Materials & Techniques for Painters

Roy Lichenstein working on one of his Brushstroke paintings, 1959.
“A painted surface is a real, living form.”
— Kazimir Malevich

## CONTENTS

- Health Hazards for the painter.................................2
- Building Supports (canvas)..................................3
- Building Supports (Masonite).................................4
- Applying Acrylic Gesso.........................................5
- An introduction to paint.......................................6
- Care of Brushes..................................................6
- Types of Brushes...............................................7
- Using Mediums in Acrylic Paint...............................8
- Using Mediums with Oil Paint.................................9
- Various painting Terms and Techniques......................10
- Grisaille Technique............................................12
- Collage and photo transfer techniques.......................13
- Working in Colour................................................15
- Colour terms and definitions.................................15
- The colour wheel...............................................16
- Chromatic greys................................................17
- The 7 Colour Contrasts.........................................18
- Bibliography......................................................19

Eighth Edition

Compiled by
MARK BELL, MOIRA CLARK & JOHN ARMSTRONG

2013
HEALTH HAZARDS FOR THE PAINTER

Serious inroads have been made over the past century and in particular the last few decades in making artist’s materials safer to use. Lead and arsenic, once staples in the paint and dye industry have completely vanished now that their health hazards are known. Nonetheless, you should always be on guard for potential hazards and make a point of avoiding them. Unless you have an allergic reaction to a particular chemical or mineral compound the only way you have of determining the effects of using artists’ materials will be in the long term. It is better to err on the side of caution.

There are three common ways for toxic chemicals to enter the body: 1) by skin contact, 2) through inhalation, and 3) through ingestion.

1) Skin contact is the most common. Most paints and chemicals cannot penetrate the skin’s protective coating if washed off in a reasonable amount of time, but some substances such as turpentine can penetrate directly to the bloodstream. It’s important to wash your hands after handling paint paying special attention to any build-up of paint under the fingernails. Avoid contact with the eyes while painting.

2) Inhalation occurs when breathing in vapors, spray mists (when using an air brush system) or air-borne particles caused by sanding. Most acrylic paints contain trace amounts of ammonia and formaldehyde and most oil painting mediums will contain turpentine. If you are using excessive amounts of these make sure you do so in a well-ventilated area. If spraying varnish or fixative from a can or using a spray gun, be sure to wear a fine particle mask or work in a spray booth or under well-ventilated conditions such as outside. Sanding can also produce hazardous air-borne particles. Synthetic wood products such as MDF (Medium Density Fibreboard) or Masonite (Hardboard) contain a variety of glues and resins that become airborne in the sanding process. Sanding a gessoed or painted surface can also release undesirable pigments. Use common sense (and a fine particle mask).

3) Ingestion can occur through the careless handling of cigarettes or food while painting. Avoid doing this.

The following are some of the more hazardous pigments you should be aware of:
Cadmium (found in all “cadmium” paints such as Cadmium Red)
Chromium (Zinc Yellow, Chrome Yellow)
Cobalt (Cobalt Violet, Cobalt Green, Cobalt Yellow and Cerulean Blue)
Manganese (Manganese Blue and Violet, Burnt and Raw Umber and Mars Black)
Note: some manufacturers use the word “hue” or “replacement” in a colour name (such as “cadmium red hue” or “flake white replacement”) to denote that real cadmium was not used, or, in the case of flake white, no lead was used).

The above information has been extracted from Mike McCann’s Health Hazards Manuel for Artists. See the bibliography at the back of this handbook for details on it or other related books.
BUILDING SUPPORTS FOR PAINTING

“Supports” refers to the surface on which you will paint. Stretched canvas and Masonite (hardboard) are the most common choices, but oil and acrylic paint will adhere to almost any surface (if primed properly).

Part A: Stretched Canvas

The easiest (and most expensive) way to acquire a stretched canvas is to buy one. Unless these are custom made they are usually of questionable quality. To ensure that you have a good support, it is best to construct it yourself.

Making a stretched canvas will require the following steps:
1. bevel lengths of 1 x 2-inch pine
2. measure beveled lengths of pine and cut at a 45-degree angle
3. join corners with nails and glue
4. attach triangular supports to the back of each corner
5. add additional cross bars if required (usually only for dimensions larger than 16 or 18 inches)
6. stretch canvas over the stretcher frame using a staple gun

1. Bevel lengths of 1 x 2-inch pine. The beveled edge prevents the surface of the canvas from coming into contact with the stretcher bars, which would otherwise leave an impression on the painted surface. This process is done on a table saw using a fence and should be left to experienced individuals. (John McCartney usually has a supply of beveled wood on hand).

2. Measure and cut at a 45-degree angle. Carefully examine the lengths of pine for any large knots or imperfections in the wood. Measure and cut each piece making sure that the beveled edge is on the outside of the stretcher bar. Set the power miter saw to 45 degrees. Wear safety goggles and ear protection. If you are unsure of any aspect of the power saw ask John McCartney or the monitor in charge of the woodshop for assistance.

3. Join corners. Place a small amount of wood glue on two of the corners. Use a corner clamp to hold the two pieces in place at 90 degrees. Make sure the nail gun contains the appropriate size nails (1½ inch). Attach a compressor hose to the gun and fire two or three nails to secure the corner. Repeat this process for the remaining corners.

4. Attach triangular corner supports. Support the back of each corner by attaching a small triangular piece of thin plywood (generously supplied by John McCartney). Use wood glue and the nail gun.

5. Additional Support. If any dimension on your stretcher is larger than 16 or 18 inches, you may wish to add crossbars to prevent the wood from warping. Measure the inside corners and cut the appropriate lengths of 1 x 2-inch pine. Use glue and the nail gun to attach the crossbars.
6. Stretch Canvas. Measure and cut a piece of canvas appropriate for the size of the stretcher. Allow for the sides and back of the canvas. Usually 4” is enough for each side, therefore a 12 x 18-inch stretcher would require a piece of canvas that is 18 x 26 inches. Lay the stretcher face down in the centre of the canvas. Working one side at a time, fold the canvas over the back and put a few staples in the centre of each side. Slowly add more staples (at approximately 2-inch intervals) to each side working towards the corners. When you get to the corners, fold the canvas under so that you don’t end up with big “rabbit ears” protruding from the sides. The canvas should be firm, but does not need to be as tight as a drum.

45ºangle

beveled edge

canvas

corner support

Diagram: Cross section of one corner of a canvas support

Part B: Using Masonite (hardboard)

Masonite (also known as hardboard) is simpler (and cheaper) than stretched canvas. Masonite can be directly painted on once it is cut to size; however, at least one coat of gesso is recommended to make your work more archivally sound and to make it easier to apply your paint. The moisture from the gesso and paint on the front will cause the board to warp. There are two ways to counteract this.

1. Put one coat of gesso (or cheap house paint) on the backside of the Masonite. If warping continues, apply a second coat. (To save on gesso it is also possible to paint a broad “X” from corner to corner on the back)

2. Attach a frame using 1”x2” pine to the back of the Masonite. Make it flush with the edges and attach it using wood glue and clamps. Avoid putting nails through the surface of the Masonite as these may re-emerge in the years to come.
APPLYING ACRYLIC GESSO

Whether you are painting on canvas, wood or Masonite, it is important to have a good gesso ground to paint on. Gesso acts as the mediator between the support (canvas, wood, Masonite, etc) and the paint. Without it the support might absorb too much of the paint (making it unnecessarily difficult to paint and archivally unsound) or it might not absorb enough paint (again making it difficult to paint and archivally unstable).

Although acrylic gesso is by no means a traditional technique, it is generally accepted as a reliable ground for either acrylic or oil painting. If using acrylic gesso for oil painting, be sure to apply a minimum of two (and preferably three) coats in order to protect the raw canvas from coming into contact with the oil paint.

For all steps use a 2- or 3-inch natural bristle house painting brush.

1. If you are working with Masonite, sand the surface lightly with 120-, 150- or 180-grit sandpaper in order to score the surface. This will give the gesso better adhesion.

   If you are working on canvas make sure that it is stretched firmly (but not too tightly) over the stretcher frame. Wet gesso will shrink the canvas, but once it is dry the canvas will slacken again.

2. The first coat of gesso should be thinned with approximately 25% water so that it properly penetrates the weave of the canvas or the surface of the Masonite. Work it into the surface using a circular or a back and forth motion making sure that every pore of the surface receives some gesso.

3. Once the first gesso coat is dry sand the surface lightly with 220-grit sandpaper. Apply the second coat at full strength. Depending on the thickness of gesso you might want to add 5 or 10% water to get smoother coverage. Brush this coat in an east-west direction.

4. It is now possible to start painting after this second coat, but it is preferable to apply a third coat. Again, sand the surface lightly then apply the gesso at full strength, but this time brush it in a north-south direction. This change of direction not only helps with adhesion, but will avoid the build-up of strong brush marks and those marks that do remain will mimic the weave of the canvas.

5. Give the final coat a light sanding once it is dry.

6. You can stop there or you can add more coats depending on how smooth you would like the final surface to be.
AN INTRODUCTION TO PAINT

All paints contain two essential ingredients: pigment (colour) and binder (also known as vehicle). Without the pigment, paint would have no colour; and, without a binder, the colour would not adhere to the surface. All paints also have a corresponding solvent. A solvent must be able to dissolve the binder in order to be compatible with it.

Some examples:

<table>
<thead>
<tr>
<th>Paint Type</th>
<th>Ingredients</th>
<th>Solvent</th>
</tr>
</thead>
<tbody>
<tr>
<td>acrylic</td>
<td>pigment + acrylic polymer emulsion</td>
<td>(solvent: water)</td>
</tr>
<tr>
<td>oil paint</td>
<td>pigment + linseed oil</td>
<td>(solvent: turpentine)</td>
</tr>
<tr>
<td>watercolour</td>
<td>pigment + gum arabic</td>
<td>(solvent: water)</td>
</tr>
<tr>
<td>egg tempera</td>
<td>pigment + egg/water mixture</td>
<td>(solvent: water)</td>
</tr>
</tbody>
</table>

Paints may also contain other additives such as driers, retarders or other chemicals that are intended to enhance the working properties or alter the drying time. Low quality paints will also contain fillers or excessive amounts of solvent in order to stretch the paint as far as possible. Working with cheap paints can be frustrating because the colours tend to be thin and dull.

CARE OF BRUSHES

Some brushes are adaptable to both oil and acrylic paint, but usually brushes are intended for one or the other. It’s a good idea to use your oil brushes only for oil paint and your acrylic brushes only for acrylic paint.

Acrylic paint is extremely hard on brushes. The fast-drying polymer resin in acrylic paint will soon render your brushes stiff and unmanageable if you do not take care of them. Once the paint is dry, there is little you can do to dislodge it: so be vigilant about cleaning each brush thoroughly with soap and water after every use. Keep plenty of water on hand as you work and leave brushes to soak if they are not in immediate use. Using retarder in your paints will not only extend the drying time of your paints, but it can also help extend the life of your brushes because the paint will not dry immediately on the bristles.

Oil paint is more forgiving than acrylic paint when it comes to brushes. The longer drying time permits a more thorough cleaning. A well-cared-for brush can last many years. After each use, remove excess paint with a rag, and then vigorously swirl the brush in a small container of mineral spirits. Remove excess spirits with a rag. Wash each brush thoroughly with soap and water. Keep the jar of mineral spirits in a safe place. The pigment will settle on the bottom leaving the clear spirits at the top, which can be used for future cleaning. Never pour turpentine or mineral spirits down a sink drain.

To really get a brush clean from both oil and acrylic paints, at the end of cleaning, run the bristles through a disused toothbrush or nail brush.
TYPES OF BRUSHES

Tuft
- Point
- Belly

Ferrule

Handle

Flat Brush (short bristles)

Flat Brush (long bristles)

Filbert brush

Round brush

Fan Brush (used primarily for blending)
USING ADDITIVES AND MEDIUMS WITH ACRYLIC PAINT

**Acrylic Gel, Acrylic Medium, Rhoplex**: (different manufacturers have different names for these products). They are all a form of pure acrylic polymer; essentially acrylic paint without any pigment. They can be added to the paint to give it greater translucency without physically thinning it the way water would. Gel/Medium comes in a variety of levels of viscosity from water thin to peanut-butter thick depending on the effect you are trying to achieve. This is available in matte, semi-gloss and high-gloss. It also has excellent adhesive qualities, so it can also be used as glue. In liquid form, it is white or cloudy, but it will dry clear. (Cheaper versions, such as Rhoplex may dry slightly cloudy if applied too thickly). It is a good idea to experiment with various types of gels and mediums to see which one (if any) suits you best. Acrylic gels and mediums or Rhoplex can also be used as a substitute for gesso.

**Driers**: Acrylic driers can be added to the paint in order to speed up the drying time. This is rarely desired because acrylic paint already has a tendency to dry very quickly, but it can be helpful if you are using the paint in an exceptionally thick manner.

**Extender Mediums**: These are useful in extending the volume of paint without losing too much of the colour characteristics. Only recommended for large projects where cost saving is a big consideration.

**Modeling Paste**: Modeling paste acts as a thickener and can be added to give the paint greater body or to form a three-dimensional ground upon which to paint.

**Retarder**: Adding this to paint will slow the drying time giving you more “open time” in which to work the paint.

**Varnish**: Although not necessary, you may wish to varnish your finished paintings. Acrylic varnish will give the painting an overall matte or glossy finish depending on the type of varnish selected.

**Adding sand, sawdust and other foreign matter**: You can add virtually anything to acrylic paint (in moderation) if you want to change its texture or add a new dimension to your paint. If you do so, you will probably also want to add a thick gel medium or modeling paste in order to increase the adhesive properties of the paint.

**New products**: There are a variety of other gels and mediums too numerous to list here. Manufacturers are constantly introducing new products, so it’s a good idea to visit your local supplier and experiment with something you are unfamiliar with.
USING MEDIUMS AND ADDITIVES WITH OIL PAINT

**Mediums:** Most painters use a medium of some sort while painting. It is not absolutely necessary to do so, but a medium will help make the paint more manageable. Dipping the brush in a small amount of medium before mixing with the paint is the standard technique, but it can also be added into the paint on the palette using a palette knife. Depending on the desired effect, a medium can add richness to the paint, make the paint thicker or thinner, add translucency or just make it flow better. Mediums are as individual as painters themselves, so it may require some experimentation until you find what works best for you. There are a number of pre-mixed mediums on the market such as Liquin or the fast-drying Alkyd Medium or the non-toxic Eco House damar Medium, but often artists want to mix their own. One basic recipe is as follows:

2 parts turpentine (or turpentine substitute)
2 parts linseed oil
1 part Damar varnish

For many more recipes see Robert Massey’s essential book *Formulas For Painters*. (1967 Watson-Guptill Publications, New York)

**Linseed Oil:** This is the most common BINDER found in oil paint. It is also an important ingredient in any painting medium. It’s available in cold-pressed, steam-pressed and alkali-refined versions. All of which are suitable for oil painting but each type will vary in cost, drying time and viscosity. Cold-pressed is usually the most desirable for artists, but advances in technology have also produced good quality alkali-refined linseed oils that have lower acid content that reduces the oil’s tendency to yellow over time.

**Turpentine:** (*Pure gum spirits of Turpentine*) is refined oil extracted from certain species of pine trees. This is the most common SOLVENT used for oil paint. It has a strong odour, which some people have an allergic reaction to and most people find unpleasant and overpowering. Whenever possible it is a good idea to substitute turpentine with a less toxic solvent such as *Mild Citrus Thinner*, *Neutralthin* or *Natural Orange Terpene Solvent*. (Always use proper ventilation even when using mild solvents).

**Mineral Spirits:** (Also known simply as paint thinner). A refined distillate of petroleum, this turpentine-substitute is less toxic than gum turpentine, but is not recommended for mixing with damar or other hard resins or varnishes. Although mineral spirits (especially the odorless variety) give the appearance of total safety, it should be noted that it still poses a similar health hazard to turpentine and should be used with the same precautions (and ventilation) as it’s more toxic cousin. Because of its low cost, mineral spirits is the solvent of choice for cleaning brushes.
**Thickeners:** Various thickening agents are available to give oil paint more body. This can be particularly useful when painting in an “impasto” style with a lot of thick paint. There is usually a certain amount of drying medium in these products, so that the thick paint will dry within a reasonable amount of time.

Driers: In order to speed up the drying time of oils, additives such as cobalt drier can be combined with the paint. Too much drier can easily have an adverse effect on the long-term stability of an oil painting, so this (or any other drier) should be used with caution or not at all. Adding a small amount of a fast-drying medium (such as alkyd medium) is a more reliable way of hastening the drying of oil paint.

**VARIOUS PAINTING TERMS AND TECHNIQUES**

*Alla Prima:* “Italian word for “at the first,” it describes a painting which is completed in a single session. In alla-prima painting, there is often no preliminary under drawing or underpainting; the idea is to capture the essence of the subject in a bold, intuitive way, using vigorous, expressive brushes strokes and minimal colour mixing on the palette or support. One must work rapidly.” (*Artist’s Manual*, p. 90)

*Dragging stroke or scuffing:* a technique of stroking oil colour lightly over a rough surface so that it covers the high spots and leaves the depressions untouched, thus creating a broken area of colour with irregular spots of the undercolour showing through. (*Painting as Language*, p. 122)

*Drybrush:* load the tip of your brush with paint and drag it across the surface of your painting leaving the coloured ground, or the underpainting, or the previous layers of your painting to partially show through. Drybrush technique gives a high-texture type of painting, due to the weave of the canvas or dried impasto paint application. The amount of pressure will affect the texture of the paint, and the quality of the mark making. (*Artist’s Manual* pp. 98-100) I recommend that you start your painting with a dark coloured background and slowly build up the painting from dark to light colour.

*En plein air:* (French for “in open air”) Used to describe a painting made outdoors, usually directly from the subject in the landscape.

*Fat Over Lean:* “Fat” refers to thicker or oilier paint, and “lean” refers to thinner (and therefore less oily) paint. Any fat on a painting must be applied over a lean layer and never visa versa for the simple reason that the fat paint will take longer to dry than the lean paint. Following this rule will avoid cracking and long-term archival problems. Due to its fast-drying properties, this is not an issue when working with acrylic paint.

*Glazing:* the application to a painted surface of a transparent or translucent layer of pigment to modify the effect of the existing colours. Acrylic medium is required for that technique when working with acrylic paint. (*Acrylic Painting Techniques*, p. 133)
**Grisaille** (French for “greyness”) A technique that involves establishing a grey or lightly toned underpainting that will later be treated with coloured glazes.

**Impasto:** “involves applying the paint thickly and liberally, so that it retains the marks and ridges left by the brush.” (*Artist’s Manual*, p. 94)

**Painterly:**
1. Having the quality of expertly brushed workmanship; technically excellent in terms of control of the brush and the medium of painting; also, pleasing in terms of the handling of colour effect. The term may be used for a painting in which every element, including content, is handled in accordance with high technical and aesthetic standards.

2. A term applied to the dominance of tonal masses over line as a means of defining form in painting, sculpture, and architecture. It was first used in this sense by Heinrich Wolfflin in his Principles of Art History (1915), along with its opposite, LINEAR. Because the word painterly has other senses, Wolfflin's original German term, *malerisch*, is more precise. Malerisch painting, for example, relies less on draftsmanship to depict modeling than on the juxtaposition of areas of colour, or of dark and light... (*Ralf Mayer*, p. 291)

**Scumbling:** applying a thin coat of opaque or semi-opaque colour in a manner between glazing and dry brushing; the effect might be described as a “broken glaze.” You can add body, texture, highlights and details to a glazed painting. (*Acrylic Painting Techniques*, p. 133)

**Sfumato:** in oil painting, the creation of soft, delicately blended effects by the fusion of one tone into another, particularly in glazes. This Italian term is frequently used in reference to the paintings of Leonardo da Vinci, who was the first of the great masters to employ the procedure to secure airy or atmospheric effects. (*Ralf Mayer*, p. 376)

**Veiling:** glazing with a translucent wash of colour to darken or lighten existing values or to blur or soften areas that are too strong. (*Acrylic Painting Techniques*, p. 133)

**Wiping-out technique:** This consists of subtracting paint to create an image. Cover the area you plan to complete in a lapse of time of approximately 10 minutes with a thin layer of acrylic paint mixed with retarding medium. Ex.: Sepia tone. Use a colour that as a mid tone value. When the surface is evenly covered, remove wet paint in order to create lights and highlights and produce a representation of varied texture. A rag dipped in a little water is useful for wiping out light areas. Use a clean scouring pad or steel wool to rub away even more paint. For more texture, experiment with a variety of tools such as paintbrushes, carved wood, knotted string or lace. (*Painting as Language*, p. 56)
GRISAILLE: GLAZING TECHNIQUE

This technique requires the following steps:
1. Make a preliminary drawing
2. Establish the grisaille underpainting – grey tones
3. Apply coloured glazes
4. Finally add scumbling or impasto for details and/or highlights.

First stage: Establish form, design and composition by drawing with brush and highly diluted paint.

Second stage: Establish a detailed underpainting called “grisaille.” The grisaille is the true foundation of your picture. It can be executed entirely in greys mixed from black and white, but it can be in any colour you want it to be. For this assignment you will do your underpainting “grisaille” by choosing one of the following three possibilities: black and white grisaille; yellow ochre and white; grey-blue or grey-green and white as a monochrome. Add to the last two mixture possibilities a small amount of the complementary to increase the greyness of the colour.

The grisaille has a monochrome clarity to it and is always dominated by white. It is essential that the grisaille be in the high-value range, rendered in the lightest tones possible, because with the application of each coloured glaze the painting will become darker. Your darkest tone should not be darker then middle grey. It should also have a smooth finish with a minimal amount of brush strokes.

When the grisaille is completed, let it dry before going to the third stage.

Third stage: Apply colours that are of transparent quality by mixing the paint with a large quantity of medium. Gloss Acrylic medium if you are working in acrylics, a good, thin glazing medium if you are working in oils. (see recipe in the oil mediums section).

The initial colour layers are applied somewhat generally, in broad washes to cover large sections of the painting. Sometimes some opaque applications of local colour can be applied to further enhance the underpainting. Each glaze must dry before the next one can be put on top of it. Remember “week” colours such as yellow will be easy to glaze over and push towards blue or red, but “strong colours such as blue will be difficult (if not impossible) to make yellow using this technique. Always plan ahead as much as possible.

Fourth stage: Add your highlights or any necessary details with thick paint application or scumbling.
COLLAGE AND PHOTO TRANSFER

In *The Harper Collins Dictionary of Art Terms and Techniques*, Ralph Meyer defines collage as “the technique of creating a pictorial composition in two dimensions or very low relief by gluing paper, fabric or any other material to a canvas or panel. An entire work may be executed in collage, but the technique is also used in combination with painting or other techniques. When heavy three-dimensional objects dominate the composition the work is usually called “assemblage,” a term more closely related to sculpture than painting.”

The word “collage” derives from the French “coller” meaning to paste. The earliest examples of collage date back over a thousand years to Japanese artists. Persia and later Turkey developed their own traditions and in the 15th century Russian Icon painters developed similar techniques. Despite these early beginnings Pablo Picasso and Georges Braque are often credited with popularizing the medium as it played an important role in the early days of cubism and because the word itself was coined around the same time.

There are no limits as to what can be adhered to a collage and there is also an endless list of adhesives at your disposal. One very effective adhesive (especially with paper and cloth) is Rhoplex or acrylic medium (matte or glossy).

Acrylic medium is also used in another technique much loved by collage artists: the photo transfer. This technique allows you to work with scans or photocopies of images without having to sacrifice the original.

PHOTO TRANSFER TECHNIQUES

**Materials:**

1. Photocopy, computer print, image from a newspaper or glossy magazine.
2. Rhoplex or acrylic gloss medium. Do not use gel medium, it’s too thick.
3. Large brush

There are three methods to choose from:

1. The Decal method
2. The direct transfer method
3. The collage method
1. **Decal method**

2. Completely cover the printed side of the photocopy/print with Rhoplex or medium. Do not put any medium or Rhoplex on the back of the print.
3. Let it dry for at least an hour.
4. Apply a second coat of Rhoplex/medium. Let it dry for at least an hour.
5. Apply a third coat of Rhoplex/ medium. Let it dry overnight or longer.
6. The coated photocopy must be completely dry for the next stage.
7. Soak the coated print/photocopy in bath of cool water for a few minutes. Use the sink or a wide plastic container.
8. Turn the soaked photocopy so that the uncoated back of the paper is facing up in the water bath.
9. Gently start rubbing the paper with your fingers until the paper starts to roll into pieces and peel away.
10. Keep rubbing gently until all or most of the paper is peeled away. You should have a clear sheet of plastic with the photo image embedded in it.
11. Now you can glue the photo transfer directly onto your painting using acrylic medium or Rhoplex.
12. Add a coating of medium on top of the transfer when it has been glued to your canvas.  
   
   Note: Photo transfers **must** be made **ahead of time** because the process won’t work if you do it at the last minute. Start making it two days ahead of when you will attach it to your painting.

2. **Direct Transfer Method**

1. Apply a generous amount of medium (or paint) to the area on the canvas where you would like the image to appear.
2. Place the image face down in the medium and burnish lightly with your finger.
3. Let the medium dry thoroughly (preferably overnight).
4. Soak the paper backing with water and rub with a scrubby brush until all the paper is removed.

   Note: This method effectively reverses the original image so bear this in mind if you are working with text.

   You can apply a photo transfer at any point in an acrylic painting. It will stick on top of what you have already painted or you can apply it at the beginning of the painting onto the gessoed or Rhoplex surface.

3. **Collage Method**

   This is a really easy process. Simply use acrylic medium or Rhoplex as the glue. Paint some on the support surface, stick on the texture (fabric, photo images, crumpled paper, wood shavings, whatever…) and then apply a coat of medium/Rhoplex on top.

   Note: Unlike the above-mentioned photo transfer methods, this collage technique uses the actual paper support, which will add some dimension to the finished work.
WORKING IN COLOUR

There are two theories of colour: Subtractive and Additive. Additive refers only to light and Subtractive deals only with pigment. The additive primaries are RED, BLUE, and GREEN. The million colours on your computer screen, for example are all made up of combinations of these three colours. When all three are used in equal proportion this produces white.

Painters are concerned mostly with the Subtractive theory that affects how pigments are mixed. The primary Subtractive colours are RED, BLUE, and YELLOW, (or more accurately MAGENTA, CYAN, and YELLOW). These are the colours you will find in your printer. When all three are mixed in equal proportion this produces black. (Or something close to it).

COLOUR TERMS AND DEFINITIONS

**Achromatic:** Having no colour, i.e. white, grey, and black.

**Analogous:** A series of colours that are all related (i.e. on the same side of the colour wheel such as green, green-yellow and yellow-green). (Not to be confused with “monochromatic” which refers to various tints and shades of the same colour).

**Chroma:** The hue and saturation, or degree of vividness, of a colour other than black, white, or grey. It is the dimension that distinguishes the so-called chromatic colours from those in the black-white scale.

**Chromatic grey:** the colours that result from mixing equal or near-equal proportions of complementary colours.

**Cool colours:** Those colours in which blue is dominant, including greens and violets. Bluish greys are called cool greys. The term may be used in a relative sense, so that raw umber is said to be cooler than burnt umber, although both are warm colours. All cool colours lie in the green-violet half of the colour circle.

**Complementary colours:** pairs of colours that are found opposite one another on the colour wheel — hence totally opposite in terms of hue and warm/cool. (e.g.: blue is the complementary of orange)

**Deep colour:** Any colour with a high degree of SATURATION and low VALUE. A painting in which very little white is mixed with the colours may be called deep-toned.

**Desaturation:** colour in an impure state due to the addition of other colours, grey, black or white.

**Half tone:** The middle value of a colour achieved by mixing colour with its complement or a little black; for example, red mixed with a little green or black; yellow with a little violet or black; blue with a little orange or black.

**Hue:** Another term for the word colour. The name of the colour; e.g.: Red.
**Monochromatic:** of one single colour. (adding white, black or grey to a single colour will produce a series of monochromatic colours).

**Primary Colour:** colours that cannot be mixed from other colours (red, blue and yellow)

**Saturation:** degree of purity of a given colour. Maximum saturation means colour is in its purest form and uncorrupted by any other colour or tone.

**Secondary colour:** a colour resulting from the mixture of two primary colours. (blue and yellow produce green)

**Shade:** Formed by mixing pure colours with dark grey or black. In colour description or comparison, a full or definite degree of difference between two colours. One blue may be a shade darker, lighter, deeper, redder, greener, etc., than another.

**Tertiary colour:** (pronounced tersh-ree) mixtures of a primary and its adjacent secondary: for example, red added to orange produces the tertiary colour red-orange.

**Tint:** Formed by mixing pure colours with white.

**Tone:** Formed by mixing pure colours with grey

**Value:** Degree of lightness on a scale of greys running from black to white. Chromatic colours can be similarly evaluated; the darker ones are said to be lower in value or in a lower key, while the lightest are said to be higher in value.”

**Warm colours:** Generally colours on the orange side of the colour wheel (Yellow, Orange, Red, Purple). Within all families of colours, there are both warm and cool colours. e.g. Blue that contains more Red (Purplish Blue) is warmer than a Blue that contains Yellow (Greenish Blue).

**The Colour Wheel:**
Primary colours are Blue, Yellow and Red. Secondary colours are Orange, Purple and Green.

Note that the colours directly across from one another are complementaries. (i.e. Green and Red.)
Chromatic Greys

Part A
Show six complementary pairs and their mixture towards grey. These scales are prepared by adding more and more of the complementary to a given colour. In the centre of each column you will produce a chromatic grey. This neutral grey is obtained by adding equal amount of the two colours. **Do not add white to these mixtures in Part A. Do both of these charts on a separate piece of paper or board, not on the actual diagrams.**

Your chart should look like this:

<table>
<thead>
<tr>
<th>Pure BLUE</th>
<th>RED</th>
<th>YELLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue with some orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half blue/ Half orange</td>
<td>Do the same with Red +Green</td>
<td>Do it again w/ Yellow and Purple</td>
</tr>
<tr>
<td>(aka chromatic grey)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange with some blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pure ORANGE</td>
<td>GREEN</td>
<td>PURPLE</td>
</tr>
</tbody>
</table>

Part B
Take any complementary pair and produce a 25-square chart that illustrates the range of tints and chromatic greys available from these two colours. The following example uses red and green.

<table>
<thead>
<tr>
<th>RED</th>
<th>75% RED w/ 25% GREEN</th>
<th>50% RED w/ 50% GREEN</th>
<th>75% GREEN w/ 25% RED</th>
<th>GREEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add some white to the red</td>
<td></td>
<td></td>
<td></td>
<td>And again here, You're almost done.</td>
</tr>
<tr>
<td>Add some more white</td>
<td></td>
<td></td>
<td></td>
<td>Got the hang of it yet?</td>
</tr>
<tr>
<td>Keep adding white</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keep adding white</td>
<td>A bit more white</td>
<td></td>
<td>This colour will surprise you!</td>
<td></td>
</tr>
<tr>
<td>Almost pure white down here.</td>
<td>It's very light down here.</td>
<td>Yep, still more white</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Seven Colour Contrasts

Understanding the Colour Contrasts can be a big help when analyzing how a painting functions, but it can also help you in making decisions when it comes to making your own compositions.

The colour theorist Johannes Itten (1888-1967) laid out what he determined to be the 7 different types of colour contrast as follows:

1. **Contrast of Value.** This refers to using a wide range of shades/tints/tones to articulate what is on the picture plane. All black and white imagery, for instance is dependent on this type of contrast. But a colour image, of course, also uses Contrast of Value.

2. **Contrast of Hue.** Quite simply, when different colours (hues) are side by side we are able to see the difference between them. (i.e. a red apple on a green table)

3. **Contrast of Saturation** is when there is a combination of saturated (pure) colours with colours that are de-saturated. Colours may be de-saturated by adding white, black, the complementary or any other combination of colours that will make the original colour less pure.

4. **Proportional Contrast** is when a small amount of a colour stands out dramatically because it is in stark contrast with its environment. (For example: a bright red leaf will stand out on a green lawn thus producing proportional contrast. But if the same leaf falls on ground that is reddish in colour it would produce no proportional contrast.)

5. **Warm/ Cool Contrast.** When warm colours are juxtaposed with cool colours there is inevitably some contrast.

6. **Complementary Contrast** occurs when two complementary colours are the predominant ingredients in a composition. (note: all complementaries are also Warm/Cool contrasts. But all Warm/Cool contrasts are not necessarily complementary.)

7. **Simultaneous Contrast** refers to the phenomenon of how the brain is always producing the complementary colours of what we are looking at and thus effects the way we perceive all colours. The effect of Simultaneous Contrast is best illustrated by colours that vibrate violently when they are juxtaposed. This occurs when a saturated colour is placed alongside another colour of equal value.
BIBLIOGRAPHY


Grenville Killeen, Earl & Killeen, Rachael, Acrylic Painting Techniques; North Light Books, Cincinnati, Ohio, 1995.


Suggested Reading on Colour


Itten, Johannes. The Art of Color: The Subjective Experience and Objective Rationale of Color, Wiley; Revised edition (Jan 1 1974).
