

Chapter 3

It will soon be Thanksgiving, and we've just had our first frost. The rich greens of summer are gone. The landscape is turning brassy brown. Lately, I've been looking back at my recent paintings instead of looking forward to the next ones. Winter is a good time for reflection and for painting still lifes. The season calls for retreat, patience, and discernment.

I'm haunted by very familiar questions...are the paintings good enough? Have I done enough? Can anyone see what I think my paintings are about?

I know the answers. Yes, they are good enough (for whom?). Yes, I have done enough (for what?) and I can't control what someone else sees or thinks. I can only try to express in paint what I experience.

The answers only take some of the edge off the biting doubt. The only real answer is to keep working. Cold winter on the outside, the crucible of the studio inside.

A bottle and an orange on a wooden end table; underneath is an empty shelf. No artificial studio light, just the cold afternoon light coming in through the windows.

Frozen time slowly thaws.

More on Materials and Techniques

"To work is to pray."—John Singer Sargent

In the previous chapter, I touched on some general material and technical issues that countless painters throughout the ages have wrestled with. In this chapter, I will talk more specifically about my approach to painting with my two favorite media: oils and watercolors.

There are a couple of important caveats to any discussion of materials and techniques for painting. First, I am not launching into technique for its own sake. Technique serves seeing, and seeing is the foundation of everything that we are talking about in this book. Second, there is no single methodology or strategy that is going to make your paintings more or less successful and more or less soulful. That said, there are some methods for painting that tend to work better than others. They will help you get farther down the road toward your goal and cause fewer long-term problems than

other techniques. I think it is worthwhile to learn tried-and-true methods, and when you have mastered them, change them as needed.

Even within a discussion of technique, remember that rules are meant to be broken. Go ahead and break them, but remember, there are important questions to answer when breaking the methodology rules. How does this help my painting? Does it open up more possibilities? Is it just an interesting diversion that will lead to a dead end? Does it compromise the physical integrity of my painting?

Often, when a beginning artist is thinking about the how-to's of painting, they can search for "the secrets of the great masters". As enticing as it may be, the phrase "secrets of the great masters" is not helpful for beginners. The most important techniques for you to learn are straightforward, not shrouded in secrecy. Secrecy does not increase your, or anyone else's, soulfulness. The search for secrets and special materials is a lot like alchemy. You can spend years trying unsuccessfully to turn lead into gold, only to discover that you were sitting on a chair made of silver.

A good starting point for understanding methods in painting is to understand paint and pigments. I often use the words "paint" and "pigment" interchangeably, but that can cause some confusion. Pigments are specific organic and inorganic compounds with specific color characteristics. It is useful for the artist to know a little about the actual pigments that they are using and how pigment names differ from color names. Color names are sometimes informative, but often arbitrary. Color trade names like "sea-foam green" or "Nantucket Blue" are not standardized and can be applied to different mixtures of pigments for the convenience of the manufacturer. Whereas cobalt blue is the name of a specific pigment and should always have the same color properties, if the pigment is made in a consistent way.

The history of pigments is fascinating. Some pigments that we use today have been in use for tens of thousands of years. Burnt sienna, raw sienna, burnt umber, raw umber, and yellow ochre are based on naturally occurring compounds found in clays. Ivory black is burnt bone. Lamp black is the residue of burnt oil. Oxide reds have been around since blood was first spilled. Neolithic cave painters used some of the same pigments that are still in use today. These ancient pigments served them well, and we can still see many prehistoric images as clearly as if they were painted last week.

Some pigments were developed more recently thanks to the wonders of modern chemistry. The element cadmium was not discovered until 1817, and it took another century for cadmium-based colors to become available. Phthalocyanine blue was invented in a laboratory in 1927.

Pigments are shared across all types of painting mediums. Burnt sienna oil paint is made with the same burnt sienna pigment that is used for watercolor painting. Only the medium, or binder, is different. Oil paints are pigments with oils added. Watercolors use the same pigments with gum arabic, a water-soluble and edible tree sap, added. Watercolors come in tubes and pans. Experiment to see which suits you best. Mix and match if you like.

Acrylic paints use the same pigments but have acrylic resin added.

Know your pigments and know your binders. The quality of the pigment and the quality of the binder affects the quality of the paint. As with everything else in life, you get what you pay for. If you know something about pigments and binders, you can sometimes find useful materials at very favorable prices.

Now let's think about how to use these pigments and paints.

I have built the case for understanding value as the foundation of painting. However, few aspiring artists are attracted to painting because they love black and white paintings. Three cheers for tonalism, but we love color too. The problem for beginning artists is how to make sense of the vast array of color choices in front of them at the art supply store. Should we buy a tube of Prussian blue or a tube of French ultramarine? What about cerulean or phthalo blue?

We can simplify our choices for paint colors by thinking about how to organise and compare colors. This way of thinking about paint color works for all painting media, including oils and watercolors.

Just as a pianist uses a standardized instrument to make music, so too can a visual artist develop and use an instrument to make paintings. We can call this instrument the painter's palette. The word palette refers to both the physical support for a set of paints and the selection and arrangement of the paint on that support.

I encourage beginner students to think about their palette in the same way that a musician might think about a piano. The musician does not jumble up the 88 keys on their piano before they sit down to play. Rather, the keys are arranged in the same way for every performance. For a pianist, the relationship between piano keys is developed from both an intellectual understanding of music and from "muscle memory" by playing the same scales over and over.

In the same vein, we can develop a standardized instrument for beginning painters. We will begin building our instrument at the foundation for human visual perception, which is value, or light and dark.

Just as we made a monochrome pencil drawing to understand value, we can make a monochromatic painting. With oil painting, this will require one color plus white. Burnt sienna and titanium white work well for this simple painting exercise. If the student is using watercolors, they will just paint with burnt sienna and not use white paint. Instead, they let the white of the watercolor paper stand in for their lightest lights.

For a monochromatic oil painting, go as far as you can without white. Paint with just burnt sienna at the start of the painting, building up the dark shapes and letting the light of the panel or canvas show through where you need light. Paint additively with your brushes and subtractively by scraping away paint with a palette knife or by wiping it away with a piece of soft cloth or paper towel. After you feel you have the large shapes and darker values described, then add a little white to your burnt sienna and paint with opaque lights where you need them. Then go on to your lightest lights. In this way, you are building your oil painting from dark toward light. It may be helpful to follow this rule for a while and work from dark toward light when painting with oil paints. But remember, rules are meant to be broken.

For a monochromatic watercolor painting, make a light pencil drawing on your watercolor paper. Study where you need to preserve the white of the paper, then mix a light wash and paint it over the entire sheet of paper except where you need to preserve the white of the paper. Let that wash dry. Then mix a slightly darker wash and paint that over the paper, except where you need to preserve the white of the paper and the light of your first wash. Mix a slightly darker wash and repeat the process. In this way, you are building up your watercolor painting from light toward dark. Note that this is the opposite way we developed our introductory oil painting.

Please note that this method of working a watercolor, from light toward dark (going the opposite direction from a beginner's oil painting) simplifies the process for beginning watercolorists. It often results in overworked paper, which makes for a dull or muddy image. Eventually, you will want to throw caution to the wind and work directly into the darks.

The next step beyond monochromatic painting is to understand color in terms of color temperature. For the sake of instruction, let us say that we can take any two colors and call one color warmer and the other color cooler. This is obvious if we think about cadmium red and cerulean blue. Cadmium red is fiery hot compared to glacial cool cerulean blue.

Even within a selection of red or blue paint colors, we can say that one color is warmer and one is cooler. Comparing cerulean blue to ultramarine blue, we can say

that cerulean blue is cooler and ultramarine, which is more purply (another way of saying closer to red), is warmer.

It is also helpful to think about how colors are arranged in a rainbow. The coolest of blues may be near the vicinity of cerulean blue. As we move away from cerulean in our color rainbow, everything becomes warmer in each direction. Likewise, we can say that the warmest red is a vermillion fire engine red. As we move away from vermillion in either direction on our linear color scale, everything is cooler in comparison.

To reinforce the concept of color temperature, I often ask beginner painters to make a still life or landscape painting using two colors: ultramarine blue and burnt sienna. The ultramarine blue by itself is the coolest color possible with this limited palette. The burnt sienna by itself is the warmest color possible with this limited palette. If the artist is painting with oils or acrylics, they will add a white paint to the palette. If they are painting with watercolors, they will not add a white pigment, but they will again use the white of the paper to make lighter values. This limited palette, two-color-plus-white painting, is an exercise in mixing color and thinking about both color temperature and value.

In this exercise, when the student looks at a vase in a still life and mixes colors to paint it, they are asking themselves two key questions. Does the color that I am mixing need to be lighter or darker? Recall our five-square value scale. They are also asking, does the color that I am mixing need to be warmer or cooler? Thus, we can say that whenever we are mixing colors for a painting, we are trying to solve a two-dimensional puzzle. For the graphically inclined, we can say that the horizontal axis of the color scale is the value axis, running from light to dark, and the vertical axis is the color temperature axis, running from cool to warm.

It is important to remember that the act of painting has two parts. One part happens during the application of paint to the support. We do that with brushes, knives, fingers, whatever works. The other part happens during the mixing of paint on the palette. When mixing colors, we are always asking ourselves two key questions. Do I need to go lighter or darker, and do I need to go warmer or cooler? As much as possible, try to mix your colors on the palette with a palette knife. This will keep your brushes clean and prevent them from muddying your mixtures.

After the concept of color temperature is understood, we can move on to the concept of color relativity. Paint colors have absolute color properties, and they have relative color properties. A mixture of ivory black and white will always look gray by itself. But that same mixture, when placed near a different color, say brick red, may appear

to be more bluish because of the other colors around it. All colors work relative to what is around them.

When you are thinking about color theory, you may enjoy looking at the color prints of Josef Albers. He was an artist and educator especially attuned to color relativity.

An instructive exercise in color relativity is to paint with the so-called “dead color palette.” In oils and acrylics, this set of three colors consists of ivory black, yellow ochre, venetian red, plus white. With watercolors, I recommend that the beginning student does not use white as an added pigment but tries to rely on the white of the paper. The three colors of the dead color palette correspond to the three primary colors. Ivory black stands in for blue. Yellow ochre takes the place of a clean yellow. Venetian red takes the place of a clean red.

When you use this palette, mix the three “dead” colors the same way you would mix the corresponding three prismatic colors. Blue and yellow make green in prismatic colors. With the dead color palette, ivory black and yellow ochre make “green”. Likewise, ivory black and venetian red make “purple” and venetian red and yellow ochre make “orange”. If you paint a still life with this palette, you will immediately see how the colors work relative to each other. The black plus white makes a lovely blue, as long as other colors from this palette surround it. Remember, half the painting happens on the canvas; the other half happens as you mix colors on your palette.

Most students will not want to paint in subdued or “dead” colors for long. So, let’s brighten things up. A useful framework for building your instrument is to adopt the 6-color primary color palette as your starting point. With this palette, you will use a warm and cool version of each of the three primary colors. Your warm blue could be ultramarine blue. Your cool blue could be cerulean. The warm yellow could be a cadmium yellow deep, and the cool yellow could be a cadmium lemon. The warm red might be a cadmium red light, and the cool red could be permanent rose. When you first start out with this palette, your paintings will tend to look like fruit bowls with an explosion of bright colors. But be persistent and practice mixing to match the colors that you see in your still lifes, figure studies, or landscapes.

After you become comfortable mixing and painting with these six colors, you can add in other colors that you may find useful. For landscape painting, I recommend adding burnt sienna, burnt umber, sap green, purple lake, and other colors that may be convenient for you. A selection of 10 or 12 paint colors should be plenty to get you going in a good direction.

As you add complexity to your palette, it is useful to think about color harmonics the same way that a musician thinks about harmonics in chords and keys. A painting can be said to have a color “key” just as a piece of music is composed in a key that makes everything work together.

You will find that some colors make interesting harmonics, but the pigments are not as compatible as you would like. For example, the phthalocyanine pigments are very strong. They can overpower the other pigments in your palette as you mix them. Alizarin crimson may bleed through whatever is painted over it.

As you develop your palette, you may also try painting with different whites. For most painters using oils and acrylics, I recommend starting out with titanium white as it is readily available and inexpensive.

Once you get the concept of value and color temperature down, your mantra for mixing paint is “Clean Color Makes Light.” Your goal is to find light and not paint with mud.

With a few colorful paintings under your belt, you may begin to notice the emergent qualities of a painting. As I said, clean color makes light. An emergent and expansive sense of light in a painting can engage the viewer in a way that lifts them beyond just the comprehension of the image. The recognition of the quality of light in a painting is an important step on the path to soulfulness in painting.

A final note on paints. As I said, you get what you pay for. Expensive paints generally will use more and better-quality pigment, and better-quality binders. I recommend students take advantage of student-grade paints to save on costs.

Beginner painters will still struggle at this stage of their learning, even after they begin to understand what paints and pigments are all about. Building a painting is a complicated process that may take years of steady practice to perfect. As James McNeill Whistler said, It may take you 20 years to learn how to do something in 20 minutes.

I encourage students not to fret too much over the painting they are working on now. But if they are determined to advance their painting skills, they should think about where they want to be 100 paintings from now and 100 more paintings from then. There are so many factors and issues that go into a good painting that it can take years of effort to feel like you have a good sense of how to proceed. The more you paint, the faster you advance your art, and the more gems you will find.

Let's think more about how to build an oil painting. Let's assume you want to paint a still life. Take some time and set something up that is interesting to you. Set it up so that you can leave it in place for a while. Incorporate a variety of colors, surfaces, and shapes. Adjust the lighting to make it interesting. Next, think about what you are going to paint on. Do you want a smooth surface, perhaps from a plywood panel, or do you want to paint on cloth, like cotton or linen? Do you want to tint the panel surface before you start, or do you like to paint on a stark white surface? I recommend tinting your acrylic gesso with a little bit of burnt umber or raw umber if you make your own panels to paint on. Give your panels a couple of coats of tinted acrylic gesso and sand them lightly in between coats.

You will need an easel to hold your panel or canvas upright. You will need a palette of some sort to hold your paints and provide a surface to mix on. In my studio, I have a wooden kitchen table on wheels. On top of the kitchen table, I have a sheet of glass that came from a display case in a hardware store in Philadelphia. The glass is my palette. It is smooth and easy to clean and large enough to give me plenty of room for mixing colors. I recommend to the beginner painter to put small dabs of paint on the outside edges of the palette in the same order every time you paint. You can arrange your paints according to color temperature, as they would appear in a rainbow.

A palette knife or two for mixing and scraping would come in handy, as would an assortment of brushes. Oil painting brushes have long handles, so you can paint from your shoulder and stand away from your painting in order to see it better. I prefer soft bristles, either synthetic or sable, for small paintings. Hog hair bristles work well for larger brushes for larger paintings. I mostly use filberts, which are flat brushes with rounded edges. They are very versatile.

For oil painting, you will need two small cups, one to hold paint thinner and one to hold your painting medium. The medium is a mix of fluids that help the oil paint go on smoothly and dry quickly. Painting mediums have unique properties, drying faster or slower, being more or less sticky, and so on. Some mediums become very brittle after they dry and may be incompatible with painting on fabric. It is discouraging to see bits of your painting crack and flake off and end up on the floor. It is a sobering exercise to take an old oil painting that you have done on cloth and don't really care about and roll it up to see how it cracks and flakes.

As you paint with oils, the general rule is "fat over lean." In the early stages of your painting, you may use a little mineral spirits to thin your paint out (make it lean) so that it covers the canvas quickly in thin washes. As you build up layers, switch to using more medium, which contains oil, hence the "fat" in "fat over lean."

Back away from your paintings often to look at them from a distance. John Singer Sargent bragged that he walked 20 miles a day in his studio while he was painting.

Now let's build a watercolor painting. Recall that watercolors use the same pigments as oil paints, but everything else is different. Let's start with the same still life setup. The next step is to select your paper.

The quality of the watercolor paper goes a long way toward determining how the final painting looks. There are three types of watercolor paper. Rough has a pronounced texture. Cold pressed has a medium texture, and hot pressed is smooth. Heavier weight papers are thicker and can take more water and other abuse. I prefer to work on at least 140 pound hot pressed paper.

Under a magnifying glass, rough paper looks like a mountain range. Mountains cast shadows over the valleys below, so the identical painting on rough paper will look duller than the same painting on smooth paper.

Under the surface, paper acts like a sponge, absorbing and diffusing water. In order to put a water-based painting on the surface of a piece of paper, the spongelike paper must be sealed with something that resists water. Otherwise, the watercolors from the brush will just get sucked into the sponge and diffuse and mix with each other and create mud. That is why watercolor paper is coated with a starch sizing. The sizing allows the watery pigment to sit on the surface of the paper until the water evaporates. The more you paint and scrub on the surface of the watercolor paper, the more the sizing gets scrubbed off until the surface of the paper can no longer resist water, and everything turns into a soggy, muddy mess. Watercolors require a gentle touch. (Note the rule meant to be broken!)

Watercolor brushes have shorter handles than oil painting brushes because you work on top of your watercolors, supporting them flat on a table or perhaps on a board in your lap when painting outside. I use a large drawing board resting in my lap to support my watercolor palette and paper when I am using them outside for plein air painting. Invest in some large, flat watercolor brushes and learn how to use them. Some brushes have chisel ends for scraping. Other tools to consider include a toothbrush for splattering and a spray bottle for misting your paper and your palette.

Unlike other painting mediums, watercolors are very sensitive to atmospheric conditions. Painting on a warm, sunny, and dry day will feel very different from painting on a cold, overcast and humid day. For the latter, patience is a virtue.

Set up your watercolor palette in the same way that I described setting up an oil painting palette. The six-color prismatic palette plus additions works well.

I generally do only a little light pencil drawing on the watercolor paper before I begin a watercolor painting. Pencil graphite has different properties when wet, so experiment with different pencils. Some pencils are made specifically for watercolors, and the graphite will darken and spread when wet.

Some artists use resists, such as liquid latex or wax, in order to preserve white areas on the watercolor paper. After the painting has dried, the latex can be removed to reveal the white of the paper. In my plein air watercolors, I do not use any resists. I always keep paper towels handy to blot up the watercolor paint if it goes somewhere unexpected.

You can experiment with additives and other mediums with watercolors. Some artists add a little salt to their washes to create crystalline patterns. You can paint with alcohol if the temperature is too low for water.

I like to keep things simple with watercolors. A well-placed wash capturing a sun-filled sky is divinely beautiful.

I teach beginning students to work their watercolors from light to dark. At some point you may want to do the opposite and go aggressively into the darks first to keep them deep and clean. Learning the rules for beginners, and then learning how to break them will help you push your paintings farther.

There are three ways to mix watercolors. You can mix colors directly in your palette and then apply that mix to the painting with a brush. Also, you can put a wash of color down, let it dry, and then put a different color wash on top of it. This is akin to layering different colored pieces of glass. Finally, you can let a wash of one color bleed into a wash of another color and let nature take its course. Wet-on-wet techniques can be fascinating to watch when the paint is flowing, but often they are less fascinating when the painting has dried and the colors look dull or muddy.

Be a bullfighter when you paint with watercolors. Sometimes you must work hard to control the beast. Sometimes you just hang on for dear life.

Here is a riddle for you: learn to paint your watercolors like oils and your oils like watercolors.

As you grow in your understanding of painting materials and techniques, after you have painted many many paintings, after you have struggled and had breakthroughs

and struggled again, after you have faced your life with the same fearlessness that you face your paintings, then you may recognize more emergent qualities in your paintings.

The true secrets of the great masters are perseverance, humility, and honesty.

There are two parts to every painting: the creative design part and the seeing part. The creative part is fun, but the depth of the painting comes from the seeing part.

A safety note. I strongly advise art students not to smoke, eat, or drink when they are handling paint. If you do, inevitably you will ingest some pigment. Some pigments are harmless if ingested. Some are not. Ingested metal-based pigments may accumulate in the body as toxins.