30 Day Portrait Drawing Ultralearning Challenge

Goal: I want to see how well I can improve my portrait drawing abilities within thirty days of deliberate practice.

Limitation: I'm going to focus on (although not necessarily restrict myself to) black and white, graphite portraits on paper. I'm not going to do color, painting, graphite, ink, etc. (although I may explore, progress permitting)

Plan: I want to restrict this challenge to 30 days. I will begin June 27th and end July 27th. I also want to make a goal of doing 25 hours of drawing every single week. This works out to 5 hours per day, which gives another 3 hours per day for calls, language lessons or work.

I want to save every portrait I do and use this space below every day to journal my thoughts about the challenge and how it is going. I can then upload this later to provide documented records, provided I'm confident in the end outcome.

Learning Method: Right now I want to focus on a 3-part learning structure which will be simple to start, but may evolve as I decide I need more practice and refinement:

1. Full-portrait practice. This involves spending at least an hour trying to produce a very realistic looking portrait—taking time, shading, doing all the things to make it the best I can. I think this will be my main way of measuring progress and a good way of assessing what needs work.
2. Quick portrait practice and drills. Here I want to focus on faster efforts to do drills to focus on improving aspects of portraiture faster than I could if I focused exclusively on higher-level practice. Given how I'm going into things, I want to focus on a couple areas:
    1. Quickly getting the likeness + comparing via transparencies
    2. Outlining features to get general proportions and lines correct
    3. Drawing facial features independently of each other to practice line drawing
    4. Shading simple outlines, working on hair, skin texture, beards, etc.
    5. Tonal matching for a picture
3. Reading and tutorial-watching. Here I want to study other people who paint portraits, investigate their techniques and follow any tutorials they offer. I'm going to spend less time here, but I think I should spend some time, since it prevents missing any standard improvement opportunities.

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Practice Journal

June 27th

Today I did a self-portrait which took roughly ~40 minutes, the rest of the time I spent doing line drawings of fairly easy pictures and then comparing them using the computer to the originals to see how my drawings deviated from the "correct" ones.

I don't think my drawings are too bad—they're off in some cases, but not by huge amounts. A couple problems I've noticed:

1. Correctly matching the horizontal eyeline. Sometimes I place this askew of the photo, which makes things seem off.
2. Correctly sizing objects. My eyes and noses tended to be not too bad (although I tend to draw the eyes too big as a bias). However drawing the ears or features by the back/top of the head tended to be off by much more, probably because it's harder to see the size relative to something nearby.
3. Relative width of the face is something I often misjudge. My faces tend to be wider than the actual ones, and I've done this for both portrait and 3/4 views. My self portrait is a good instance of being off because of width.
4. Eye shape could use work. Although it wasn't a priority for my drills today, I'm often wrong in the shape of the eye somewhat. This makes a big difference in the look of the person or the expression.
5. I'm not good at smiling faces or changes in facial expression. Definitely working on facial expression will be important, since I'll want to be able to draw an expressive range of people, not simply people sitting stonefaced.
6. Tones and blending are terrible. I was aware of this before the challenge, but I had assumed my problem mostly lay with incorrectly sizing features or proportions. I do think that's a bit of an issue, but I think being able to beautifully shade and match tones will also create a big improvement in my portraits.

What should I work on next?

I think I should continue to do the regular line drawings, but it gets a bit tiring, so tomorrow I'll also introduce some specific feature drawing. In particular, I'd like to work on eyes, so I'll try to draw in detail an assortment of higher resolution eyes to see if I can really get the shapes and feeling down correctly.

June 28th

Today I did a reasonably good drawing of Halle Berry. The portrait was also one I got mostly right when I did the line drawing, so I thought it would be a good test of my ability to do a fully finished one.

My problem is still that I have a hard time of judging proportion and putting the features of the face in the right position. This breaks down into a couple key problems:

1. Head shape, particularly relative width. I sometimes draw faces too wide or too narrow. This is a hard skill and I have a difficult time matching the correct proportions of the face. This is often the first step which makes further alterations much harder to assess.
2. Position of the eyes. I often screw up the relative positions and sizes of the eyes. This is important since it contributes a lot to the expression on the face, and if they're off slightly the face looks wrong.
3. Ear and hair. This seems to be related to getting the overall head shape wrong, but it is more pronounced since the ear only has the back of the head or side of the head to compare to as a reference point. Any skewing here is more pronounced in the final image whereas lips, nose and eyes are more constrained since errors are more "obvious"

Doing the line drawings has been helping, but I still struggle a lot, drawing and erasing repeatedly to try to get the perfect match of features. This is frustrating because it often feels like I'm juggling many attributes of the face at once. A slight mistake in placing one element screws up all the rest and it often isn't obvious where the rest are until I put them all down and notice the face looks weird.

I'm also not entirely good at figuring out *what* is wrong when the face doesn't match. Only on some of my examples was I able to tell that I made the face too wide or narrow. In most cases it just looked "off" without being obvious that something was out of proportion.

This makes me think that getting the first issue correct: overall head shape/width, might be a more fundamental microskill to master quickly. If I could quickly do hundreds of head shapes/widths, I could get a decent level of accuracy here which would make the second weakness—positioning the eyes, nose and mouth, much easier.

I'm trying to think about the best way to test this. Right now, I think the method I have been using—drawing the picture and comparing with the reference photo probably isn't a bad idea. I just need to do it a lot faster. Do 20 per page with at most one minute per drawing, photograph, align, redraw over mistaken ones and repeat.

My goal will be to do this for 100 drawings, which I expect to take about 2-3 hours. With my one full portrait, that should be roughly the right amount of time to fill up the five hours for the day. For each drawing, I will do the following:

1. Draw the general shape of the head. I will score myself particularly on whether I can get relative width correct. If the subject has hair, this must also be drawn in, with the part of the face clearly separated.
2. Mark the eyeline and overall eye position, nose depth and lip span. Put ears and ear size if there are any. The goal isn't to make a picture which resembles the main feature, so stereotypical or simplified representations are okay.
3. After twenty, take a picture of the paper, add in all the images done, fit them to the picture and then redraw the originals on paper to fit the corrections.

June 29th

For my finished portrait today, I tried doing the Keanu Reeves picture I had done earlier as a line drawing. The picture didn't turn out too great as I missized the eyes while redrawing. I didn't notice until after I had already shaded, by which time it was too late to notice my mistake.

I did 60 quick sketches in blue ink and corrected them with red ink after overlaying the reference photos in GIMP. I do think this is a good method to get over my inhibitions regarding drawing and to do things more quickly. At the very least, I'm getting tons of rapid practice, even if the practice is fairly course grained.

One worrysome aspect of this type of practice is that when I get the quick sketch "correct" it rarely looks even close to the reference photo. There's just too little detail to match it unless the face is particularly distinctive. However, I do think I've gotten better at quickly sizing and positioning facial features as a result of this drill.

What's next? Well, I'd like to finish another two sets of the quick drawings with 20 to a page. Then I'll try switching back to the line drawings to see if I've gotten any better at it. Another option might be to increase the size. At 20 to a page, I can only represent deviations from the average by slight variations. The fluidity of my sketching masks a lot of mistakes so I can see that I was "inside" a line, but only vaguely so.

I think after I finish more sketches at this scale and get good enough at them that I'm only making minor errors, I should move up to doing 4 per page. This will roughly double the size of the images, but it should be easier to notice deviations in GIMP and harder to hide errors because of a loose style.

Really, I think the goal should be to have somewhere in between my line drawings and quick sketches, building up as it were from getting the coarsest representation of the face and matching features with relatively low sensitivity up higher and higher until I'm doing fairly full portraits.

Doing the larger line drawings in pen is another good idea since it forces me to be committal and not constantly erase/redraw/erase the strokes I'm making.

It's clear that getting the proportions and angles correct would get me about 85% of the way to a great portrait, and that details like doing the hair, shading the eyes, etc. can probably be fixed on their own just by doing the main drawings.

June 30th,

Today I did a fairly good main portrait. Although the eye is a little off, it looks good as a whole, with the general contours and shape being done well. Once again—getting the outline and positioning is the biggest challenge—when I have those down, I'm much better at filling in the details to an acceptable level.

Having finished 99 quick drawings, I'm going to move to 5-minute drawings a la the line drawings I had done earlier. While there's some merit in the very fast sketching, they're so loose that it's hard to make a real assessment of my abilities once they're within a margin of error. I might bring them back for focusing on difficult positions (tilted heads, very high/low viewing angles).

The 5-minute drawings seem like a good compromise to me (even though they're usually more than 5 minutes. They're pretty fast—so I can't spend hours agonizing over placement, I need to train my visual intuition. But not so fast or permanent that I can't make corrections when I notice my initial outline was wrong.

Doing the main drawing every day has been very beneficial. Although I'm sometimes tempted to skip it and go directly to drills, I think it provides a lot of good practice on its own.

What are some milestones I'd like to achieve in my drawings?

1. Be able to draw an accurate drawing, in terms of overall shape or placement most of the time (right now I'm correct on all features <20% of the time). This should include all angles and orientations.
2. Be able to adequately capture facial expressions and the emotion. This is harder than resemblance, but it is an essential part of drawing a portrait.
3. Draw truly beautiful, artistic portraits. Artistic portraits go beyond just being an imitation of the original but express it through the medium in an elegant way.

I'm not sure I'll be able to reach #3 in my challenge, but I'd like to be able to get abover average success at #2. #1 should definitely be something I can accomplish with continuous practice over the month.

Assessing my drawing technique:

My technique right now is to pick some feature, usually a contour on the outside of the face and draw that first as a basic unit. Then I sketch out the rough shape of the face, place and size the eyes, put nose and lips, usually do some resizing to make it fit, then redraw the eyes with greater accuracy to the details or expressions.

This probably isn't a bad method. One error I frequently make is messing up the eye alignment, particularly if the head is tilted. I've tried eyeballing the angle of the eye, but I think the error comes from sometimes not "seeing" the face when I'm putting down the features. I need to work on seeing the face so it can pop out at me where the correct placement is.

Ideas for new drills:

-   Practicing drawing the head shape and major angles for tilted faces, a la the quick method.
-   Trying to guess what the errors are in the drawing before doing the overlay. This way I can test my intuition about what exactly is wrong with the picture, even if I can't change it myself.

My feeling is that continuing to work on the line drawings and getting proportions/shapes correct will have the biggest improvement factor on my drawings. Later when that element is right most of the time, working on things like shading technique, blending, different media, etc. will be helpful.

July 1st,

Today I did another portrait. Although the only large placement mistake seems to be a small nose, the portrait doesn't look as good as the one yesterday. Some of that might be shading, but I also suspect part of it is how well I can capture the facial expression in the subtler details.

I've gotten a lot faster at doing the line drawings. It used to take ~10 minutes to do one, with considerable frustration. Now I'm able to do them consistently less than 5 minutes. Although I still make mistakes, I think I'm getting better and, more importantly, I've broken through the frustration barrier. Churning out line drawings isn't nearly as frustrating as it was before.

How much progress have I made this week? Although it's hard to see on any individual drawing, since there is some aspect of luck involved in getting the first few lines down correctly, I do think I'm getting more accurate with the sketches and I'm better able to assess what is wrong with

them by sight. That means, given enough time, I'm able to get the drawing to a fairly accurate place.

What parts do I still struggle with?

- Drawing angles correctly for 3/4 views. If there is even a small amount of tilt in the head, I tend to screw up the angles of the face.
- Placement of the back of the head. Although this seems to because there are fewer reference points.
- Stretching (or shrinking) the facial features due to an incorrectly sized face. Since a lot of my positional judgement is relative, I'll sometimes end up stretching or shrinking facial features to make them line up with the chin contour.
- Eye line. Sometimes I place one eye too low or high, particularly if there is some tilt involved.

This first week has been pretty good. It's still uncertain how far I'll be able to go in just one month, but I've got another 3.5 weeks to find out. My goal for the time being is just to continue with my 5-minute drawings + the main daily portrait. I feel like I should probably continue with this until I'm able to achieve a strong resemblance in the line drawing most of the time.

July 4th

I tried doing a portrait of Zoey. This was the first time I did one of someone I knew (other than my self-portrait). It's clear I've got a lot of work to do to really capture the likeness. The image was actually fairly accurate in the overlay, but it still didn't feel like it really looked like her.

Doing more portraits, I might be reaching a point where the likeness is being helped/hindered by the details, rather than the overall placement of the facial features.

Here's a couple ideas:

1. The likeness *is* controlled by the matching of the line drawing, but it is extremely sensitive. Therefore, I need to keep working on this dimension of portrait drawing until I can do it extremely well.
2. Likeness depends a lot on exact eye shape, nose shape, lips, etc. Therefore, I need to get the positions accurate, but then spend the rest of my time on getting those features looking good.
3. Shading and lines are a major influence. I need to compare my drawing to a black and white version of the original to detect differences in tone.

Chances are it is a mixture of all three hypotheses. I still think that the amount of time I spent trying to line up the features to get it mostly accurate needs work, since I spent 1.5 hours trying to line up the features and still wasn't perfectly accurate at the end of the portrait.

Shading and getting the right tonal values seems to be something that could benefit me, and it's worth exploring more. My best portrait so far had pretty good shading, whereas the two after it (which don't seem to match any worse) have somewhat worse shading which could have created the problem.

How could I test/practice shading?

One idea is again, to limit the drawing: make a faint line drawing first, compare with the refence photo and adjust, only then going onto shading everything. This might not be a bad idea in any case because it would give me a good sense of what my portraits would look like IF I could get the line drawing exactly right.

From there I could tell that any unsatisfactoriness in the finished portrait is due to details/shading and not positioning. This might be a good experiment to do tomorrow on the finished drawing.

I might want to do bulk shading of the quick line drawings. From these drawings I could try to compare them with the reference photo by converting to black and white, scaling the range of values and "subtracting" one photo from the other. The remainder would be the difference in relative tone, and could demonstrate clearly not only mistakes of positioning but also mistakes of contrast/shading.

I'll try out these two methods tomorrow and see how they impact my finished drawings.

July 5th,

I completed a drawing with multiple photos/comparisons against the original picture. The picture turned out quite well. I think it was also great shading that helped it.

A couple points:

1. Likeness is almost certainly defined by correctly positioning elements. Shading and technique make the finished product more attractive, but I think it won't take as much practice for me to be good at these parts.
2. I realized that, particularly with the large drawings, even a slight tilt in the camera completely distorts the picture I'm trying to size against the drawing. This led to some awkard adjustments because things would not move to a closer and closer approximation but bounce around as I went back and forth between slight tilts. I think the effect is reduced on the smaller drawings, but I need to be more careful when taking the photos because its on the large ones that I want the greatest accuracy.

I feel like almost as important as drawing is being able to quickly assess what is wrong with pictures: eyes are too big? too wide? angle is wrong? etc. I also need to pay attention to the gestalt of the photo—does the expression match? If not, how are they different?

I think now that I've been doing a lot of drawings quite quickly, I'd like to move to drawing them with photos and revisions. This will give me a chance to move them into a correct position and will be good for practicing my ability to revise the drawings correctly.

July 6th,

It's really hard to quantify the quality of my line drawings. On the one hand I feel like my full drawings are getting better, but I'm not doing enough of them to really see a trend. With my line drawings, I feel like I'm hitting roughly the same level of accuracy as before, I'm just doing it faster.

What should I be working on now that I've finished my set of photos?

Some options:

1. Continue doing line drawings as-is. I simply need to keep practicing and getting feedback and I should stick with what has been working.
2. Do line drawings + adjustments from photos. This might give me more practice adjusting my drawings since the big difference seems to be that with the line drawings I do less adjusting before I declare it "completed".
3. Work with pen. Try to force myself to draw without being able to erase. Maybe by preventing myself from sketching and work on really "seeing" the image on paper before I start drawing.
4. Draw the same image multiple times, producing different types of drawings (a line drawing, a tonal drawing, one reconstructing the facial features)?
5. Draw then predict what the errors are before moving onto the overlay.

For now, I'm not convinced I should change my general approach. I think the problem is simply that I need more practice. With more practice I should be able to get better.

July 7th,

Today I didn't complete a full portrait. After some frustration trying to align the features, I realized that I needed better instruction on this point. I managed to find a course by Vitruvian Studios which covers an incredibly realistic looking portrait.

I spent much of the day watching the lessons of this, and I'll continue spending them tomorrow. Although ~10 hours is a lot to invest, given the time constraints of my project, I think it was useful to see a portrait being done properly so I can adjust my technique.

Things to adjust:

1. I need to have a much more accurate and systematic approach for positioning the facial features. His method consists of picking the apex of the head and chin, sighting that angle, then triangulating the two extreme leftward and rightward points on the face. From there, additional angles are built up, the hairline, facial features, etc. It is somewhat complex, but I think it would be worth doing with practice to improve my ability to draw portraits accurately. My current approach of sketching and adjusting is okay, but it can lead to frustration as I need to "see" the likeness before I notice something is off. This method can help place facial features in the right ballpark before I invest in detail work.
2. I need to pay more attention to the details of the eyes, nose, mouth and ears. Seeing how these are being done it's clear I need to place more details first to get the level of realism I desire. In particular, I need to pay more attention to the eyes since they are the least forgiving and often define the expression.
3. I need to pay attention to the form and cast shadows of the face, drawing these in before establishing a tonal range and shading. I like the idea of form building—choosing to put light and shadow not based just on how things appear optically but based on a 3D view of the facial structure. This is somewhat useful because relative contrast makes it hard to accurately assess tonal ranges and it has lead me to darken things too much in some areas while leaving others too bright.

I also recognized some extra materials I'd like to get. In particular I'd like to get:

1. Tonal paper
2. Chalk pencil
3. Really good sharpener
4. Eraser stick
5. Blending stubs
6. Drawing board

I don't think I need anything else now, although I might get some charcoal to experiment with.

What's my plan for the next week? Well, I have to try out the steps he recommends. His process is more time consuming, but I think if I practiced it, I could get it down faster in sketches and also improve overall accuracy as well. I think working on his triangulation method to quickly do some line drawings of the faces to mark out major regions might be a good step since I can then compare those to the image overlays.

July 12th,

I'm almost done the portrait course by Vitruvian Studios. This plus Drawing on the Right Side of the Brain were the two best investments I've made so far. Although this course was more expensive ($125) it was well worth it because of the attention paid to the triangulation method and anatomy.

I finished my first portrait using these new methods and I think it is a noticeable improvement over my previous efforts. Even just using the toned paper and chalk makes a difference since it enables highlights more easily. However, using the triangulation method (even if it is time consuming for me right now) is a major step up from my previous approach of eyeballing it, sketching and adjusting. This now allows me to get quite accurate on the feature placement before starting, and even has the benefit of allowing further deepening and placement of smaller features (lower lid compared to upper lid) so it may even be a more versatile method than using the grid.

My plan now is to get better and faster at the triangulation method for shaping out the rough features of the head. I'd like to do the blocking out phase for heads quickly, to see if I can get one done in ~5 minutes as a test so that I'll be able to do it accurately and quickly on real portraits rather than spending ~3 hours as I did with this one. I think it will always be more time consuming than sketching, but if I can get it working quickly, it will enable me to do real-time sketches of people instead of just photographs.

I'm going to keep working on improving my general technique this week. If things continue as planned, I'll spend next week working on trying out different artistic styles and the final three days doing finished portraits.

July 14th,

I attempted to do some of the triangulation portrait drawing more quickly, but the end result was a mess—the same inaccuracies as I had in my drawings before (maybe worse), so I think the

end result was even worse. It's clear that I need to get *good* at this method before there's any possibility of being able to do it quickly.

Yesterday I started working on a new drawing. The first attempt at blocking it in worked alright, but I noticed that the features were somewhat off, so I decided to redo. Unfortunately my second attempt ended up even worse!

I think there's a couple things that are clear to me:

1. I'm more interested with quality than speed. Doing the fast drills earlier in the experiment was supposed to help with quickly sizing and placing the features. Although I have gotten better at it, I think it's been improving speed more than accuracy.
2. To get better, I need to dive deeper, not skim more shallowly. I think my portraits are at a level of accuracy now that if I want to do better portraits I'm going to have to go deeper, making smaller, more nuanced changes. That means I need to spend more time, not less.

Today I'm going to finish the original drawing I started yesterday (the first one), and I'm going to try to really focus and pay attention to the details.

I think if I want to improve now I need to do so by picking more challenging subjects and testing out different techniques. Some ideas to test:

-   Hatching method, no blending
-   Ink drawings
-   Graphite
-   Color?

If I continue expanding the techniques and range of subjects, I think this will be the best kind of practice and I'll stop doing the quick drills for now.

July 15th,

I finished another portrait. My last three have been pretty good. Far from perfect, but still a big improvement over my first few attempts.

I tried doing a quick test with charcoal and it was a disaster! Clearly I can't operate with the same smooth gradations technique I've been using with graphite. I'm honestly not sure whether I should be experimenting with other materials with my remaining time. On the one hand, it would showcase a wider variety of applicable skills. On the other hand, perhaps I should focus my efforts on getting this triangulation method down perfectly first—it's still clear that I can only get the portrait looking "right" after considerable effort.

Hair has been a point I've been somewhat unhappy with in my drawings. My last few drawings have felt good except for the hair. I've also felt that the black doesn't get smooth enough coverage so there is a grainy quality to it. Hardly ideal, but also something I'm not sure what to do about.

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I just got the idea to work on the area with the brush. Sure enough it reduced the grainyness by a large factor. I think having the brush is important for blending since it can work deeper into the grain of the paper than the blending stub, and if you want particularly smooth and dark blacks, I don't think there is any substitute.

What's my plan for the last 8 days?

I think I'm going to stick to the style I've already developed. I'd like to finish at least 4 more pieces:

1. Another self-portrait (final project)
2. A very challenging portrait
3. Redoing a portrait I did earlier (perhaps Zoey?)
4. One extra one

That should give me a good chance of getting a portrait I feel is fairly good at the end of the process, I'll probably save 3 days for the self-portrait since it will not only be more difficult, but also be the clear before-and-after comparison drawing.

July 18th,

Today's portrait isn't going as well as I'd like. I feel like my likeness of her is off somehow, and the shading is quite difficult because I have to create large smooth areas of value. As with doing line drawings, I find relative differences to be harder to observe when the distance is greater, so a large, smoothly changing area is hard to match tonally with everything else since I'm too focused on the details instead of seeing the bigger picture.

I'll be able to do a better analysis when I do th overlay of what is missing, however most of the angles in the face and head seem to check out, so my guess is that it's something less obvious like eye height/width. It's a good reminder that if I want to get something that looks pretty identical, I need to be more thorough in doing the checks and sizing as per the Vitruvian course, and not just rely on eyeballing judgements.

I'll work on it more tomorrow, today I'm pretty exhausted and I'm worried that if I keep going I'm going to get sloppy and start making mistakes (if I haven't already).

July 19th,

I finished yesterday's portrait. It turned out okay, although the resemblance isn't as strong as I would have liked.

Today I got the idea of doing some drills related to the triangulation method, however when I tested the angles in GIMP I found that I couldn't get them to match properly! It does seem that my accuracy with the angles, as measured, is really quite good—in many cases it was to within one degree.

Therefore I don't think the problem is with my drawing angles. I think, instead, my problems lately have been more to do with reconciling differences in angles from the reference and my drawing (what should I do when there is a contradiction?) and with positioning the facial

features. The sensitivity of the drawing to slight facial offsets is large enough that I need to be extra careful during this step. Making the eye a milimeter off of the original is enough to disturb the likeness (particularly when the drawing is small).

I think it's important that I really follow the steps clearly here:

1. Centerline the face. Double check angles on brow ridge to ensure it lines up.
2. Find the brow ridge.
3. Check the doubling spot to see where it compares on both the reference photo and my drawing.
4. Find the bottom of the nose.
5. Check the doubling spot (~ brow ridge) and tripling spot (~ hairline) with reference photo and my drawing.
6. Find eyeline and eye position.
7. Find horizontal reference points for eyes
8. Draw in sockets
9. Find vertical reference points for eyes
10. Find horizontal reference points for nose edges
11. Find vertical reference points for nose edges
12. Find horizontal reference points for lips
13. Find vertical reference points for lips
14. Find lips line
15. Sketch in nose and lips
16. Where does the eye reach is highest points? Lowest points? Map these in for both the eyeball and eyelids
17. Using this information sketch in the eye
18. Make sure the eye is set in the right spacial extent (it should push back in enough and not just fill the gap given by the lids
19. Note the pupil position and relative height/width. Draw those in

July 20th,

I'm going to go back to the Vitruvian lesson and document the exact steps he follows exactly. This was I can quickly refer to this template when I need to draw the portrait as the facial features blocking-in steps I find most difficult.

1. Draw center line
    1. Indicate with 2-3 lines (chin to between eyebrows), (brow to hairline).
    2. Estimate height of brows
2. Find back of jaw (in front of ear) and angle of the body of mandible
3. Start by finding the level of the eyes
    1. Imaginary straight line that passes through the corner of the eyes
    2. Should be approximately halfway between top and bottom of head.
        1. Compare to reference to see where these line up
    3. Remember perspective will alter the eyeline even if there isn't any head tilt
4. Find thirds of the facial length. The features of the bottom of nose and brow ridge should approximately fit the 1/3rds and 2/3rds marks
    1. Be sure to measure this and compare to reference
5. Bottom of lower lip ~1/2 of the distance between base of chin and bottom of nose

6. Mark the top of the bridge of the nose
    1. Often as a corner/plane break on the surface of the form (overhead lighting it may be a distinct value change
    2. Clarity of this point varies considerably
    3. Usually between level of eyes and brows
7. Draw centerline of nose itself (gauge angle of centerline). Note this is *not* the contour line
8. Estimate from center of nose at top and find the angle of the wings of the nose
9. Draw where the wing tucks under to base of nose
10. Do we need to adjust the centerline for the fullness of the mouth?
    1. Where does it emerge from beneath the nose?
11. What is the width of the nose at the top? (He makes two marks for medial boundaries of eye socket)
12. Reshape brows and eye socket boundaries
    1. In the far side of the face, adjust the facial contour for the eye
    2. Look at the shape of the shadow in the eye socket to find eye position
    3. Trace trajectory of eyebrow
    4. Landmark the angle of the two ends of the eyebrow to confirm shape
       Confirm apical point is in right spot in the brow
    5. Edge of eye socket compared to top of the head and chin. (*check* reference points!)
    6. (Note: In this reference the socket are a clear shadow shape)
13. Draw the far contour of the nose
14. Outline bottom of nose (Note: we're not drawing the nose yet)
15. Start mapping out limits of eye
    1. Eyebrow?
    2. Shadows in eye socket?
    3. Underside of brow
    4. Apex of supercilliary arch (defines height of eye)
    5. Find lateral position of outside corner
        1. Exterior shapes
        2. Landmark via center of chin or outside of nose
    6. Height, outside corner, inside corner, lower border of upper lid, position of apex, lower lid boundary
    7. Repeat for other eye
        1. Compare with other eye for symmetry
16. Shadow edge on the nose
    1. Transitional stage between linear and tonal development
    2. Sometimes adding shadows can make the picture look more "correct" since the contours will match
17. Corner of the mouth
    1. Nasolabial fold (wing of nose to lip). Note: This is *not* where the corner of the mouth lies. The corner of the mouth is medial of this position.
    2. Upper part of lip
    3. Bottom part of lip
        1. This has two parts: a color change of the lip and where it forms the crease with the fat pad of the chin
18. Adjust hairline and facial contours to compensate
19. Draw the ear(s)
    1. Top and bottom of ear should be landmarked off of eyebrow and bottom of nose
    2. Attaches to the face at an angle (Don't make it too vertical)

3. Doublecheck lateral placement of ear—is it too close or far. Look for matching distances between inside ear and nose, eyes, and vertical placements.
4. "Triple checking is even better than double checking."
5. Angle between apical points in top & bottom of ear
6. Angle of far edge of the ear
7. Lower border of "concha" which is the deep recess of the ear
8. Upper border and width of concha
20. Meticulously check these measurements common errors I've made:
    1. Eyes
        1. Too high
        2. Too low
        3. Angle is wrong. This is *very* common
        4. Eyes are too wide or too narrow
    2. Nose
        1. Too wide
        2. Too long
        3. Too short
        4. Too narrow
        5. Is the angle of the bottom correct?
        6. Is the height of the wings correct?
    3. Mouth
        1. Too wide/narrow
        2. Angle of of the eyes correct?
        3. Thickness of lips?
    4. Ear
        1. Lateral displacement of ear
        2. Size of ear
        3. Placement of neck and jaw
21. Lay in a few more boundaries
    1. Shadow boundaries
    2. Secondary form boundaries (where bumps change (cheek to jaw))

Summary of core concepts of placing the features:

- Work outside in. Place the larger, broader features before the smaller features. There is a hierarchy of placement. We start with siloutte of face, hairline, centerline, eyeline, brow level, nose level, etc. This increases the likelihood of things "fitting" properly, and it also allows for increased accuracy where it counts most in the small details of facial features.
- Don't rush to draw the specifics. Lay in a lot of different limiting lines before committing to a particular drawing. By the time you sketch in the actual features, you should only have possibly sub-millimeter level adjustments to make. If you need to adjust things more than that, you didn't block in enough.
- Pay extra attention to the eyes. This is the most sensitive area of the drawing and the easiest to mess up. Even slight misalignments and wreck the overall likeness, or worse, the idea that this portrait is an actual person.
- Don't be afraid to revise. Points on the portrait start off with considerable uncertainty. A correct application of the method may lead to misalignments by a few millimeters or more in the beginning. This is reduced through crosschecking and building in, but the final placement of any of the features may be off by up to a millimeter by the time we place facial features.

This requires an attitude that all of these placements are hypothetical and to test how they integrate before committing, including the possibility of adjusting previously drawing points slightly to make things fit better.

- Adjustments should decrease in magnitude as more features are placed. While the initial features in the first sketch may be off by a couple millimeters at the extreme, the final details should be accurate to within a line width or a fraction of a line width. This is achieved by working in and cross checking from multiple reference points.
- Use shadow shapes and form boundaries to doublecheck. Frequently, when I approach the task of shading, I notice that things don't fit quite right. This is an issue, obviously, because it means that my drawing was too rough and now I've committed to it. I should work on getting those details into the linear stage of the drawing where it is more amenable to modification. Getting these smaller shapes right performs very good checks on the positioning.
- Step back and look at it from a distance. While not mentioned in the video, this step (including taking a photograph of the work and viewing it when it's small) actually improves the ability to see the whole picture and get the gestalt. This makes it easier to see whether the picture feels "off" before committing the shading.

I'm going to spend the rest of the day just blocking in the features—*not* drawing them. I want to be extra careful both because I want to push myself to reach a new level of realism and because I want to really train my ability to follow the steps set out in the course, not skipping over them of rushing the drawing.

July 28th

Yesterday was the final day for the portrait drawing challenge. This past week has been relatively slow in terms of output. I only finished one more portrait (my final self-portrait) and I got halfway through repeating the one I did with Zoey (without quite as much success as my last one).

I'll save my full summary of the challenge for the blog, but I'll say a few things here for this journal just to document it (in case I forget to include things publicly).

An important theme in this challenge was the balance between theory and practice. Major advancements in my ability to draw faces came from improvements in understanding a semi-formal procedure for drawing faces.

1. First was from Learning to Draw on the Right Side of the Brain, which focused on generalized drawing technique. This was quite helpful and allowed me to make a relatively rapid advancement in quality from my pre-portrait to my first portrait of this challenge in only ~20-30 hours.
2. 2. Second was Vitruvian Studio's portrait drawing course. This one taught me specialized skills in portrait drawing. But it also gave good general advice—in particular the triangulation method which allows you to draw incredibly accurate images without a grid or guessing purely based on likeness.

Despite these specific technical improvement, I also feel like practice played a major role in my ability to improve. Doing many quick drawings and comparing to reference photos meant that I got a good sense of how to predict what was wrong with a drawing after I had made it. This—

combined with the approaches of the two theoretical guides—allowed me to produce relatively accurate drawings, even if it was by approaches I can't easily translate to sketches.

One minor disappointment I had from the challenge was that drawing accurate portraits did not lend itself to drawing greatly more accurate sketches. Although I think there is some transfer of ability, and hopefully I will get faster with drawing portraits over time, that was not a direct outcome of this challenge.

I had hoped that being able to draw quite accurate formal drawings would directly translate into being able to draw somewhat less accurate (but still approximately good) sketches.

Unfortunately these two skills diverged somewhat more sharply because my main improvements came from a more technical, time consuming method and from *correcting* drawings, which isn't as helpful if you want to do pen work or quick sketches where you must place features correctly in the first place.

That being said, the quality of my portraits went considerably above what I would have considered likely in the beginning, and I was able to produce a level of accuracy that would give a good foundation for doing more serious paintings. The fact that it didn't translate as closely into being able to quickly draw faces accurately is something that wasn't obvious without hindsight.

Another note is that my drawings took more time as I got better. My initial self-portrait took about 40 minutes. My final self-portrait took ~8-9 hours. That's an order of magnitude more time to do a portrait.

I have some thoughts on this:

1. My earlier portraits got "stuck" because I couldn't accurately draw features, so there was only so detailed I could get in my drawings because I was aware that broader details weren't nearly as accurate.
2. I didn't know how to correct portraits. Therefore my first drawings are more like first drafts, since my main improvements came in "editing" or "correcting" rather than correctly placing things initially.
3. As I got better, I was able to dive deeper into a portrait, working on subtleties that expanded the time needed, but also enhanced the quality. There's a real sense that although both portraits represented my best ability at the time, my second portrait is a different kind of drawing than the first, one that I didn't know how to do properly.

What interested me about this project, as with past projects, was how wildly my impression of which activities were "correct" deviated from those which actually mattered. I thought that doing lots of quick drawings of faces would be what made a difference, and although it did, it was actually learning a more involved method for drawing faces and practicing it that created most of the improvements.

This suggests that metalearning is very important for learning and being able to adapt and be flexible in your approach is probably the key to efficiency. Since it's difficult to know, a priori, which methods will actually cause you to learn something better, the correct approach involves experimentation and research.

Another issue that came up with the challenge was the difficulty in sustaining 5 hours of focus every day. Despite being less than the MIT Challenge, I found this task exhausting and it was clearly a full-time job. In the future, I'm definitely going to go with fixed-schedule instead of fixed-hours since picking an hourly amount didn't constrain the challenge as I would have liked.

Overall I'm quite satisfied with this challenge. On the specific goal of being able to draw realistic drawing portraits, I believe I've succeeded. There is still more to go if I wanted to reach a truly professional level (in accuracy, consistency and artistic quality). But I've gone far enough that I would say my drawings are "good".

On the more general goal of improving artistic ability, I'm also hopeful that this challenge was productive. For one, I've learned new tools to correctly place features, measure angles, judge relationships and size up a drawing. I've also worked on being able to "correct" features of a drawing. I believe these tools will help even if I'm not drawing faces, but trying to accurately render complex scenes.