

## Egg Tempera Painting Techniques Methods and Materials

Egg Tempera is one of the oldest painting mediums - existing examples date back to Roman wall paintings, and egg tempera was the prevalent medium used by artists prior to the introduction of oil paint to Europe at the end of the 15th century. Egg Tempera is also the longest lasting, and the colours never fade or darken, and there is no varnish applied to crack or damage the surface.

The materials and methods employed in the process are simple and organic, and haven't altered in the past millenium.

The colour pigments used in egg tempera (the word tempera originally came from the verb temper, "to bring to a desired consistency") are pure, and often from natural source, not chemically fabricated - there are exceptions, like Ultramarine, whose original source was ground lapis lazuli, a semi-precious mineral. Because of this, the colours are vibrant and true, often referred to as "luminous".

The process to create paint for application is as follows:

- 1. Pigment** is finely ground into distilled water using a mortise and pestel or a glass muller on a glass or polished stone surface until the pigment is completely dispursed in the water, and a creamy paste is the result.
- 2. Egg yolk** is used as the binder. Separate the egg as for baking, etc., and carefully tip the yolk sac onto a paper towel - roll to the edge - leaving the traces of egg white behind, lift the paper towel with yolk on the edge, pierce the yolk sac and drain the yolk into a waiting container.
- 3.** Egg tempera is applied thinly in several layers, so **distilled water** is added to the egg yolk at a ratio of 1 part water to 2 parts egg. A few drops of **white vinegar** is added to extend the working time of the egg binder (I use the same mix for 2 days). Mix well.
- 4.** The egg mixture can be added to the prepared pigment in two ways:
  1. mix in a **palette well** - use a **palette knife** to drop in a small amount of paint - add an equal amount of egg mixture and mix well with a paint brush.
  2. use a palette knife to drop a small amount of paint directly onto a **palette** and mix in egg mixture as you work. Egg tempera is a very fast drying medium, so be prepared to use what you have mixed on your palette in a matter of minutes.
- 5.** Egg tempera must be applied on a solid support, or the dried, cured egg will crack with any surface flexing. Traditionally, a **wood panel** has been the support for egg

tempera paintings. (see materials list for recommended supports).

**6. The ground used in egg tempera painting** is traditional gesso consisting of marble dust (extra fine calcium carbonate), rabbit skin glue, and distilled water. Acrylic gesso cannot be substituted because egg and organic material will not adhere to acrylic polymer. Traditional gesso, like plaster, is very absorbent.

I have prepared the panels we will be using for this workshop, but have included a "recipe" for gesso if you are interested in continuing the adventure after the weekend. Traditional gesso is also available in a convenient pre-mix (see materials list).

**7. Options for sketching out prior to applying the paint** - as with watercolour, the less sketching you do the better, so keep to simple line drawings that concentrate on form outline:

1. you can sketch directly onto the absorbent ground, but using an eraser is not recommended (it can leave a trace of gum or acrylic on the gesso). I use 220 grit sandpaper in place of eraser.
2. Create "to scale" line drawing or cartoon from preliminary sketch on transfer paper (onion skin, newsprint, etc.) and use a graphite "rub" to transfer over, but not too soft a graphite or you will create smudges that are difficult to remove.
3. Use carbon paper to transfer cartoon - press lightly so carbon will cover easily later on.
4. Underpainting (optional) - because egg tempera is a translucent medium, an underpainting is often executed to reinforce contrasts and dark areas prior to applying paint. The options for this are casien or india ink (organic base mediums). Because of the brevity of time for this introduction to egg tempera painting, I have chosen to skip this option, but if you decide to investigate further, the application of india ink is the same as dry brush watercolour - minimize your use of water, and don't allow any washes to sit on the surface of the gesso (it may crack when overly saturated).

**8. Application of the paint** - paint can be applied with any watercolour brush, following the same procedures followed with dry-brush watercolour. Paint is gathered onto the brush and then excess is knocked off or rolled off. A brushstroke should not end in a bead when lifted from the surface as this may possibly cause loosening of the paint under succeeding layers.

Brushstrokes are laid side by side, and because the paint dries quickly, you can return to crosshatch and layer usually within a matter of seconds.

The first layer can be applied thinly in a small work area by "scrubbing" it on with a dry brush usually in a light to medium base tone.

As with dry-brush watercolour, building up with successive layers of side-by-side strokes will increase the intensity, and allow the introduction of other colours to the area.

Shadows can be introduced at this time -glazing is an important feature of this medium.

"Scumbling" - a term that denotes an application similar to glazing, but instead of deepening and darkening tone, scumbling uses transparent layers of white and light colours to soften and enhance highlights. Titanium white is a very strong "blue" white, and when applied in thin transparent lines gives egg tempera the "luminous" glow that sets it apart from other mediums.

A return to glazing will soften whites and light areas that may seem too bright in contrast. Applying a defining "calligraphic" stroke will intensify light/dark contrast.

Egg tempera surfaces are built up slowly, constantly returning to an area to define, to strengthen, or to soften according to its relationship to other areas and to the composition as a whole. It is not uncommon to return to an area 15 - 20 times (layers). Like watercolour, the transparency of the medium draws the underlying layers and colours up through the surface, while isolating and defining areas at the same time. It can sometimes feel like you are "weaving" your colours together. The result can be magic.

The work can be constantly returned to, and it can sometimes take months to complete a large piece. When the egg is left undisturbed (no succeeding layers applied), it will start to cure within two weeks, and within two months will no longer have an adherence to support any more layers of paint. The surface is now sealed. Egg temperas don't need to be varnished, as the cured egg works as a protective seal. It can be gently buffed two months after the work is complete to even out the surface shine.