

The Panel: Measuring Proportions with a String

By Michael Loren Diaz | Edmond, OK

[24 Works on Paper](#)

Summary

1. **Big Idea and/or Question(s):** *The Grid*, “What am I going to draw and how will I place it on my paper?”
2. **Medium(s):** Drawing
3. **Grade Levels:** 9th– 12th grade, College Freshmen
4. **Time Breakdown:** Approx. 1-hour lesson
(*Video—20 minutes; Activity—30 minutes; Wrap-up—10 minutes*)

Materials

- Charcoal pencils
- Soft pastels
- Eraser
- Ruler
- String
- Large newsprint or drawing paper pad

Video

a. **Introduction:**

My name is Michael Loren Diaz, I live in Oklahoma City and teach Drawing and Printmaking at the University of Central Oklahoma in Edmond. I've drawn all my life but started actively pursuing a career in art nine years ago. I work in all drawing and painting media, often mixing media. I also make copper plate etchings, one of which is included in the *24 Works on Paper* exhibition.

b. **Present a Big Idea and/or ask an Essential Question:**

"The Grid"— When you are drawing from nature, you're translating three dimensions into two. To do this, it's imperative that you learn how to look at things in terms of a two-dimensional grid so that you can get your subject in proportion. It takes a lot of practice to see like an artist, and in this lesson, I'll show you how I start teaching that—even to people who say they cannot draw, at all!

There are two essential questions you must ask before beginning a drawing:

"What am I drawing?" and "Where will it be placed on my paper?"

That then leads to a third question "How tall and how wide is my subject?"

Basically, what are the proportions of the subject? These may seem like simple questions, but they often go ignored, resulting in drawings with awkward compositions and proportions. If these questions aren't answered in a figure drawing, it's common to see things like feet running off the bottom of the page or heads that are too large and cut off by the top of the paper.

c. **Show an Artwork that Relates to the Idea/Question:**

I answer these questions before starting any drawing or painting. Keep in mind that the answer is not set in stone and can be changed during the course of the artwork, but a clear goal needs to be kept in mind. As for the grid itself, I have, at times, made the grid itself more explicit (examples in the video). Artists like **Euan Uglow** and **Ann Gale** have explored this topic in depth.

d. **Assign an Activity to Investigate the Idea/Question:**

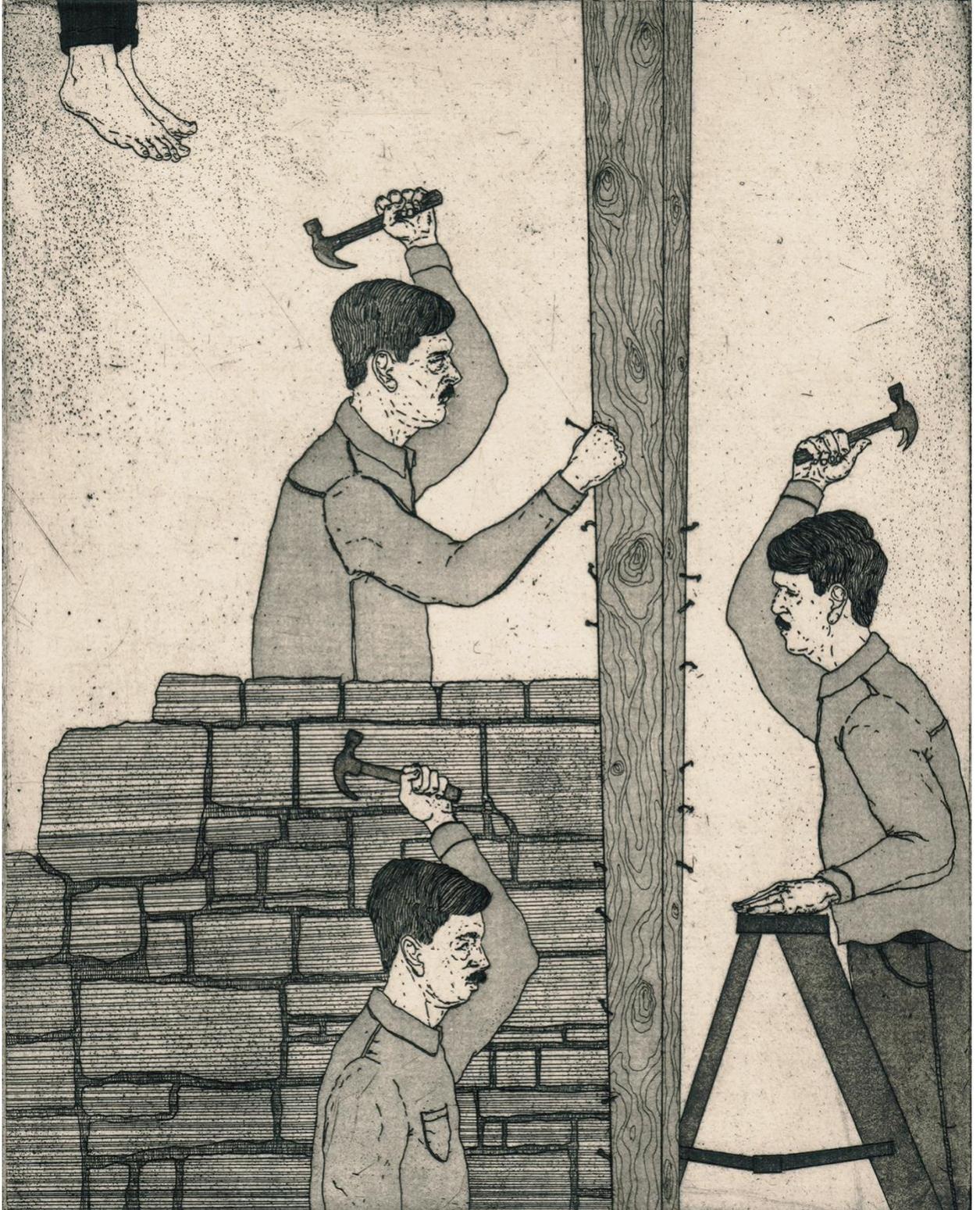
This is the assignment I start my Beginning Drawing students with. I call it "The Panel" because we start by drawing a simple wooden panel on the ground. This is the literal foundation upon which other objects are put as the class goes on. As I say to all my students: "If you learn to draw the panel from observation, you can draw anything from observation."

Begin by asking those essential questions: “What are you drawing?” *The panel*. “Where will it be placed on your paper?” *Nearly touching the bottom and both sides of the paper*.

- i. Start with a pastel “block in” to give you an idea of where the shape will go. Ensure that you’re not drawing any diagonals at this point, you’re trying to notate, in the simplest terms possible, the area of the paper that the panel will exist within. The color of the pastel is arbitrary, meaning it doesn’t relate to any color we’re looking at. It’s simply a tool to help build the drawing.
- ii. If it’s nearly touching the bottom and both sides of the paper, it begs the question, how tall should it be? How far up on the paper does it go? Use the string to measure the overall height of the panel in your field of vision and compare it to the width. Write down what you saw on your paper as a ratio. Keep the string completely horizontal and vertical and your elbows locked out like you’re mimicking a grid.
- iii. Now, compare what you saw in nature (the panel on the floor) with what you blocked in. Measure the height of your drawn block and compare it to the width. Does it match what you saw? It’s ok, and even likely at this point, that it will not match exactly, so go ahead and adjust your block by drawing a horizontal “reference line” where the block should end.
- iv. Draw reference lines all the way around the block now to give clear edges to the rectangle. The panel will exist within this rectangle.
- v. Plot where you think the corners are. Always draw first and measure second. We are trying to learn to see proportions on our own and eventually move away from needing the string as much.
- vi. Return to the height of the panel as your “unit of one”. That will be your measuring unit for the whole panel. Use that height to count how far the bottom point is. Compare to your drawing and make adjustments. Repeat for the top point.
- vii. Use the height once again to see how high the points on the side are.
- viii. Once you have measured each point, connect the dots!
- ix. Take a step back and look at your drawn panel. The string is not a perfect tool, and it’s likely you will have to play with your drawing some. Adjust the points as you see fit. The charcoal and pastel will not completely erase—this is on purpose! You will be able to see the history of the drawing. If you make a change and it looks even more off, you can return to what you had before. Don’t think of this as making mistakes, you’re simply playing around with the shape!

e. **Wrap-Up:**

To wrap up, this is a basic exercise to begin learning how to measure and “see like an artist”. We used a string to mimic a grid, holding it only vertically and horizontally to compare lengths and points. I covered *proportions, reference lines, blocking in, and arbitrary color*. Most importantly, the first two questions to ask when drawing from life are: “What am I drawing?” and “How will it be placed on my paper?”



Michael Diaz, *Ungrateful*, 2021. Etching and aquatint. 28"x22".