemistry. It is recommended to have at least two or more graduates of varying sizes—small ones are more accurate, larger ones obviously hold more chemistry, and multiples are needed so you do not cross-contaminate developer and fixer solutions.



### Storage Bottles

Depending on the number of chemicals you end up using, working and stock solutions should be kept in labeled storage containers for easy access and to prolong their working life. The size of the container is dependent on the chemistry you are using and how often you will be developing film.



### Film Clips

Seemingly frivolous, film clips, in my experience, truly do work better than clothespins when air-drying your film.

### Thermometer

A thermometer is another essential, and it’s important to get a separate one for your film-developing needs.



Stop Watch or Timer

Dedicated cooking timers, stop watches, or any clock with a legible second hand will help keep track of developing times, for greater consistency.

The Process

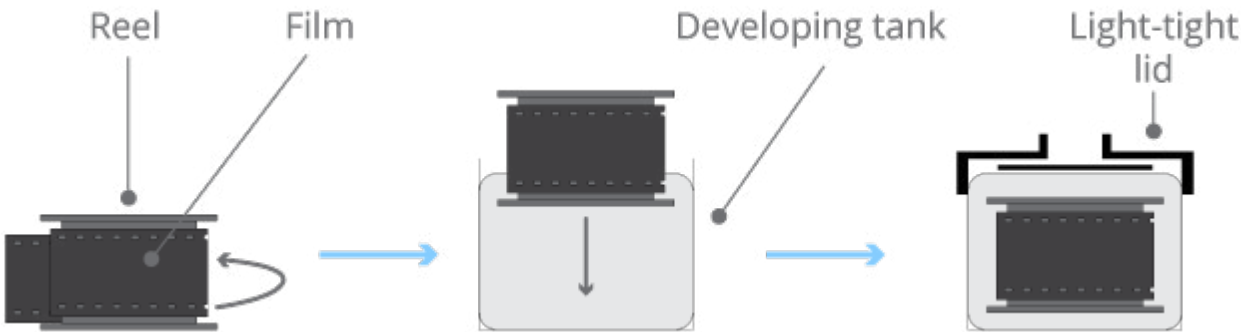
After you’ve acquired everything you need to develop, the fun part begins. Beyond the developing kit itself, there are a few other things you need for processing: a completely dark room (or a changing bag, if necessary), a sink with running water (make sure the faucet is high enough to accommodate your tank underneath), and a clean, dust-free place for your film to dry when you’re finished (I dry my film in the bathroom, hanging from a metal coat hanger that, itself, hangs from the shower-curtain rod). If this is your first time developing film, it is worth sacrificing a roll of unexposed film to practice loading your reels; depending on the type of reels you have, make sure you can load your film comfortably and easily with your eyes closed the entire time.



Loading

After spending time familiarizing yourself by loading a practice roll in light and dark, move to your completely dark space and configure your equipment: have your tank and, if applicable, center post, funnel, and lid all laid out, along with your reels. I like to also keep a pair of scissors in my back pocket to trim the film from the spool or remove film leaders, as well as pry open 35mm cartridges if necessary. Once set, turn out the lights and wait a few moments for your eyes to adjust, which will allow you to spot if any light is creeping into your loading space. Go through the process of either ratcheting or rolling your film onto the

reels, put them into the tank or onto the center post, attach the lid or funnel, and make sure all of your film is secure before turning on the lights or leaving the light-tight space.

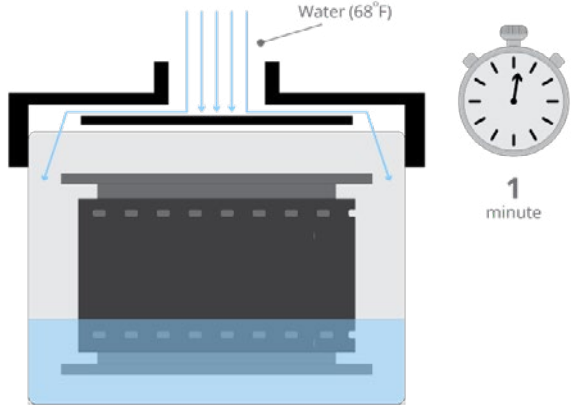


Developing Preparation

With your tank loaded, move over to the sink you will be using and lay out all of the chemistry you need in premeasured amounts. Depending on the developer you will be using, prepare enough chemistry using the recommended dilution on your developer bottle. The tank you are using will dictate the amount of chemistry needed. One important thing to note during this stage is temperature—most of the time, it is recommended to work with liquids between 68-70°F / 20-21°C. Use your thermometer to ensure the water you are mixing with developer is this temperature, to produce consistent and accurate results. If the water temperature is hotter or colder, the film’s contrast could be greatly affected and developing times will change. If you haven’t already, prepare your fixer according to its specified dilution, and make sure to not have any fixer come into contact with your developing solution—do not mix fixer first and then use the same vessel to mix developer, for instance. Additionally, prior to beginning the process, make sure to note development time for your film. A good starting point will be listed on the box in which your film came, or possibly on the bottle or package of developer you are using. In any case, these times are called “starting times” and can be adjusted as you learn more about how you personally like to expose and print/scan your film.

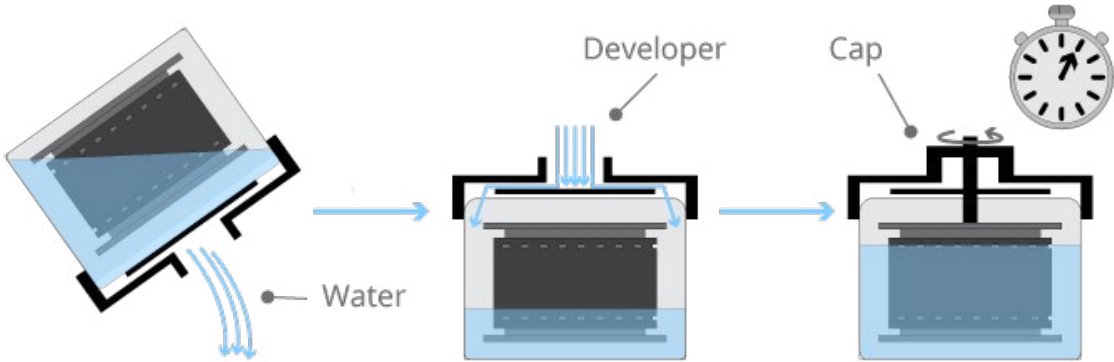
Developing

Now, with your mixed developer at 68°F, and your mixed fixer to the side, you can do an optional, but recommended by the author, pre-wetting stage. Fill the tank loaded with film with 68°F water until it is full, and let the film sit for 1 minute. This step brings the film and tank to the temperature of the developer, can rinse off anti-halation layers, and some say it softens the emulsion layer of the film to be more receptive to the developer—the benefit I’m sure of is the temperature stabilization, but it’s become a habit of mine over the years and has always led to successful results.



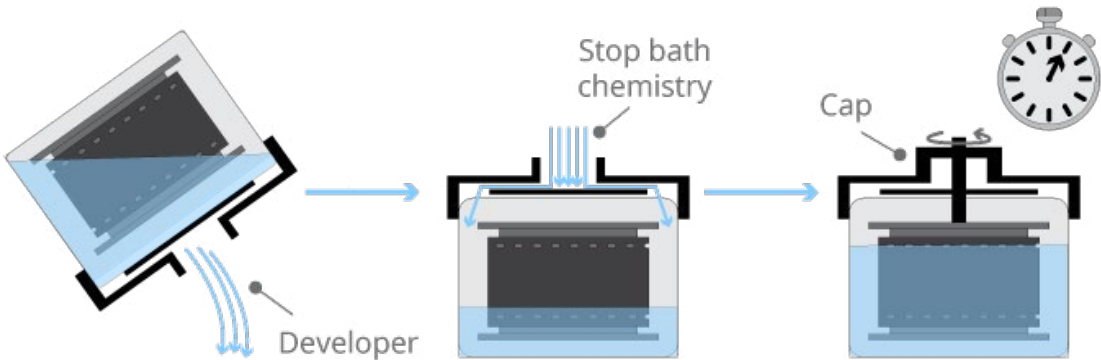
After 1 minute, pour the water from your tank down the drain (don’t worry if the water turns a bright blue, dark purple, or some other color—that’s perfectly normal) and quickly, but steadily, pour in your mixed developer solution. As soon as your tank is full of chemistry, start your timer and begin agitating the film. Depending on the tank you are using, various agitation styles can be employed, ranging from total inversion agitation to simply using a spindle to rotate your film—I prefer to use a gentle inversion agitation method. Agitate the film continuously for the first 30 seconds, and then agitate for 10-15 seconds every 30 seconds thereafter. This agitation schedule is

pretty standard method; however, it can be changed depending on processing method, developer type, or to alter contrast slightly.



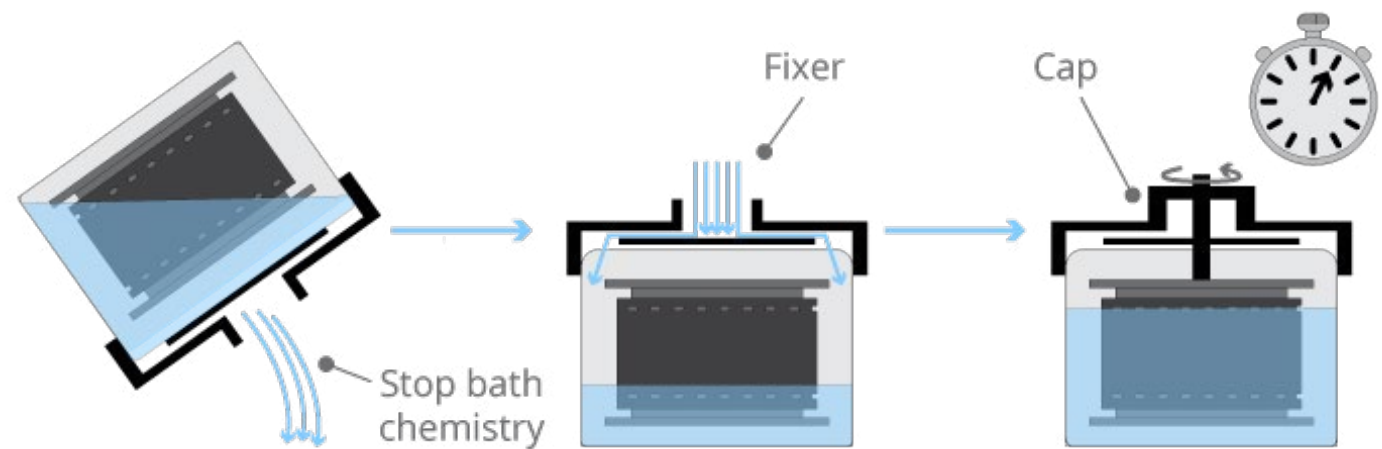
Once you have finished developing, either pour the spent developer down the drain, if you are using one-shot developer, or return the developer to its bottle if it is reusable. Quickly fill your tank with

68°F water, empty it, fill again with water, and agitate continuously for 30 seconds to 1 minute. This step is functioning as a stop bath to halt the developing action, and is an alternative to using proper stop bath chemistry. In my practice, water has almost always been suitable for stopping developing action, and I’ve rarely felt the need to use a true stop bath. If you’re total developing time is 5 minutes or shorter, though, a proper acetic or citric acid stop bath can be used to more quickly stop the developing action to prevent overdevelopment.

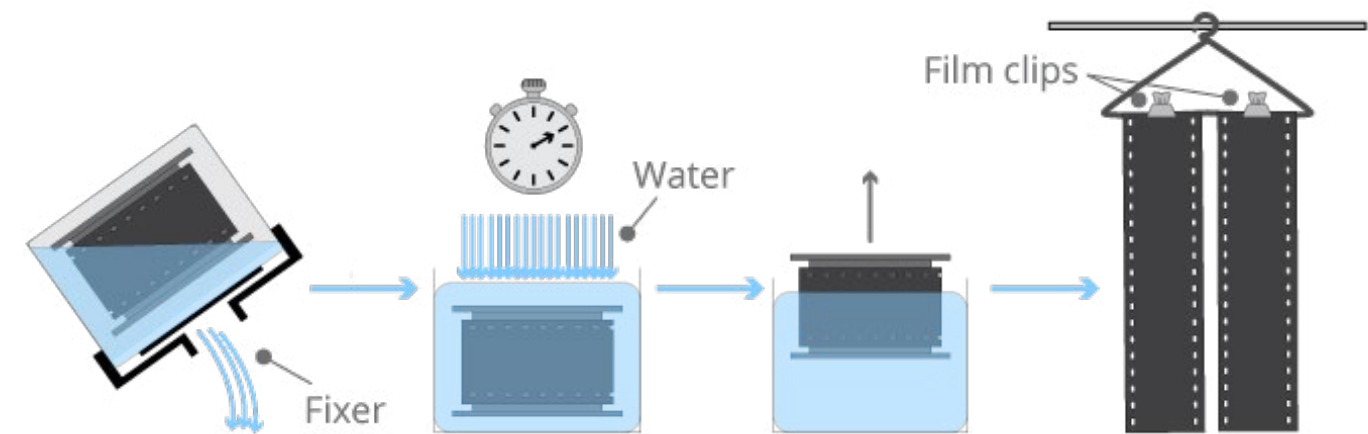




After the stop bath step, empty your tank and fill the tank with your mixed fixer solution. Similar to the developer stage, I like to agitate continuously for the first 30 seconds, and then for 10 seconds every 30 seconds thereafter. Fixing typically takes about 5 minutes in total, a minute or so longer won't hurt, but the total amount of time is not as crucial as the development stage. After fixing your film, make sure to return the solution to your bottle using your fixer-dedicated funnel or graduate, and save.

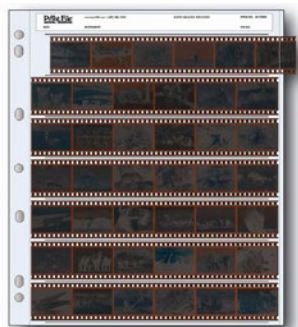


Now that the fixing is done, you are essentially finished with processing your film, and can now remove the lid from your tank; however, I would recommend keeping your film on the reels for the washing process. Many advocate for the use of a hypo clear or washing aid step to expedite the total washing time needed. Similar to stop bath, I feel this step is completely optional if you don't mind spending a few extra minutes washing your film. My process for washing is to fill and empty the tank with cool ~68°F water three or four times, then slow the rate of the faucet and let the water continuously fill and overflow in your tank for approximately 10 minutes. After this rinse period, you can perform one more optional step, and this time I recommend it, which is the use of a wetting agent to prevent water marks from forming on your film during drying. After you've emptied the tank from the water rinse, refill it with a very dilute mixed solution of water and wetting agent, and let that sit for about 30 seconds or so. Afterward, you can now remove your reels from the tank, remove your film from the reels, and use film clips for hanging your film to dry.



Post Development

After development, let your film air-dry in a dust-free area for approximately 2 hours or so, until the film is completely dry. If any moisture is still present on the film's surface, just be patient and wait for it to dry as opposed to trying to wiping it off. Once completely dry, I typically cut the film into strips using a pair of scissors, and file into negative sleeves.



PRINTING & DEVELOPING

Mixing Your Chemicals

Follow the instructions written on the packaging. The temperature of the solutions must be accurate.

Place three trays in order: development, stop, fix. Fill the trays with their solutions.

Place the Negative in the Enlarger Head: Remember that the image will be projected upside down, so you have to invert your negatives when mounting them.

Focus the Projected Image: Turn on the enlarger and adjust the height so that the projected image covering the whole area of your easel. Using the knob near the head of the enlarger, try to focus the image. If you have one, use the Focus Scope to focus on the film grain. You only need to put the instrument on the projection plane at the center and examine the image.

Set the Aperture and Insert the Multigrade Filter: Close the aperture to f / 8 to increase detail. In the filter holder of the enlarger head insert a Multigrade n2 filter. This filter produces a good range of print tones with an average negative.



Exposing a Test Print: Turn off the light, turn on the red safety lamp. You have to sacrifice a sheet of photo paper for testing exposure. Extract one sheet (always in the dark or red light) and cut a strip of sufficient size to cover an area of the image that has the relevant details to find the correct exposure.

Place the paper strip with the sensitive part upwards on the projection plane  
Turn on the projector light for 2 seconds using the timer connected exposing

the entire strip  
Cover with a matte card one-fifth of the paper and expose the rest for another 2 seconds  
Cover 2/5 and expose for 4 seconds  
Cover 3/5 expose for 8 seconds  
Cover 4/5 expose for 12 seconds  
Developing the Test Print  
Always with the safe light on:

Dip the test strip into the development bath. Start the timer for 60 seconds. Shake the basin gently to ensure that the solution covers the entire image.

After 60 seconds, remove rapidly the strip from the development and dip it into the stopping bath for about 30 seconds while stirring.

Last step, dip the strip into the fix bath for another 30 seconds.

At the end, you put the paper in another tray with a good flow of water to wash for 1 to 2 minutes.

Now examine the test you just did. You can turn on the lights now. The paper will present 5 strips with different exposures. The lightest was exposed for 2 seconds, the second by 4. The third for 8 seconds (2 +2 +4), the fourth for 16s (2 +2 +4 +8), the last for 28s (2 +2 +4 +8 +12).

Make a note of the time and the aperture used. One of these strips should give you a correct exposure. If they are all too light, open the aperture by two stops or increase time. If they are all too dark, close the aperture by one stop and repeat the test.

Making the Final Print

When you finally determine the correct exposure time, put a new sheet of photographic paper under the enlarger and expose. Repeat step 6 to develop the final print.

Contrast Correction

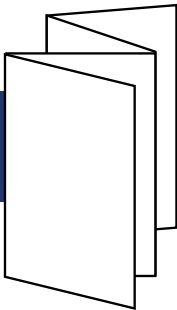
If you think that your photo is not well balanced in contrast, you could place contrast filters in your enlarger. If your print looks too gray and lacks either solid black shadows or clean white highlight (or both), try putting a Multigrade 3 filter or higher. At this point, repeat step 5 to make another test. If you have too much contrast, use a Multigrade filter 1 instead.

Exercise #1: Film Photography

Practice capturing frames on a shared roll of film. Subject matter and concept will be explored together in class. We will be processing the roll together as a group, however you will be developing your own prints.

Choose 1-2 frames to print and process.

This exercise should be included in your concertina sketchbook



Assessment

Assignment Rubric

Concertina Sketchbook - 25%

- Your sketchbook is constructed neatly and designed according to the lesson concepts and aesthetics
- Exercise 1 - Anna Atkins Photograms 10pts
- Exercise 2 - Photograms 10pts

Exhibit Artwork - 75%

- Your photographs show strong understanding of composition. 25pts
- You followed directions and properly processed your printed photographs. 25pts
- You showed professional studio partnership in caring for the dark-room. 25pts

Comments



# OIL PAINTING

Oil painting is the process of painting with pigments with a medium of drying oil as the binder. Commonly used drying oils include linseed oil, poppy seed oil, walnut oil, and safflower oil. The choice of oil imparts a range of properties to the oil paint, such as the amount of yellowing or drying time. Certain differences, depending on the oil, are also visible in the sheen of the paints. An artist might use several different oils in the same painting depending on specific pigments and effects desired. The paints themselves also develop a particular consistency depending on the medium. The oil may be boiled with a resin, such as pine resin or frankincense, to create a varnish prized for its body and gloss.

Although oil paint was first used for Buddhist paintings by Indian and Chinese painters in western Afghanistan sometime between the fifth and tenth centuries, it did not gain popularity until the 15th century. Its practice may have migrated westward during the Middle Ages. Oil paint eventually became the principal medium used for creating artworks as its advantages became widely known. The transition began with Early Netherlandish painting in Northern Europe, and by the height of the Renaissance oil painting techniques had almost completely replaced the use of tempera paints in the majority of Europe.

## TECHNIQUES

Traditional oil painting techniques often begin with the artist sketching the subject onto the canvas with charcoal or thinned paint. Oil paint is usually mixed with linseed oil, artist grade mineral spirits, or other solvents to make the paint thinner, faster or slower-drying. (Because these solvents thin the oil in the paint, they can also be used to clean paint brushes.) A basic rule of oil paint application is ‘fat over lean’. This means that each additional layer of paint should contain more oil than the layer below to allow proper drying. If each additional layer contains less oil, the final painting will crack and peel. This rule does not ensure permanence; it is the quality and type of oil that leads to a strong and stable paint film. There are many other media that can be used with the oil, including cold wax, resins, and varnishes. These additional media can aid the painter in adjusting the translucency of the paint, the sheen of the paint, the density or ‘body’ of the paint, and the ability of the paint to hold or conceal the brushstroke. These aspects of the paint are closely related to the expressive capacity of oil paint.

Traditionally, paint was transferred to the painting surface using paintbrushes, but there are other methods, including using palette knives and rags. Oil paint remains wet longer than many other types of artists’ materials, enabling the artist to change the color, texture or form of the figure. At times, the painter might even remove an entire layer of paint and begin anew. This can be done with a rag and some turpentine for a time while the paint is wet, but after a while the hardened layer must be scraped. Oil paint dries by oxidation, not evaporation, and is usually dry to the touch within a span of two weeks (some colors dry within days). It is generally dry enough to be varnished in six months to a year. Art conservators do not consider an oil painting completely dry until it is 60 to 80 years old.



## BOOK AND PAPER ARTS

## History

Although the history of tempera (pigment mixed with either egg whites or egg yolks, then painted on a plastered section) and related media in Europe indicates that oil painting was discovered there independently, there is evidence that oil painting was used earlier in Afghanistan. Outdoor surfaces and surfaces like shields—both those used in tournaments and those hung as decorations—were more durable when painted in oil-based media than when painted in the traditional tempera paints.

Most Renaissance sources, in particular Vasari, credited northern European painters of the 15th century, and Jan van Eyck in particular, with the “invention” of painting with oil media on wood panel supports (“support” is the technical term for the underlying backing of a painting). However, Theophilus (Roger of Helmarshausen?) clearly gives instructions for oil-based painting in his treatise, *On Various Arts*, written in 1125. At this period, it was probably used for painting sculptures, carvings and wood fittings, perhaps especially for outdoor use. However, early Netherlandish painting in the 15th century was the first to make oil the usual painting medium, and explore the use of layers and glazes, followed by the rest of Northern Europe, and only then Italy.



*The Arnolfini portrait by Jan van Eyck*

Early works were still panel paintings on wood, but around the end of the 15th century canvas became more popular as the support, as it was cheaper, easier to transport, allowed larger works, and did not require complicated preliminary layers of gesso (a fine type of plaster). (This style was known as a fresco painting: applying gesso, then painting over with tempera paint) Venice, where sail-canvas was easily available, was a leader in the move to canvas. Small cabinet paintings were also made on metal, especially copper plates. These supports were more expensive but very firm, allowing intricately fine detail. Often printing plates from printmaking were reused for this purpose. The popularity of oil spread through Italy from the North, starting in Venice in the late 15th century. By 1540, the previous method for painting on panel (tempera) had become all but extinct, although Italians continued to use fresco for wall paintings, which was less successful and durable in damper northern climates.

## INGREDIENTS

The linseed oil itself comes from the flax seed, a common fiber crop. Linen, a “support” for oil painting also comes from the flax plant. Safflower oil or the walnut or poppyseed oil are sometimes used in formulating lighter colors like white because they “yellow” less on drying than linseed oil, but they have the slight drawback of drying more slowly and may not provide the strongest paint film. Linseed oil tends to dry yellow and can change the hue of the color.

Recent advances in chemistry have produced modern water miscible oil paints that can be used and cleaned up with water. Small alterations in the molecular structure of the oil creates this water miscible property.

An even newer type of paint, heat-set “oils” (which are actually thermoplastic) remain liquid until heated to 265–280 °F (130–138 °C) for about 15 minutes. Since the paint otherwise never dries, cleanup is not needed (except when one wants to use a different color with the same brush). Although not technically true oils (the medium is an unidentified “non-drying synthetic oily liquid, embedded with a heat sensitive curing agent”), the paintings made with this paint resemble oil paintings and are usually shown as such.



## Oil Painting “Rules”

In oil painting, there are some “rules” which you should follow to avoid your paint cracking.

**Fat over lean:** As noted earlier, oil paint is basically colored pigment which is held together by some kind of drying oil. The more oil present, the “fatter” the paint is and the slower it will dry. In general, you want to make sure the top layers of paint are fatter (or oiler) than the lower layers. Otherwise, the layers on top will dry faster than the layers below and the paint will crack.

**Thick over thin:** The reasoning behind this rule is the same as the above rule. You want to make sure the paint at the top dries slower than the paint at the bottom. Thick paint will usually dry slower than thin paint.

In practice, I will start a painting with thin paint which has been mixed with some odorless solvent. Then I start using paint straight from the tube and take advantage of the paint texture.

**TIP:** Visible brushwork is a fantastic element of painting, but it is often overlooked by beginners. Below is a close-up of one of my paintings which demonstrates visible brushwork. This kind of visible brushwork is only possible when you use a brush loaded with thick paint.

These rules are only really applicable to the traditional painting approach where you would paint layer on layer using glazes. If you paint alla prima then you do not need to worry as much about these rules. However, it is still important to understand them.

If you want to make sure you never have an issue with the fat over lean rule, then just use paint straight from the tube. This way most of the paint will have a similar drying time and the paint on top should not dry any faster than the paint at the bottom. However, this is not a hard and fast rule as the drying time of paint is influenced by many factors. But you should not have any issues in practice.

### Links to explore:

[https://www.youtube.com/watch?v=axnk6fRooWg&feature=emb\\_title](https://www.youtube.com/watch?v=axnk6fRooWg&feature=emb_title)

<https://artprof.org/courses/oil-painting/>

<https://www.khanacademy.org/humanities/special-topics-art-history/creating-conserving/painting-materials-techniques/v/oil-paint>

[https://www.youtube.com/watch?v=eIXZeAjq\\_v0](https://www.youtube.com/watch?v=eIXZeAjq_v0)

<https://drawpaintacademy.com/oil-painting/>

<https://www.youtube.com/watch?v=9mFvglbxmpw>

## Oil Painting Technique 1 - Scumbling

Scumbling is the technique of applying a very thin amount of paint using a stiff bristled brush in a kind of broken glaze. The result is a textured effect which leaves some of the underpainting exposed.

Scumbling is a dry-brush technique where little or no additional medium is used. Scumbling is different to glazing in that you do not want a smooth application of paint over the entire surface. You want a broken application of paint which leaves areas exposed.

This technique can be perfect for creating an atmospheric depth in your paintings. For example, have a look at these paintings by Turner, who most likely used a scumbling technique to create such a feeling of atmosphere in his paintings:



*Turner, Norham Castle, Sunrise, 1845*

## Oil Painting Technique 2 - Alla Prima (Wet on Wet)

Alla prima, or wet on wet, refers to a direct style of painting where the paint is applied without letting earlier layers dry. Artists using this technique can finish paintings often in as little as a single session.

This technique differs from the more traditional method of painting layer on layer, allowing the paint to dry in between each layer. Artists would often build up many layers (sometimes over 50) before deeming the painting complete. Obviously, this was a very time-consuming method of painting, as oil paint can take anywhere from a few days to some months before being completely dry.

Alla prima painting was practiced by many of the impressionist masters, as it allowed them to capture the elusive light as quickly as possible.

Some of the famous artists who painted alla prima were John Singer Sargent, Claude Monet, Vincent van Gogh and Joaquín Sorolla.



*Sunset Study, Kingfisher Bay, Oil, 10x12 Inches, 2017*

## Oil Painting Technique 3 - Glazing

A glaze is a thin, semi-transparent layer of paint. Glazing is a popular technique in oil painting, where glazes are applied on top of an opaque layer of paint which has been allowed to dry.

The general practice is to create a monochrome underpainting using opaque colors and then gradually build up glazes on top, allowing each layer to dry in-between. This practice is obviously very time consuming due to the



slow drying time of oil paint. Depending on how many glazes are used, the time it takes to create an oil painting using this method could be anywhere from a few weeks to years.

When glazing, it is best to use paints which have more of a translucent quality. White, for example, is not great for glazing as it is very opaque.

When there are multiple layers of glazes, the colors optically blend as if they were all combined, without the pigments actually mixing. This creates interesting effects which are very effective for portrait painting.

As there are many layers of paint, care needs to be taken in relation to the fat over lean rule. Each subsequent layer of paint should have more oil than the prior layer to avoid cracking in the paint.

Many painters use both thin glazes and thick, impasto brushwork to create a variance in the painting. The impasto areas would appear pushed forward in the painting compared to the softer glazes.



*Johannes Vermeer, The Girl With A Pearl Earring, 1665*

#### Oil Painting Technique 4 - Chiaroscuro

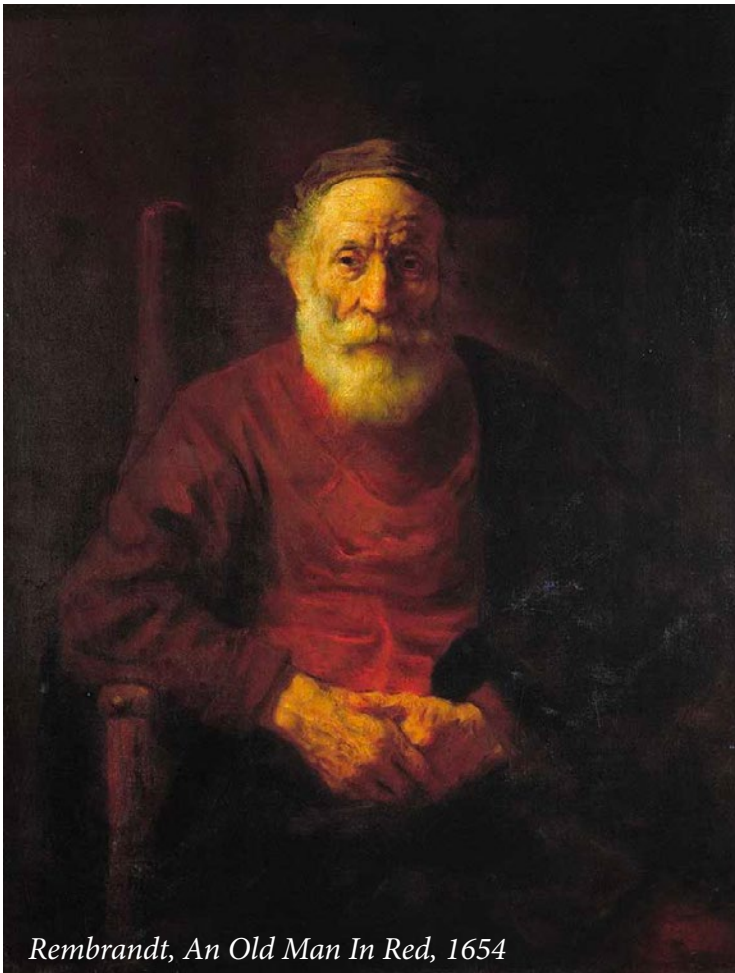
Chiaroscuro is Italian for “light dark”. In drawing and painting, it refers to the balance and structure of light and dark in the artwork.

Chiaroscuro originated from the Renaissance period where artists would create strong contrasts between light and dark to render three-dimensional forms to dramatic effect. Generally, chiaroscuro is only mentioned of artworks with a dominant contrast between light and dark.

Some of the prominent artists associated with chiaroscuro are Ugo da Carpi (c. 1455–c.1523), Giovanni Baglione (1566–1643), Michelangelo Merisi da Caravaggio (1573–1610) and Rembrandt Harmenszoon van Rijn I (1606-1669).

Caravaggio went on to become a figurehead in the Tenebrism art movement, where chiaroscuro was used to dramatic effect with violent contrasts between light and dark with a spotlight effect.

Rembrandt also used this technique to create many dramatic portraits.



*Rembrandt, An Old Man In Red, 1654*

#### Oil Painting Technique 5 - Impasto

Impasto is generally used in reference to paint which is applied in a thick and bold fashion with clearly visible brushwork, but it can also refer to the more subtle textures created by delicate brushwork on a more smooth surface.

By using an impasto technique you can add another dimension to your painting by adding increased texture to areas of significance. This can enhance the illusion of three-dimensional representation.

There are a number of ways you can use the impasto technique to improve your paintings:

The impasto area of paint will create areas of actual shadow on the painting depending on the light source. This gives another element to your painting and can really add some depth depending on how it is used.

The protruding areas of paint will be more visible from side angles.

You could use the impasto technique to give the illusion of distance, with close areas being more built up and distant areas being more smooth and soft.

By using impasto brushwork, you can help guide the viewer as you please around the painting using directional lines. These do not have to be obvious and could be something as simple as subtle lines in trees directed towards your focal point.



*Vincent van Gogh, Seascape at Saintes-Maries, 1888*

One artist who is famous for using a very impasto technique is Vincent van Gogh. His brushwork was extremely dominant in his paintings and a real signature of his work. His brushwork gives a sense of activity and movement in his paintings.

You can see in the close-up of one of van Gogh's paintings below how he builds up a significant amount of paint on the canvas, even in the background. This gives his paintings a very bold and dramatic effect.

How do you use an impasto technique? Well simple really. You just make sure you load up your brush with lots of paint and spread it liberally on the canvas. Alternatively, the palette knife is a fantastic tool for making thick strokes of color unmatched by the paintbrush.



Oil Painting Technique 6 - Blocking In

Blocking in refers to an initial painting process of blocking in the general colors and shapes on your canvas.

The purpose of blocking in is to lay down the general composition and color harmony without having to worry about the tedious details. You can really get a feel for where the painting is going with this technique. Generally, very large brushes and thinned paint are used for this.

The end result of blocking in will be a no-frills painting - what you would see if you squint. From there, you can start to add details and make any adjustments.

For blocking in you will usually start with toned down versions of the main color you are blocking in. You can then build up the saturation of the color as needed later in the painting. If you block in the colors with too much saturation, the painting could be overwhelming and you would spend the rest of your painting time trying to tone it down.

Sometimes, much of the blocked in area is left exposed in the finished painting.

Blocking in is a very popular technique for plein air painting as it allows you to cover the canvas very quickly with the general layout and color harmony.



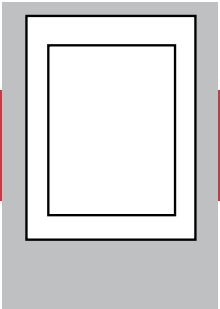
Exercise #1: Oil Painting

We will be working with still objects in class. Use them to practice oil painting using the techniques demonstrated.

Be encouraged to try out multiple methods and materials before committing to one to pursue further.

Create a final painting. You Choose the style, subject matter and method.

This exercise should be display-ready



Assessment

Assignment Rubric

Exhibit Artwork - 100%

- You attempted various methods to practice oil painting techniques.  
25pts
- Your final painting shows good use of technique, composition, color, and value. 50pts
- You showed professional studio partnership in caring for the materials. 25pts

Comments





# CRAFTS

The etymology of the term “craft” is a discussion point in itself and one that brings with it varying viewpoints and perspectives. Perhaps this is due to the fact that the Renaissance saw a distinction between art and craft as the status of painters and sculptors (*who were previously regarded as craftsmen*) was upgraded to “artist”. Complicated further, distinctive meanings of terms like decorative and applied arts adds to the confusion. While the discussion of art vs. craft interests me, I will leave this distinction to those who simply know more about it than I do. For my purposes here, I understand the term craft to be an activity involving skill in making things by hand.

For most of our history, making things by hand was the norm and the techniques were passed from one generation to the next. Many of these skills are in real danger of dying out as technical knowledge is possessed by craftspeople who are becoming older and retiring from their work. In an age where screens devour the hours in a day, there are fewer people rising up to take their place in the chain of folk artists and craftspeople. The UK Heritage Craft Association even has a list of roughly 100 endangered and extinct crafts, including clock making, chair caning, and surprisingly, letterpress printing.

The definition of craft is complex. For many, craft is defined as the creation of an object (often functional) employing skill. Many examples of craft might be considered art and many examples of art might be considered craft. The distinction is often subjective and influenced by differences in culture. Today’s craftspeople and artisans use historical techniques and combine individual fair to create their own individual work.

For this unit, we will be exploring traditional crafts from around the world with an emphasis on those crafts which explore creativity, self-reliance, sustainability and cultural preservation. We will discuss the role of crafts throughout history and the potential of crafts in contemporary times.

Links to explore:

<https://www.tandyleather.com/en/leather-craft-abcs.html>



## CRAFTS

# Wood Carving

Wood carving is one of the oldest arts of humankind. Wooden spears from the Middle Paleolithic, such as the Clacton Spear, reveal how humans have engaged in utilitarian woodwork for millennia.

Indeed, the beginnings of the craft go so far back that, at least where timber is present, the use of wood exists as a universal in human culture as both a means to create or enhance technology and as a medium for artistry. The North American Indian carves his wooden fish-hook or his pipe stem just as the Polynesian works patterns on his paddle. The native of Guyana decorates his cassava grater with



*The “Clacton spear tip” is the oldest wooden artifact ever found in Britain. Estimates of its age range from 300,000 to 450,000 years old. The original spear tip has warped and shrunk since its discovery. The name comes from Clacton-On-Sea, England where it was found. The Clacton spear was discovered in interglacial deposits in 1911 by J. Hazzledine Warren. Experiments show that one of the most efficient ways the sharpened tip could be made was by using fire, grinding and scraping processes.*

a well-conceived scheme of incised scrolls, while the native of Loango Bay distorts his spoon with a design of figures standing up in full relief carrying a hammock.



A series of completed whittling projects (Credit: Jimmy Lung)

## What is Whittling?

At a very basic level, whittling is the craft of woodcarving performed using a carving knife. Okay, you knew that much already. However, whittling differs to other types of woodcarving (such as relief carving) in that the craft itself is used to produce a sculpture as opposed to adding detail to something, say like a piece of furniture. Taking this further, some sources suggest that whittling differs from wood carving because it only involves knife work. Carving, on the other hand, can involve using a number of woodworking tools to remove excess material, such as gouges, files, and specialized knives.

For ease of definition, we can say that when you whittle, you are using a knife to create a finished sculpture from a piece of wood that you have before you.

Whittling is also a little more rugged than other types of woodcarving. A finished whittling project will often show signs of the knife strokes. This natural approach befits the nature of whittling. Many that practice the craft will simply pick up a piece of appropriate wood while going for a walk, pull out their pocket knife, and carve something straight away.

## What is the Best Wood for Whittling?

The best types of wood for wood carving and whittling can actually be categorized into two types: softwoods and hardwoods.

For the beginner soft woods are definitely better, (with a fine, straight grain if possible). The reason soft woods are better is due to the fact they are nice and easy to cut.

By all means, move onto harder woods after you have got the knack of the soft woods – experience will open up your options. However, you will still find that you can achieve good results with the soft wood picks.

Opting for straight grain is recommended because it is easier to whittle than wood that has the grain going in multiple directions. Likewise, you should avoid any wood that has lots of knots as these are difficult to carve around.

The following types of wood are the most popular choices for beginner whittlers:

### Basswood

Basswood is soft and easy to carve with a fine grain. The wood coloration is also very pleasing for the average whittler as it has a rather lovely creamy tint. Basswood is probably the best choice for beginners as it is readily available at most local craft shops and is reasonably priced too.

### Balsa

We’ve all come across balsa wood in our time. A favourite for model making when we were kids, this too is a soft wood with a fine grain. Again, this is easy to get hold of and cheap to buy.

### Pine

Pine is a soft wood, however, the grain is slightly coarser than our first two choices. The coloration makes this a popular option for whittlers mind you as you can get white or yellow tinted pine.

### Butternut

Butternut is soft yet has a courser grain that all the other woods listed here. This, in turn, makes it the most difficult wood to use for the beginner whittler, as it is very easy to chip. It is also more difficult to get hold of as you will likely need to go to a local lumber yard to get your hands on some Butternut.

### Twigs & Branches

Let’s not forget random twigs and branches. After all, if you plan on picking up wood during a walk in the forest and wish to whittle it into something magical – you will need to know what type of wood works best for carving.

However, the good news is twigs and branches from most kinds of trees are great for whittling. While size and thickness will have an impact on what you are able to create, the fact is, simple ornaments can very easily be crafted from fallen twigs once you know how to whittle.

## The Best Knife for Whittling

There are two types of knife that are great for whittling.

The first is the purpose-built whittling pocket-knife. This is very much the traditional method of the craft, as it all stems from those early whittlers of generations past that used nothing but a trusty pocket-knife while out in the field.

In fact, purists will argue that the pocket knife is the only acceptable tool for true whittling.

The beauty of a good whittling pocket knife is that it is so portable. Anytime you find a good piece of wood, you can just whip out your pocket knife and start sculpting your wooden masterpiece.

## Keeping it Sharp – The Correct Sharpening Stone

As you will see when we start to talk about whittling safety measures, a sharp knife is essential. If you are whittling with a dull edge you will have to exert more force to carve and that force can end up taking your finger off when you slip.

The bottom line is if you want your whittling experience to be pleasurable and relaxing, and most of all safe – you will need to keep your knife sharp.

The good news is, sharpening your knife is very simple indeed. As long as you have the correct tools.

The easiest way to sharpen a carving knife is with a ceramic sharpening stone. Top tips for this include keeping the blade tilted at a 10-20 degree angle. You then simply move the knife back and forth across the stone. During the process, your wrist should be locked. Bend your arm at the elbow to help maintain the correct angle and trajectory.

## Safety First

As we have already mentioned, you are much more likely to cut yourself with a dull knife than with a sharp one. Keeping your knife sharp is essential.

## Wear a Glove!

When learning to whittle you should definitely wear a glove on the non-knife holding hand.

Leather hide work gloves may feel a bit cumbersome however they offer the best protection when it comes to sharp knives and whittling.

You can also opt to buy specific gloves for carving. These are designed to protect your hands from the sharp edge while being more comfortable and easier to maneuver.

## Don’t Rush It!

whittling take your time

Whittling is all about relaxing. This should apply to the method in which you carve your wood. Take your time. And be patient with your skill set. Avoid getting frustrated if the cut doesn’t quite go as you would like. There is always another piece of wood out there with your name on it.

## Cut With The Grain

You should always carve with the grain where you can. Not only is whittling easier when you do so, but it will also help prevent tearing and splintering of the wood.

To identify the grain, observe the dark streaks running through the wood. The direction that those streaks take is the direction of the grain.

The best whittling method is to run the blade parallel to these streaks. The easiest way to find out what direction of cut is going either with or against the grain is to simply perform a light shallow pushing cut (away from your body) in both directions.

The cut that provides the least resistance will be the one “with the grain”. This is then the direction you should aim to cut in throughout that whittling project





Cuts

There are several types of whittling cuts you will have to perform while whittling. Seasoned whittlers use those whittling techniques every day to make awesome designs. Here are a few of the most common ones:



Straight away Rough Cut

With a straightaway rough cut, you make thin cuts on the wood and try to carve the general shape of the design you want to reproduce. As the name suggests, this is a rough cut and a preliminary step before starting to use more advanced techniques. However, we know a few whittlers that exclusively use the straightaway rough cut to make a complete work of art. It might be difficult for newbies, but it is nice to know that the possibility is out there.

When using this technique, it is important not to cut too deep but rather “shave” thin layers, layer by layer. Take your time. The more you shave, the more you will find that the design will start appearing on the wood. Of course, a soft wood like basswood or butternut should be used with this whittling cut type. You will have a lot of difficulty whittling through hardwood with the straightaway rough cut method.



Pull Stroke

With a pull stroke, you use your thumb as a pivot and pull the whittling knife towards you. This method is the most common whittling type and it is also a very comfortable position to work. The thumb allows the blade to maneuver with great accuracy and this method works well with the straightaway rough cut. Simply draw a rough pattern using the straightaway rough cut and then use the pull stroke to get a more accurate carving out of your material. The pull stroke is the best method to get an accurate whittling pattern since you have so much control over your work this way.

It is highly recommended to use protection gear when using the pull stroke method as it is one of the riskiest whittling types.



Push Stroke

The push stroke is the contrary of the pull stroke. With this method, you place your thumb on the back of the knife blade and push the blade over the material. Since you have the support of your thumb, the blade has more force to dig deeper into the material. It works only with a carving knife and not other tools like a V-knife or hood knife. However, both the pull stroke and the push stroke are excellent whittling methods to get a detailed whittling result.

Exercise #1: Whittle flowers

To practice knife-working, we will be creating Gypsy Flowers. Follow the instructions in class.

<http://frontierbushcraft.com/2017/03/28/making-gypsy-flowers-an-exercise-in-knife-skills/>

This exercise is just for practice

Exercise #2: TBD

This exercise is just for practice

Assessment

Assignment Rubric

Exhibit Artwork - 100%

- You attempted various methods to practice oil painting techniques.

25pts

- Your final painting shows good use of technique, composition, color, and value. 50pts

- You showed professional studio partnership in caring for the materials. 25pts

Comments



# Leather

## History of Leather

Leather is one of man’s earliest and most useful discoveries. Our ancestors used leather to protect themselves from the elements. Primitive man hunted wild animals for food, then made clothing, footwear and crude tents from the hides. Like then, hides used today are a by-product. Animals are raised for the meat, dairy and wool industries, not for their hides. Roughly half of all leather produced today is used to make shoes, and about 25% for clothing. Upholstery demands only around 15% of the total product.

Wall paintings and artifacts in Egyptian tombs dating back to 5000 B.C. indicate that leather was used for sandals, clothes, gloves, buckets, bottles, shrouds for burying the dead and for military equipment. The ancient Greeks are credited with developing tanning formulas using certain tree barks and leaves soaked in water to preserve the leather. This was the first record of vegetable tanned leather, which became a well-established trade in Greece around 500 B.C. Vegetable tanned leathers are still produced today and remain an active ingredient in modern tannages. The Romans made extensive use of leather for footwear, clothes, and military equipment including shields, saddles and harnesses.

Due to its durability and comfort, leather has been used for seating throughout the history of transportation and furniture. It has always been the ideal material for making saddles and tack, as well as footwear. During the Middle Ages, leather became the cover of choice for dining chairs, because it was easy to maintain and did not absorb the odor of food.

The spread of industrialization in the 18th and 19th centuries created a demand for new kinds of leathers, such as belting leathers to drive machinery. The invention of the automobile, the demand for softer, lightweight footwear with a fashionable appearance, and a general rise in the standard of living created a demand for soft, supple, colorful leather. The traditional vegetable tanned leather was too hard and thick for these requirements and thus, the use of chromium salt was adopted and chrome tanning became the standard for modern footwear, fashion and upholstery leathers.

Modern technology has allowed for innovation in the leather industry, as the development of chemicals and sophisticated processing methods have greatly expanded the aesthetics and feel of leather as well as the possible applications. Leather continues to be the material of choice, not just for commercial and residential furniture but for automotive, aviation and marine applications as well.



The tanning process from the early 1900’s.

## Links to explore:

<https://www.tandyleather.com/en/leather-craft-abcs.html>



