# Drawing a portrait with likeness

First a little disclaimer: Many times, when I draw a portrait I don't get the likeness correct, even for me this is an ongoing learning process. Here I collected what I found out so far.

The method in this document is intended for drawing a live model, but you can also use it for drawing a portrait from a photo. The basic idea is to work from inside out starting with the eyes and then to add other parts of the face. That said, there is a tricky question to find out first: where will the eyes be on the canvas?


To find out where the eyes will be on the drawing surface we need to start to figure out the overall composition just for the location of the eyes, and with that, we can return to drawing the eyes, etc. In the figure to the left, you can see a couple of examples of how to decide an portrait composition. Often the eyes are in the middle between the top of the head and the chin. When you are planning for the layout at this stage, it is better to draw very lightly.
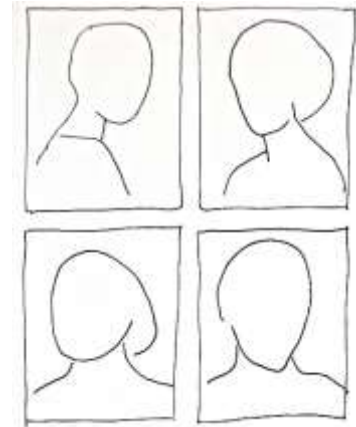
Before drawing it can be good to establish where the horizon is because if you know this from an early stage, then you can avoid surprises later.

The horizon is always horizontal.

- When the model is drawn from below then, the horizon is low on the canvas. See the first image to the right.
- When you draw the model in front "of the horizon" then the part of the face that coincides with the horizon is also horizontal, see the middle image to the right.
- When you draw the model a little bit from above then the horizon is high on the canvas, see the bottom example.
- When the eyes are equal to the horizon, and the face is drawn straight from the front, then you should look with only one eye at the model if it is a live model. Often this is what many starts practicing when the start with portrait drawing. It is easy to believe that frontal portraits are the only type of portrait that you need to know but that is not the case. I suggest that you start practicing drawing portraits from different sides so that you are not stuck into drawing only one kind of view.
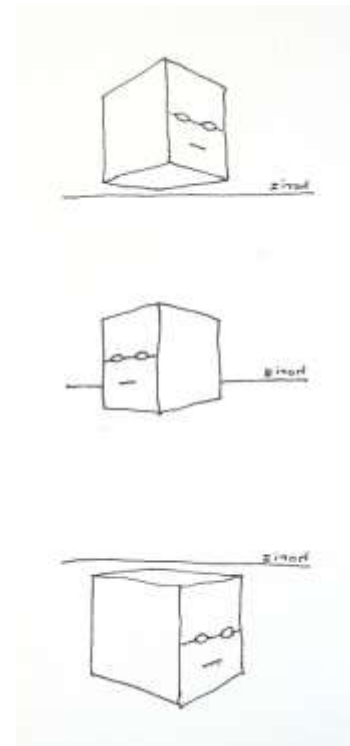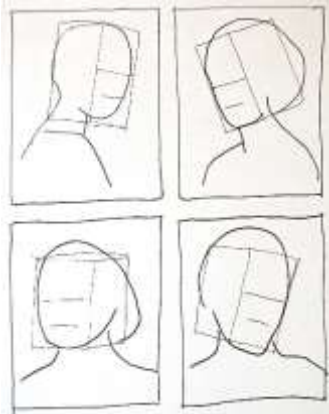
If you imagine that the model got a box over the head, then the mouth must follow the perspective of the box. You can draw a box lightly at the place for the head to help analyze the perspective of the portrait. If the bottom of the box is the kin and the top of the box is the top of the head, then the eyes will be in the middle on the front side of the box.

Now you can sketch a line for the place of the eyes. Don't draw this line too hard so that you can draw other things over it. Try to make the length of the line to be exactly as long as the distance from the outermost eye corners.

If you paint with watercolor, then often you let your paper lie horizontally on a table, but this introduces a parallax. See the image to the right. Many times, especially when starting drawing portraits, it is easier to let the canvas be standing vertically.


The bone between the eyebrows is called glabella in Latin.
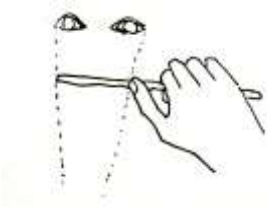
Hold a pen or paintbrush in your hand and stretch your arm in front of you. Look along the paintbrush with one eye and hold the brush equal to the pupils of the eyes of the model. Let the end of the brush be in front of one outer eye corner- the first landmark, and put your thumb on the brush at the other eye corner- the second landmark. Now you did your first measurement.
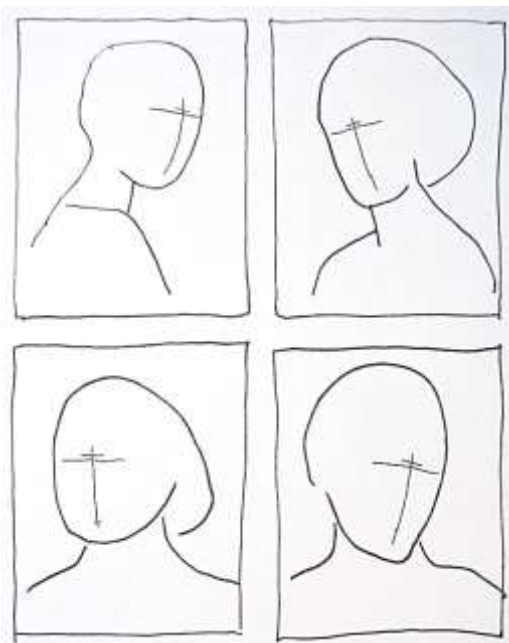
Now leave your thumb on the brush and turn it 90 degrees. Still with the arm stretched, look along the brush again and put the tip of the brush at glabella - the third landmark - and ask yourself "what landmark of the face is the thumb at?" Sometimes this is easier to do with one eye only.
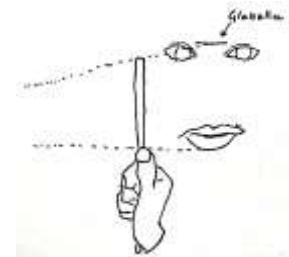
On your canvas you should measure the distance between the eyes, that is the line you drew, and use that distance from glabella and down to figure out where the same feature of the face is that the thumb was marking. At this spot, you make a "note" of the feature, a little line indicating what feature should be at this spot, draw just enough so that you can remember what you should draw at this spot. Later you will come back and "connect the dots." So far this is the basic method for creating likeness.

Glabella is above the eyes between the eyebrows. Perhaps you will need to guess the position of this line.

In the next step, we will use the eyes as a measurement tool as well. The distance between one outer eye corner – the first landmark - and the next eyes inner corner – the second landmark - is a convenient measurement. Make the same comparison similar to what you just did with the eyes. At what part vertically is the thumb? Make a note. Move on. Decide on a distance between two landmarks that you already made notes. Measure the distance on the real and then copy the measurement to your drawing.

Observe the vertical line between the eyes down through the nose over the mouth and chin. If you see the face from the front, then that line is a straight line. From the side this line is curved. Try to sketch of this line. From this moment in the drawing process, the challenge is to find something in the face that you already drew that you can use as a measurement for another part of the face.

In general, this is what you are trying to do:

1. Find two known landmarks on your drawing that you can use as a measurement and measure this distance on the model.
2. From one known landmark find a new unestablished landmark with the distance equal to the distance between the first two landmarks.
3. Make the same comparison on your painting and then draw the new landmark.
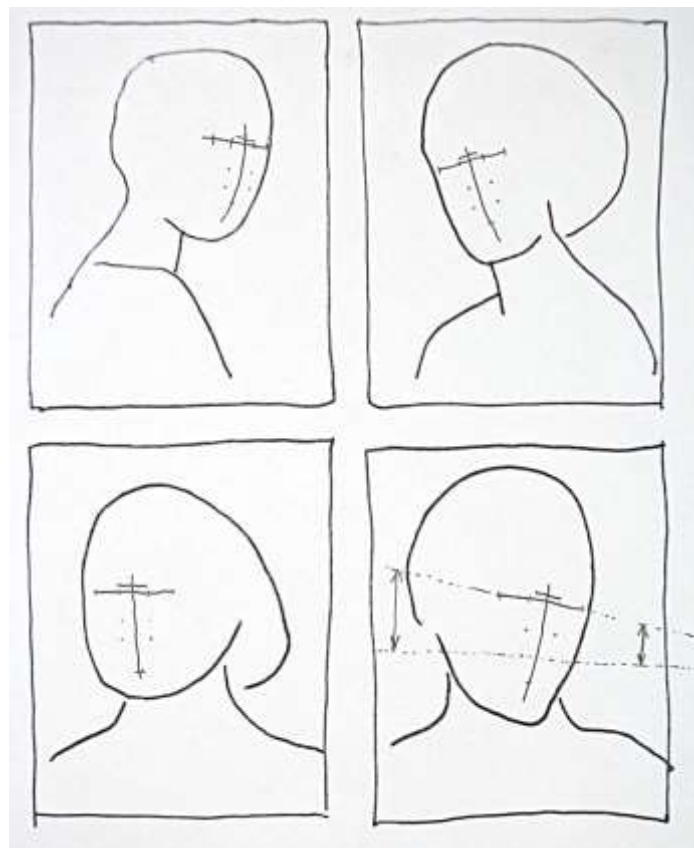
Using this method, you are gradually drawing landmarks further out from the eyes. Sometimes it is not so easy to measure accurately especially with the distance between smaller features. The thing with perspective is that some of the smaller differences are vital for how realistic the portrait appears. The aiming line of the eyes compared to the aiming line of mouth is such thing. The nearer the two lines are towards the aiming point, the shorter actual distance there should be between the lines. Even if you cannot easily see this IRL, it is good to reflect on it. Even if you make just a tiny effort to mimic this, it is better to get those angles deliberately figured out rather than just letting it happen by itself.

There are points in the face that you could try to concentrate on to get the most likeness:

- The distance from the glabella to the inner corners of the eyes.
- The inner corners of the eyes compared to the nose wings.
- The distance from a line under the nose to the upper lip.
- The width of the chin.
- The distance between the chin and the lower lip.

At this point, you have drawn many landmarks, and perhaps you are happy with what you have, or there is something wrong. In that case, try to double check your drawing against common measurement relations:

- The distance between the eyes is many times (but not always) equal to the size of one eye. If your model does not have this relation, then you need to look carefully and bring over the relation that the model got. For example, the model might have smaller eyes and bigger space between the eyes.
- The distance from the chin to under the nose is often one third, then from under the nose to glabella is one third and finally from glabella to the hairline is one third.
- From chin to eyes one half and from eyes to top of the head the other half.
- In a face viewed from the front, the pupils often line up with the hooks of the mouth.
- As a rule of thumb "boring areas" are often made smaller than they are in reality. Do you know that you don't fancy the area between the nose and the ear, then perhaps you made that distance smaller than it should be?

So far, we talked only about relative distances. It is also possible to measure with the help of angles. If you hold the brush with a straight arm aiming along the nose of the model, then you move the arm (keeping the angle) to your canvas then you can see if the angles meet up. This method will not work if your drawing is lying on the table. If the canvas is vertical, this works like a charm.

Now you got plenty of landmarks placed at the correct distance from each other, so it is time to start working on the form of things. Look at the form of the eyes. Here again, you should consider perspective. If one eye is nearer to the perspective aiming point, then it should be slightly smaller than the eye further away from the aiming point, just slightly.
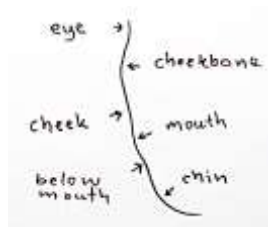
"Normally" a human body got no straight lines anywhere. Look for straight lines and try to curve them up ever so slightly. Search for the points in curvature where the curve is switching from going outwards to going inwards. On the left, you can see a curved line. If you look carefully, you see that it curves outwards and inwards and each segment is curving out or in because of the underlying bone structure of the skull. Is each of the curve changing features placed at the right distance from the eyes, nose, and mouth?

The eyebrows are not crucial for the likeness but pay attention to the form, direction, and perspective.

Perhaps you followed the instructions in this document so far, but it still does not look right. Why is that? Many times this is because you need to practice a lot of portraiture drawing to get better at it. If you are lucky or have talent, then you use less time. If you are normal, then you need to practice more often.

Often you missed small differences between the reality and your drawing. To find out what these differences are you can use an image program on a computer to show you what the differences are. If you got access to a computer, then you can use programs to show you the differences. The idea is that you take a photo of the model you are drawing and a photo of your drawing and these two photos you load into a computer. In the program, that we will talk about in a moment, you put the photos on top of each other (half transparent) to reveal the differences.

The differences are the reasons for that your drawing is not having enough likeness to the model. This method is good because it makes it possible to see the differences so that you can learn from your own mistakes without the help of a teacher.

I will explain the image comparison method in GIMP (Shareware) and PhotoShop. GIMP is great because it is very inexpensive. PhotoShop, on the other hand, is much more expensive but if you already have it why not use it?

How to compare two images in GIMP

For this exercise, I will use an image of Dianne Cowern. She is a YouTuber that promotes science for young people, and that is so nice and since she seems to be such a nice person I wanted to make a portrait of her. That turned out to be more difficult than I had anticipated, so that is a good material for comparing my drawing attempt with the image of her.

1. Search for "GIMP drawing program download" in Google. Find the installation that suits you. If you like GIMP then donate money to them. I donated 20 dollars myself. 😊
2. Launch GIMP. This is the window that will open:
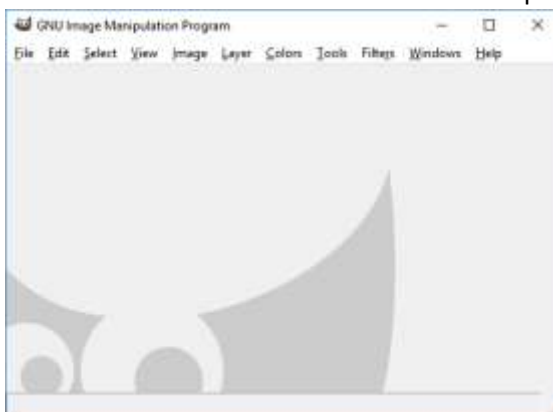
3. Under file select Open… and select the original image of Dianna Cowern (Or your original that you are using).

4. Now the original image is opened in the bottom layer of GIMP. In the file menu select "Open as layers…". Select your drawing. In my case, I select my "failed" portrait of Dianna. Now the original image is not visible anymore, and we only see the drawing.

5. Select Windows → Dockable dialogs → Layers
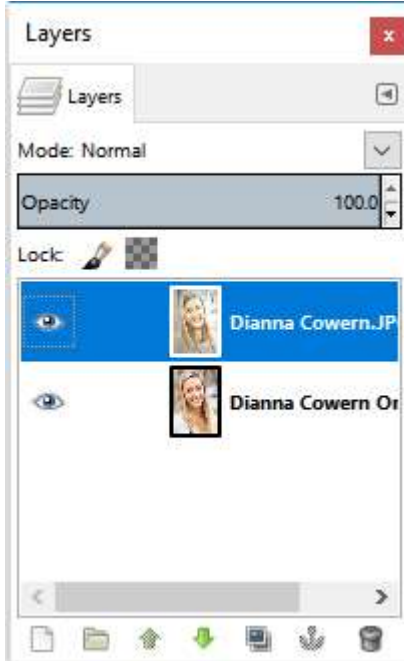
In the layers window, you can see the two layers. The bottom layer is the original of Dianna, and the top layer is the drawing. Click on the top layer. Then hover over the field marked Opacity. You will notice an arrow up icon. Drag that to the left.

6. When you change the opacity of the top layer, you will start to see through your drawing with the original beneath.
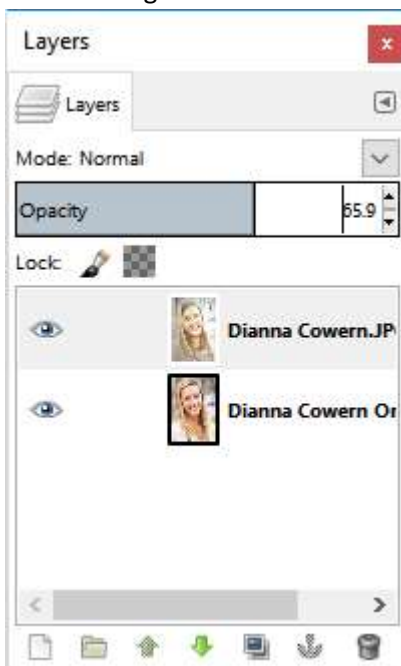
Perhaps you find a nice see-through level of 65%, experiment with that.

7. Here is an example of the chin line.

On my drawing, the chin line is a much broader and straighter line than on the real Dianna. She got a more curved line in reality.

8. I made her right eye (as seen from the observer) too high. It became almost one third too high.


9. I chopped a substantial part of her forehead.

How to compare two images in PhotoShop

1. I suppose you own a copy of PhotoShop already and that you installed it.
2. Start PhotoShop
3. Select File → Open… Select the original image of Dianna.

4. The image with open and it can look like something here below.
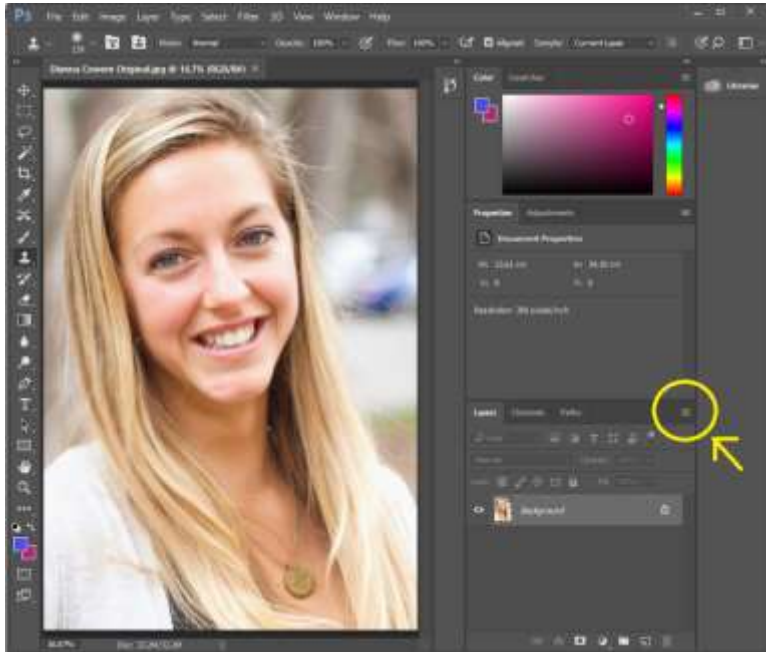

5. Now open the second image, the image of your drawing. Now the PhotoShop window looks like this:
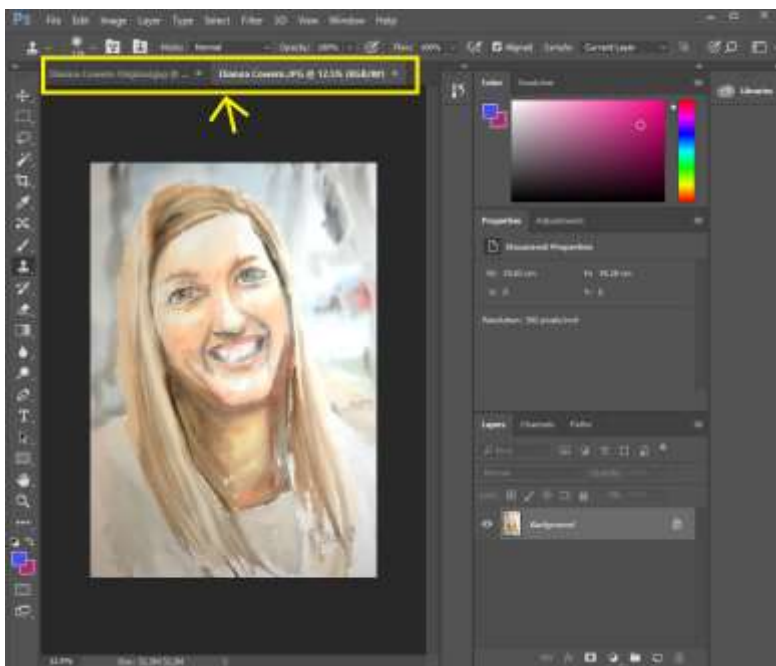
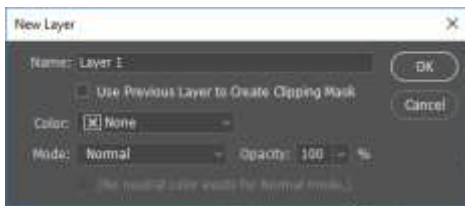Observe the two tabs with the two images open next to each other.
6. With the drawing image active use the menu item Select → All. Then in Edit → Copy. Then activate the original image in the tab bar we talked about before.

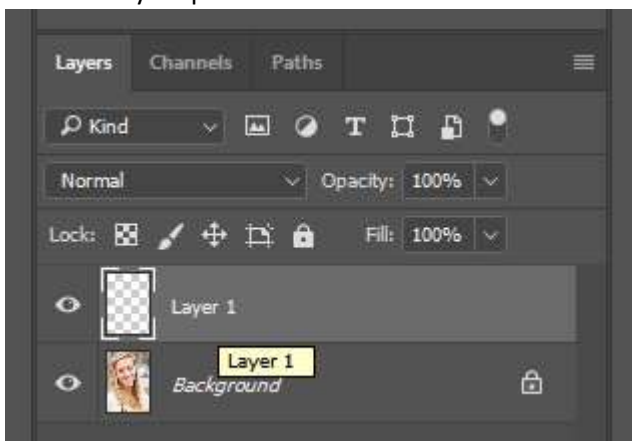7. Find a little tiny menu belonging to the layer section of PhotoShop.
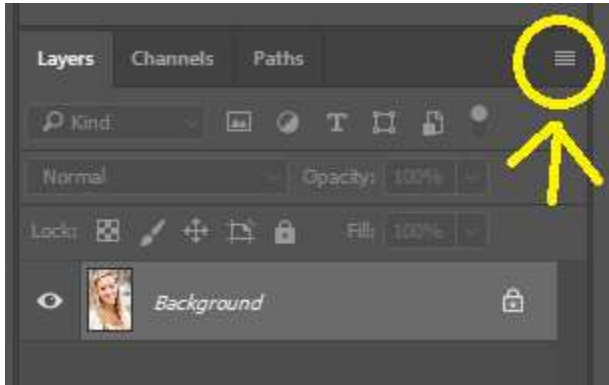
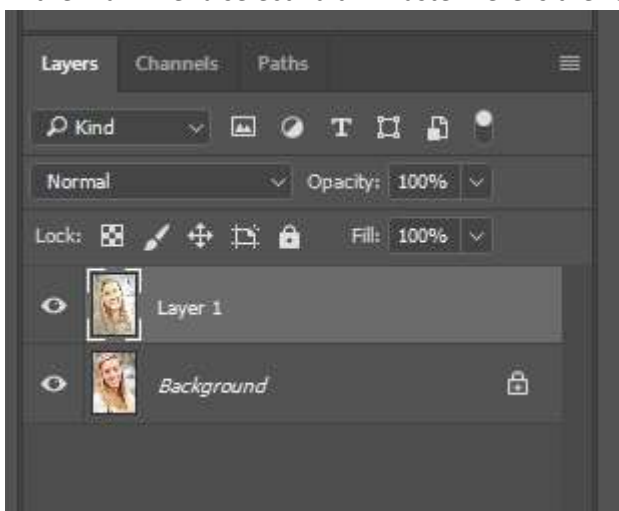
Expand this menu. Select "New layer…".

8. Press OK

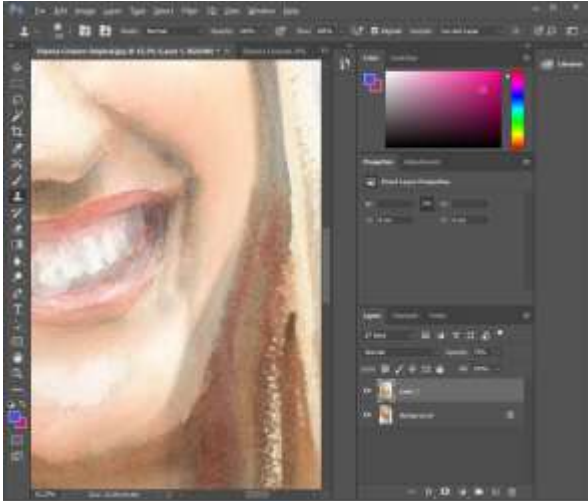9. Now the layers panel looks like this:

10. In the main menu select Edit → Paste. Here is the result:

Now in the opacity field, you change the opacity. Press the drop-down menu and then drag to the left. Release to set the value.

11. At 73% it looks like this.

Good luck!