

GRASSHOPPER NOTEBOOK

Grasshopper, I have prepared this book for you to save your figure painting notes. I have also collected many of the basic ideas you will need to master.

Good luck in your painting, and remember-

The journey of a thousand minis begins with one brush stroke.

And...

If at first you don't succeed, destroy all evidence that you tried!

SUGGESTED SUPPLIES

BRUSHES: While everyone has their ideas about brushes, the finest painters use the finest brushes. It really can be that simple. The brushes of choice for figure painting in acrylic paint are Kolinsky Sable brushes. These natural hair brushes hold and release water better than any other and allow detail painting with ease. This will encourage the novice to paint with confidence.

Brushes of this type include:

Windsor & Newton Series 7

Escodo Optimo

Raphael 8404

For our purposes, you should need sizes ranging from 00 thru 1. These brushes should cost \$10-15 each. While that might seem costly, they will last much longer than any less expensive alternative and perform better all the while.

PAINTS: No single manufacturer seems to make the perfect paint for every occasion, but most of the common, miniature hobby companies do a fine job. I would recommend avoiding the 2 fl oz 'craft' paints. These often lack pigment density appropriate to painting figures.

PAINT PALLETES: To use acrylic paints routinely involves thinning with water on a mixing surface or palette. These could be plastic lid, a purpose/made tray with small wells, or a piece of cardboard. Because these paints dry very quickly, I recommend using a Wet Pallett. This is a shallow tray with a thin sponge in it. A layer of baker's parchment paper is then laid on that and the whole stack dampened. It may take a bit of trial to find the proper moister level, but the result is long lasting puddles of paint that can be stored even overnight with a snap on lid.

You can make a Wet Pallett or simply buy one: Masterson's Sta-Wet Handy Palette. I do not use their parchment paper, preferring a large roll from baking supplies.

WATER PLUS: Acrylic paints are thinned with water to improve performance, but tap water is too simple. There are several additives available to the painter to extend the drying time and improve the flow of paint. I use Liquitex Flow-Aid and simply follow the mixing directions on the bottle. We use so little of this; the cost is not prohibitive.

FIGURE PREPERATION

Most figure prep is common sense: clean any flash, remove seam lines assemble appropriate parts and fill any gaps. I normally install the figure onto its final base and fill any gaps there. I also strongly recommend sticking the figure and base to a small handle such as a bottle cap or block of wood. I never touch the figure again with my hands.

Priming and Base Coating: Priming refers to adding a layer of paint to insure a good bond to the figure. Many acrylic paints do not normally stick well to raw metal or plastic. However, they do love to stick to other paint. I

prime my figures with the least expensive canned spray paint available. This paint is often thin and does not cover small details. It does bond well to the figure and following paints stick well to it. Shake well, spray in close with full strokes. Don't spritz.

Depending on the figure, I use Flat Black or Flat White. Brighter colored figures or those with a lighter scheme usually are in White.

EXCEPTION: REAPER BONES FIGURES ARE MADE OF A SPECIAL SOFT PLASTIC THAT DOES NOT NEED PRIMING AND SPRAYED PRIMERS ACTUALLY GUM UP ON THE SURFACE. YOU MAY PAINT DIRECTLY ON THE PLASTIC OR USE REAPER'S BRUSH ON PRIMER.

NOW YOU MUST WAIT OVERNIGHT FOR THE PRIMER COAT TO FULLY CURE. WHILE IT MAY SEEM DRY, THE CHEMICAL PROCESS IS NOT COMPLETE, AND MAY INTERFERE WITH ANY NEW COATS OF PAINT. IF YOU DO NOT HAVE THE PATIENCE TO LET PAINT DRY, I SUGGEST YOU CONSIDER A DIFFERENT HOBBY, LIKE SNOWBOARDING.

Because I use a very light coat in priming, I frequently return at this stage and base coat a black figure with flat black acrylic paint applied in a thinned light coat to fill every small nook.

COLOR

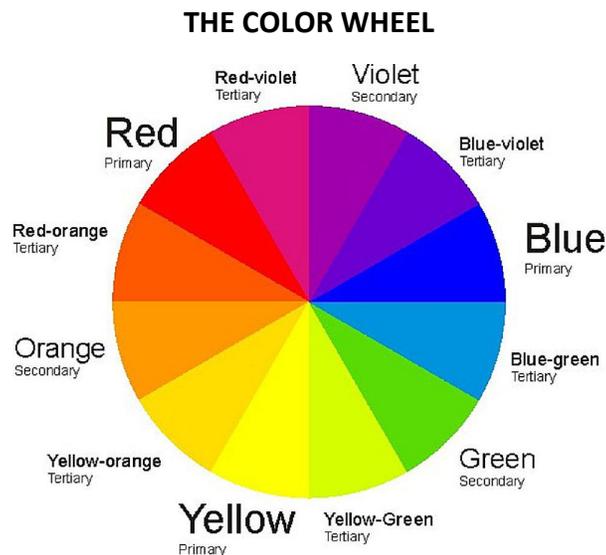
This section covers the terminology and theories concerning color.

HUE: The hue is how the eye sees color as related to blue, green, red and yellow. For our purposes, it is the basic color of that part of a figure.

TINT: A tint is the hue lightened by adding white.

SHADE: A shade is the hue darkened by adding black.

TOPE: A tone is the hue subdued by adding grey.



The Color Wheel above illustrates the relationship of colors.

Warm Colors refer to colors Red thru Yellow plus Brown and Tan. Warm colors tend to appear more aggressive and forward next to Cool Colors.

Cool Colors refer to colors Blue-Green thru Blue-Violet plus most Greys. Cool Colors tend to appear to retreat next to Warm Colors.

A Complimentary Color is the color directly opposite a color on the Color Wheel.

Techniques Applying Paint

WET BRUSHING: Just as it sounds, a small amount of thinned paint is applied to the figure. Best results are achieved with one or two strokes. If more paint is needed, wait for the first coat to dry (perhaps 10 minutes) and recoat. Avoid rebrushing over wet paint.

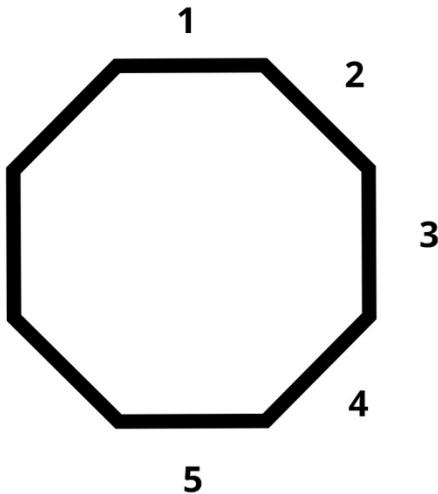
DRYBRUSHING: This is technique where a small amount of almost dry paint is dragged across the figure with a dry brush. This leaves color on only the raised portions of the figure.

WASH: In figure painting, a Wash is heavily thinned paint applied heavily and allowed to flow into the inner recesses of the figure and away from the raised areas. A wash can be achieved by thinning normal paint or using inks that have been cut with acrylic carriers (Liquitex Matte Fluid Medium) and water.

GLAZE: Similar to a Wash, but applied lightly with the goal of changing the hue slightly. Multiple glazes can be used to gradually change all or some of a hue.

THE STOP SIGN METHOD

The Stop Sign Method was developed and taught by the legendary modeler and figure sculptor/painter Shepard Paine. I was fortunate to take a painting class from him years ago and learned this method. It is how we decide what paints go where.



We will imagine light falling in a halo above our figure. The light strikes different surfaces at different angles, changing the appearance of the hue. Suppose we are painting a blue jacket on a figure. Light from above and shadows below mean you cannot paint the whole jacket one hue. By breaking the shape of each part of the jacket into planes, we can simplify our understanding of tinting (lightening or Highlighting) and shading (darkening). We will arbitrarily assign our basic hue as Number Three, the vertical plane on the Stop Sign. Number Two, just above it, is a lighter tint, with Number One lighter still. Number Four is darker than Number Three with Number Five even darker.

On our jacket this mean that most of the trunk of the jacket is Number Three, becoming Number Two near the shoulders and finally Number One right at the top.

Number Four might appear along a fold on the back, and Number Five only underneath.

Arms would be painted the same fashion depending on their position.

This method is concerned with the SHAPE of things related to the light source. Their position forward or recessed on the figure is secondary.

With experience, you will instinctively break any shape into its color planes. In time, even creases and small details will simply be Numbers on the stop sign.

USING THE STOP SIGN METHOD

There are two basic ways to use the Stop Sign Method on a figure.

Color Blocking: This method starts with a black base color which functions as color Number Five. Color Number Four is then painted in, leaving the Number Five in the darkest shadows. Number Three then follows and so on as you work your way up the Stop Sign. This method is simple and easy to understand. It also is very forgiving, as anything remaining as black or very dark simply is not visible.

This method is also handy when using Black Lining. Black Lining is a style where a very thin black line is painted along the edge of two different items, enhancing the difference. The Blocking method allows you to simply not paint to that edge, leaving a dark line. This is often easier that adding a black line later.

Base Color & Wash:

In this method, you begin by painting the Number Three color over the entire item. A dark wash (either commercial or custom mixed) is then flowed over the area and allowed to dry. This wash will stain the Number Three color into the Number Four color and also collect in the deep areas and produce the Number Five color. Next, we restore the Number Three color where appropriate and continue as with the Color Blocking method.

Each method has its uses. The Blocking method works best on darker colors and simpler shapes. The Base Color method is somewhat subtler and works better on light colors. You may find yourself using both on the same figure.

Blending the Stop Sign Colors

There are many ways of achieving a smooth blend between the colors as you apply them.

Perhaps the simplest is to break the Stop Sign into even smaller faces. Number Two and a Half for instance. This will allow the difference between Numbers to be so small as to be unnoticeable. I often use this on skin tones.

Similarly, would be to thin the next color a bit more than usual and apply light coats, moving up the Stop Sign a bit. This will also give a smooth transition.

On larger areas, it may be best to use a stippling or dabbing technique along the color edge. This will create an uneven edge and the eye will see it as a smooth transition.

You may also try Crosshatching. With this you paint a row of small diagonal lines across the edge, then add another row slanted the opposite direction. Again, this will break up the edge hardness.

Truly smooth transitions will take a lot of practice, so manage your frustration and just keep working.

PAINTING DETAILS

The Stop Sign Method is intended most obviously for the large areas of a figure but certainly has uses in small details. A belt pouch would not be a single-color brown, but would, tiny facet by tiny facet, conform to the Stop Sign also. In this way, details come to life without a glaring difference in style from the rest of the figure. An interesting side effect of this method is that small details hiding in the darkest Colors get painted darkly also. If something is in the shadows, it will be hard to see.

PAINTING A FACE

I normally start a figure by painting the skin tones. Working from the inside out is usually cleaner, with less chance to leave accidental paint in the wrong place.

For most European skin colors, I have used the Reaper “Tanned Skin” series. This ‘Triad’ includes:
“Tanned Shadow” “Tanned Skin” “Tanned Highlight”

As you will see, these paints will correspond directly to Numbers from the Stop Sign.

Step 1) Carefully paint the face, hands and any other exposed skin areas with “Tanned Shadow”. Let dry.

Step 2) Wash the painted areas with Reaper “Flesh Wash”. This will stain the paint and settle into the folds and nooks.

Step 3) When the wash has dried (ten minutes), you will notice that the painted areas are now not uniform. The undersides and recesses have become quite dark and the more exposed areas are darker than before. Congratulations! You have just painted Colors Five and Four and a half on the Stop Sign!

Step 4) Using the “Tanned Shadow again, restore the areas that correspond to Colors Four and less. Take care to leave the darkest areas near the eyes and under the nose.

Step 5) Now use “Tanned Skin” to paint Color Three and less. This will be a much smaller area than Step 4 and will only appear on vertical surfaces or those above.

Step 6) I now invoke a Color Two and a half and mix “Tanned Skin” and “Tanned Highlight” about 50/50 and paint the areas just above the vertical surfaces.

Step 7) By now, the only areas needing attention will be those seen from directly above. Very small touches of “Tanned Highlight” on the bridge of the nose, point of the cheeks and perhaps the chin.

Don’t be frustrated if you do not achieve perfection quickly. I will warn you that these paints will darken as they dry, so adding the lighter tints can be a bit startling at first. It will all work out.

PAINTING EYES

I purposely left eyes out of the above section for clarity. I normally paint eyes after Step 2, after the wash, but before restoring the Number Four color. At this point, the wash has settled into the area of the eyes, making details easier to see.

Most figures are painted with white “whites”. This is not exactly accurate. When seen from even a short distance, a person’s eyes will seem a very pale pink or skin tone. For most fantasy figures, this may be of no importance, but in painting historical figures, it might add a level of reality that white “whites” does not.

So, using your smallest, pointiest brush and your choice of color, carefully paint a horizontal slash where the eyeball is. It is best to first paint the eye furthest from your painting hand as that is the most challenging, then paint the other to match. Do not panic if you paint outside the lines.

Using grey/blue or dark brown, paint a small vertical slash for the pupils. It is not so important that they be perfect, but it is important that they match. Pupils at this scale are not visible as round, but appear more squared off by the eyelids.

We will assume you got some paint outside the lines of the eyes. You may now mix a darkened shade of “Tanned Shadow” (just add a bit of dark chestnut brown) and carefully outline the eyes to their proper shape. Remember that only the outline edge at the eye matters. The backside of that edge will be painted over.

With your eyes done, you may now return to Step 3) and paint over the backside of that outline you created.

SPECIAL CASE COLORS

Some colors require a bit of extra thought, although the painting method should remain the same.

WHITE- Painting whites on a figure can often seem frustrating. If the Number Three color is already white, how do you highlight it? The answer is that you don’t use white as that Number Three color. Instead, use a very pale grey, so pale that it only appears grey next to true white. Reaper makes “Leather White” which I use, but you may certainly mix your own. After painting in the Number Three color (very pale grey), you then proceed with the rest of the stop sign as before, ending with pure white as Number One.

BLACK- Black offers a similar challenge. In this case we use a dark grey for the Number Three color and go from there. As black clothing is rarely truly black in sunlight, a dusty, faded look on the highlight is common. Experimentation and practice will guide you.

RED- Highlighting red can be a challenge as adding white to red creates pink, not a light red. The classic answer is to add yellow for the highlights and fool the eye. Since reds come in so many different colors, there is no simple answer to which paints to use. If you want a dark or muted red, try starting dark and using a Blood Red to lighten. Alternately, if you want a bold red, use Blood Red as the Number Three color and lighten with yellow. Experiment on every figure and you will find there are many satisfactory paths to red.

METALICS- There is a movement among some painters to paint the metal areas of a figure with ‘Non-Metallic Metal’ techniques similar to traditional canvas painting. I have not experimented with this and use normal ‘Metallic’ paints instead.

I prefer the metallic line from Vallejo, although the Citadel paints are also fine. My technique is the “Base Color and Wash” described above.

If painting, say, a figure in plate armor, I paint the area in ‘Gunmetal’ or ‘Steel’ or a darkish silver. Then a wash of black, to flow into the crevices and create the Number Four color. After the wash had dried, I restore the Number Three, often drybrushing first to define the dark edges. A “Silver” is then applied to the Number Two areas. Finally, a “Pale Silver” is used just along the upper edges of armor and to pick out rivet details. A small ‘bright spot’ can also be added to convex shapes, like a helmet. One interesting virtue of this technique is that metallic look best without any blending, as they are reflecting light differently than opaque colors.

WOOD

Unlike painting fabric areas, wooden areas are not often uniform in appearance. Some wood may be old and weathered, some varnished and shiny. Many will show at least a hint of grain. Some thoughts-

OLD WOOD- Wood exposed to the elements fades quickly to a greyish color. The simplest way to replicate this is to paint a medium grey (using the Stop Sign, nothing is simply one coat of paint), then apply a thin glaze of dark brown to stain it. Don’t worry about grain on old wood.

NEW WOOD- Freshly cut wood will often appear as light tan with some visible grain. Using the Stop Sign, paint the tan, then using a medium brown and the finest brush, carefully add graining. Patience and practice are the only path here. If you find the grain to be too bold, try a glaze of dark brown to cut the contrast.

POLISHED WOOD- Furniture, chests and some weapon handles might be well cared for and varnished. Colors here may be a bit darker, with graining more subtle. Follow the Stop Sign as with New Wood. When dry, you might apply a coat of Gloss Clear or even tint the Gloss with a bit of orange ink.

FEATHERS AND FUR- These highly textured surfaces are treated like any others. Base color and wash first. Then drybrush to restore the Number Three with further, lighter Drybrushing of Number Two and Number One.

MAKING YOUR OWN WASHES

Many of the miniature paint brands include washes. These are used for darkening the inner or under sides of areas already painted. While there is a broad range of colors available, you may find it useful to be able to make your own custom wash from time to time.

The secret ingredient to making a wash is “Matte Medium” fluid. This is available in the art department of most craft stores from Liquitex, among others. This is basically a clear matte finish used to thin the opacity of acrylic paints, or in this case, inks.

The Matte Medium is a thick liquid and should be thinned 50/50 with distilled water. I usually make up about 2 ounces and store it in an empty bottle for later use. You then add ink (available at the same art department) to create a wash. This wash will then flow into the folds and crevices of an area and create the Number Four and Number Five shades as described above. I keep a wash of dark blue (for denim) and dark olive drab (for military kit) as I often paint those colors.