The start…
When we start an idea, and since I am drawing portraits here for the ideation of character design or panels in comics or storyboards, I can't emphasize enough how you cannot start with foundation to help you find something new. New cannot grow from what we already do. If you have learned an art system, all that can be done with it has already been. These systems are foolproof ways of gaining insight into the world of creation, which is not a system. How do we start on our path to discovering the secrets of Nano or Molecular Biomechanics harvested? We start with basic math and science. From these basic concepts we then build and grow ideas from them, and if we are careless enough to know there are rules created to be broken, we might just find that something new. But it all starts with foundation for control, and foundation for change when error occurs, but don't lead your head with it or you will fall into a time and again trap.

Foundation first, if you don't know it, you have to learn it or the real job world will more often than not reject you. That is a bad way to try entering into the workforce as an artist. Unless art is in your blood and the art director sees raw talent that can be motivated, then you need, absolutely need to have foundation as your guide.

Preaching aside, let's get into the sketch routine of drawing and lighting consistently, characters from scratch. There was no time for the additional information of expression, but that is also going to be included in the DVD's.

The Sketch-fleshing out ideas begins with loose abstract concepts of shape, be they drawn in line, shape or form, the idea here is to search for something unique, something you wouldn't routinely draw. Scribbles help begin this process, use the other hand, throw a bunch of junk together and look for interesting, developing shapes, or find your own way. There has to be a way to break the mold of what you do all too often. If ideas are too radical, they can always be culled back to something manageable. But get radical!!!

All of the scribbles should be given some attempt of completion. Don't avoid one because it is hard to see something in it. That is when new styles form if you stretch yourself into making these things work. Then, Find the most appealing of the bunch, or the one that shows the most potential for development, and move into the 3 view...

CONTINUE DEVELOPING THE SKETCHES
DONT THINK-JUST EXPLORE

DON'T SKETCH → LIKE THIS
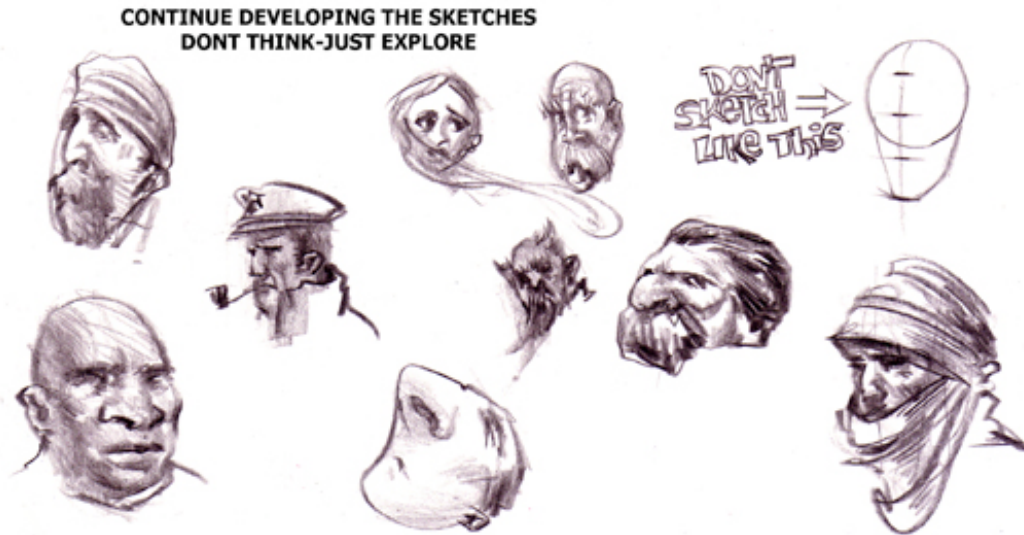
Fleshing out the form-This next step is where foundation is a must. If no foundation or understanding is there for the artist to fall back onto, then the concept can and more than likely will loose its strength as a design, or fall apart as the artist struggles to draw around the form poorly placing further features and such of our subject.

Structure is very important in this stage. Anatomy is important, but not as much as the understanding of planes, and basic geometric knowledge of the shapes the surface anatomy generates (which is still no excuse in the long run for not learning the anatomy too since the planes are a reflection of the anatomy!) We need to understand that a head is structurally planed, as opposed to a ball form or completely soft with no inner surface divisions clearly defined (that is unless you are in a stylized animation). The ball acts as a place holder for the specific geometry to come. A top, a back, two sides, a front and back are the first generalized planes to visit, the ones visible to the eye from this set of planes.

In the front, the nose cone, tooth cylinder, eye balls and wedges for the eye sockets, and forehead and chin blocks are the added to the mass. This inner structure is ideally what defines the volumetric character features, as opposed to the exterior line called the contour, that helps us read the immediate big shape of something regardless of whether it is totally lit or not. These two principals help us recognize someone at a glance.

Let me turn away from this process for a moment, what I just last defined are two attributes to keep in mind when we are looking for a likeness, or someone we recognize, the contour and the plane structure, or overall form. The form is lit with a high contrast light, creating a movement of dark shadows over the form defining it dimensionally, in art this is termed tenebrism. Regardless of the direction of light, the plane structures should still have some sense of recognizable identity of that someone specific.

Going back to the structure, once a concept of planes has been generated, they can be sanded down, that is softened to accommodate a softer general form structure, but begin rigid with the planes until this concept is intuitive.

I will typically light my concept ideas to retain 100% of the vision I had since I see it in my mind clearly, in color, moving or spinning as I need it to. Sometimes the idea is hard to conceptualize thoroughly, so I have to scribble a bit more to find it, but eventually I should be able to focus the minds eye-lens to seeing the vision or idea, an important trait to exercise, like a muscle, with exercises to help develop it.

The 3 view-We take the sketch and move it into the finished 3 view. Transfer the idea to a new cleaner sheet of paper off to one side so that the other 2 views can be drawn next to the first sketch. Once the original has been transferred over, horizontal axis lines are drawn across the page cutting directly atop on underneath each major feature as you need them to transfer the information to the other 2 views.

When designing your 3 view with lighting, make sure not to kill your shadow side into total black unless it is in the vain of a stylized comic, that is, describe as much as you can in the design process. Don't leave the details out of the design drawings, they are your guides for all your other drawings related to this or these particular characters.

This means that you will need to understand reflected light to develop a core shadow of sorts for further form understanding, as the core shadows are also planes, transitory planes that help you get from one major side to the next.
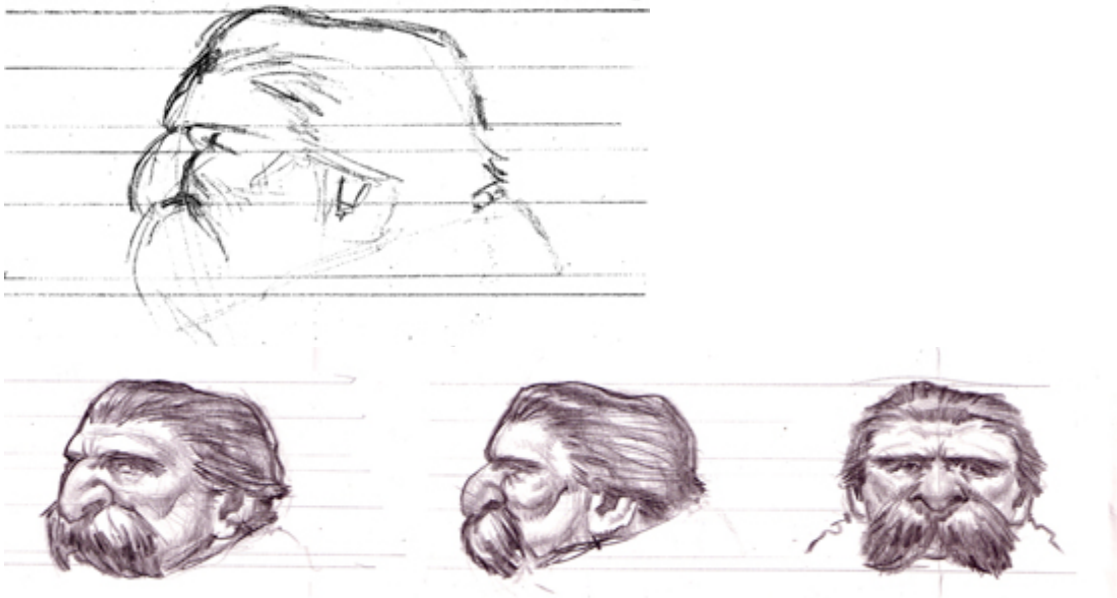
Some concepts to help keep proportions realistic-

Profiles-profiles generally fit into a square from the tip of nose, to top of the skull, to the back of the skull, to the bottom of the chin. These 4 points help us create the abstract notion of a squared proportion.

The ear fits in the lower left quadrant if the profile is drawn facing the left, lower right if drawn facing the right.

The top of the eyes and the top of the ears, the bottom of the nose and the bottom of the ears generally line up horizontally. Caricaturing the head bends this rule.

Dividing the skull into 1/3rds at the hair line, top of the eye brow, bottom of the nose where it attaches, and the bottom of the chin.

More fine tuning of proportions, from the top of the skull to the tip of the nose or base of the nose is the same or similar in distance to the bottom of the nose and the pit of the neck, or the sternum, and the same distance from the sternum to the zyphoid process. But this is for our figure discussion…

The eye socket is attached to the check projection line, creating the second profile contour of the face.
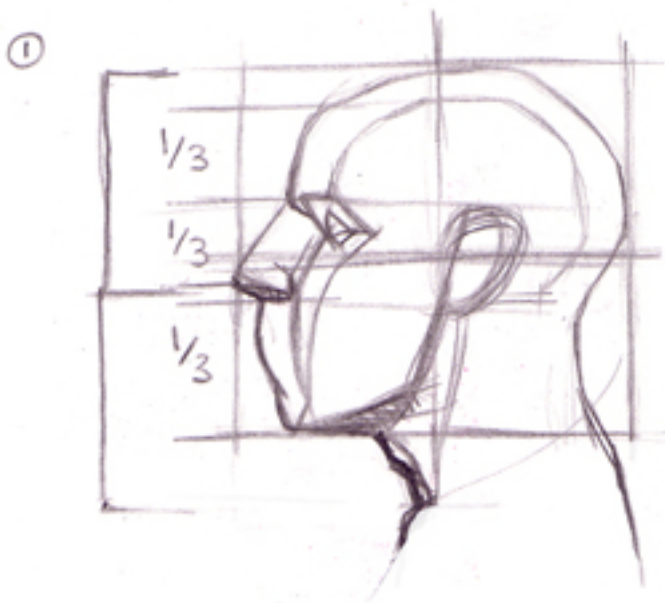
¾ view-most important is that the tip of the nose will normally touch the far cheek contour line. This will immediately resolve the issue of centering the nose, to balance the eye sockets and the corners of the mouth to the nose.

The mouth, or the tooth cylinder is projected forward, causing the center of the mouth to sit where we would not think if we just followed our standard center line. The brow, nose, tooth cylinder and chin all protrude forward into their own centerline that is anchored to the original centerline possibly if it was placed accurately from the start of the drawing.

The brow generally extends outward from the skull, but in rhythm stays flush with the brow. Caricaturing will exaggerate this concept also.

1/3rds Rule applies again for facial feature divisions with relatively no perspectival differences between major surfaces, i.e. side to front, side to back. Adding to what has already been said about the thirds concept, these lines are flexible, no one person really has ideal thirds one will generally be larger, compressing the other two into equal or unequal smaller units of measure. But, to keep features aligned, we need those divisions. The ears will still remain in alignment with the nose also regardless of what we do with those thirds.

Connect the nose to the inside eye socket between the outside edge of the inside wing of the nostril to the inner corner of the inside eye…this helps establish the nose cone proper and separate it from the cheek form.

Find the ¾ point side of the skull down the temple through the eye socket down the cheek, around the outside edge of the zygomatic arch down around the outside edge of the tooth cylinder, possibly passing through the corner of the mouth depending upon the character type, and down into the outer contour of the ball of the chin…

Hair line runs parallel with the outside corner of the eye socket when drawing it around down the side of the face to the top of the ear.
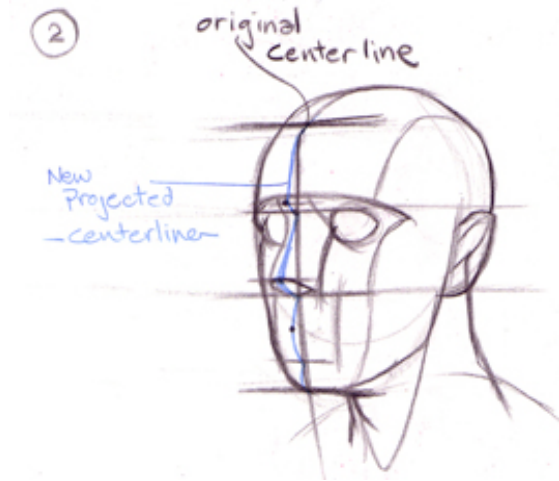
Front View-Start from the middle out. Make a center line, here is where the centerlines recesses are not visible other than through tonal shading. Starting from the center out means figure out the distance between the eyes first, this helps begin the likeness chain.

Generally there is one eye distance between the two eyes, and from outer ears edge to related outer ears edge is 5 eyes distance.

The corners of the nose or outside edges of the wings of the nostrils line up vertically with the tear ducts of the eyes.

The corners of the mouth line up with the centers of the eyes, or more specifically, the centers of the irises.

There is space between the outside corners of the eyes and the hairline or inner line of the ear. Laugh line in older people, properly termed the nasolabial furrow attaches to the middle top of the back edge of the wing of the nostril, curves around the orbital of the mouth and away from the mouth a small distance, roughly the distance of the tubercle of the middle of the lip from corner to corner.

Center of the lips, split line is generally half way between the bottom of the nose and the bottom of chin.
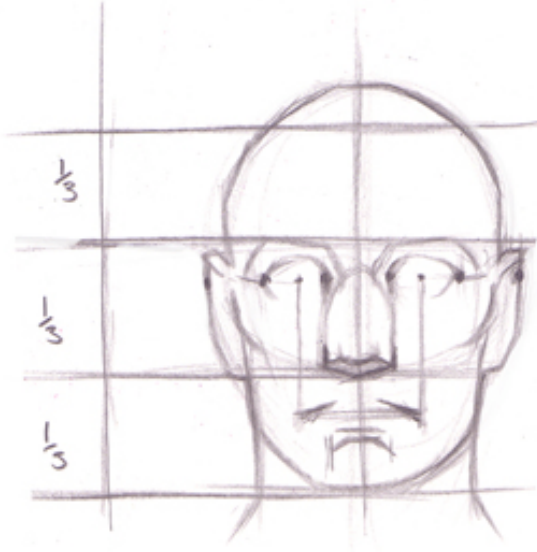
All of the above given are general tools for ideal faces and should be considered a fall back within your special proportions where necessary. Don't rely upon them as absolutes or you will fall into the rule trap, all your characters will suffer from the similarity syndrome. Originality suffers from rules stepping in first.

A key to remember about any face, ideal or fantastically designed, the contours all mirror one another to some extent, or the same shape pattern or form designs will find themselves in almost every form of the face. Profile really shows this trait off as the inner and outer profile contours of the front of the face, the nose shape, the eye socket shape all feel very similar.

When fleshing in values, make sure to start with general flat tones, filling the entire object with the objects local color to understand its general relationship with the values surrounding it, i.e. hair value to flesh, flesh to shirt, shirt to hair, hair to background or surroundings, background to skin tone, etc.

Then block in the appropriate value of shadows of all these object values, that is, if a light object has a dark contrast of about 3-5 values difference, it will be lighter in the shadows as opposed to the shadows of the middle and dark value objects that will still have a 3-5 value difference between the lights and darks, but appropriate to their local values, see chart for clarity of concept. The object is not the same value everywhere in the shadows, the shadow values are local surface value relative (see diagrams below) Diagram 1 shows the result of using one value for all different types of local values. The object appears to have more bounce light throughout as opposed to looking directly lit with strong shadows as example 2 shows.

1   **2**
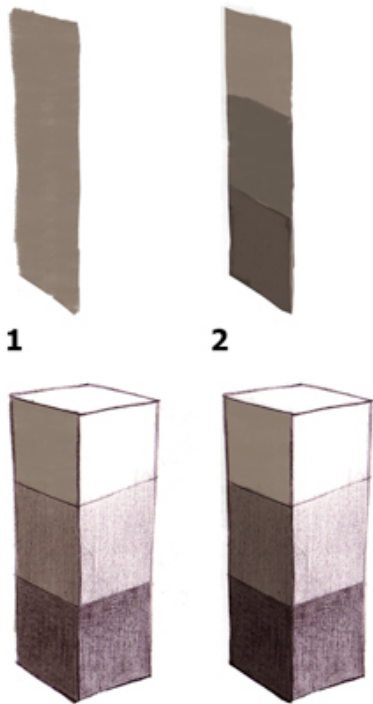
Building The Frames-

Ok, now that we know who we have, we need to build frames to prove our likeness issues.

Lets first go through a series of typical lighting conditions-
Top, Bottom, Front, Back, Side, 3⁄4 view lighting

Side Left   Top Down   Bottom Up

Back Light   Front Light   Side Right 3/4

This chart will help us understand in concept how to get around the visual cues in our head as to what to see in lighting. See the similarities in likeness regardless of the complexity of shadow pattern?

Lets pick 5 frames since I have more time to do this, and exemplify dual lighting, side lighting from an extreme, back lighting from above, low angle front top left lighting shot from the right and dramatic mood lighting, grabbing from our 3 view and from our lighting chart.

We will sketch the frames in Black and White to get the forms reading clearly. If you are new to drawing, I would recommend maybe starting with line as opposed to be blocks of value to learn proportions of things you draw. Losing information before you find it can develop bad work habits later on. But eventually you will let go of this line drawing concept in search of other ways to block in an image.

Once the drawing is found, the artist should be able to proceed right into blocking in the tones to establish whatever lighting he is looking for.

Let us put an organized working order to what we do here so we have a clear understanding of what to do if you have no working habits yet.

1. Block in-since we are unclear of several points in our picture, lets rough in the general block in of the image, to clearly understand where, how, who etc. stay loose, we are scribbling again for a bit.
2. Next we tighten up the image, placing any rules you need into the image to help at this stage, i.e. center line, 1/3rds, etc. block out using the understanding of perspective, the axis of the forehead and chin in relationship to their adjacent planes, locating the pitch and tilt of the head.
3. Fill in values of the object according to how we found them in our 3 view.
4. Color over the values with appropriate color/values to add colors to image, adhering to the color theory rules we will be going over shortly.
5. Mould the values of the forms with their colors or without, until they have the correct, or accurate perspectival read in the image to properly exude the correct lens tilt, as well as chipping out the appropriate plane structure in light and dark, perspectively strengthening the image through the lens.
6. Continue fleshing out the forms, rounding them as needed for additional subtlety. During this step we start introducing the details, the specific features etc. sharpening and softening edges to polish the image to a finish.

Color Theory at a Glance-First in the workshop I forgot to mention that I learned color theory from my mom and Gary Pruner, both exceptional colorists, when I was a kid, then Jim Kaneko, an old ex-Art Center Instructor, then my biggest push in understanding color came from Sebastian Capella. All that you read below is a combination of all these folks and many more including Craig Mullins etc. I would say that my biggest understanding came from the painter Sebastian Capella, who is the premier living portrait artist of Spain, a descendent of Sorolla's way of painting.

1. value=color A concept I would like to describe first before proceeding into the rest of the discussion. This is the best way to put it, black and white photos come from color reality and black and white photos are completely about value, therefore, color=value. It is very strange that an artist in training can sit down to a drawing and block out a great black and white depiction of what they see, but set in front of a palette of colors, cannot go back to what they see and copy it genuinely. Part of this inability arises from not knowing this new medium of color, whatever it be, i.e. oil, digital, pastel, etc. The other part of why we can do the black and white thing vs. the color thing is that the number of color choices we have and what we do and don't know what mixing options we have

sitting in front of us, confuses the issue of where to start. Maybe some of what is discussed further can clear this part up.

2. warm vs. cool-this is another mystery factoid we need to clear the air of to understand what gives when choosing colors. We need a color wheel to understand this point-yellow sits at the top of the wheel as what artists would deem the lightest value. Purple sits directly opposite the yellow, at the bottom of the wheel representing the darkest value in the color value chain at the purest point of saturation for the colors/hues. This is an artist philosophy, more clearly, this is the rule set the impressionists created to control the pure pigment paintings they were creating. This is not really how color works, but without a rule, anything goes or chaos in the colors as we say, or do we?

Within this rule set, we have the chroma scales I will mention below. In a high key of chroma, or closer to pure colors vs. values, we cannot mix both high contrast values with pure colors, because the purest colors reside in the middle of the value range. This means that if we want a colorful picture, high contrast destroys this chance of looking healthy, colorful, light and airy.
If we want what is called low chromatic pictures, or high contrast, we have to minimize what we do with color, or not put much pure color into this moment or suffer breaking or misleading the moment.
In a high chroma picture, the accents and highlights, if kept to a dash or the scale of a brushstroke, evoke the idea of a full value range with all the colors in the picture as pure as they be painted.
In a low chroma picture, pure color can be added as the accents of this key, giving the dark mood the appearance of more color than actually painted, or affecting the temperatures of a surface in a very sublime way…see Steven Assael's images below. Another tidbit I learned in color theory from Sebastian Capella, all colors that have yellow mixed into them are considered a warm of some kind, as yellow is a warm color. Therefore, the color green can also philosophically be considered a representative of the warm color family. I don't know what that does for your painting other than, it's a cool tidbit to chew on for a moment. This is more a trivial pursuit factoid than something totally artistically useful.

---If the light source we are using is warm, the indirect planes to the light source will appear cool to the eye, just as if the light source is cool, the shadows will appear warm to the eye. Maybe someone can further extrapolate this answer, but it has to do with the cones and rods in our eyes, and our fight or flight mechanism we all have designed within us. In order for us to see subtle movement, the eye needs to comprehend subtlety. If we are in a jungle, everything appears cool because of the vast amount of foliage surrounding us, the tree canopy, etc. but within the dark pockets, regardless of whether it is there or not, the eye will reverse the temperature and we will see warm hints within these areas. Part of that is also due to fact-dead leaves, dead branches, patches of ground, etc. are browns or dull warm colors, and will act to a certain extent as an influence to warm the uncertain areas we are scanning.

If the sun is our direct light source, the sky is the indirect light source. We have warm against cool in nature automatically because of this phenomenon. Indoors we have a similar situation, especially in the workspace or school room with fluorescents vs. direct lighting on our subject matter, halogen lighting, incandescent, etc.

Warm vs. cool
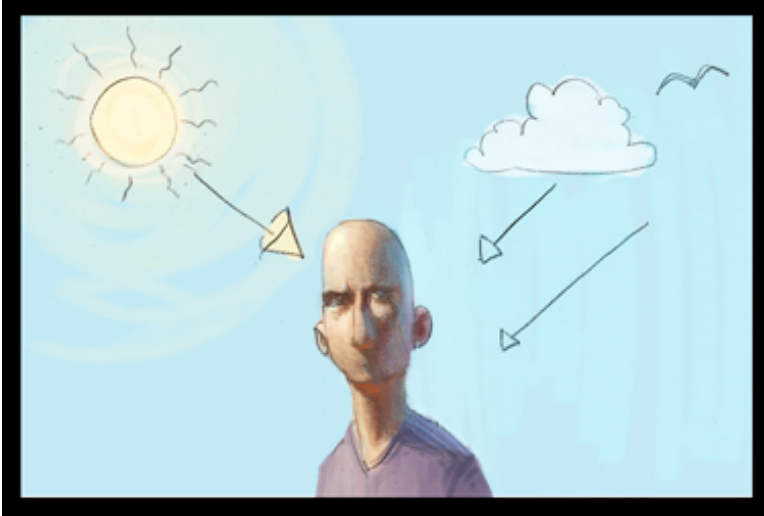
3. natural vs. colored light-as above, under normal or casual interior lighting goes within most business, warm spots, or the sun is the warm source light, and the sky is the cool bulb, as are fluorescent lights. It is safe to say that outside under normal lighting conditions we will see warm light directly hitting surfaces, and the blue sky affecting the coloration of the shadows and the indirect planes of the form.

4. In illustrating under these conditions, we have to control the amount of color we put into the image, using it as an artistic expression of mood or emotion, therefore we need to learn how to control these natural source lights, either by increasing contrast and decreasing color saturation, or replacing certain colors with more coordinated colors to a specific context. BUT we train to see what we see true to what it is, and record it as such to learn about subtlety of color, transition of color, indirect colors also known as the irradiance spectrum.

Colored lighting is not like natural light, in that the colors wavelength cuts off any higher colors from our visible spectrum, thereby tweaking surfaces to what we see as more of a monochromatic surface area, while still typically, the eye will reverse the temperature of what we see in the shadow areas. We have to be careful about this though, not to fall into too tight a trap with this rule, as it is just a tool to be used and flexed, not to remain rigid, as in some illustrations, it might not work to add the opposite temperature, but stay totally monochrome, or slightly analogous for the illustration to read the way the artist intended. And then breaking the rules even further because it calls for breaking is important also to remember, so long as you know why you broke it and how to fix it if it doesn't work in the direction you are intending it.

Colored light is simpler to work with, just remember that in your 3 view of your character design, you are also recording its general overall value plan, and as long as the colored lights adhere to your value plan with regard to light and shade, the character will not loose recognizeability.

5. bounce light or what is known as the irradiant spectrum is the light that fills shadows so we can still see recognizeable features. It is a product of nature, as all objects have a value and color to them, if they are lit brightly, and exist near other objects, each of these objects then become light bulbs unto themselves and cast their surface color out into the

world. They are not self luminant so the surfaces do not cast light too far into space like a bulb or the sun, but do affect its local neighbors tones, both in the light, but moreso in the midtones and shade tones. This rule also breaks or affects the warm/cool light cool/warm shadows rule.

6. local color vs. color of light vs. reflective light-this rule to help us equate the colors we see to a mixing formula of some kind as artists. Local color is the objects surface color under neutral conditions. A red apple is such, a cactus is green, the soccer ball is black and white, etc. The color of light is split into two parts, the color of the direct light, and the color of the indirect lighting conditions. Easier still to think, what temperature is the light, this will give a clue as to what color it is, this color/temperature is added to the local color to add more conviction of light influence.

With this said, I would like to bring up 2 conditions of painting, both legit, but both very separate concepts. The first is painting objects symbolically, or based upon local colors only without any light source influence what so ever (example 4). The second condition is painting the objects objectively, or influenced by the lighting conditions the objects are subject to (example 3). This is how fine art painters work when we look at their canvases, where as illustrators paint usually under the previous condition, and students paint with both concepts in the same painting more often than not, breaking an otherwise descent looking painting. The shirt of the sitter in the portrait painted is painted the color of the shirt locally, but the face looks warm. This is one of many examples of breaking this concept. Please take note of this and fix your intentions of painting what you see, knowing that there are directions to paint into and do affect how we see the overall picture content.

Finally we have the reflective light, or irradiance lighting conditions that also influence the shadows of our objects local conditions. With these 3 lighting conditions, the painter should have a better understanding of what the grays are, what the bright colors really are, and what the shadow colors are when observing what to paint.


3   4
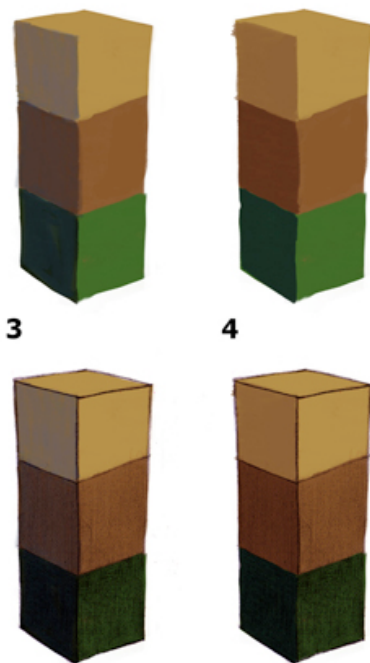
7. color wheels-there are two types of color wheels that work to the artist's advantage, the first is a mixing wheel, the second is a scale wheel. The mixing wheel is a Munsell wheel, Hal Reed created this Analagous color wheel that can be purchased at www.artvideostore.com .

This wheel helps mix colors easier, as you can see the root colors, where they stem from that is, and mix appropriately.

The second color wheel is a wheel I learned from Sebastian Capella.
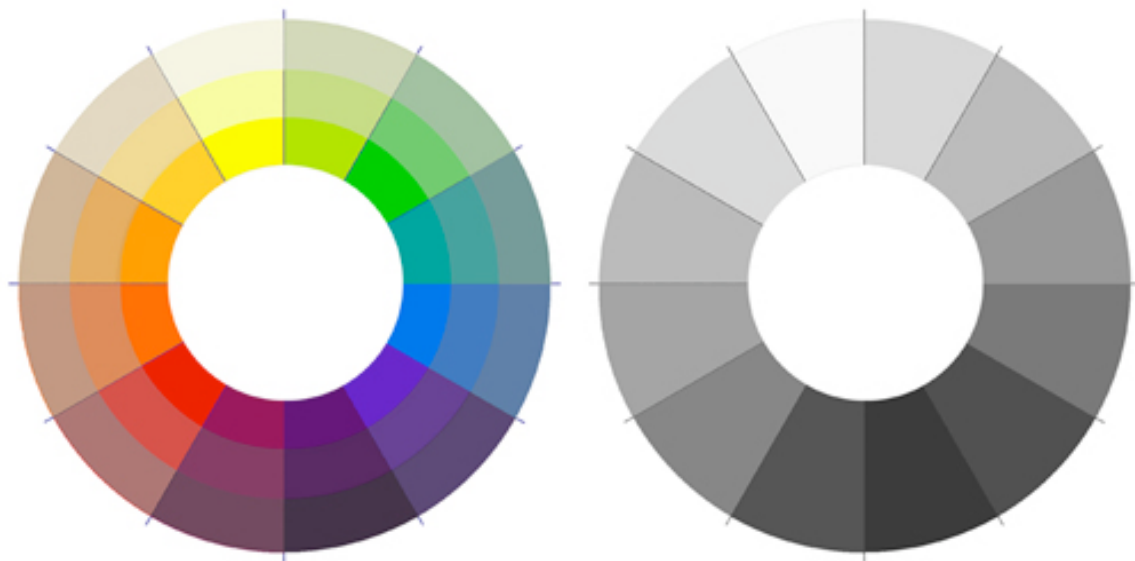
It teaches how to see color as value, as I have mentioned above, in 3 saturation points, from what is called high key of chroma to a low key of chroma. It teaches the hue value saturation relationships of the color spectrum, and is very calculated. When we paint them, which is the only way to make them since it is about the experience of mixing the colors to see them correctly, we train our eye to understand what color is on a scientific

level, which actually helps us completely on the intuitive level when practiced enough to really understand the concept. The examples below show both wheels.

8. hue, value, saturation-the 3 major properties of color, there is also temperature and texture(paint depth and transparency), but for simplicity, we will stick with the 3 primary properties. Hue-the color name, red, blue, green, etc. Value, the lightness or darkness of the hue, based upon the white to black value scale. Saturation or Chroma is the vibrancy or dullness of the color. When judging these three properties of color, first and most important is the value, judge it accurately, as it would be the value of your black and white drawing. Next, what kind of saturation do I want to use in my picture, high contrast low chroma, or high chroma low contrast…? Then finally figure out the color you are using. The color or hue is the least important of the three to get right, unless you are dealing with a graphic design, or logo…

9. mixing-mixing colors is one of the big hang-ups of most would be artists. How to do it….all this confusion, with all these colors to choose from. The basic thing to remember is that color is broken down into 3 bands of color, the primaries, and 2 other agents, a toner and tinter or black and white. Red, Yellow, Blue, Black and White is the primary spectrum and with these colors the secondaries and tertiaries can be mixed. Therefore, when building a palette, stick with this concept when purchasing colors, and then buy additional colors as conveniently needed when we don't want to work hard to mix them. I do not recommend starting digitally unless you start with Painter and you use the mixing board where it does the best job possible doing what paint does in a subtractive mixture system, vs. on screen which is commonly known as additive mixing. Problem with digital painting is that without color control, the artist is left to these monster sized color charts that have too many choices. We limit everything we do in painting classes to control the situation effectively down to just a few major problems to solve vs. compounding them with too many at once.

Digital cant do this, but Painter did as best they could. With a traditional teacher and painter, any student can learn digitally, but the reality is that there is so much subtlety in mixing real paint, that the understanding of how colors work really does need to come from the traditional platform. If nothing more, just to make color tiles to learn where colors stem from, or how they are formulated to make for better formulated images, which every painting is under the guide of a formula or recipe of some kind.

10. the idea of spectral colors for added interest-this concept is a bit confusing, but if you can understand white light conditions, then it is understood that all light exists simultaneously to produce this condition. If this is the case, then we should be able to paint every color or temperature everywhere in the picture where our subject is directly lit with white light, adhering to the bigger picture lighting/temperature plan. Steven Assael (below), Nicolai Fechin, Rembrandt, and a few of the amazing Chinese painters are the only small group of high minded high brow artists that understand or understood the concept well enough to paint it. It is extremely difficult to do, but when done well, it makes a normal contrasty picture jump with so much color life on a very sublime level. When photographed, the image will look absolutely real although it was not painted to a degree of realism that the photo captures. The reason why these artists paintings cannot photograph well, its all sublime on the surface. It's about manipulating paint, and the intellect in doing such takes a very high minded thinker to control as the above mentioned painters are/were this.
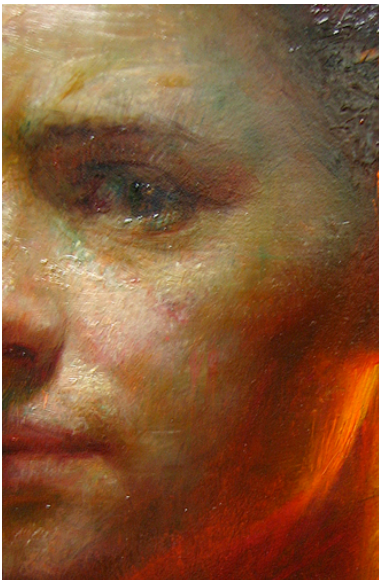
Coloring the Panels-since we have created these panels in gray scale, it should be easy to use the above formulas to color the image. Following the color=Value rule, if we pick colors that match the gray values we have generated, then coloring the image will not be difficult. If the values don't match, it will be optically noticeable when laying one over the other. STOP, don't try and mix them together, mix a new batch of the color until it works with its value, then apply it to the image. Anything bad done to the image will amplify other mistakes to be had since the eye bases each new objective on what is seen already.

The rest is about finishing a piece of art, and I am not going to spend a lot of time discussing that since that is a matter of taste and would require another 22 pages to complete.

I hope these above mentioned rules/tools can help improve your working routine positively.

Thank you and please visit **Studio2ndStreet.com** for more information on classes, tutorials, workshops, and events.

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