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I wrote this article for my own artblog www.fiurin.net:

Painting with Tempera Grassa – eco-friendly and handmade binder

For thousands of years human beings used natural materials to make paint. About 30.000 years ago our ancestors took ochre to depict animals on the walls of caves. Artisans in ancient Egypt decorated Sarcophagi with paint made of eggs – and isn't it stunning, that the art created with these most basic of materials is still vibrant today?

Eggs are among the oldest binders for pigments – and egg yolk was especially popular in medieval times. But it is quite difficult to handle and too brittle to use on stretched canvas. That is why medieval artists painted mostly on rigid surfaces like wooden panels.

In the 14th century, a clever person eventually invented tempera grassa: A mixture of linseed oil, egg and water makes a durable and flexible paint – that also works well on stretched canvas. No wonder, that tempera soon became widely popular.

Dedication and time

I owe my thanks to the clever inventor, because this natural binder is my favourite today – and I create all my paintings with it. It is just a fantastic material. As soon as I discovered the recipe, I got rid of my acrylics – and never used synthetic paint again.

Okay, there is a tiny downside: Natural paints need some extra time and dedication, because you have to make fresh paint, every day you want to use it. The tempera itself lasts longer and you can store it in a cool place for weeks or even months. But as soon as you add pigments to it, tempera deteriorates within a day.

Tempera grassa: Beautiful like velvet

This might be one of the reasons, why oil paint finally replaced tempera in the 15th century. Oils simply stay fresh for a long time. But they are not water-soluble – and sticky, if you ask me.

Tempera grassa is often described as a water-soluble oil paint, but its appearance is quite different: The surface looks matte and velvety – which is especially beautiful combined with earth pigments.

Because of its look and behaviour, I wouldn't consider tempera grassa as an alternative to oils – it is rather a wonderful non-toxic, environmental friendly alternative to synthetic paints like acrylics.

The recipe is easy: Simply mix egg, linseed oil and water. Add pigments and start to paint. That's it.

Tempera grassa – My recipe

There are many other ways to make tempera. The following recipe is very basic, but it is the one I love best.

Note: Keep the eggshells, these are your measure. All the ingredients should be the same temperature.

- **1 egg** – It should be very fresh and not too cold. I prefer organic, because of the chicken.
- **Linseed oil or varnish**, as much as fits in 1 egg – If you use linseed oil varnish instead of linseed oil, the paint oxidizes faster.
- **Water**, as much as fits in 1 egg

Step 1: Take a clean screw top jar. Break the egg and put yolk and egg white into the jar. Put the lid on the jar and shake well.

Step 2: Open the jar. Take the two empty halves of the eggshell, fill one with linseed oil (or varnish) and slowly pour the oil into the jar. Then fill the other eggshell and pour it slowly into the jar as well. Put the lid back on and shake, shake, shake – a couple of minutes should do.

Step 3: Open the jar again. Fill both eggshells with water and add the water to the egg/oil emulsion. Put the lid back on and shake again.

Your tempera grassa is ready to use. If you keep it refrigerated and clean, it usually stays fresh for weeks or even months.

Making paint with a natural binder

To paint, simply pour a bit of tempera into a jar or on a plate (or whatever you use for your paints) and add some pigment.

For paste-like paint, use a larger amount of pigment or add some filler like chalk. Only make as much paint as you need – you cannot store it and it spoils within a day.

When you are finished, simply use water to wash your brushes. You can also clean your plates and jars that way – unless you use toxic pigments, your paint is environmental friendly.