

# The Complete Painter

## Lessons from the Masters

Course Guidebook

Professor David Brody  
University of Washington



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David Brody, MFA  
Professor of Painting and Drawing  
University of Washington

David Brody has been a Professor of Painting and Drawing at the University of Washington since 1996. He did undergraduate work at Columbia University and Bennington College and received an MFA in Painting from Yale University. Professor Brody has lectured or been a visiting critic at Carnegie Mellon University, Massachusetts Institute of Technology, the University of Chicago, Harvard University, Capital Normal University in Beijing, and the China Academy of Art in Hangzhou. At the University of Washington, he previously served as chair of the Painting and Drawing Program and cochair of the Division of Art, and he currently holds the Hermine Pruzan Endowed Faculty Fellowship.

Professor Brody's paintings and drawings have been shown in more than 100 exhibitions in the United States and Europe. These include solo shows at Gallery NAGA in Boston, Gescheidle in Chicago, Esther Claypool Gallery in Seattle, and Galeria Gilde in Portugal. His group exhibitions include shows at The Painting Center, The Alternative Museum, Bridgewater Fine Arts in New York City, the Florida State University Museum of Fine Arts, the Springfield Museum of Art in Ohio, the Chicago Center for the Print, Koplín Del Rio Gallery in LA, and the Frye Art Museum and Prographica Gallery in Seattle. His work has also been shown at ARCOMadrid, the RipARTE Art Fair in Rome, the Trevi Flash Art Museum in Italy, the FAC Art Fair in Lisbon, and Art Chicago in the United States.

Professor Brody's work has been published and written about in two monographs and in many articles and reviews in such publications as *Seattle Weekly*, *Artforum*, *Art in America*, *The Boston Globe*, the *New Art Examiner*, the Spanish journal *Lápiz*, and the Lisbon daily newspaper *Público*. He has also received numerous awards, including a Fulbright Scholarship, a Guggenheim Fellowship, the Basil H. Alkazzi Award in Painting, a grant from the Elizabeth Foundation for the Arts, and two fellowships from the Mass Cultural Council. At the University of Washington, he received two Royalty Research Fund grants and five Wyckoff Milliman Endowment for Faculty Excellence awards.

Professor Brody's current studio work spans traditional drawing and oil painting and extends into contemporary digital processes and methods. The visual concerns center on an exploration of the play between flatness and the illusion of three dimensions on a two-dimensional surface.

Professor Brody has had a parallel career in music. He has performed at music festivals in the United States, Europe, and Canada, including appearances at Avery Fisher Hall and Symphony Space in New York City and on Garrison Keillor's radio show *A Prairie Home Companion*. He has recorded with the Klezmer Conservatory Band and other artists on the

Rounder, Vanguard, and Flying Fish labels. He has published five books on traditional music, including the best-selling *The Fiddler's Fakebook: The Ultimate Sourcebook for the Traditional Fiddler*. For the past decade, he has been writing and performing original lyrics and music. Most recently, he has performed in the Harvard-Yale Cantata at 54 Below in New York City and at the Northwest Folklife Festival in Seattle.

Professor Brody's other Great Course is *How to Draw*.

# Acknowledgments

This course's instructor would like to thank his past students for letting him use their artworks in these lectures:

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<i>Xiao Sharon</i> LI	<i>Zixin</i> ZHENG

# **Disclaimer**

**Oil painting involves the use of  
potentially toxic  
and hazardous materials.**

**Please follow all safety  
precautions as outlined  
in Lecture 2.**

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## INTRODUCTION

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# **The Complete Painter: Lessons from the Masters**

The goal of this 34-lecture course is to offer you a comprehensive and in-depth introduction to painting. The course includes projects ranging from landscapes to interiors and portraiture, and it also includes smaller, skill-building exercises.

The course takes a step-by-step approach. It starts with one brush and one color before building to very sophisticated projects. No prior knowledge or experience is necessary.

For hundreds of years, artists made cartoons, or preparatory drawings that they transferred to their painting's surface before beginning the painting. This course has adopted that method. You can download the preparatory drawings from [thegreatcourses.com/painter](http://thegreatcourses.com/painter). The preparatory drawings are also available in the Cartoon appendix at the end of this guidebook.

This course also incorporates the use of master studies, a time-honored method of learning to paint. To give you examples of great works, the course makes use of renowned paintings spanning many centuries.

# The Grand Tradition of Painting

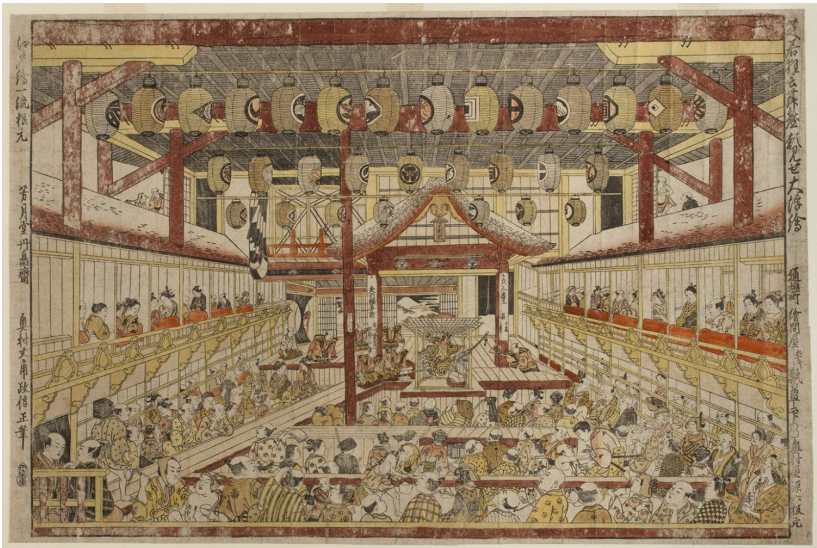
**A**RTISTS HAVE ALWAYS LOOKED BACK OVER HISTORY, SIDWAYS ACROSS CULTURES, AND from high to low culture to learn about their craft and inform their visions. Some people are surprised that learning to paint involves this kind of study, but as this lecture shows, it is essential.

## Examples of Looking Around

Raphael and his 16th-century contemporary Michelangelo looked back 1,400 years to early Pompeian and Roman culture. The Romans, in turn, looked back to the Greeks, and the Greeks looked back to ancient Egypt.

The 17th-century Jesuit missionary Giuseppe Castiglione looked to the present, taking in what he saw in Qing dynasty China. He mixed Italian *chiaroscuro*—dark-light modeling—with Qing landscape conventions.

The Japanese painter Okumura Masanobu meshed East and West, incorporating Renaissance linear perspective in his 18th-century woodcuts. Picasso also borrowed broadly across cultures.



Okumura Masanobu, *Large Perspective Picture of the Face-Showing at the Stage Performance of a Drama (Shibai kyōgen butai kaomise ōkie)*

Many 20th-century Americans like Roy Lichtenstein, Keith Haring, Jean-Michel Basquiat, and others looked to comics and graffiti. By studying painting and making your own, you're entering into a dialogue that has been going on for millennia and across many peoples and cultures.

It is a great time to learn how to paint, because studying great paintings has never been more accessible. Anyone with an internet connection has immediate access to countless great works of art. The quality of the best visual files is extraordinary.

## PAINT

Paint consists of two basic ingredients: pigment, which is a powder-like, colored material, and adhesive, which is a binder. That binder, or the binder plus any thinners, is called the vehicle.

With watercolor, encaustic, egg tempera, acrylic, and oil paint, the pigment is much the same. The vehicle is different. For watercolor, it's gum Arabic. For egg tempera, it is egg yolk. Encaustic uses heated beeswax. Acrylic uses acrylic polymer. In oil paint, the vehicle is oil.

## Painting and Its History

Painting is nothing more than applying paint to a surface. As an art form, it goes way back: In the 1990s, a range of colored pigments were found in the Twin Rivers cave in Zambia dating to at least 350,000 to 400,000 years ago.

During the early historical period, people on every continent painted in one form or another. Ceramics date from about 6,000 years ago in what is now central Iran. Egypt saw painting on tomb walls 3,500 years ago.



Unknown, Mogao Cave Mural

In China along the Silk Road, 492 caves were carved into cliff walls. Known as the Mogao Caves, the interiors are richly painted with Buddhist imagery. This occurred over a period of about 1,000 years, from the 4th to the 14th century.

On a more intimate scale, there has been a rich history of illuminated manuscripts from places like Ireland, India, Turkey, Persia, and Ethiopia. People have painted in Africa for millennia.

The takeaway point is this: Starting to paint can be intimidating. However, it's good to remember that for tens of thousands of years, people on every continent have painted—and made beautiful things. For tens of thousands of years, people just like you have been painters.

## A First Painting Project

For an initial painting project, refer to the video lecture. The supplies the demonstration calls for are:

- Burnt wood, such as wooden matchsticks or a singed twig or chopstick.
- Dirt.
- Egg yolk.
- Water.
- Cheesecloth.
- A knife and fork.
- A mortar and pestle, or a spoon and bowl.
- Three additional bowls.

### ARTWORK VIEWING RESOURCES

You'll find links to most of the important artworks in this course in the Artworks by Artist's Name appendix on [page 186](#).

You can find very high-resolution jpegs of many other great works through the Google Arts & Culture platform, which is accessible at [artsandculture.google.com/partner?hl=en](https://artsandculture.google.com/partner?hl=en).

### READING

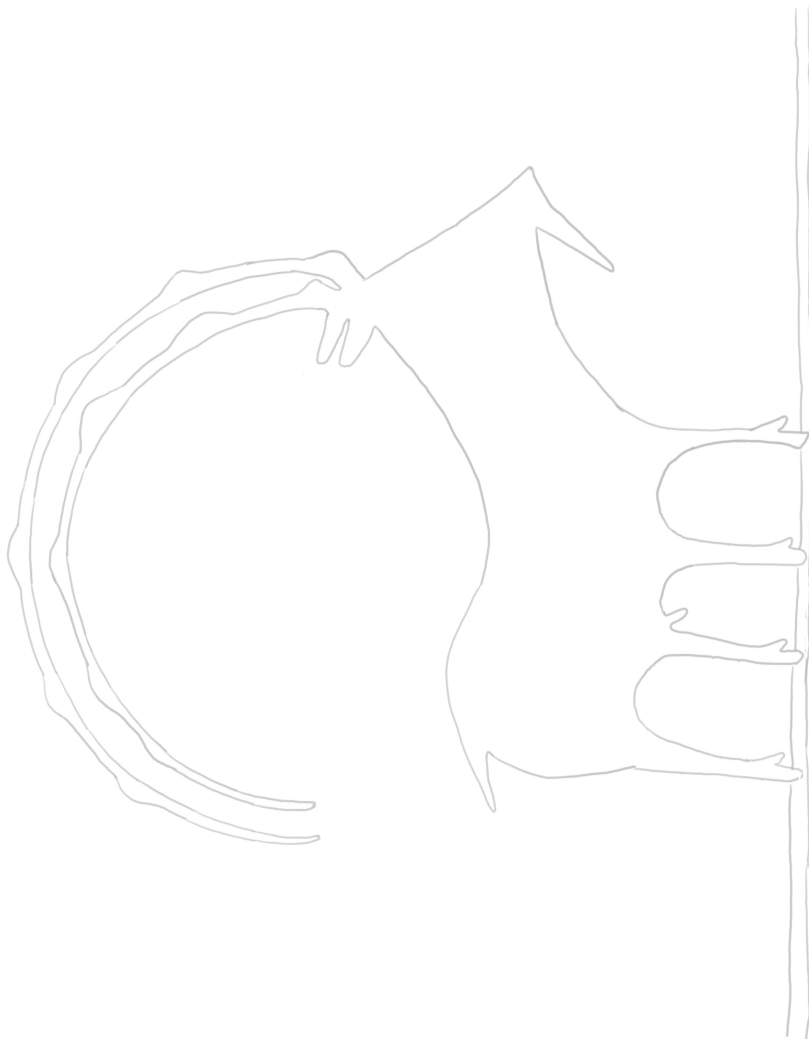
Neddo, *The Organic Artist*.

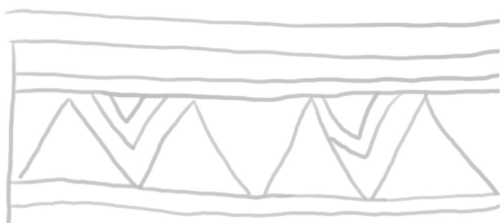
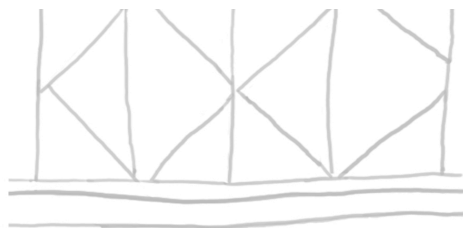
Shan, *The Shape of Content*.

Webster, Sandy. *Earthen Pigments*.

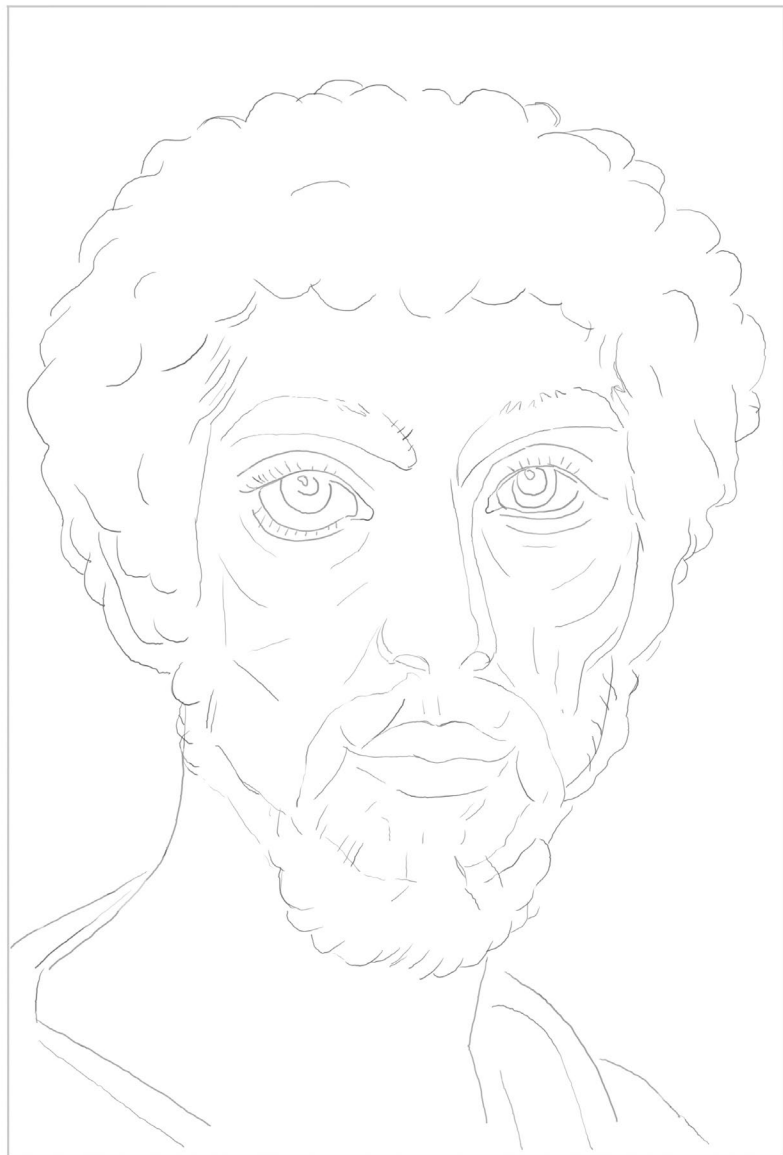
## CARTOONS

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on [page 244](#), or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter). See “Printing the Underdrawings” in Lecture 9 on [page 57](#) for more details.









# Health and Safety in the Studio

**T**RAINING ON HEALTH, SAFETY, AND ENVIRONMENTAL CONCERNS IS NOW A ROUTINE part of art school and university instruction. Similarly, this lecture provides some general guidelines for creating art in a safe, healthy, environmentally friendly way.

## Selecting a Workspace

A chief consideration is where you'll be painting. Very few people have the luxury of a dedicated studio. If you're working with watercolors, setting up at the kitchen table is fine. If you're working with traditional oils, it's best to separate your work area from where you eat and sleep as much as possible.

A den, basement or garage can all work. If you have an extra bedroom, that's ideal. If you need to protect a finished floor, a drop cloth or plywood or hardboard panels can be used.

Another good idea is to look up and familiarize yourself with the *Art and Craft Safety Guide*, provided courtesy of the US Consumer Product Safety Commission. Additionally, there are a number of excellent books on the subject. *Artist Beware* by Michael McCann is substantive. He also cowrote a more abbreviated volume titled *Health Hazards Manual for Artists*. Monona Rossol's *The Artist's Complete Health and Safety Guide* is another fine option. Online, many art-related businesses have pages covering best practices, as do some university art departments.



## Assessing Hazards

With traditional oil painting, the main areas of concern are pigments, solvents, and oils. The first two can be toxic. Solvents and oils both pose fire hazards.

Get into the habit of reading labels. You want to be aware when a manufacturer is alerting you to a potential hazard. All else being equal, choose the safest materials available for your purpose. One indication is the presence of few or no warning labels.

You'll find more complete information on a product's safety data sheet, or SDS. Retailers should be able to supply you with an SDS for any material you're considering purchasing. Online retailers often have SDS links for a given material on that material's page. They're also often accessible with an internet search.

If you have a particular concern, consult your physician, especially if you have any underlying illness or condition. If you're pregnant or nursing, it's likely a good idea to wait until you're not before using traditional oil paints.

## Toxic Chemicals

For a toxic chemical to be harmful, it has to enter or come in contact with your body. In painting, there are three main ways this can happen: inhalation, ingestion, and through the skin.

Certain pigments are potentially toxic. They include those containing antimony, barium, cadmium, chromium, cobalt, copper, lead, manganese, nickel, and zinc, among others.

### SAFETY TIP

In the US, it's a good idea to have the number for the Poison Control Center Hotline on hand. The number is **800-222-1222**. You might also identify your nearest certified Poison Control Center.

Many colors announce the toxic element in their name. Cadmium red, cobalt blue, and zinc yellow are all examples.

Others do not. For instance, flake white contains lead, and cerulean blue contains cobalt. It's a good idea to read labels carefully for any health warnings. Paint tube labels contain a wealth of information.

## Avoiding Hazards

Inhalation is a problem when pigments are in powdered form or become airborne. This means **sanding down an oil painting is a bad idea**. The same goes for spraying and heating paint.

Ingestion generally occurs by mistake. To avoid this, **don't eat or drink when you're painting**. Additionally, **don't smoke when you're painting**. This risks both ingestion and the ignition of flammable materials.

**Don't be tempted to point your brush tip between your lips. Don't chew on the handle. Keep your hands away from your eyes, nose, ears, and mouth. Don't bite your nails.**

To avoid penetration with the skin, **avoid skin contact**. It's a good idea to **wash your hands frequently**. A scrub brush for your nails is an excellent investment. **Don't clean your hands, face, or any part of your body with solvents**. Use soap and water. Some people use mineral oil, often labeled baby oil.

Disposable protective gloves can be a good option. However, keep this warning from the *Art and Craft Safety Guide* in mind:

Chemical protection is extremely complicated. Do not judge a glove's effectiveness by how waterproof it appears: solvents and other chemicals can pass through glove materials that water would not penetrate. This is called "permeation."

Nitrile gloves are generally recommended for both mineral spirits and linseed oil. Latex and vinyl are not. But be aware, some individuals report allergic reactions to nitrile. There are also barrier creams that you can apply to your hands in lieu of gloves. You'll find these at the art store.

Along with pigments, solvents can be toxic and combustible. Buy them in limited quantities. **Don't store more than you need.** Prolonged and/or repeated exposure can cause skin irritation and dermatitis. Inhalation can cause respiratory problems. It can also cause a range of symptoms including headaches, dizziness, nausea, and in extreme cases, coma.

The main solvent used in some painting studios is odorless mineral spirits, or OMS. Its harmful aromatic hydrocarbons have been removed. This makes it much less toxic. It is also less flammable. There are a range of OMS options at hardware and art stores.

If you have a negative reaction to OMS, you'll find a number of alternatives at art stores. They include natural terpenes and citrus- and lavender-based solvents. When investigating any of these products, read the label and SDS.

## Flammable Materials

Regardless of which solvent you choose, flammability is an issue. Don't store more flammables or combustibles than you need. **Keep the containers closed** when not in use. If you transfer a solvent from one container to another, **label it.** Note both the contents and hazards.

Make sure to **keep solvents and all of your materials out of reach of children and pets.** Keep solvents and other flammables out of direct sunlight. Store them upright.

Use OSHA-approved fireproof cabinets if possible. If you use one, make sure the cabinet door closes properly.

Anything heavy should be stored below shoulder height to limit potential spills. Keep flammables away from heat sources and any electrical equipment that might spark.

### SAFETY TIP

If you have a spill, clean it up right away. **Activated charcoal and diatomaceous earth are recommended for containing flammable spills, as is deodorant-free cat litter.** It's a good idea to keep spill-cleanup materials on hand in the studio.

## Ventilation, Oxidization, and Oil

**Adequate ventilation is important.** Princeton University's web page on art safety gives this advice: "If possible, artists should set up ... about 3 feet from a window that has a fan exhausting at work level and pulling the solvent vapors away from your face." Minimizing flammable vapors will also reduce the risk of fire.

Ventilation is most important when a solvent is evaporating. Assuming there's no solvent in your paint, there won't be any evaporation. That's because the oil in oil paint doesn't evaporate. It undergoes a chemical reaction: oxidization.

However, oxidization brings up another hazard. As drying oils oxidize, they produce heat. If the heat can move off the surface, there is no problem. However, if the heat becomes trapped, fire can result.

**Do not crumple up oil-sodden wet canvas or rags.** If you plan to reuse a rag that has a limited amount of oil on it, tack it the wall so that it dries. Keep it flat and exposed to the air. For extra safety, you can pour water on your used, oily paper towels and rags before disposal. Some people opt to put them in a sealable glass jar.

Many universities locate OSHA-approved closeable-lid oily waste cans in their painting studios. The lid limits the available oxygen in the can. This can is only used for oily rags and the like. A separate garbage can is used for other refuse.

A household smoke alarm in your work area is a good idea, as is having a fire extinguisher and knowing how to use it. A multipurpose class ABC extinguisher is appropriate for most home studios. Local fire departments are often able to make recommendations based on specific conditions and needs.

**Keep both your alarm and extinguishers in working order.** Both should come with directions on what to check for. It is a good idea to plan an exit route in case of emergency. Your path should be unencumbered. You don't want flammables or combustible items along the way.



## Other Safety Tips

Drawing materials like graphite pencils or vine charcoal are pretty safe. However, charcoal dust can be an irritant if inhaled. **It is not a good idea to blow on a drawing to remove excess charcoal.** A better practice is to tap the drawing on the back so that the dust falls to the floor. Sweeping up charcoal dust makes it airborne, so wet mopping is preferred.

Another alternative is to put some paper or newspaper on the floor under the drawing before tapping off the excess charcoal. Then, carefully fold up the paper and throw it away.

Spray fixative is toxic when inhaled. Most colleges and universities require that fixative be used in spray booths. Spraying outdoors on a calm day, away from others, can be a reasonable alternative.

Some artists use air purifiers in their studios. Depending on the type and filter, these can reduce dust, airborne particles, solvent fumes, and the like.

Separate clothing for the studio is a good idea. Try keeping certain clothes reserved for studio use. Wash them separately from your street clothes.

Disposal of materials also requires care. Inform yourself about local regulations regarding hazardous waste disposal and the location of your household hazardous waste disposal site.

**Solvent waste should never be poured down the drain.** Partially full paint tubes and solvent containers are generally considered hazardous waste. Empties can usually be thrown in the trash, but it is best to check your local ordinances.

**Oily rags can self-combust.** When dry, slightly dirty rags can usually be thrown in the trash. **Rags heavily contaminated with oil paint and solvents are generally considered hazardous waste.**

### READING

Churchill, *Painting as a Pastime*.

McCann, *Artist Beware*.

## INFORMATION ON SAFETY DATA SHEETS (SDS)

An SDS contains 16 sections. The following is an overview.

Section 1 identifies the product and gives the company's contact info.

Section 2 generally details hazards. Pay special attention to the hazards.

Section 3 covers the product's composition.

Section 4 lists first aid measures.

Section 5 gives information on what to do in case of fire.

Section 6 suggests cleanup methods if there is a spill or release.

Section 7 concerns handling and storage.

Section 8 covers exposure control and personal protection.

Section 9 details physical and chemical properties.

Section 10 deals with stability and reactivity.

Section 11 covers toxicological information—that is, how it could affect your health.

Section 12 covers ecological information.

Section 13 details proper disposal methods.

Section 14 covers any transport issues.

Section 15 details regulatory information.

Section 16 contains other miscellaneous information.

## HEALTH AND SAFETY RESOURCES

The following resources provide more information on studio health, art hazards, and related topics:

Dick Blick Art Materials, "Health and Safety." Available at [dickblick.com/productinfo/healthsafety/](http://dickblick.com/productinfo/healthsafety/).

Local Hazardous Waste Management Program in King County, "Waste Disposal for Artists." Available at [hazwastehelp.org/ArtHazards/paintingwaste.aspx](http://hazwastehelp.org/ArtHazards/paintingwaste.aspx).

Princeton University Environmental Health and Safety, "Art Safety." Available at [ehs.princeton.edu/health-safety-the-campus-community/art-theater-safety/art-safety](http://ehs.princeton.edu/health-safety-the-campus-community/art-theater-safety/art-safety).

US Consumer Product Safety Commission, *Art and Craft Safety Guide*. Available at [cpsc.gov/s3fs-public/5015.pdf](http://cpsc.gov/s3fs-public/5015.pdf).

## DOs

- ◆ avoid skin contact
- ◆ wash your hands frequently with soap and water (don't use solvents)
- ◆ clean up spills immediately with activated charcoal, diatomaceous earth, or deodorant-free cat litter
- ◆ ventilate your workspace
- ◆ keep your smoke alarms and extinguishers in working order
- ◆ plan an exit route in case of emergency
- ◆ keep certain clothes reserved for studio use and wash them separately
- ◆ keep all materials out of reach of children and pets
- ◆ label all containers, noting both the contents and hazards
- ◆ keep containers closed when not in use
- ◆ store solvents and other flammables
  - \* upright
  - \* out of direct sunlight
  - \* away from heat sources
  - \* away from electrical equipment
  - \* in OSHA-approved fireproof cabinets
- ◆ store heavy materials below shoulder height
- ◆ inform yourself about local regulations regarding hazardous waste disposal and the location of your household hazardous waste disposal site

## DON'Ts

- ◆ eat, drink, or smoke while painting
- ◆ point your brush tip between your lips
- ◆ chew on the brush handle
- ◆ touch your eyes, nose, ears, or mouth
- ◆ bite your nails
- ◆ clean your hands, face, or any part of your body with solvents (just use soap and water)
- ◆ “judge a glove's effectiveness by how waterproof it appears”
- ◆ store more than you need
- ◆ crumple up oil-sodden wet canvas or rags (they can self-combust)
- ◆ blow on drawings to remove excess charcoal
- ◆ sand down oil paintings
- ◆ pour solvent waste down the drain

# Basic Painting Materials

**A**S THE COURSE PROGRESSES, DIFFERENT LECTURES WILL HONE IN ON SPECIFIC materials like oil paint, brushes, and the like. This lecture begins that focus on materials by giving an overview of the basics.

## Drawing Materials and Oil Paint

First, you'll need some standard drawing and studio materials, like paper, pencils, medium or hard vine charcoal, a pencil sharpener, erasers, and fixative. A chamois (used for erasing charcoal), a drawing board, and masking tape can also be useful. Similarly, a ruler, tape measure, straight edge (like a yardstick), T-square, triangle, and level can all come in handy.

As for oil paint, to get started, you'll need five standard-size tubes. These are generally between 35 and 40 milliliters, though there are a handful of companies that make standard tubes between 50 and 60. This course recommends:

- Yellow ochre.
- Raw sienna.
- Burnt sienna.
- Burnt umber.
- Ivory black.

Paint also comes in larger tubes. They're generally in the 110 to 225 milliliter range, depending on the brand. Get one of these larger tubes of titanium white.

These colors represent a palette with a long and distinguished history. There's another factor here: Oil paint, depending on brand and color, can span a great range of price points. You'll find that these six colors are among the least expensive. That's a great thing when you're starting out.

A side note: Starting with the lectures on the earth-tone palette, the course's instructor uses one other tube: flake white. It has a unique, pearly and translucent appearance. The downside is that it is dangerous because it contains lead. It needs to be handled with care. Do your due diligence and decide whether flake white is an appropriate choice for you.

## Medium

Artists often mix additives—solvent, oil, and a range of other materials—into paint. This is to change the paint's viscosity and other handling properties. Such an additive is known as a medium. To start, you will want some odorless mineral spirits (OMS) and linseed oil.

Some people put their medium in little cups. These can make sense if you're working with a traditional wooden palette. However, unless you're very careful, every time you dip a paint-laden brush in the cup you dirty the medium.

A good alternative is a couple of squeeze bottles. Fill one with OMS and the other with oil. You can also have a third filled with a half-and-half mix of the two.

If you choose to work with water miscible oils or acrylics, water can be used to thin the paint. There is a wide range of other mediums made for different types of paint.

## Brushes

There are two main types of oil painting brushes: those with stiffer tufts and those with softer ones. The stiffer ones are called bristle brushes. Those traditionally used for oil painting are made from hog hair and are white. There are also synthetic bristle brushes.

The softer brushes include sables and synthetic sables. The sables are varieties of browns. The synthetics are commonly brown or white.

Brushes come in several basic shapes. Brights are rectangular. Flats are like elongated brights, and they are more flexible in the tuft. Filberts are like flats with a rounded top, which is also called the toe. As their names suggest, rounds are round and angles are angled.

Each shape is made in a range of sizes. Brushes are numbered. Lower numbers are smaller, and higher numbers are larger. However, bristles of the same number will be larger than a similarly numbered sable. Additionally, there is no industry standard. A number 10 bristle from one company may well be larger or smaller than a number 10 bristle from another company.

For your bristle brushes, this course recommends obtaining sizes 1, 3, and 5 in these four shapes: bright, flat, filbert, and round. A couple of size 8s would also be useful. If you don't want to get all four shapes, get one or two.

For your soft brushes, get synthetics. The tufts are typically nylon, polyester, or taklon—a type of polyester. They're much less expensive than quality natural sables, and they'll be fine for this course's projects. Get a few brights, flats, filberts, and angles in an assortment of sizes.

Make sure you get a very small, pointed round. It should have a cap to protect the hairs. Save this. Carefully replace it on your brush if you'll be transporting it. It will protect the delicate hairs.

Many brushes, especially bristle brushes, are treated with glue, known as size, to keep the tufts together. To remove this, gently massage the bristles between your fingers. The size will rub off in a powder. Alternately, you can rinse them with warm water. If you do this, let the brushes dry before using them.

You can use these same kinds of brushes with water-miscible oil paints. For acrylics, synthetic sables are fine.

If you need to transport your brushes, a protective brush case can be useful. The tufts are delicate. You'll get more life out of your brushes if you treat them with care.



## Palette and Painting Knives

Palette knives are flat. Painting knives are angled. Most are made of metal, but some are made of plastic. This course recommends metal knives. The blades are generally finer and will take more punishment. To get started, get one palette and one painting knife. You'll see what works for you.



## Palettes

Wooden palettes were the standard for many centuries. They range from small to medium to large. It is best to clean wooden palettes after every use.

Many artists and students today use glass palettes on a table. There are also peel-off, disposable paper palettes. They're inexpensive and don't require cleaning.

There are also plastic and aluminum palettes. They're fine for watercolor, but not so good for oil. If the paint dries, it's hard to remove.

If you're considering buying a wooden palette, it should be weighted toward the front. When you put your thumb through the hole, the palette should balance. It shouldn't tip back. If it does, your hand will become tired holding it.

## Supports

Next are surfaces, also called supports. For starting out, this course recommends a roll of primed canvas. You can cut a piece to any size you want. Attach it to a drawing board or the wall.

There are two main types of canvas. Cotton duck comes in varying weights. The most common are numbers 10, which is heavier, and 12, which is lighter. The other type is linen, which is more expensive than cotton and comes in varying weaves. Coarser weaves are cheaper.

If the canvas is primed, that means the cloth material has been coated, generally in a white color. There are many priming options. The two most common are acrylic gesso and oil-based primers.

You'll also see single-primed and double-primed variants. Avoid single-primed gesso. Your paint will sink into the canvas. Single-primed oil should be fine.

Canvas boards are another option. They're inexpensive, light, and compact. Essentially, they're a piece of acrylic-primed canvas stretched on cardboard. Look for boards that feel solid. The canvas should be a reasonably tight weave and not be too thin. Look for a surface that's double or triple primed.

If you'll be painting this course's paintings using the  $8\frac{1}{2} \times 11$ -inch cartoons and intend to paint with watercolor, you could use a 90-pound watercolor paper.

Similarly, if you plan to use the small cartoons with acrylic or oil, you could use a 90-pound acrylic or oil painting paper. Nine by 12 inches is a common size for pads of both. If you trim a sheet to  $8\frac{1}{2} \times 11$  inches, you'll be able to print the cartoons on your home printer.

## Easels

Easels are great if you're working from observation. For example, if you're painting a landscape from observation, an easel is an obvious choice.

However, many artists dispense with the easel and work on the wall. This saves space. For smaller paintings, you can hang or tack the painting directly on the wall. A canvas board can be secured to the wall with a couple of pushpins, nails, or screws. Artists working on larger paintings will often rest them against the wall stacked on gallon paint cans.

If you decide to go with an easel, there are many types to choose from. There are studio easels of various heft and bulk, lightweight portable models, French easels with storage compartments, and even tabletop easels. Easels range from less than 20 dollars to several thousand dollars.

When choosing an easel, ask yourself how you'll be using it, where you'll be using it, and how much space you'll have. Also consider if you will store it or leave it set up after each use. Additionally, think about the size of paintings you will be making. The smallest painting created in this course is about  $8 \times 10$  inches. The largest is about  $2 \times 3$  feet.

## Other Tools

There are a number of other things that may be useful. A razor blade tool can be useful for cleaning glass palettes. Always push the tool away from you on the palette. Never place your free hand in front of the tool. Be careful, and when you're done using the tool, close it.

You'll need extra blades. Change the blade with care. There will be both a closed and an open end. The blade is made to slide out the open end. Hold the tool vertically, with the open end up. Place the exposed side edge of the blade on your table and press down. Remove the blade with a pair of pliers.

For disposal of used blades, check local guidelines. One method is to wrap used blades in cardboard and seal them with tape before throwing them away. You could also make or buy a blade bank.

To install a new blade, carefully insert the blade into the tool. Turn it vertically with the closed side up. Press down until the blade locks in. Close the tool until you're ready to use it. If it doesn't close easily, that likely means the blade hasn't been inserted all the way.

A pair of tweezers can be useful. As your brushes wear, you may find individual hairs left on your painting's surface. You can partially lift a hair off the surface with a painting knife. Then, remove it with the tweezers.

A pair of scissors and a utility knife are also useful to have on hand. Additionally, awls are useful for unplugging a squeeze bottle. You'll want to keep a stock of paper towels and/or rags in your studio. You'll use them to clean both your brushes and palette.

Plastic cups and sticks are useful when you want to mix larger amounts of paint. Proportional dividers may come in handy as well.



Sofonisba Anguissola,  
*Self-portrait Painting the Madonna*

A final useful tool is a mahl stick (depicted at left). It's used to support the brush hand so that it doesn't come into contact with the painting's surface. Many, including those commercially available, have a padded, hooded top.

## READING

Albala, *Landscape Painting*, pp. 26-31.

Gottsegen, *The Painter's Handbook*, pp. 15-31.

Guptill, *Oil Painting Step-By-Step*, chap. 1.

# Studio Setup and Brush Care

**T**HIS LECTURE LOOKS AT HOW TO SET UP YOUR WORKSPACE. THERE IS NO ONE RIGHT WAY TO do this, but the guidelines in this lecture can be a helpful starting point. As you progress, feel free to adapt your space so that it works best for you.

## Paint Tables and the Basics

Many painters use one or more tables for their materials. Tables are liable to get paint or solvent on them, so it is best not to use anything valuable. If your table has a couple of shelves or drawers, those can be useful. Your table should be large enough to accommodate your palette, with room behind it and at least to one side for other things.

Lots of artists paint standing. Others paint sitting. Many do both, depending on the painting's size. Regardless, if you are using a glass palette, it should be at a comfortable height for mixing.



*Aert de Gelder, Self-Portrait at an Easel Painting an Old Woman*

Many artists put casters on just about everything in the studio. This helps when you want to move things around.

Many painters keep their brushes in cans, jars, or glasses, which are easy to knock over. You can pour sand in the containers to weigh them down.

## Lighting

Lighting is another important factor. Most artists want consistent and even light. Additionally, it is advisable to avoid shadows falling across your palette or painting. Glare can be a problem as well.

You don't want other surfaces, like an orange accent wall, reflecting onto your painting. If a wall's problematic, cover it or reposition yourself.

You also want the same kind and amount of light illuminating both the painting and palette. That way, color and value will appear the same on both surfaces.

If you're painting from observation, you'll also be concerned with the illumination of your subject. That may require a different light source from the one illuminating your painting station.

With natural light—a window and/or a skylight—size, shape, and location are primary factors. In the northern hemisphere, a north-facing window or skylight will provide the most soft, diffuse, and neutral light. Southern light, though consistent, will be more piercing. And east and west light can change dramatically over the course of the day. In the southern hemisphere, it's inverted. You'll get the best light from the south.

If you have problematic windows, you have a couple options. If they only pose a problem during certain seasons or times of day, you could try semitransparent drapes. That's what Cézanne had in his studio. If the windows are a problem throughout the day, you could try masking them with a diffusing material.

The location and height of the light source relative to where you're working are also important. Distance and height reduce glare.

When it comes to artificial light, artists prefer light that's in the 4,500 to 6,500 Kelvin range. That's a broad daylight range. CRI, or color rendering index, is a measure of a light source's ability to illuminate all the colors in the spectrum faithfully. A bulb that's rated 90 or 95 to 100 is great. Additionally, you want enough light, measured in lumens, to illuminate the work area.

## Laying Out the Palette

Historically, a common way was to lay out the colors has been from light to dark. You can adapt this to a glass palette. Put your neutrals and earth colors along the vertical axis on the left, moving from light to dark as you go from bottom to top.

Start with titanium white, then place yellow ochre, then raw sienna, burnt sienna, burnt umber, and ivory black. Later, you can add more colors along the top. A wooden palette can be set up in a similar manner.



Frans van Mieris the Elder,  
*Pictura (An Allegory of Painting)*

## Brush Cleaning and Care

Brush cleaning and care are also important factors. For watercolor, acrylic, and water-miscible oils, you can wipe your brush off and clean with water.

With traditional oil paint, it's not so easy. One of the most common beginning problems is muddy color. This is often traceable to dirty brushes.

There are two times when you may want to clean your brush. The first is while you're painting and intend to use the brush again for a different color. The second is when you're done for the day. Refer to the video lecture for a demo on brush cleaning as well as making a brush cleaner. To make a brush cleaner, you'll need the following supplies:

- A small can, like a tuna can. Clean it, dry it, and remove the label. If there's a sharp edge on the inside rim, crimp it with a pair of pliers.
- A larger jar or can with a screw-top lid. It needs to accommodate the smaller can.
- Screen wire. Fine aluminum is a good option. Avoid wide, stiff mesh and synthetic mesh. You can buy the mesh at a hardware store.
- Wire.
- Wire cutters.
- Scissors.
- A marker.
- A straight edge and a piece of paper.
- Odorless mineral spirits.

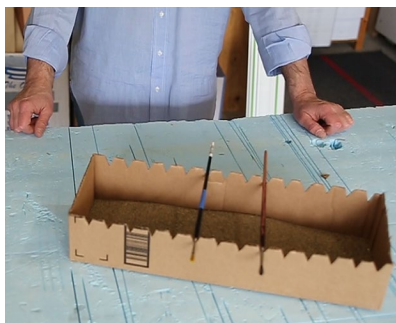


For storing dirty solvent after you clean your brushes, consider keeping a bottle around in your studio. Pour the dirty solvent into the bottle. It is a good idea to label it as flammable and toxic. Set it someplace safe for a week. The paint particles will settle to the bottom. The solvent will be a little discolored, but it will work just fine.

When the small can fills with sludge, replace it with a new one. After finishing painting for the day, some people follow the solvent baths with soap and water. Some use dish detergent. Others use bar soap. There are specialty cleaner/preserver soaps made for art brushes.

After cleaning with liquids, it's best not to store your brushes vertically. Solvent or water can drain down into the handle. Some artists opt for a brush holder or stand. It is best if the brushes rest with their tufts down.

Refer to the video lecture for a demonstration on making a brush holder. You will need a cardboard box between 4 and 6 inches wide, something to cut the box with, and something to make marks with. To make it more stable, you could put some sand, a brick, or both in the box.



## REMBRANDT'S STUDIO TOUR

You can tour Rembrandt's studio in this video:

Park West Gallery, "The Rembrandt House Tour (Part 2): The Studio." Available at [youtube.com/watch?v=gifDbh0MaiQ](https://www.youtube.com/watch?v=gifDbh0MaiQ).

## READING

Albala, *Landscape Painting*, pp. 33–41 and 46–47.

# First Exercises: Line and Mark

**A**LL PAINTINGS ARE COLORED MATERIAL DEPOSITED ON A SURFACE. THOSE MATERIALS appear as lines, marks, and areas of value and color. This lecture's book chapter goes over some general tips for brush handling and basic painting.

## Holding the Brush

People painting very small, highly detailed paintings, like miniatures or illuminated manuscripts, tend to use small, short-handled brushes. They also hold the brush more like a pencil.

People painting at a larger scale, with greater bravado, tend to use longer-handled brushes and hold them toward the handle's end. That would have been the case with the passages we looked at earlier in the Greuze.

Moving your grip up on the brush brings your face closer to the painting's surface. Your view of what you're painting zooms in to a smaller area. Holding the brush at the handle's end pushes your eyes back away from the painting.



Jean-Baptiste Greuze, *Aegina Visited By Jupiter*

Extending your arm allows even greater distance. Depending on your arm and your brush length, you can reach a distance of about two to four feet from the painting's surface. All else being equal, this allows you to see more of the painting in one look as you work.



## EXERCISES

### MAKING STRAIGHT LINES

If you're having any difficulty making straight lines, here's a good exercise for eye-hand coordination: Start by making a vertical line. Add another line, parallel to the first. Try tight spacing first. Then, try wider spacing. After that, try horizontal lines.

### AIMING

You may often have to make a line or carry paint from one point to another. This requires aiming. To practice this, make two points. Before connecting them with a line, move the brush back and forth, hovering over the surface. You're rehearsing the direction. You can leave small traces. As you become more confident, make the line.

Next, try this while varying the direction, angle, and distance. Then, try connecting two points with an even curve. In one sense there are only four kinds of lines—horizontal, vertical, diagonal, and curved. If you can dependably make these kinds of lines you'll be in good shape.

### ANGLES

The next exercise involves angles. To start it, make a horizontal line. Then, make a vertical line at a 90-degree angle. Then, create 45-degree lines aimed to go through the center. Next, add a curve to connect the outside points.

## Behavior of Paint

Below are some factors that affect how paint behaves. Most of these factors play out along a continuum:

- 1 How you hold the brush.
- 2 How you charge it.
- 3 What part of the bristles you use.
- 4 Pressure.
- 5 Speed.
- 6 Angle.
- 7 Level of viscosity, opacity and transparency.
- 8 Painting with a free hand, using a mahl stick, or using a straight edge.
- 9 Size, shape, and type of bristle.

## Different Bristles

A flat brush's bristles are longer than the bright brush's. This makes the tufts springier. It also means that you can load the brush with more paint.

Like the flats, filberts are longer than the brights and will be springy. They also have a somewhat rounded or pointed shape. Using minimal pressure, you can control the brush so only the tip comes into contact with the surface. You can also use the slanting edges.

Rounds give you access to a point and the body of the tuft. Because they're the same all the way around, there's no front and side. By changing pressure, you can change the thickness of the line.

You'll feel a distinct difference when you start working with your soft-haired brushes. They hold and disperse the paint very differently from the bristles. Especially when used with a bit of linseed oil and OMS, they cover the surface more evenly.

The angle gives you a clear distinction between the thin top edge and the full face. You'll get a range of line moving from one to the other. A good soft-bristle filbert can offer similar range.

### READING

Guptill, *Oil Painting Step-By-Step*, pp. 42-48.

## MARK-MAKING STUDY PAINTINGS

Below you'll find links to the paintings for the mark-making studies in this lecture.

Thomas Couture, *Juliette*, 1876. [augustins.org/fr/oeuvre/-/oeuvre/40398](http://augustins.org/fr/oeuvre/-/oeuvre/40398)

Pablo Picasso, *Madame Picasso*, 1923. [nga.gov/collection/art-object-page.46669.html](http://nga.gov/collection/art-object-page.46669.html)

Sir Anthony van Dyck, *A Bearded Man, A Study*. [christies.com/img/LotImages/2007/NYR/2007\\_NYR\\_01822\\_0057\\_000\(\).jpg](http://christies.com/img/LotImages/2007/NYR/2007_NYR_01822_0057_000().jpg)

Jan Vermeer, *Young Woman with a Pearl Necklace*, 1662. [artsandculture.google.com/asset/young-woman-with-a-pearlnecklace/kQFMVJh6zAXoxQ?hl=en](http://artsandculture.google.com/asset/young-woman-with-a-pearlnecklace/kQFMVJh6zAXoxQ?hl=en)

Rembrandt van Rijn, *A Woman Bathing in a Stream*, 1654. [nationalgallery.org.uk/paintings/rembrandt-a-woman-bathing-in-a-stream-hendrickje-stoffels](http://nationalgallery.org.uk/paintings/rembrandt-a-woman-bathing-in-a-stream-hendrickje-stoffels)

Canaletto, *Piazza San Marco*, late 1720s. [metmuseum.org/art/collection/search/435839](http://metmuseum.org/art/collection/search/435839)

Jean-Baptiste Greuze, *Aegina Visited by Jupiter*, 1767-1769. [metmuseum.org/art/collection/search/436580](http://metmuseum.org/art/collection/search/436580)

Winslow Homer, *The Veteran in a New Field*, 1865. [metmuseum.org/art/collection/search/11145](http://metmuseum.org/art/collection/search/11145)

Claude Monet, *Wheatstacks, Snow Effect, Morning*, 1891. [getty.edu/art/collection/objects/900/claude-monet-wheatstacks-snow-effect-morning-meules-effet-de-neige-le-matin-french-1891/](http://getty.edu/art/collection/objects/900/claude-monet-wheatstacks-snow-effect-morning-meules-effet-de-neige-le-matin-french-1891/)

Vincent van Gogh, *The Starry Night*, 1889. [artsandculture.google.com/asset/the-starry-night/bgEuwDxeI93-Pg?hl=en](http://artsandculture.google.com/asset/the-starry-night/bgEuwDxeI93-Pg?hl=en)

Paul Cézanne, *The Bathers*, 1898-1905. [philamuseum.org/collections/permanent/104464.html](http://philamuseum.org/collections/permanent/104464.html)

Frida Kahlo, *Self-Portrait with Necklace*, 1933. [curiator.com/art/frida-kahlo/self-portrait-with-necklace](http://curiator.com/art/frida-kahlo/self-portrait-with-necklace)

Pablo Picasso, *The Weeping Woman*, 1937. [tate.org.uk/art/artworks/picasso-weeping-woman-t05010](http://tate.org.uk/art/artworks/picasso-weeping-woman-t05010)

# First Exercises: Value, Edges, and Texture

**T**HE LIGHTNESS OR DARKNESS OF A COLOR IS REFERRED TO AS ITS VALUE. THIS LECTURE LOOKS at how to create different values of a color without adding white. The lecture also examines edges and texture.

## Dark and Light Value

You can create the darkest value of a color by fully charging the brush and applying the paint opaquely. You can create progressively lighter versions by spreading it out and depleting the brush of its charge.

Another way to create translucent, lighter values is to reduce opacity by thinning. You can do this with linseed oil, OMS, or a mix of the two. If you're using watercolor, gouache, acrylic, or water-miscible oil paints, you could use water. There are specialty products for acrylics and water-based oils.

It is also possible to create value optically. Think of the way a black-and-white dot matrix printer works: It places tiny dots of black in ratio against the white of the page to create the illusion of a range of values from white, through all the grays, to black.

It's not uncommon for artists to layer and combine strokes. Layering can also build more opaque areas of value or color.

Using a brush that is partially depleted of paint can result in a lighter and more transparent line. Additionally, most painting surfaces are not perfectly smooth. There are generally higher ridges and lower recesses. With less paint and pressure, the paint catches on the high ground. The recesses remain, to a greater degree, white. Your eye mixes the two to create an overall value.

You can also create many different types of optical value using a range of marks. For instance, using the tip of the brush, you can stipple. Different brushes will yield different marks. For a lighter value, dry the brush. If you increase the number of marks, the optical value deepens. Tighter spacing will produce darker values.

Another technique is hatching. A single hatch is a set of more-or-less parallel lines that create the optical effect of value. They need to be relatively close together to get the sensation of optical value. The tighter the hatch, the darker the value.

Degas makes use of wild, scribbled hatchings.



Edgar Degas, *Nude Woman Drying Herself (Femme au Tub)*

## Edges

Line can be used to create an edge and define a shape. You can also define an edge and shape by painting two values or two colors meeting along an edge.

Edges exist along a broad continuum, from hard and sharp to those that all but dissolve into nothingness. Controlling edges is essential in painting.

You can play with edges to create a range of qualities. Try all your brushes, and experiment with harder and softer bristles. You'll get a wide range of different edge sensations.

## Texture and Surface

Line, mark, and value can be combined and recombined to create the complex overall texture of a painting. For instance, this Canaletto painting uses a brownish wash to create a quiet texture. Ruled lines and organic dabs, swirls, and dots add to the painting's style:



Canaletto, *Piazza San Marco*

Mark and texture have significance beyond mere aesthetics. They're essential to creating a focal structure and visual hierarchy in a painting. In this sense, texture functions compositionally.

Related to the texture of the paint is the underlying surface texture. It'll play a fundamental role in the feel or emotional quality of a painting. It will also affect the way the paint travels. Pulling a brush across a smooth surface is like riding a bike on a newly paved road. You glide along.



Pulling that same brush across a rougher surface is like riding a bike on a pockmarked dirt path. You'll feel every bump. The paint will deposit itself accordingly.



## Wet into Wet, Scumbling, and Glazing

You can brush wet paint into wet paint. When painting wet into wet, you can control paint interaction by how you load the brush, how you hold it and move it, and how much pressure you exert.

You can also use a clean, dry, bristle brush to rub a color or a mix translucently on top of an underlying color. This creates a complex color made from the overlay. This technique is called scumbling.

You can also mix a color with some oil or varnish, then translucently paint it on top of an underlying layer. This is called a glaze.

The same combination of colors will give you very different results depending on how the paint is combined—that is, whether the colors were simply mixed, scumbled, or glazed.



## Permanence

Not everything will produce equally permanent results. For instance, if you use too much OMS in a wash, once the solvent evaporates, the pigment particles can flake off. As for paint layers, not everything will stick to everything.

An oft-cited rule is that of fat over lean: As far as permanence is concerned, fatter—meaning oilier—paint should be applied over leaner, or less oily, paint.

## Removing Paint

Sometimes, you may need to remove paint. This can be because you want to start completely over, or for a smaller goal like editing a shape.

To practice removing paint, cover an area with burnt sienna, using a large filbert brush. Then, wipe everything off with paper towels or a rag. Sometimes it's easier to lay the canvas or board flat.

Once you have most of it off, dampen a paper towel or rag with OMS and continue cleaning. It can take a bit of effort to return to something approaching white, but it's doable.

You can also practice more surgical paint removal using other tools like a palette knife, cotton swabs, and the back of a brush. If the paint is already dry but not too thick, you can dampen a rag with OMS and rub. This should remove a fair amount.

### READING

Guptill, *Oil Painting Step-By-Step*, chapter 15.

Schwartz, "The Mortality of Art."

# **Creating Basic Forms: Lines, Shapes, and Solids**

**T**HIS LECTURE LOOKS AT HOW ARTISTS CONCEIVE OF A RANGE OF SUBJECTS IN TERMS OF LINE, shape and geometric solids. Its exercises involve painting a block, sphere, cylinder, and cone simulating the effects of light on three-dimensional form. For demonstrations of this lecture's concept in action, refer to the video lecture.

## Formal Language: Line and Shape

Line, mark, value, color, and texture are all elements of the formal language of painting. Other important elements include shape, composition, space, volume, and proportion.

Lines can be of various types, including horizontal, vertical, diagonal, and curved. They can also be straight, made of compounded right angles, or zigzags. If you bend a line so that it begins to return to its point of origin, it will begin to suggest a shape.

For instance, try drawing a line away from the point of origin, changing direction at will. Eventually, return to the point of origin. You will have produced a shape. This is called a contour, and it is often used to create outlines.

Most shapes appear relatively flat, though some suggest the illusion of depth. This is often the case with those having diagonals, like triangles and trapezoids. Shapes on the curvilinear side have an elliptical quality. You can also take a shape that otherwise looks flat and make it appear three-dimensional by adding interior lines.

### DRAWING FUNDAMENTALS

If you'd like more background on the drawing fundamentals related to this lecture, take a look at lectures 4, 5, and 6 of the Great Course *How To Draw*. Additionally, in lectures 24 and 25, the course's instructor covers the technical method related to linear perspective that is used to project cast shadows.

Keep in mind that paintings—even very representational paintings—are not mere assemblages of renderings of objects. Instead, they're highly organized groupings of interlocking shapes. Sophisticated artists are very attentive to this.

## Conceptions

Artists often conceive of the objects and figures in their paintings in terms of geometric shapes and volumes. For example, many paintings are a rectangle divided into two sub-rectangles.

In many still-life paintings, a lower rectangle accounts for the table, and the upper rectangle accounts for the wall. In landscapes, the lower rectangle is land, and the upper one is sky. In each case, the lower rectangle represents a plane that's perpendicular to the surface of the canvas. This surface is called the picture plane. The upper rectangle often has the quality of being parallel to the picture plane and perpendicular to the lower rectangle.



Thomas Eakins, *John Biglin in a Single Scull*

## HOPPER'S SKETCHES FOR NIGHTHAWKS

You can see Edward Hopper's very abstract first sketches for *Nighthawks* reproduced in Robin Cembalest's article "How Edward Hopper Storyboarded *Nighthawks*." It is available at [artnews.com/2013/07/25/how-edward-hopper-storyboarded-nighthawks/](http://artnews.com/2013/07/25/how-edward-hopper-storyboarded-nighthawks/).

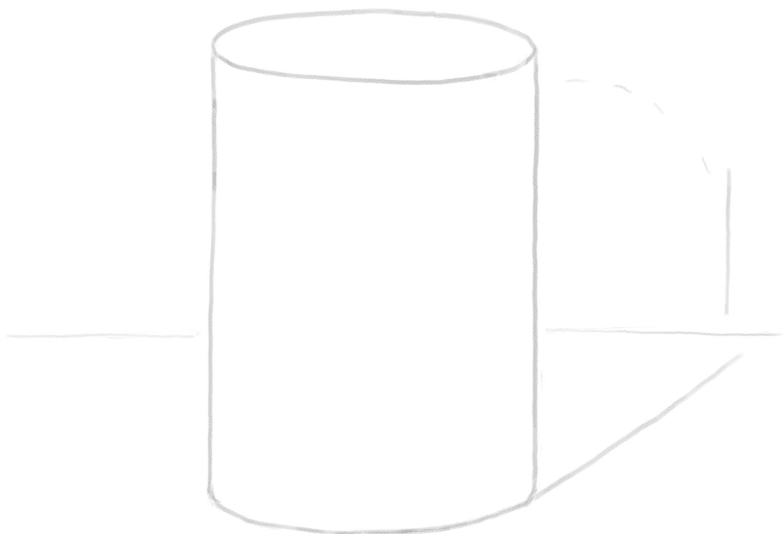
## READING

Augsburg, *Augsburg's Drawing, Book 1*.

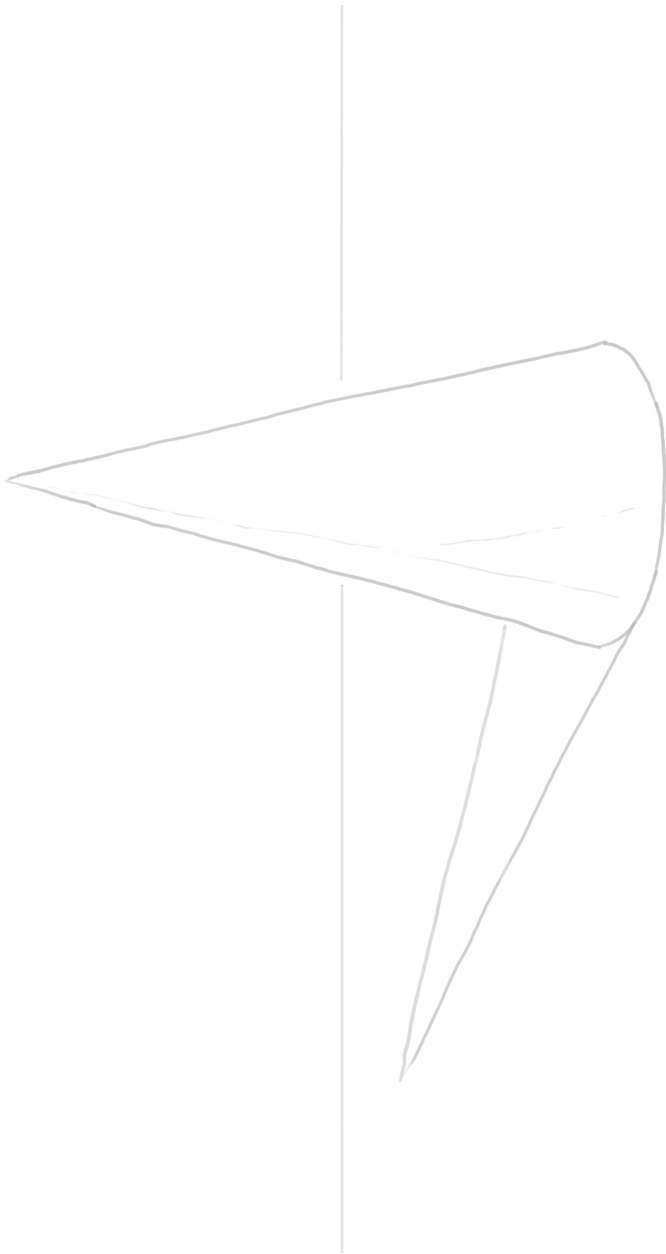
Merrifield, *Handbook of Light and Shade with Especial Reference to Model Drawing*.

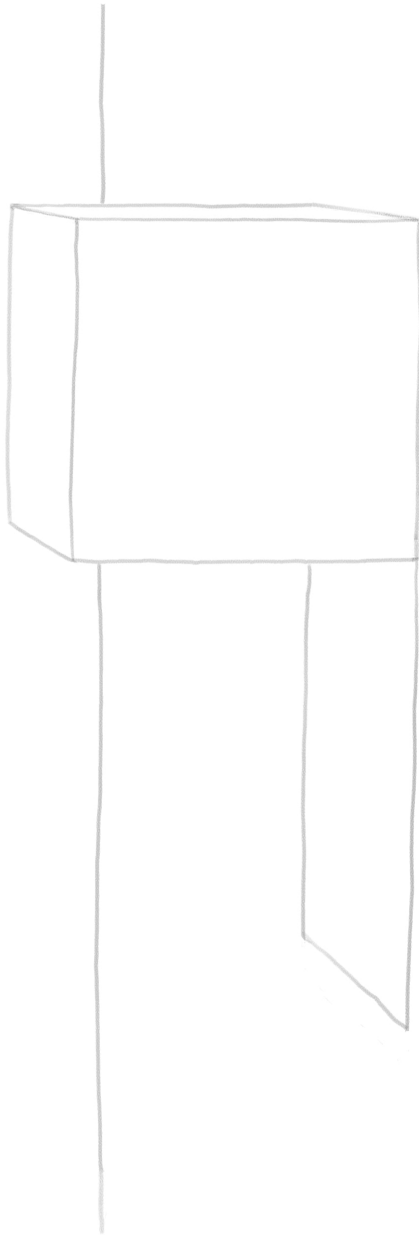
## CARTOONS

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on [page 249](#), or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter). See "Printing the Underdrawings" in Lecture 9 on [page 57](#) for more details.







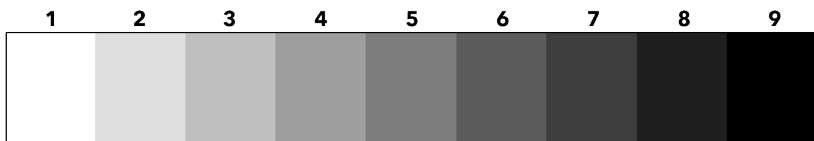


# Value: Making a Value Scale

**T**HE TERM *VALUE* REFERS TO THE LIGHTNESS OR DARKNESS OF A COLOR. A RANGE OF VALUES can be used to paint basic forms. Value is also one of the factors used to create the illusion of three-dimensional form on a two-dimensional surface. Additionally, different ranges of value project different moods. All in all, value is an extremely important factor in painting.

## Value Scales

Many artists conceive of value in scale degrees. A value scale can be useful for quantifying lightness or darkness. A value scale could have any number of steps. However, there is a balance: Three would be too few, but 20 would be too many. Below is a nine-step value scale:



## Simultaneous Contrast

Colors appear the way they do relative to the other values and colors surrounding them. This is known as simultaneous contrast. When you're painting, and you want an area to appear a consistent value or color, you can't just mix a big batch of paint and brush it in. It may appear to be different—lighter, darker, redder, greener—depending on what abuts or surrounds it.

This is a good rule of thumb: A value will appear lighter as the value that abuts or surrounds it becomes darker. A value will appear darker as the value that abuts or surrounds it becomes lighter.

After Leonardo da Vinci's death, one of his students, Francesco Melzi, put together some of his writings in a volume known as *A Treatise on Painting*. In this text, the principle of simultaneous contrast is summed up as follows: "Anything white will appear whiter by being opposed to a dark ground; and, on the contrary, darker upon a light ground."

### READING

Albala, *Landscape Painting*, pp. 51-55.

Guptill, *Oil Painting Step-By-Step*, ch. 14.

# Value: A Simple Still Life

**T**HIS LECTURE'S VIDEO COMPONENT HAS YOU PAINT A BRUNAILLE BASED ON A STILL LIFE BY Norman Lundin. This guidebook chapter provides some guidance on using the course's cartoon files and some general tips on the lecture's project.

## PRINTING THE UNDERDRAWINGS

Scaled-down versions of the cartoons or underdrawings are available within the guidebook chapters. Full-size versions can be found in the Cartoons appendix on page 243.

You can also download the full-size PDFs from [thegreatcourses.com/painter](http://thegreatcourses.com/painter). If you choose to download the cartoons from the Great Courses website, you will see that they are organized by lecture and further separated by size.

- ♦ Files marked with “US\_LETTER” are formatted to print out at 8½ × 11 inches. Use these cartoons if you want to print the drawing directly onto 90-pound watercolor paper, 90-pound acrylic or oil painting paper, or even prepared canvas of a similar thickness.
- ♦ “TILED” files will print out at full scale on multiple sheets of paper on any standard printer. The image areas are a light gray. For the interior facing portions of the tiles, cut along the gray. On the exterior, leave a one-inch border to help with registration. Then, tape the pieces together.
- ♦ Files with “SINGLE\_SHEET” in the title can be printed as a single sheet on a plotter printer. You will find plotter printers at many copy chains. Send or bring the digital files to the shop, and you can print them out on one large sheet of paper. There are also printing company websites where you can upload your files to be printed and delivered to your door in a mailing tube.

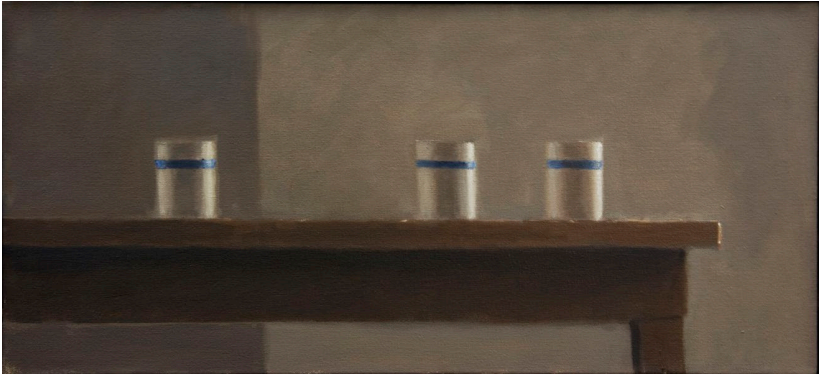
You can transfer any of the three types of underdrawings. For additional guidance on working with the underdrawings, including preparing them, refer to the video lecture.

## Drawing Freehand

If you have prior drawing experience, you may want to lay out your own underdrawings freehand. Use what you know about construction shapes, negative shape, plumb and level lines, a standard unit of measurement, and other tools and methods for controlling proportion. You could work from the supplied cartoons or from a reproduction of the painting itself.

## Understanding the Painting

This lecture's project involves a painting based on a still life by the contemporary American painter Norman Lundin. It's titled *Simple Still Life—Three Cups*, and it is shown here:



Norman Lundin, *Simple Still Life—Three Cups*

Each of the painting's shapes is not much more than a rectangle. They are constructed of horizontal and vertical lines. Even though these are simple shapes, they produce a sophisticated painting, with the illusion of form, space, light, and air.

The painting illustrates an important concept. In painting, abstraction and figuration aren't necessarily opposites. There is abstraction in figuration and vice versa. It's common for beginning painters to focus on rendering details while ignoring the larger abstract structure. Professionals tend to fixate on the structural elements. Then, they make sure the details relate to that larger structure.

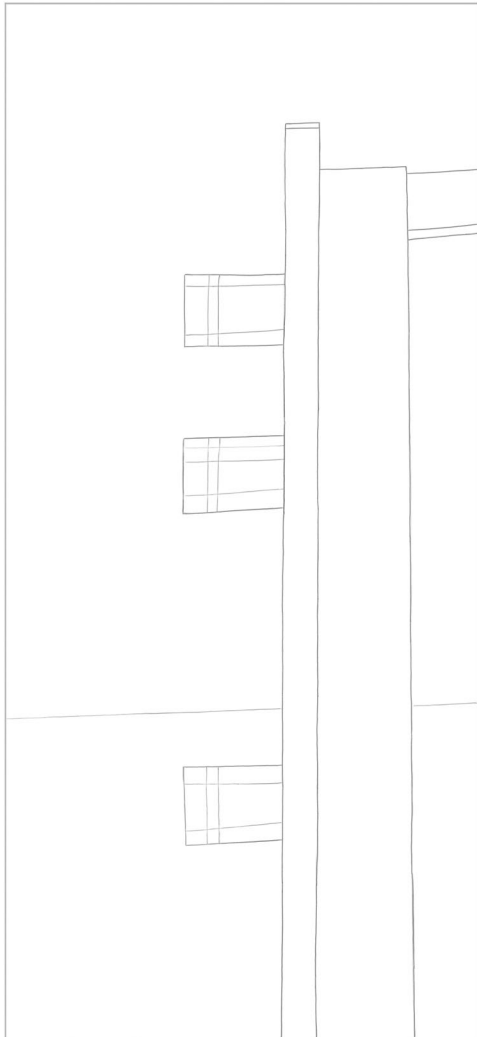
### READING

Guptill, *Oil Painting Step-By-Step*, chap. 9.

Lundin and Brody, *Norman Lundin*, pp. 9-14.

**CARTOON**

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on [page 254](#), or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).

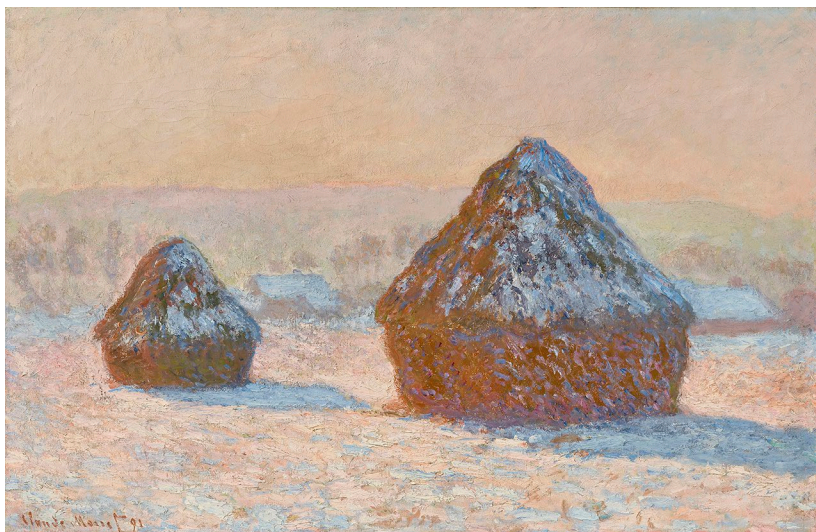


# Value: Mood, Palette, and Light

**M**ANY BEGINNERS ASSUME THE MAJOR FUNCTION OF VALUE IS TO CREATE SHADING. However, value functions in many different ways. Those functions are the subject of this lecture.

## Value Palettes and Mood

Creating mood is one function of value. For example, the value of this Monet painting registers in the light to mid-range:

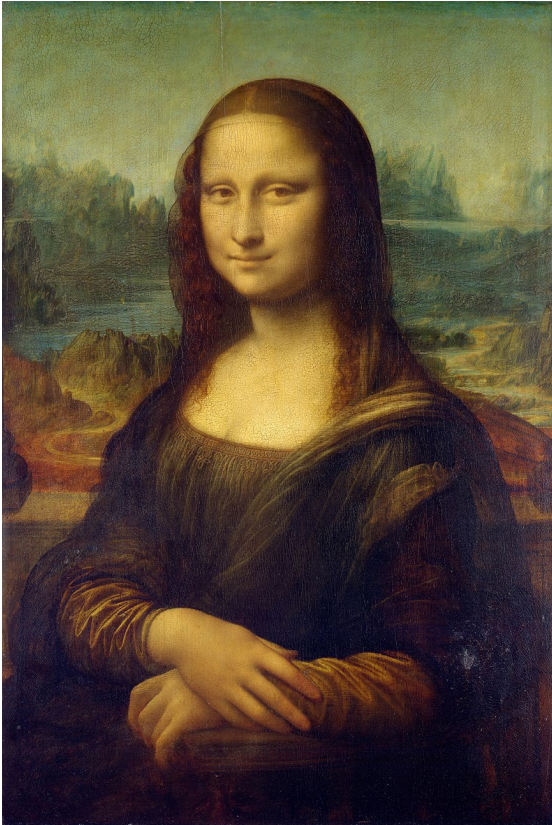


Claude Monet, *Wheatstacks, Snow Effect, Morning*  
(*Meules, Effet de Neige, Le Matin*)

Though there are some moderate light-to-dark contrasts, there are also many areas where the transition from light to something darker is very gradual. Overall, the mood is soft, quiet, and calm.

## Composition and Focal Hierarchy

A second use of value relates to composition and focal hierarchy. All else being equal, the viewer's eye will go to the highest contrast first. For example, take Leonardo's iconic portrait:



Leonardo da Vinci, *Mona Lisa (La Joconde)*

The highest contrast is in the head and chest. The next-highest contrast appears in the hands, then the landscape, and then the sky.

The management of value contrasts creates focal areas and focal points. In other words, painter can control the way the viewer moves through the painting.

## Edge and Shape

To make one thing distinct from another, we need to paint edges. Edges made by changes of value—or color—in a painting can function the same way lines do in drawing. They create shapes. For example, take Picasso's portrait, *Madame Picasso* (see video lecture).

It incorporates both line and value-color edges to establish shape. Many of the prominent lines coincide with edges where one value and color abuts another.

## Space and Atmospheric Perspective

In painting, reducing edge clarity to create the illusion of spatial recession is often referred to with the term *sfumato*. With spatial recession, the diminutions of edge clarity and value contrast are also defining aspects of atmospheric perspective. As distance increases, dark values, value contrast, and edge clarity decrease.

## Overall Value Patterns

A final big-picture notion about value has to do with pattern. When using value, we generate what will tend to be read as pattern, even with seemingly random occurrences of value.

The Japanese term *notan* means “shade” and “light.” It refers to principles of design governing the interaction and patterning of dark and light shapes. The idea is that the dark completes the light, and the light completes the dark. Together, they create the whole. The Chinese yin-yang symbol demonstrates the principle.



Viewers can see careful attention paid to the ordering of light and dark in the painting *Nighthawks*:



Edward Hopper, *Nighthawks*

The large light shape in the diner is answered by the somewhat light sidewalk diagonally across from it on the lower left. The dark of the upper left is answered by the dark on the lower right.

## READING

Boyer, "Drawing Lesson—A Theory of Light and Shade."  
Pumphrey, *The Elements of Art*, pp. 147-161.

# Value: Block and Sphere in Grisaille

**T**HIS LECTURE CONTINUES THE COURSE'S FOCUS ON VALUE. IT ALSO LOOKS AT THE USE OF blocks and spheres in grisaille painting. The term *grisaille* comes from the French word *gris*, meaning "gray."

## The Sphere and Block

An understanding of the way light moves over a faceted surface and the way it moves over a continuously curving surface is important. Block-like forms, like tables, walls, and buildings evince harder edges. They often show a greater consistency of value within each plane.



Fayum, *Portrait of a Man With a Mole on His Nose*

In contrast, spheroid objects like oranges, pears, and a bowls will generally take light in a more graduated way. However, complex, three-dimensional forms can be conceived of as block-like forms, too. That's because many forms, like the head, have attributes of both the sphere and block.

In the Fayum and Picasso heads, the change of plane at the cheekbones feels more faceted and block-like. The necks and foreheads are more cylindrical. Meanwhile, a Caravaggio head feels more spherical than a Fayum or Picasso head.



*Caravaggio, David with the Head of Goliath*

## Creating the Illusion of Three Dimensions

At the most basic level, the creation of the illusion of three dimensions requires only two values: one to play the role of the light and one to play the role of the dark. For example, a mid-gray could serve as a dark in relation to a lighter gray or as a light in relation to a darker gray.

Adapting brush direction to the axis or axes of the plane or form is very common. For instance, in a wall, horizontal strokes might dominate to create a horizontal feel.

## Contrasts

When painting, you can keep your high contrasts associated with the objects themselves and their relationship to the value of the parts of the ground that abut them. If you hold off on using pure blacks and whites, you can continue calling on higher contrasts to create greater visual drama.

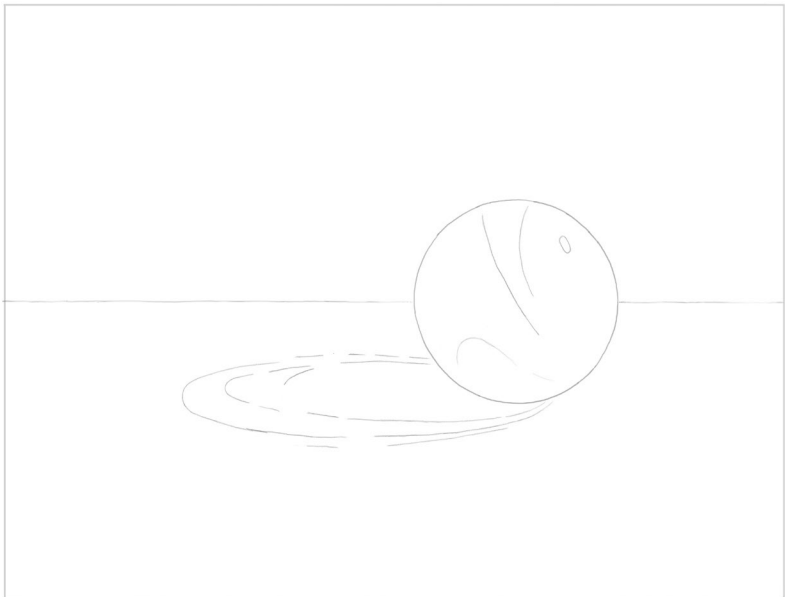
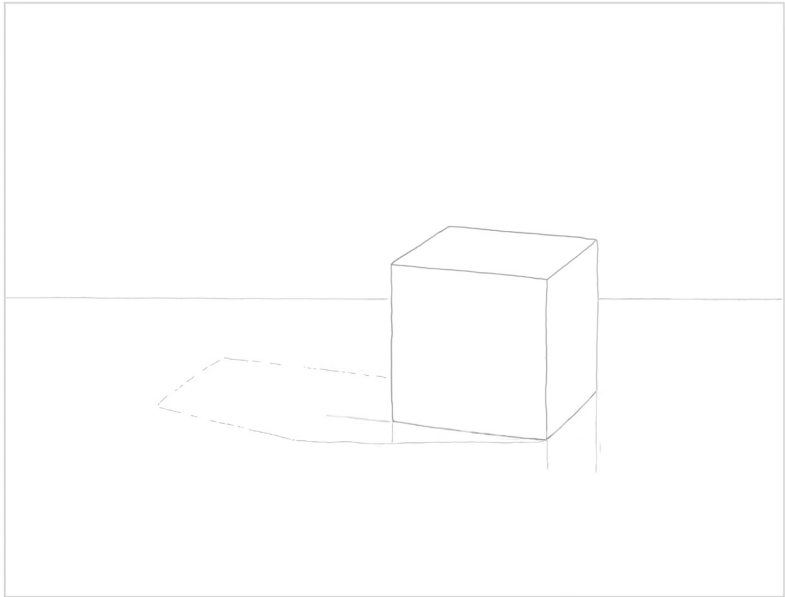
### READING

Albala, *Landscape Painting*, pp. 57-67.

Loomis, *Successful Drawing*, pp. 79-97.

### CARTOONS

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on page 263, or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).

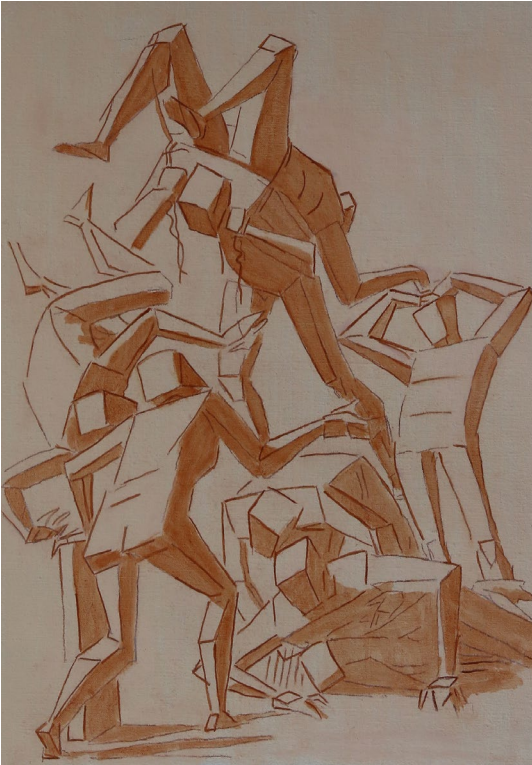


# The Figure and a Portrait in Brunaille

**T**HIS LECTURE'S VIDEO COMPONENT FEATURES SEVERAL ACTIVITIES: THE FIRST HAS YOU WORK on a two-value brunaille based on a multi-figure drawing by Luca Cambiaso. Then, you'll paint a study based on an antique torso copied by many artists as part of a drawing course. Finally, you'll paint a study based on a portrait by Thomas Couture. This guidebook chapter provides background information for all three.

## The Cambiaso-Based Brunaille

This lecture's first drawing is a 16th-century piece by Luca Cambiaso. He was born in Genoa in 1527. His father was a painter, so he grew up drawing and painting from a young age. By his mid-teens, he was working professionally. He came to be regarded as one of the most important painters of the Genoese school.



Today, he is best remembered for drawings where the figures are constructed using block-like forms. One of the great utilities of this method is that it allows you to paint or draw convincing three-dimensional figures in just about any conceivable position, all from your imagination.

David Brody, after Luca Cambiaso

## An Antique Torso

Once you complete the Cambiaso exercise from the video lecture, you'll be in good shape to make a study of an antique torso. It was part of a famous French 19th-century printed drawing course called the *Cours de Dessin*, meaning the "Drawing Course." Many artists made copies of these plates, including Picasso and Van Gogh.



David Brody, after Charles Bargue

## A Couture Portrait

This lecture's final piece is a portrait by Thomas Couture titled *Juliette*. Couture was a mid-19th-century French academic painter and teacher.



Thomas Couture, *Juliette*

Painting a study based on *Juliette* will help solidify your understanding of the many ways that value functions in a painting. It will also be a great opportunity to further apply your knowledge of light and form to a more complex subject.

This painting represents a common portrait type. The rectangle of the canvas is vertical, also known as the portrait orientation. The viewer sees the head, neck, shoulders, and part of the chest.

This painting follows a fairly common focal hierarchy for this portrait type. Couture takes you to the eyes and features first. Then, he moves to the head, followed by the cropped upper torso, and finally the space behind the figure.

Couture carefully organized his value contrasts to achieve this. The features get the highest contrast, greatest attention to modeling, and most detail. The hair comes next, then the upper torso, and then the wall behind the subject.

## READING

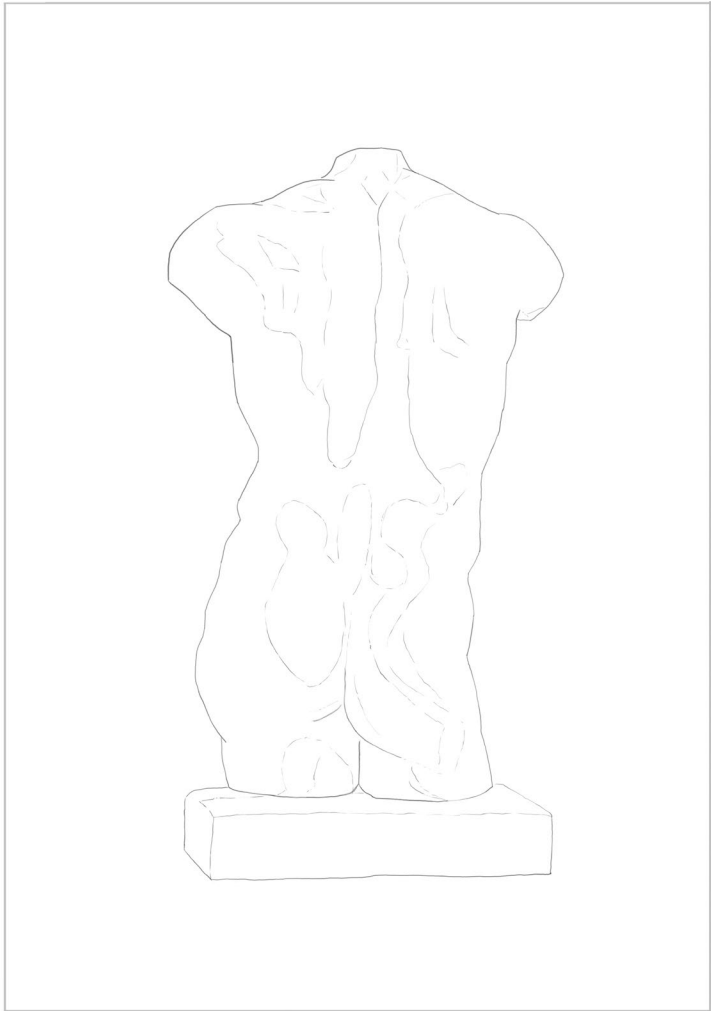
Ackerman and Parrish, *Charles Bague and Jean-Leon Gérôme Drawing Course*. Available at [ia801200.us.archive.org/14/items/C.BargueDrawingCourse/C.%20Bargue%20-%20Drawing%20Course.pdf](http://ia801200.us.archive.org/14/items/C.BargueDrawingCourse/C.%20Bargue%20-%20Drawing%20Course.pdf). You'll find the antique torso on page 83.

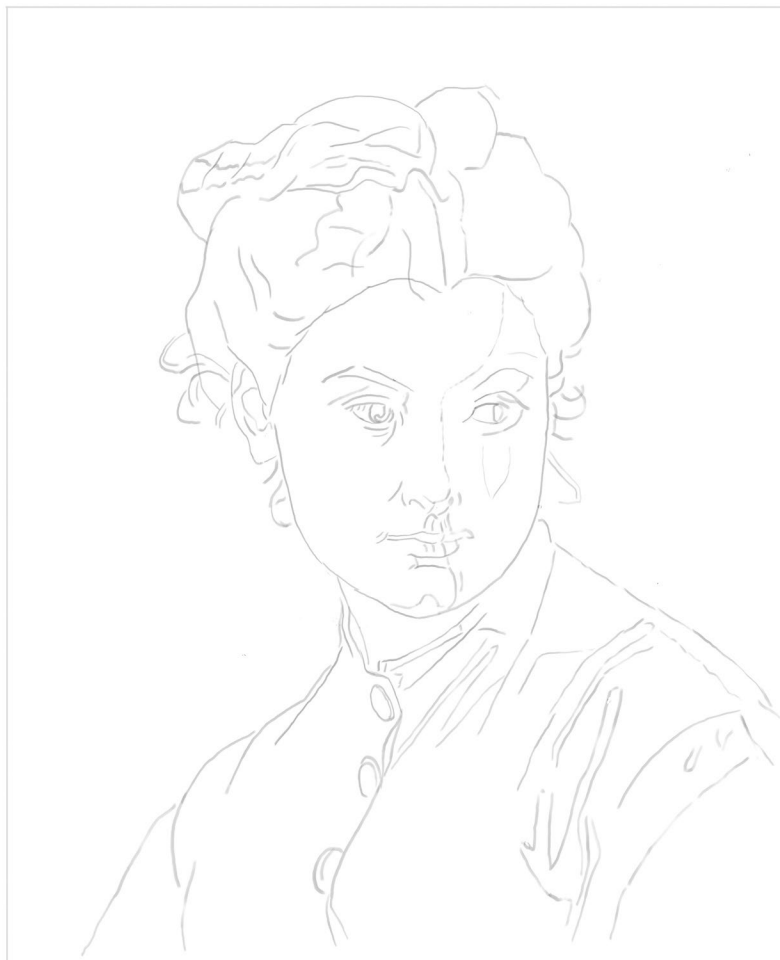
Couture, *Conversations on Art Methods*.

## CARTOONS

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on page 272, or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).







# Working with the Earth Tone Palette

**T**HIS LECTURE EXPLORES THE FULL PALETTE OF EARTH TONES. THIS PALETTE HAS BEEN USED FOR millennia. It has appeared across cultures and continents, and it has created depictions of just about every subject imaginable. The video component of this lecture involves a color mixing exercise and then a study based on a still life painting. This guidebook chapter provides supplemental information on black paint, color sampling, and other topics.

## The Use of Black Paint

Black paint is not only a darkening agent. It's also a coloring agent. Black can be used to create cool colors, like those associated with a cool forest or lake. These colors can have a blue, green, or purple character.

For instance, in the Fayum portrait ([page 66](#)), there is color that leans toward the green in the drape and ground. In the Picasso painting (see video), the ground and drapery lean toward coolness as well.

## Color Sampling

Color can be illusive. It's contextual. The same color can look lighter, darker, greener, or redder depending on the abutting colors. A color-sampling tool is useful for studying colors. Many graphics editors, like Photoshop and other similar programs, have a color-sampling function. The basic procedure is this:

- 1 Open the image in your graphics editor. Create a white border around the image.
- 2 Use the color-sampling tool to select a color by tapping on the color you'd like to identify. That color loads as the active color in the program.
- 3 Create a rectangle in the white border. Paint a digital swatch of the color in the rectangle.
- 4 Connect the swatches to the colors sampled with lines.

Using a graphics editor can help you map the value and color range in a given painting. It can help educate your eye. The results will depend on a number of factors, including the quality of the image file and your screen's calibration. If you print a copy, the calibration and color quality of your printer will have an effect as well.

If you have done a color mixing study with your intended palette, you'll be able to compare this with your digital sampling. This can really help you get going in the right direction.

## The Uncertainty of Color

When studying a work of art, it's not always easy to know what the color was like when the painting was made. Paintings can change over time in a number of ways. One example is *pentimenti*: Paint can become more transparent and reveal changes that were not visible when the painting was first completed. Paintings can also crack over time. Color and value can also change.

Curators will clean and otherwise seek to restore paintings. However, there is not always consensus on what the painting in question would have looked like at completion.

Digital versions of paintings can vary as well. For instance, if you search for a well-known painting online, you'll come across many versions. The value and color can vary greatly.

Additionally, oil paint has evolved over the centuries. Given all this, it's unlikely you'll be able to make an exact match for every color you find in many historical paintings. However, you will generally be able to get reasonably close and capture the sense of color, light, and form. Overall, you'll learn a good deal about painting in the process.

## Giorgio Morandi

Though not a household name, Giorgio Morandi is a highly regarded artist. He is considered one of the great still life painters of the 20th century. Morandi was interested in playing with both flatness and the illusion of space and volume. His paintings are structured to hover between two and three dimensions.

For example, while Morandi uses overlap to create a sensation of special depth, there's very little in the way of *chiaroscuro*.

Morandi has a number of other tricks up his sleeve. For instance, he positions the light bottle in front to line up on its right edge. The dark bottle behind it is positioned in a way that flattens the space between them. Additionally, while Morandi likes to give objects form, he also likes to make them dissolve. Note how the bottom left edge of the pitcher bleeds out into its cast shadow.



David Brody, after Giorgio Morandi

**READING**

Dunkerton, "The Restoration and Technical Examination of Jan Van Eyck's *Margaret, the Artist's Wife*."

**CARTOON**

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on page 295, or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Ensuring Accurate Proportions

**L**EARNING HOW TO CREATE ACCURATE PROPORTIONS IS A GREAT STEP FOR ANY PAINTER. While artists are commonly caricatured as wild and spontaneous, many are, in reality, much more boring and workmanlike. To arrive at accurate proportions, they measure carefully and repeatedly. This guidebook chapter provides some basic information on tools in art and proportion work.

## Tools in Art



Over the centuries, artists have used many measuring devices. One such tool is called the velo or veil. It goes back to the Renaissance, and it consists of a wooden frame strung with string. Calipers are another long-used tool.

Artists, like people in many fields, have consistently been interested in what evolving tools and technology might bring to their work. It has been argued that Johannes Vermeer and Giovanni Canaletto both used a camera obscura or a related device to project, trace, and paint their images.

More recently, in the 1960s and early 1970s, it was common practice among the American Photo-realists—including Richard Estes, Ralph Goings, and Robert Cottingham—to project slides or photos directly onto their canvases. This helped them trace out their drawings. The takeaway point is that there is no reason not to experiment with any tool that might prove potentially useful.

## Proportional Dividers

A proportional divider is a particularly useful tool. They come in plastic, brass, and wood. The ends are sharp, so be careful when using them. You can use proportional dividers to draw from a two-dimensional source or to draw directly from life. They can be used for virtually any subject you could imagine.

When using a proportional divider, you take a measurement from the image between the divider's two arms, and then you transfer it to your page. Transfer enough coordinates from the original, and you will create a connect-the-dots version of the painting. Connect the dots, and you will create proportionate drawing. Similarly, you can use a beam compass.

If you are drawing from life, consciously note where you're standing or sitting. If you'll be working over an extended period, give yourself some tape marks on the floor for your location.

Assume a default position. Sit or stand straight up with your shoulders squared. Hold the dividers horizontally at eye level. Extend them straight out. Close one eye. Identify what you see coincident with the dividers.



If you're drawing a still life, this may coincide with some part of one of your objects or part of a patterned drape on the wall. If it only correlates with a portion of a blank wall, put a piece of tape on the wall at that point. Once you've determined your position, posture, and eye level, make sure you maintain this when measuring. If you do, you'll always be seeing the same proportions.

Another complicating factor is the position of the dividers themselves. For accurate proportions, you also have to keep the dividers at a consistent distance from your eye. The standard practice is to keep your arm fully extended.

## READING AND VIEWING

Hockney, *Secret Knowledge*.

Kemp, *The Science of Art*, pp. 167-220.

Lectures 11 and 12 of the Great Course *How to Draw*.

# Composition: Shape, Ground, and Format

**T**HIS LECTURE FOCUSES ON THE LARGE STRUCTURAL CONCERNS OF SHAPE, GROUND, and format. In painting, they all relate to composition. Composition is essentially organization, which makes paintings coherent.

## Rectangles and Aggregate Shape

Many aspects of painting boil down to organizing things within rectangles. The goal is relationship and wholeness.

In Norman Lundin's *Simple Still Life—Three Cups*, (page 58) the three cups are grouped in a central rectangle.

Individual objects gain weight and presence by being grouped into a larger shape. These larger groupings are known as aggregate shapes. They're positioned to relate to the shape of the canvas—that is, the format shape.



Not all aggregate shapes are simple. Some are compounded. For instance, in this painting, Henri de Toulouse-Lautrec groups his major figures in a central pentagon. The figure on the right attaches as a rectangular wedge.

Henri de Toulouse-Lautrec,  
*At the Moulin Rouge*

## Aggregate Shape Sub-Groupings

Large groupings often have sub-groupings. For instance, in this Giotto painting, the major rectangular grouping has a sub-grouping—another rectangle—accounting for the focal area:



Giotto di Bondone, *Pieta (Lamentation)*

He implies another smaller sub-grouping on the left that's overlapped by the first group. Another is present on the right. Looking to the sky, Giotto organizes the angels as an aggregate arrow, which can be read in response to a lower, left-pointing one.

## The Ground

The ground shapes are often the largest shapes in paintings. Additionally, some paintings have no obvious objects at all. This is common in interiors and landscapes.

As with aggregate shape, there are also ground shape strategies that have been used repeatedly over the centuries. Monet's *Wheatstacks* (page 61) evinces one of the most common. The painting's rectangle is divided into two sub-rectangles that create the ground.

Alternately, we can conceive of the two ground rectangles as constructing the format shape. It's deceptively simple, but good compositions are often most elegant in their simplest form.



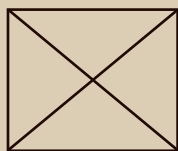
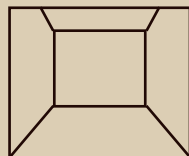
Winslow Homer, *The Veteran in a New Field*

The ground can also be seen as structuring the illusion of depth in a painting. In the Monet painting, we can read the two ground rectangles as flat abutting rectangles that fill the shape of the painting itself. Another way to look at this painting is that the two rectangles are setting up a foreground receding to a mid-ground. Then comes a depth of space, or background, that includes buildings, trees, hills, and the sky.

## THE BOX

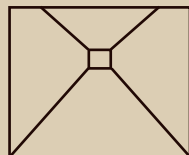
The box is another compositional strategy for the ground that has been used repeatedly over the centuries.

To see how it works, grab a pencil and a piece of paper. Draw a rectangle. That's your format shape. Then, draw a second rectangle inside the first. From each corner of the small rectangle, draw a diagonal to intersect a point along the edge of the outer rectangle. You can read what you've drawn as six shapes: the original outer rectangle and five, smaller, internal shapes. The five smaller shapes are one rectangle and four trapezoidal and wedge shapes. You could read what you've drawn as the interior of a box.



You can also read flat shape and dimension at the same time. To see this in action, draw any rectangle and cross your diagonals. You can read it as a drawing of four flat triangles. Alternatively, you can read it as a drawing of a very deep room where the floor, walls, and ceiling vanish to a point at a great depth.

Next, re-draw your first format shape. Draw a smaller internal rectangle this time. You'll find that as the inner rectangle—the back plane of the box—gets smaller, the box's depth increases. As the inner rectangle gets larger, the depth decreases. When the back wall grows to fill what was the larger rectangle, the space is squeezed out. All is flat.



If the initial ground shape looked at all familiar, there is good reason. It is widely used. For example, it appears in Leonardo da Vinci's *Last Supper*.

## The Format Shape

One of the most important factors governing the success of a painting has nothing to do with fancy brushwork, subtle color, or fine rendering and details. It only depends on sound visual judgment regarding the format shape.

Choosing the right format shape for a given subject and composition can either launch a painting in the right direction or doom the outcome. Get into the habit of thinking about subject, composition, and format shape together.

A good rule of thumb is that if the subject or aggregate object is horizontal, use a horizontal format. If the subject or aggregate object is vertical, use a vertical format. If the subject or aggregate object is somewhat square, use a somewhat square format.

### READING

Loomis, *Creative Illustration*, pp. 29-34 and 47-53.

Pumphrey, *The Elements of Art*, chapter 5.

Rockman, *Drawing Essentials*, pp. 22-38.

# Composition: Leonardo and the Armature

**E**ACH RECTANGLE IN A PAINTING HAS ITS OWN INNER STRUCTURE AND RHYTHM. YOU WILL compose with greater sophistication as you develop a sense for this. This lecture aims to help you build that sense by focusing on the painting structure known as the armature, and this guidebook chapter provides some examples of the armature at work.

## The Last Supper

Leonardo da Vinci's painting *The Last Supper* has an underlying geometric structure that binds all the imagery to the painting's particular format. Jesus rides the rectangle's vertical half. The figures' heads sit along the rectangle's horizontal half. The back edge of the table, a major horizontal in the painting, coincides with the top of the bottom horizontal third.

The figures' upper bodies extend from that bottom horizontal third to the horizontal half. The tablecloth rides the bottom horizontal sixth. The table is contained within the second sixth from the bottom. The figures as a unit make up an internal third.

The painting features figures, table, and the area under the table in roughly equal division, accounting for the bottom half of the painting. The figures fall into vertical quarters, with three disciples to a quarter. Jesus bridges the two center quarters. The receding side walls each occupy a third of the width of the format.



Leonardo da Vinci, *The Last Supper*

The back wall occupies the center third. The top of the back wall corresponds with the topmost horizontal quarter of the rectangle. The two rearmost banks of the side walls occupy the sections extending horizontally from the inside edge of the right and left quarters to just beyond the inside edges of the right and left thirds.

Da Vinci also composed in reference to the format's diagonals. The top edges of the four rectangular banks of the side walls parallel the major diagonals that cross the format shape. The diagonals suggested by Jesus's arms echo the diagonals of the large triangle of the central lower horizontal third.

This kind of structure is referred to as the rectangle's armature. Generations of artists from diverse cultures have depended on an understanding of what's implicit in the armature to create their own works.

## The Armature: Painting Analysis

Leonardo is far from being the only great artist to use the format's geometry to structure his compositions. For example, Giotto's *Pieta* (page 88) is fully wedded to the armature.

The aggregate figure group relates to the horizontal half, with the standing figures arranged along its width. The seated and kneeling figures are arranged in relation to the lower third, with the angels in the upper third. The whole scene is arranged in reference to the vertical half, splaying right and left. An important figure's head is pinned to the painting's center.

### READING

Aristides, *Classical Painting Atelier*, chap. 2.

Bouleau, *The Painter's Secret Geometry*.

Pacioli, *De Divina Proportione (On the Divine Proportion)*. English translation available at [docgo.net/detail-doc.html?utm\\_source=tennenbaum-pacioli-divine-proportion-pdf](http://docgo.net/detail-doc.html?utm_source=tennenbaum-pacioli-divine-proportion-pdf).

## The Potato Eaters

Vincent van Gogh used a pared-down version of the armature. His painting *The Potato Eaters* involves the armature of the rectangle. In this painting, all of the heads are arranged in relation to the horizontal half. The tops of the heads of the adults are placed in reference to the upper third.

The entire figure grouping is centered on the vertical half, with the child's head placed in the center of the composition. Many other important visual events are grouped in relation to the lower horizontal and vertical thirds.



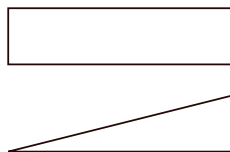
Vincent van Gogh, *The Potato Eaters*

# Composition: Balance, Focus, and Space

**T**HIS LECTURE DISCUSSES COMPOSITIONAL BALANCE, HIERARCHY AND FOCAL considerations, and compositional concepts related to depth of space. This will round out your knowledge and give you a broad range of possibilities to consider when planning your compositions.

## Compositional Balance

A rectangle, which is the shape painters most often start with, is an inherently balanced shape. A right triangle, meanwhile, has a clearly uneven distribution of visual weight.



Balance and repetition are built into the armature of any rectangle. The vertical, horizontal, and diagonal halves all mirror their mates. Quadrants follow suit. However, loading up visual weight on one side will tip the balance. Meanwhile, introducing something in the center will not change the overall balance. In fact, it will help join each side.

As an example of balance, take *The Last Supper* (page 93). It is unlikely the painter believed that the event took place in a room with an intricate gridded ceiling. However, he needed visual weight there to hold the painting together.

## Hierarchy, Focal Areas, and Focal Points

One of composition's primary goals is to control how the viewer proceeds through the visual information in a painting. The viewer attends to one thing first, then something else, and so on. This occurs through deft manipulation of several visual principles:

- Value contrast.
- Placement.
- Relative scale.
- Direction.
- Contrast of shape.
- Prominence.
- Clarity.
- Level of detail or complexity.
- Color.
- Subject matter.

As you study different paintings, notice how the artist manipulates each of these areas to direct your attention.

## Spatial Considerations

Space is one of the most important factors in painting, but it's generally one beginners consider least. One important spatial technique is bas-relief (also known as low relief). For instance, Giotto's *Pieta* (page 88) shows modest depth of space.

The central figure in green and the other seated figure in the left corner are pressed right up against the picture plane. The rest of the figures and the hill are all tightly compressed into what reads as a very shallow depth. This is an example of bas-relief, which is often used in reference to somewhat flat three-dimensional representations.

One common compositional motif is related to the idea of foreshore, also known as the foreground. For instance, take John Singer Sargent's *Madame X* (page 99).

This painting features a foreshore and a figure located in a mid-space or mid-ground. Then, there is depth of space behind. All in all, this painting features three depths of space, with the subject located in the mid-ground. Countless other paintings use this setup.

## READING AND VIEWING

Art UK, "Alfred Wallis." Available at [artuk.org/discover/artworks/search/actor:wallis-alfred-18551942/](http://artuk.org/discover/artworks/search/actor:wallis-alfred-18551942/).

Lecture 13 of the Great Course *How to Draw*.

Mendelowitz, Faber, and Wakeman, *A Guide to Drawing*, chap. 8.

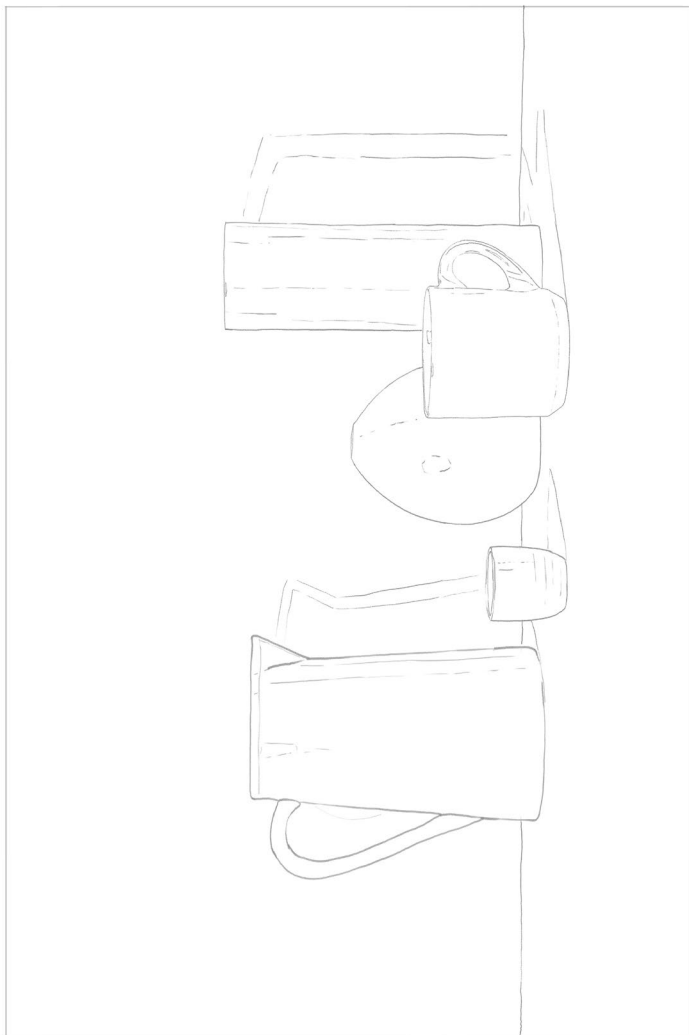
WikiArt, "Alfred Wallis." Available at [wikiart.org/en/alfred-wallis](http://wikiart.org/en/alfred-wallis).



John Singer Sargent, *Madame X* (Madame Pierre Gautreau)

**CARTOON**

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on [page 304](#), or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Degas, Hammershøi, and Other Projects

**T**HIS LECTURE'S VIDEO COMPONENT INVOLVES SEVERAL SELF-DIRECTED PROJECTS. ONE IS based on an Edgar Degas painting, and another is based on a painting by Vilhelm Hammershøi. This guidebook chapter provides some tips for completing each. For additional projects and instructions, refer to the video lecture.

## The Degas Painting

To begin the Edgar Degas project, download *Nude Woman Drying Herself* from the Brooklyn Museum's website. It is also displayed on [page 42](#).

[brooklynmuseum.org/opencollection/objects/4693](http://brooklynmuseum.org/opencollection/objects/4693)

Spend some time studying the image. Ask yourself questions such as:

- Which tubes should you use?
- Which color should you use, and where?
- Which brushes will you use, and where?
- Where has the paint likely been thinned with solvent, oil, or a mix? Where should you use it straight out of tube?

## The Hammershøi Painting

The Hammershøi project is based on his painting *Moonlight, Strandgade 30* ([page 103](#)). It is in the collection of the Metropolitan Museum in New York. Again, you can download their high-resolution JPEG. Then, study the image.

[metmuseum.org/art/collection/search/441933](http://metmuseum.org/art/collection/search/441933)

You could interpret this painting in a number of ways. For example, you could paint a translucent monochromatic approach, like a brunaille or paint an opaque grisaille. While overwhelmingly warm, the painting depends on warm-cool contrasts between red and green.

In many areas, on close inspection, you'll note a neutral greenish tone under the reds. In other places, a more opaque neutral green overlaps the reds. You could approximate this by using yellow ochre with varying amounts of raw sienna, black, and white for the neutral greens.

Use a mix of burnt sienna with varying amounts of burnt umber, black, and white for the reds. The black will help contribute the cool violet-blue undertone in the warm.

To get started, consider laying-in the neutral green as a colored ground in the wall, window, and door planes as well as in the cast shadow and projected light on the floor. That will approximate what you see in these areas. In the rest of the floor, use a transparent burnt sienna.



Vilhelm Hammershøi, *Moonlight, Strandgade 30*

## RESOURCES FOR GEOMETRIC SOLIDS, DRAWING CASTS, AND PLANAR HEADS

3Dtotalshop  
shop.3dtotal.com/3dtotal-anatomy-  
male-female-planar-busts

Caproni Collection  
capronicollection.com/

Elements of Home  
elementsofhome.com/catalog/  
drawing-casts/06

Fine Art Store  
fineartstore.com/s-2317-plaster-  
cast-models.aspx

Orlandi  
orlandistatuary.com/catalog/  
drawing-casts/06

Planes of the Head  
planesofthehead.com/

Statue.com  
statue.com/Products/  
Drawing-Casts/

## FIGURE POSING APPS

ArtPose  
itunes.apple.com/us/app/  
artpose/id836464625?mt=8

ArtPose Female Edition  
itunes.apple.com/us/app/  
artpose-female-edition/  
id886697025

ArtPosePro  
itunes.apple.com/us/app/  
artpose-pro/id1322105540

Handy Art Reference Tool  
itunes.apple.com/us/app/  
handy-art-reference-tool/  
id478643661?mt=8

MagicPoser  
itunes.apple.com/us/app/  
magic-poser-art-pose-tool/  
id1141755970?mt=8

## READING AND VIEWING

Ackerman and Parrish, *Charles Barye and Jean-Leon Gérôme Drawing Course*.

Albala, *Landscape Painting*.

Aristides, *Classical Painting Atelier*.

Guptill, Arthur L. *Oil Painting Step-By-Step*.

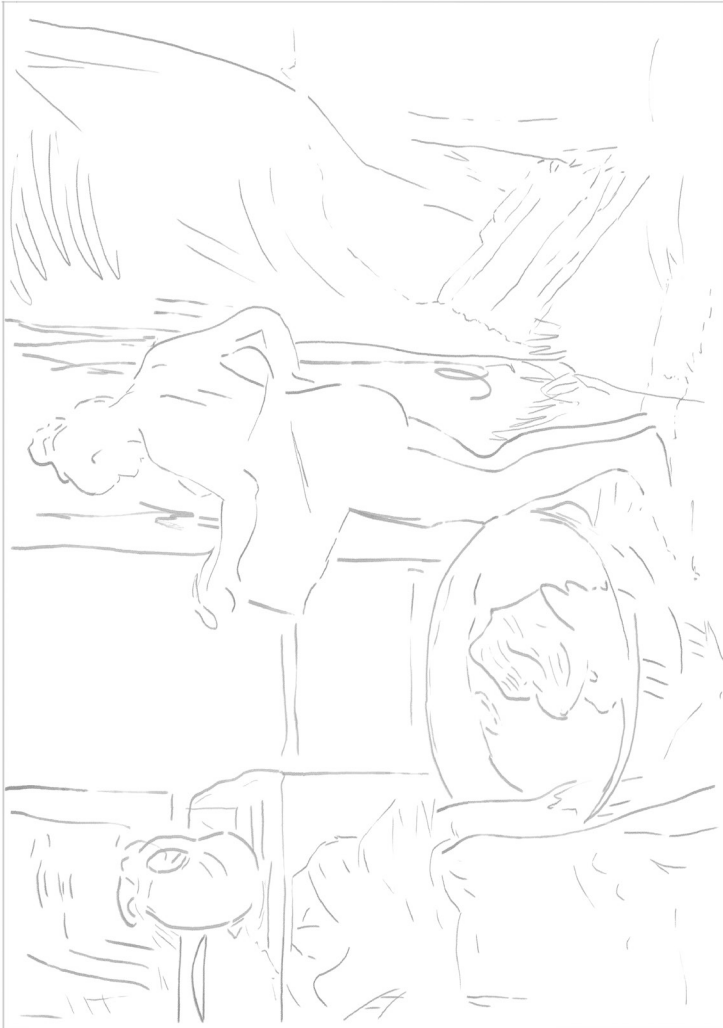
Lectures 4, 5, 24, and 25 of the Great Course *How to Draw*.

Rousar, *Cast Drawing Using the Sight-Size Approach*.

—, *Cast Painting Using the Sight-Size Approach*.

**CARTOONS**

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on page 316, or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).





# Materials: Oil Paint Brands and Quality

**T**HIS LECTURE AIMS TO EXPAND YOUR KNOWLEDGE BASE OF PAINT. YOU WILL HAVE AN EASIER, MORE productive time if you know more about paint before you go shopping. In particular, this lecture covers paint price tiers and sizes.

## Paint Price Tiers

The following information covers many paint brands, grouping them into five tiers based on price. Keep in mind that some brands may be low priced overall but have a few paints that cost comparatively more. The opposite is also true.

Additionally, some manufacturers have two brands at different price points. Generally, one is marketed as student-grade paint, and the other is marketed as professional- or artist-grade paint.

### GROUP 1: LOW PRICE

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- Blick Studio
- Daler-Rowney Georgian
- Lukas Studio
- Soho Urban Artist

### GROUP 2: MEDIUM-LOW PRICE

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- Gamblin 1980
- Maimeri Classico
- Richeson Shiva
- Van Gogh
- Weber Permalba
- Winton

### GROUP 3: MEDIUM PRICE

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- Blick Artists' Oils
- Blue Ridge
- Daniel Smith
- Da Vinci
- Gamblin
- Grumbacher
- Lefranc & Bourgeois
- Lukas 1862
- M. Graham
- Rembrandt
- RGH
- Robert Doak
- Sennelier
- Utrecht Artists Oils
- Winsor Newton

#### GROUP 4: MEDIUM-HIGH PRICE

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- Charvin
- Holbein
- Rublev
- Williamsburg

#### GROUP 5: HIGH PRICE

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- Blockx
- Langridge
- Maimeri Puro
- Michael Harding
- Old Holland
- Schminke Mussini
- Vasari Classic



## Paint Quantity

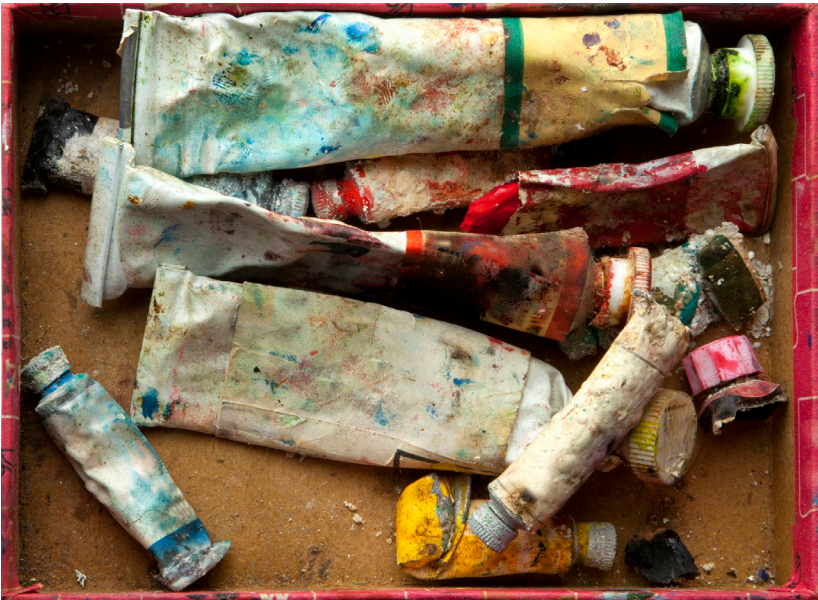
Quantity is also an important factor to consider. Oil paint comes in a wide array of tubes, jars, and cans of varying sizes, from 20-milliliter tubes to gallon cans. As with many products, while the absolute price goes up with size, the unit price goes down. That can make a dramatic difference.

The following is a rough breakdown of quantities supplied by different manufacturers.

### 20-MILLILITER TUBES

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- Charvin
- Holbein
- Soho



### 35-MILLILITER TUBES

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- Blockx
- Schminke Mussini

### 37-MILLILITER TUBES

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- Da Vinci
- Daniel Smith
- Gamblin
- Grumbacher
- Lukas 1862
- Lukas Studio
- M. Graham
- RGH
- Richeson Shiva
- Utrecht
- Weber Permalba
- Williamsburgh
- Winsor-Newton
- Winton

### 38-MILLILITER TUBES

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- Blick Studio
- Georgian

### 40-MILLILITER TUBES

---

- Blue Ridge
- Holbein
- Langridge
- Lefranc & Bourgeois
- Maimeri Puro
- Michael Harding
- Old Holland
- Rembrandt
- Robert Doak
- Sennelier
- Van Gogh
- Vasari Classic

### 50-MILLILITER TUBES

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- Rublev
- Soho Urban Artist

### 60-MILLILITER TUBES

---

- Charvin
- Maimeri Classico

### 63-MILLILITER JAR

---

- RGH

### 75-MILLILITER TUBES

---

- Lukas Studio
- Georgian

### 110-MILLILITER TUBES

---

- Langridge

### 125-MILLILITER TUBES

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- RGH

### 140-150 MILLILITER TUBES

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- Blue Ridge
- Charvin
- Gamblin
- Grumbacher
- Richeson Shiva
- Robert Doak
- Utrecht
- Williamsburgh

### 170-175-MILLILITER TUBES

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- Soho
- Vasari Classic

### 200-MILLILITER TUBES

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- Lukas
- Maimeri Classico
- Sennelier
- Van Gogh
- Winsor-Newton
- Winton

## 225-250-MILLILITER TUBES OR JARS

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- Gamblin
- Georgian
- Michael Harding
- Old Holland
- RGH
- Soho
- Williamsburgh

## 16-OUNCE CAN

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- Gamblin
- RGH
- Williamsburg

## 32-OUNCE CAN

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- Gamblin
- RGH

## HALF-GALLON AND FULL-GALLON CAN

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- RGH

## COLOR INDEX NAMES

If you want to learn more about pigments, there is an exhaustive color index pigment information database on the Art is Creation website. You can access it at: [artiscreation.com/Color\\_index\\_names.html](http://artiscreation.com/Color_index_names.html).

## READING

Gottsegen, *The Painter's Handbook*, pp. 199-23.

Mayer, *The Artist's Handbook of Materials and Techniques*, pp. 29-166.

# Materials: Oil Paint Characteristics

**T**HIS LECTURE DISCUSSES PAINT CHARACTERISTICS AND HEALTH AND SAFETY LABELING. IT ALSO makes some suggestions regarding purchasing and caring for your paint.

## Paint Characteristics

Many paint labels include information about the paint's characteristics. First is its relative opacity.

Some manufacturers simply label a color transparent or opaque. Others will use the labels of transparent, semitransparent, semi-opaque, and opaque. Still others use a symbol system.

Another characteristic is its tinting strength. A color with low tinting strength will require more of that color to affect a mixture. A color with high tinting strength will require less.

Consistency is another trait of paint. Most manufacturers strive for a similar consistency across their colors. Generally, they strive for a relatively stiff consistency, which is called short paint. Long paint would refer to thinner, more runny paint.

Another important characteristic to note is drying time. Some manufacturers introduce additives with the goal of evening out the drying times of their various colors. Others may simply note drying time.

### ASTM D4303

You may see "ASTM D4302" printed on a tube of paint. The ASTM is the American Society for Testing and Materials. The D4302 component refers to their specification titled "Standard Specification for Artists' Oil, Resin-Oil, and Alykd Paints." This specification is voluntary, and its appearance on a tube of paint is a positive indication.

## Permanence and Lightfastness

Another concern is permanence. In addition to fading, a paint film could darken, discolor, or crack. A number of companies use some variation of a system where the classification AA means "extremely permanent," A means "permanent," B means "moderately durable," and C means "fugitive." If you're concerned about permanence, stick to AA and A.

The trait of lightfastness is also related to permanence. Info about this is also often included on the label. Not all paints do well when exposed to light over time. Some fade or become transparent. Others are quite durable.

The ASTM has a five-step scale for lightfastness. Roman numerals I and II are considered “excellent” and “very good,” respectively. Any colors in the III to V range are best avoided.

## Health and Safety Warnings

The last category of information we can glean from the label concerns health and safety. The American Society for Testing and Materials also plays a role here. You’ll see these words “Conforms to ASTM D4236” on all tubes sold in the US.

D4236 is titled “Standard Practice for Labeling Art Materials for Chronic Health Hazards.” This labeling is mandatory under federal law. The label means that the product was reviewed by a toxicologist who made an assessment of potential chronic health hazards associated with the paint.

If there is no further cautionary labeling, the material is not associated with any chronic health hazards. However, if there is another issue, a cautionary label is added. For instance, flake white contains lead, and cadmiums contain cadmium sulfide. Viridian green may contain trace elements of soluble hexavalent chromium, considered a known carcinogen in California.

### SAFETY TIP

Many labels on the more dangerous colors will carry a warning stating that in an emergency you should call your local poison control center. Having this number on hand in your studio is a good idea.

The Poison Control Center Hotline is **800-222-1222**.

Some paint labels contain information related to the FHSA. That's the Federal Hazardous Substances Act. Other related labels include those from the Art and Craft Materials Institute (ACMI). They have two seals: an AP, or Approved Product seal, and a CL, or Cautionary Labeling seal.

The first identifies products that contain “no materials in sufficient quantities to be toxic or injurious to humans.” The second “identifies products that are certified to be properly labeled in a program of toxicological evaluation by a medical expert for any known health risks and with information on the safe and proper use of these materials.” Both conform to ASTM D4236.

## Buying Paint

This lecture now recaps the paints recommended earlier in the course, accompanied by the color index name for each color. To the starting palette, this section will also add new colors. (Not all manufacturers use the same names for the same color. However, the color index number will not deviate, so you can use it to ensure you are buying the right one.) With this selection of colors, you'll be able to cover a lot of bases.

### STARTING PALETTE

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- Flake white: PW1.
- Titanium white: PW6.
- Natural yellow ochre: PY43.
- Raw sienna: PY43 or PBr7.
- Burnt sienna: PR102 or PBr7.
- Burnt umber: PBr7.
- Ivory black: PBk6 or PBk9.
- Dioxazine purple: PV23.
- Ultramarine blue: PB29.
- Phthalo blue: PB15.
- Viridian green: PG18.
- Arylide yellow: PY3.
- Cadmium yellow medium: PY35 or PY37.
- Cadmium orange: PO20.
- Cadmium red medium: PR108.
- Quinacridone red: PV19.

Below is information on additional colors beyond this course's palette of 15–16 tubes.

## YELLOWS

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- There are two other varieties of cadmium yellow. This course uses cadmium yellow medium. There are also a cadmium yellow light and a cadmium yellow deep. These should also be PY35 or PY37. Another oft-used yellow is Naples yellow (PY41). Note that true Naples yellow contains lead.

## GREENS

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- Other common greens include phthalo (PG7), cadmium (PG14), chrome oxide (PG17), cobalt (PG19), and green earth (PG23).

## BLUES

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- Among the blues are Prussian (PB27), cobalt (PB28), cerulean (PB35), and indigo (PB66).

## VIOLETS

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- In the violet range, you'll find cobalt (PV14), ultramarine (PV15), and manganese (PV16).

## REDS

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- Among the reds are cadmium red light and cadmium red dark. Both should be PR108. Another red is naphthol (PR112). Alizarin (PR83) has also been a popular red, though true alizarin isn't lightfast. A number of manufacturers make a color labeled permanent alizarin crimson, but it is not really alizarin. Instead, it is anthraquinone red (PR177).

## EARTH COLORS

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- The earth colors include raw umber (PB7). It is more gray than burnt umber. There are also synthetic iron oxides, including a yellow, orange, red, brown, and violet. They are made with PY42 and PR101.

## BLACKS

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- Mars black (PBk11) and lamp black (PBk6) are two other common blacks.

## WHITE

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- Another common white is zinc (PW4).

## Caring for Your Paint

When it comes to caring for your paint, oxygen is the enemy. Exposed to oxygen, the oil polymerizes, and the paint hardens. Seal your paint carefully. Make sure the cap screws on tightly. If there is any paint around the threaded opening, clean it before replacing the cap. This prevents the cap from bonding to the thread. Store your paint tubes horizontally or vertically with the cap up.

To get the most out of each tube, invest in a tube wringer. Put the tube in the wringer. Turn the key, squeeze the tube, and you will save some paint. Another option is a tube key, though you'll need a new key for each tube. In both cases, avoid wringing too much. If you wring too much, lots of paint will gush out the next time you open the tube.



If your paint is in jars or cans, make sure to wipe off the top of the jar or can as well as the lid. If there's an air space between the top of the paint and the lid, press some plastic wrap down onto the paint's surface.

When sealing a metal paint can, avoid denting the lid. Dents let air in. A rubber hammer is a useful tool for sealing metal cans without damage.

Another option is to use a piece of scrap wood that is a couple of inches wide and longer than the diameter of the can. Place it so that it is straddling the lid. Tap the wood, rotating around the lid to get a good seal.

To open a can, avoid using a screwdriver. Instead, buy a paint-can opener from a hardware store. Work your way around the can slowly, with a light touch. That should preserve the lid's shape and ensure a tight seal.

## Preserving Your Paint

There are a number of common methods for preserving paint. Oil of clove slows drying. You'll find it at many art stores and online. A drop placed near a glob of paint will slow its drying.

You can also extend the life of your paint by simply covering it with plastic wrap. Some people use both oil of clove and plastic wrap. Others substitute individual small cups for the plastic wrap.

Another common method is to put the unused paint on a plate or piece of glass and submerge it in water. An alternate version of this is to put each color in a small cup, like a shot glass, and fill it with water.

### READING

Mayer, *The Artist's Handbook of Materials and Techniques*.

# Color: Theory and Exercises

**T**ODAY, MANY PAINT COMPANIES OFFER OVER 100 DIFFERENT COLORS, WITH AN INCREASING number offering over 150. The choices are essentially unlimited, so there is quite a bit to sort out. To help you understand more about paint colors, this guidebook chapter covers vocabulary. It also provides the order of paint swatches mentioned at the beginning of the video lecture's exercise.

## Basic Vocabulary

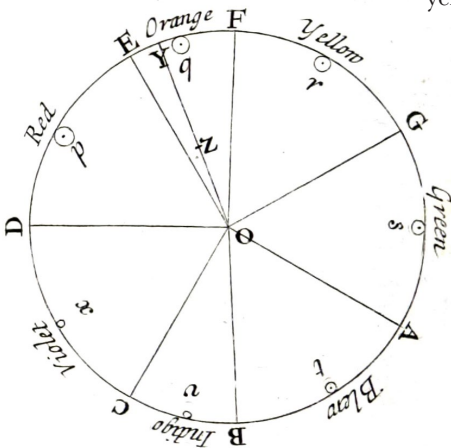
Color has three principal attributes: hue, saturation, and value. Hue is associated with the color's name, with examples being red, yellow, and blue. Saturation refers to a color's purity. Value refers to a color's lightness or darkness. Any color, at least in theory, can be made lighter or darker.

It is also possible to refer to color in terms of temperature. Warm colors are the ones associated with heat or fire: yellows, oranges, and reds. Cool colors are associated with water or a forest: greens, blues, and violets.

Mixing white with any color produces a lighter value called a tint. Mixing black with any color produces a darker value called a shade. Mixing gray with a color creates a tone.

Whenever you mix pigments, you diminish saturation. For instance, mixing cadmium red and yellow gives you an orange. However, it will be less saturated than either the red or yellow you started with. It will also be browner.

In painting, the primary colors are yellow, red, and blue. Mixing any two primary colors will produce a secondary color; for example, blue and red together create violet.



### THE FIRST COLOR WHEEL

People often arrange primary and secondary colors in a color wheel. The first was published by Isaac Newton in his 1704 book *Opticks*.

## Color Mixing Exercise Preparation

This lecture's exercise adopts a historical practice of studying color. Here's how it works: Cut a piece of canvas to 9 × 18 inches. Rule a 1-inch margin around the border. Then, rule a 1-inch grid in the internal rectangle. This will give you 16 units across and 7 down.

If you're not using flake white, you can make this an inch smaller in either direction. Paint a swatch of each of your 15 or 16 colors in the top row. Paint them in this order:

- |   |                  |    |                  |
|---|------------------|----|------------------|
| 1 | Dioxazine purple | 9  | Raw sienna       |
| 2 | Ultramarine blue | 10 | Cadmium red      |
| 3 | Phthalo blue     | 11 | Quinacridone red |
| 4 | Viridian green   | 12 | Burnt sienna     |
| 5 | Arylide yellow   | 13 | Burnt umber      |
| 6 | Cadmium yellow   | 14 | Ivory black      |
| 7 | Yellow ochre     | 15 | Flake white      |
| 8 | Cadmium orange   | 16 | Titanium white   |

From here, follow the instructions in the video lecture to complete the exercise.

### READING

Albers, *Interaction of Color*.

Itten and Birren, *The Elements of Color*.

Mendelowitz, Faber, and Wakeman, *A Guide to Drawing*, pp. 114-121.

Pumphrey, *The Elements of Art*, pp. 147-187.

# Color: Painting with Limited Palettes

**T**HIS LECTURE LOOKS AT LIMITED PAlettes. IT DISCUSSES SOME VERY COMMON ONES USED throughout history by many great painters. The lecture also looks at why artists choose certain palettes for certain paintings.

## LIMITED PALETTES

In a given painting, an artist often only uses a selection of the tubes he or she has. The artist constrains the color to a specific range. That's a limited palette. Limitation is key because it can create a particular mood, a sense of season, and a depiction of a time of day.

### Common Palette Limitations

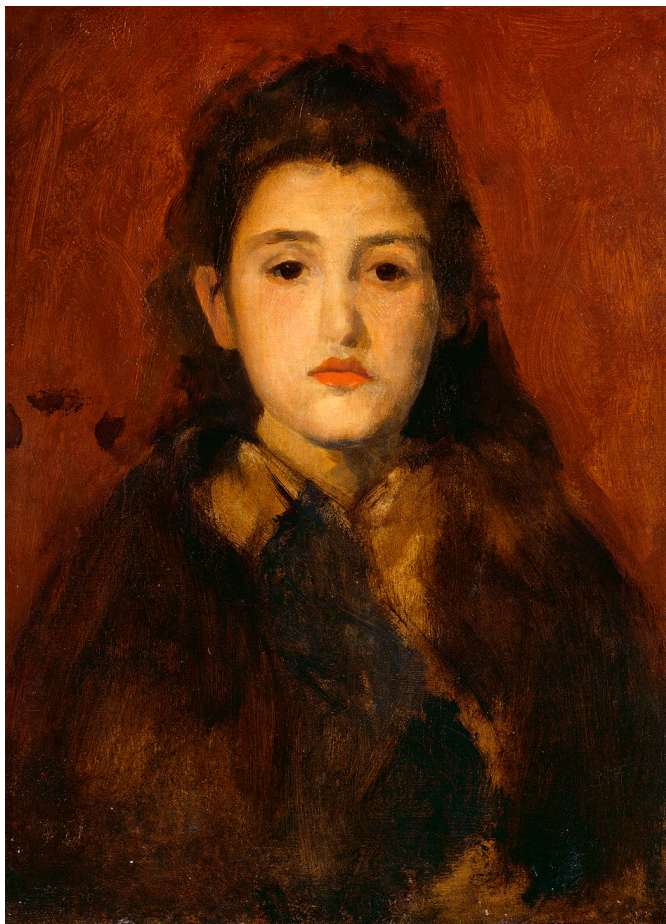
Perhaps the simplest palette is the monochrome palette, which goes back thousands of years. Grisailles and brunailles are examples of monochrome palettes. Note that a monochrome palette can be any color. Related to the monochrome palette is the expanded monochrome palette.



Unknown, Panel of the Rhinos, Chauvet

Another common palette is the earth tone palette. Its cousin is the expanded earth tone palette.

One palette related to the monochrome palette is the dominant hue palette, as used in James McNeill Whistler's *Alice Butt*.



James McNeill Whistler, *Alice Butt*

The next step in palette complexity is the analogous palette. Generally, this will involve any two to three colors that abut on the color wheel.

Palettes are also commonly based on complements, with yellow and violet being one example. A variant is the split complementary palette. That palette is used in Rembrandt's *The Night Watch*. The highest saturations are red-green complements.



Rembrandt van Rijn, *The Night Watch*

Another type of palette is called the complementary-analogous palette. For instance, in Monet's *Wheatstacks* (page 61), there is an orange-blue complement. There are also smoothing analogous colors, which move from orange to red to violet to blue.

The double complementary palette is popular as well. For instance, blue-orange and red-green combinations have been used widely over the centuries, including in John Singer Sargent's *Street in Venice*.



John Singer Sargent, *Street in Venice*

## MARK TANSEY'S MONOCHROME PAINTINGS

You can see a selection of monochromatic paintings by Mark Tansey at the Gagosian Gallery site, which is available at: [gagosian.com/artists/mark-tansey](http://gagosian.com/artists/mark-tansey).

Another source is his WikiArt page: [wikiart.org/en/mark-tansey](http://wikiart.org/en/mark-tansey).

## READING

Albala, *Landscape Painting*, pp. 19-23.

Guptill, *Oil Painting Step-By-Step*, chap. 2.

—, *Watercolor Painting Step-By-Step*, chaps. 7-10.

Loomis, *Creative Illustration*, pp. 145-179.

# Materials: All about Medium

IN PAINTING, THE TERM *MEDIUM* CAN BE USED IN TWO WAYS. ONE USE REFERS TO THE MATERIAL OR process, with painting in oil or watercolor being examples. The term *medium* can also refer to many of the substances artists mix into paint. This lecture focuses on that second usage, and it covers several mediums.

## Drying Oils

When exposed to air, drying oils oxidize and polymerize, hardening into a film. Linseed oil has been the most commonly used. Walnut, poppy seed, and safflower oil have been used, too. These oils thin the paint and make it more translucent.

There are two thicker oils, made from linseed oil, that are also used. The more traditional, dating back at least to the 14th century, is sun-thickened oil. Stand oil, also called heat-bodied oil, is made by heating linseed oil to a high temperature. This causes the oil to partially polymerize without oxidation. It's honey-like and is much more resistant to yellowing than raw linseed oil.

## Thinners, Solvents, and Diluents

Next are thinners, solvents, and diluents. Today, the most common is mineral spirits. It's a petroleum distillate, and it is also called paint thinner. This course's projects have used the odorless variety—that is, odorless mineral spirits, or OMS.

It's a versatile material that can be used to clean brushes, palettes, and canvases. It can also be used to thin paint to create washes. Additionally, OMS is among the least expensive solvents.

While today OMS is common in artists' studios, historically, turpentine was the solvent of choice. However, turpentine is classified as mildly toxic. Vapor and skin contact can cause a range of negative health effects.

## Resins, Varnishes, and Balsams

Resins are sold as hard tears or crystals. They're used to make varnishes. The main natural resins that have been used in oil painting varnishes include copal, mastic, sandarac, and damar. These resins are tapped from trees. Damar is the best of the natural resins.



Copal



Mastic

There are two ways to make a varnish from a natural resin. The first involves melting the resin in a heated oil. Do not try this at home. The second method involves dissolving damar in turpentine to produce damar varnish. You can buy this at an art store.

There are three main ways artists use varnishes in oil painting.

- 1 The first is as a medium or medium component. Varnish is generally added to increase the paint's transparency and reduce stiffness.
- 2 The second use is as a retouch varnish. If a painting ends up looking dull, artists will often apply retouch varnish to the dull area.
- 3 A common third use for varnish is as a final or picture varnish.

Balsams are related to resins. These are sticky, semiliquid secretions from coniferous trees. They have a long history of use in European oil painting mediums.

## Waxes

Waxes make up another class of ingredient. They are resistant to moisture and fairly stable. They do not generally yellow or darken with age. However, they are very susceptible to changes in temperature.

They are used in some brands and colors of oil paint to help create a short or buttery consistency. They are also used in oil painting mediums to thicken the paint and to create a matt or waxy surface.

## Driers and Retardants

Driers, or siccatives, speed drying. Retardants slow it down. The driers are metallic salts dissolved in a liquid that speed oxidation and polymerization. Much commercial oil paint already contains driers. Among the most common historic retardants is oil of cloves. Another option is to add a slower drying oil like walnut, safflower, or poppy seed to your medium.

### READING

Gottsegen, *The Painter's Handbook*, pp. 95-125.

Kirby and White, *Rembrandt and His Circle*.

Mayer, *The Artist's Handbook*, pp. 167-256.

National Gallery, *Technical Bulletin*.

# Materials: All about Brushes

**T**HIS LECTURE GOES OVER THE BASICS OF BRUSHES. IN PARTICULAR, THE LECTURE LOOKS at the strengths and weaknesses of brushes with stiff and soft tufts. It also looks at some paint application tools that are not brushes.

## Types of Brushes

Artists use somewhat different brushes for different paints. For instance, the standard go-to brush for watercolor is the round, pointed Kolinsky sable-hair brush.

Most people using acrylics use the same range of brush shapes as those using oils. However, many prefer synthetic bristles for both their soft and coarser brushes. They tend to hold up better.

Oil painting is hard on brushes, and not all brushes are ideally suited to oil painting. Most oil painters use two main classes of brushes: those with stiff tufts and those with soft tufts. The stiff ones are known as bristle



John Singer Sargent, *An Out-of-Doors Study*

brushes, and they will take a greater degree of punishment. The softer, more delicate ones are often referred to as sables or synthetic sables. They require more delicate treatment.

Tougher bristle brushes are best for general painting. The softer, more delicate ones are best used for more fluid paint in fine linear work. They are also useful for creating sharp edges and to work on small details. The soft brushes are also generally used for glazing—that is, applying a smooth, thin and semitransparent film of paint to an area.

Today, both the stiff and soft brushes can be made from natural hair, synthetic hair, or a blend of the two. Many artists prefer natural hair for all their brushes. However, some synthetics, especially the synthetic sables, can make a lot sense with oil paint.

## Beyond the Brush

There are a number of other paint application tools. Common ones include palette knives and painting knives. More recently, several companies have marketed so-called paint shapers.

In reality, just about anything can be used to apply paint to a canvas. Jackson Pollock used sticks to drip paint. Others have used household brushes like toothbrush, makeup brushes, toilet brushes, and even brooms. Beyond that, artists have used putty knives, squeegees, their fingers, and more. The takeaway point is that you should try anything that intrigues you.

## READING AND VIEWING

A. Sartorius & Co., "Illustrated Catalogue and Price List of Artists' Materials" (1894 and 1897 editions).

Bradshaw Foundation, "The Archaeology of Altamira Cave."

Janetzky & Co., "Price List of Artists' Materials" (1879 edition).

Opus Art Supplies, "The Making of an Escoda Versatil Brush."

Spain Is Culture, "Airbrush."

Turner, *Brushes*.

Winsor & Newton, Limited, "Manufacturing Artists' Colourmen."

# Materials: Flexible Supports

**T**HE SURFACES ARTISTS PAINT ON ARE GENERALLY CLASSIFIED AS BEING OF ONE OF TWO TYPES: flexible supports (such as canvas and paper) and rigid supports (like wood and metal). This lecture looks at flexible supports, focusing on stretched canvas.

## Stretched Canvas

The most common support used today is stretched canvas. It is the support used in the majority of the paintings examined in this course. You can buy a readymade stretched canvas at your local art store. For a detailed look at the traditional preparation of a stretched canvas, refer to the video lecture.

Some canvas chassis are fixed. They're called strainers. Others are keyed. They're called stretchers. Most commercial stretchers are made of pine or fir. Some better grades are made of spruce.

Another element is the fabric. For most of oil painting's history, it has been linen. The fabric gets stretched and attached to the chassis. The video lecture uses portrait linen. Many different types of linen are available. Generally speaking, finer weaves are preferred for smoother treatment with greater detail. More broadly, other textiles have been used as well. Many painters use cotton as an inexpensive option.

You can't paint directly on plant-based textiles with oil paint. Oil paint would cause it to rot. This necessitates the creation of a barrier between the textile and the paint. For most of history, artists applied a solution of glue—also known as a size—to the surface. Traditionally, this was an animal hide glue. It would be applied in one to two coats. After the glue had dried, one to two coats of primer—or ground—would be applied to the surface.

The most common ground used on commercially prepared supports is gesso. While this is fine for acrylic on canvas, there has been real disagreement as to whether it is suitable as a ground for oil on stretched canvas.

However, when it comes to the size, hide glue is far from ideal. Hard acrylic dispersion mediums are a better modern-day choice. As for the ground, there are over a dozen white oil grounds on the market, including the historical standard: lead white grounds. Given lead's toxicity, several companies also make titanium oil grounds. There are also oil/alkyd grounds.

## The Shape of the Canvas

Rectangular canvases are certainly the most common, but artists have painted on a variety of shapes. For instance, circles called tondos have been popular. It is possible to find commercially prepared tondos, ovals, triangles, and hexagons in a variety of sizes. Quite a number of 20th-century artists—including Frank Stella, Elizabeth Murray, Tom Wesselman, and Alex Katz—made irregularly shaped paintings.



Frans Hals, *Laughing Boy*

### READING

Gottsegen, *The Painter's Handbook*, pp. 40-72.

Mayer, *The Artist's Handbook of Materials and Techniques*, pp. 288-299.

Sands and Mckinnon, "Preparing a Canvas for Oil Painting."

Smith, *The Artist's Handbook*, pp. 48-61.

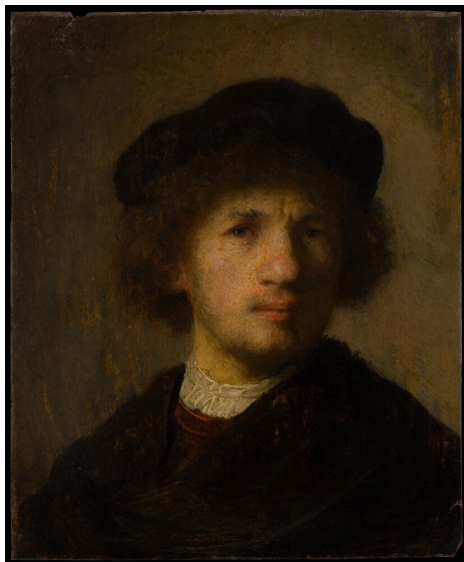
# Materials: Rigid Supports

**W**HILE FLEXIBLE SUPPORTS LIKE STRETCHED CANVAS ARE COMMON, THEY'RE CLEARLY not ideal. They can become brittle and crack over time. The alternative is a rigid support. Artists have used a variety of rigid supports, including wood, metal, and even glass.

## Wood Supports

Wood panels have been a very popular support, second only to stretched canvas. It was the standard support for tempera, which predated oil painting by centuries. It was also the most common support among the early oil painters. Stretched canvas did not become the dominant support for oil painting until the 16th century.

In more recent times, many artists who paint on wood have opted for plywood or composite panels. Another option is high-density fiberboard, which is also called hardboard. Another variant is medium-density fiberboard, which is less dense but provides a reasonable surface for painting.



Rembrandt van Rijn, *Self-Portrait*

## Metal Supports

Artists have also painted on metal. Copper was a popular surface among many of the Dutch painters, including Rembrandt. Artists have also used tin, zinc, and aluminum. There are both ACM panels—which stands for aluminum composite material—and honeycomb aluminum panels available today.

## CONCLUSION ON SUPPORTS

There are upsides and downsides to many flexible and rigid supports. As with many aspects of painting, your choice will boil down to personal preference. Experiment to find out what works best for you.

## READING

Gottsegen, *The Painter's Handbook*, pp. 32-40 and 51-72.

Mayer, *The Artist's Handbook of Materials and Techniques*, pp. 300-326.

Smith, *The Artist's Handbook*, pp. 43-47.

# Materials: Carpentry for the Studio

**T**HIS GUIDEBOOK CHAPTER SERVES AS A COMPLEMENT TO THE VIDEO LECTURE BY providing a list of useful carpentry supplies and diagrams of the project from the video.

# Carpentry Supplies

## POWER TOOLS

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- Table saw with dust collection
- Miter saw with dust collection \*
- Track saw or circular saw
- Drill and driver with assorted bits, screw tips, countersink bits, and hole saws
- Nail guns (16- and 18-gauge) and compressor
- Stapler
- Sander and sandpaper

## HAND TOOLS

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- Tape measure
- Folding ruler
- Combination square
- Long straight edge
- Utility knife
- Hammer
- Rubber mallet
- Chisels
- Screwdrivers
- Pliers and nippers
- Clamps

## FURNITURE

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- Worktables
- Sawhorses

## MISCELLANEOUS ITEMS

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- Eye and hearing protection
- Masking tape
- Glue and brushes
- Empty cans or cups
- Pencils

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\* A saw and miter box can perform many of the same functions as a miter saw.

## Wood Pieces for Studio Furniture

To build the painting table and brush table discussed in this lecture, you will need two 4 × 8-foot sheets of ¾-inch plywood. You will also need four 3-inch locking casters for the painting table and a pneumatic stand for the brush table.

Refer to the video lecture for a demonstration on how to build the painting table and brush table.

The diagrams on [page 147](#) and [page 148](#) demonstrate how to divide and cut up the plywood panels. Pieces that will be used for the painting tables are highlighted yellow and labeled **Paint 1**, **Paint 2**, etc. Pieces that will be used for the brush table are highlighted red and labeled **Brush 1**, **Brush 2**, etc. The leftover plywood is highlighted blue.

### TIP

Be sure to label your pieces with pencil as you cut them. This will help you find what you are looking for and will help prevent you from using the wrong piece for the wrong thing.

### PAINTING TABLE

- **Paint 1** Back, 32½ × 32½ in
- **Paint 2** Back cleats (3), 32½ × 6¼ in  
This piece will be cut to produce three 2 × 32½-in cleats.
- **Paint 3** Handle assembly, back, 32½ × 5 in
- **Paint 4** Side, 32½ × 24 in
- **Paint 5** Shelf, 32½ × 23¼ in
- **Paint 6** Base, 34 × 24 in
- **Paint 7** Shelf, 32½ × 23¼ in
- **Paint 8** Side, 32½ × 24 in
- **Paint 9** Shelf, 32½ × 23¼ in
- **Paint 10** Side Cleats (6), 29½ × 12⅝ in  
This piece is trimmed to a width of 22¾ in. The resultant piece is cut to produce six 2 × 22¾-in cleats.

- **Paint 11** Handle assembly, sides,  $29\frac{1}{2} \times 7\frac{1}{2}$  in  
Crosscut this piece at  $22\frac{1}{2}$  in.  
Then rip the larger piece ( $22\frac{1}{2} \times 7\frac{1}{2}$  in) to produce two  $1\frac{1}{2} \times 22\frac{1}{2}$ -in pieces and two  $2 \times 22\frac{1}{2}$ -in pieces.  
Rip the smaller piece ( $7 \times 7\frac{1}{2}$  in) to produce four  $1\frac{1}{2} \times 7\frac{1}{2}$ -in pieces. Trim these four pieces to 6 in.

Refer to the video lecture for instructions on how to assemble the painting table.






## BRUSH TABLE

- **Brush 1** Base,  $28 \times 16$  in
- **Brush 2** Angled brush holder, sides,  $28 \times 7\frac{1}{8}$  in
- **Brush 3** Angled brush holder, spacer/base,  $28 \times 5$  in
- **Brush 4** Vertical brush holder, side,  $28 \times 5\frac{1}{2}$  in
- **Brush 5** Vertical brush holder, side,  $28 \times 5\frac{1}{2}$  in
- **Brush 6** Vertical brush holder, spacer/base,  $28 \times 3\frac{1}{2}$  in
- **Brush 7** Vertical dividers,  $28 \times 3\frac{1}{2}$  in  
Cut this piece into five  $4\frac{3}{4} \times 3\frac{1}{2}$ -in pieces. These will be the dividers.
- **Brush 8** Vertical dividers and spacers,  $29\frac{1}{2} \times 6\frac{1}{2}$  in  
Crosscut this piece at 20 in.  
Then rip the 20-in piece to a  $3\frac{1}{2}$ -in width.  
Take the  $20 \times 3\frac{1}{2}$ -in piece and cut into four  $4\frac{3}{4} \times 3\frac{1}{2}$ -in pieces.  
These will be the dividers.  
  
Rip the remaining  $9\frac{1}{2} \times 6\frac{1}{2}$ -in piece into two  $9\frac{1}{2} \times 2\frac{3}{8}$ -in pieces, then cut each piece into a  $5\frac{1}{2}$ -in length. These will be the spacers for assembly.

Refer to the video lecture for instructions on how to assemble the brush table.

<p><b>Paint 3</b> Handle assembly, back, 32 1/2" x 5"</p>	<p><b>Brush 7</b> Vertical dividers, 28" x 3 1/2"</p>
<p><b>Paint 2</b> Back Cleats, 32 1/2" x 6 1/4"</p>	<p><b>Brush 6</b> Vertical brush holder, spacer/base, 28" x 3 1/2"</p>
<p><b>Paint 1</b> Back, 32 1/2" x 32 1/2"</p>	<p><b>Brush 5</b> Vertical brush holder, side, 28" x 5 1/2"</p>
<p><b>Paint 5</b> Shell, 32 1/2" x 23 1/4"</p>	<p><b>Brush 4</b> Vertical brush holder, side, 28" x 5 1/2"</p>
<p><b>Paint 4</b> Side, 32 1/2" x 24"</p>	<p><b>Brush 3</b> Angled brush holder, spacer/base, 28" x 5"</p>
<p><b>Paint 4</b> Side, 32 1/2" x 24"</p>	<p><b>Brush 2</b> Angled brush holder, sides, 28" x 7 1/8"</p>
<p><b>Paint 1</b> Back, 32 1/2" x 32 1/2"</p>	<p><b>Brush 1</b> Base, 28" x 16"</p>

## Plywood Sheet #1

		
<p><b>Brush 8</b> Vert. dividers and spacers, 29 1/2" x 6 1/2"</p>	<p><b>Paint 9</b> Shelf, 32 1/2" x 23 1/4"</p>	<p><b>Paint 7</b> Shelf, 32 1/2" x 23 1/4"</p>
<p><b>Paint 11</b> Handle assembly, sides, 29 1/2" x 7 1/2"</p>		
<p><b>Paint 10</b> Side cleats (6), 29 1/2" x 12 5/8"</p>	<p><b>Paint 8</b> Side, 32 1/2" x 24"</p>	<p><b>Paint 6</b> Base, 34" x 24"</p>

## Plywood Sheet #2

## WOODWORKING COURSES

If you are interested in woodworking, you may find these Great Courses useful:

*How to Build Your Own Cabinets*

[thegreatcourses.com/courses/how-to-build-your-own-cabinets-techniques-and-projects.html](http://thegreatcourses.com/courses/how-to-build-your-own-cabinets-techniques-and-projects.html)

*How to Build Your Own Furniture*

[thegreatcourses.com/courses/how-to-build-your-own-furniture.html](http://thegreatcourses.com/courses/how-to-build-your-own-furniture.html)

*Woodworking 101*

[thegreatcourses.com/courses/woodworking-101-techniques-and-everyday-projects.html](http://thegreatcourses.com/courses/woodworking-101-techniques-and-everyday-projects.html)

*Woodworking Tips, Tricks, and Secrets*

[thegreatcourses.com/courses/woodworking-tips-tricks-and-secrets.html](http://thegreatcourses.com/courses/woodworking-tips-tricks-and-secrets.html)

## READING

Gottsegen, *The Painter's Handbook*, pp. 37-40 and 43-48.

Mayer, *The Artist's Handbook of Materials and Techniques*, pp. 304-305.

# Project: A Modigliani Portrait

**T**HIS LECTURE'S VIDEO COMPONENT IS BASED ON A STUDY OF A PORTRAIT BY AMEDEO MODIGLIANI. This guidebook chapter provides some background on the artist and his work.

## Amedeo Modigliani

Amedeo Modigliani and Jeanne Hébuterne met in Paris in the spring of 1917 at the Académie Colarossi.

Hébuterne was a 19-year-old art student. Modigliani was in his early 30s. He had been living in Paris since 1906 and was part of the city's thriving bohemian art scene. Over the years he counted Picasso, Cocteau, Brancusi, Soutine, and many others among his friends.

He and Hébuterne soon fell in love and moved in together. In the fall of 1918, they had their first child, a daughter.

Unfortunately, Modigliani was first diagnosed with tuberculosis when he was 16 and had periodically suffered from bouts of the disease. By the spring of 1919, he was suffering the full effects of tubercular meningitis. His years of excessive drinking and drug use didn't help matters. He quickly deteriorated and died in January of 1920.

Jeanne, a mere 21 years old, was left with their first child and was pregnant with a second. Two days after Modigliani's death, she threw herself from her family's fifth-floor apartment window, taking her and her unborn child's lives.

## About the Portrait

In terms of color, the portrait presents itself as an orange-blue complementary system. To approximate the color range in the painting, you can use the following colors:

- White (flake or titanium)
- Burnt sienna
- Burnt umber
- Ivory black
- Dioxazine purple
- Ultramarine blue
- Phthalo blue
- Cadmium orange
- Cadmium red
- Quinacridone red



David Brody, after Amedeo Modigliani

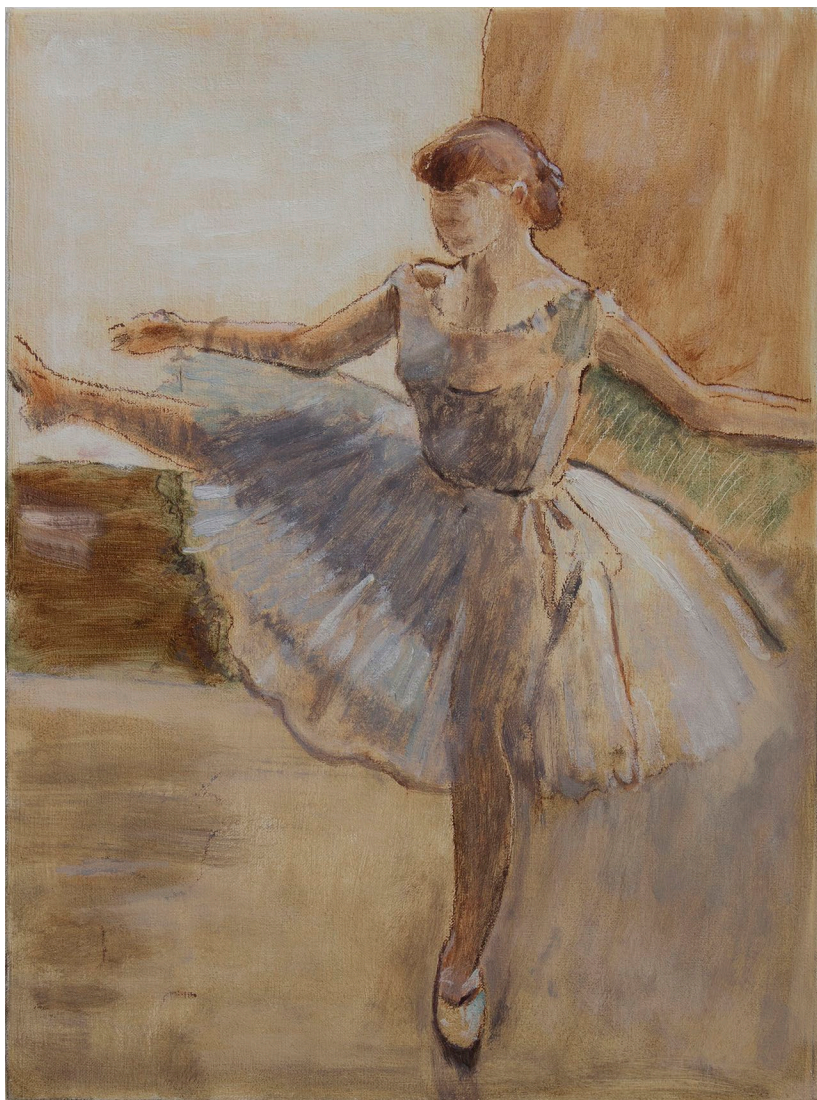
**CARTOON**

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on [page 316](#), or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Project: A Degas Ballerina

**E**DGAR DEGAS WAS BORN IN 1834 IN PARIS, AND HE DIED IN 1917 AT AGE 83. HE HAD A NUMBER of personal failings, including the voicing of anti-Semitic views, and he earned a reputation for being quite argumentative. He also had a long and extremely productive career, and this lecture's project is based on one of his paintings, *The Ballerina*.



David Brody, after Edgar Degas

## Tips for the Project

To complete the project for this lecture, you'll need these colors:

- Burnt sienna
- Burnt umber
- Dioxazine purple
- Ultramarine blue
- Viridian
- White (flake or titanium)

You'll also want a piece of test canvas on hand. The palette is a red-green complementary-analogous palette, meaning the red and green are bridged analogously on the cool side through violet and blue.

In general, most of this project is very thinly painted. You can use a medium-sized bristle brush and remove paint as needed. A small bristle brush may also be useful.

After you complete the first pass, you should have the basic color and structural components. The opacity and contrasts will likely be understated. On a second pass, you'll be able to pull out greater contrast.

After the second pass, try putting the painting aside for awhile. It's very common not to see everything the first or second time around. Return to the painting in a week or two. You'll likely see more after a short hiatus.

### READING

Bomford, Herring, and Kirby, *Art in the Making: Degas*.  
San Diego Museum of Art, "The Ballerina." Available at  
[collection.sdmart.org/Obj2773?sid=219&x=9045](https://collection.sdmart.org/Obj2773?sid=219&x=9045).

**CARTOON**

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on page 348, or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Project: A Corot Landscape

**T**HIS LECTURE'S STUDY IS BASED ON JEAN-BAPTISTE-CAMILLE COROT'S *Bridge on the Saône River at Mâcon*. It involves painting a great depth of space. This guidebook chapter provides background information on the painting and its artist.

## About the Artist

Jean-Baptiste-Camille Corot was born in Paris in 1796 and died at the age of 78 in 1875. He was born into the bourgeoisie and lived, by all accounts, a stable and contented life. From age 26, he was given an income in the form of family money that supported him during his early years.

He worked consistently and was extremely productive. Eventually, he was well rewarded. He ended up as a wealthy man, with many patrons and the respect of his peers.

Corot was also a pivotal figure in oil painting's evolution. His life straddled decades during which painting was undergoing some seismic shifts. Both materials and procedures were undergoing rapid change.



Jean-Baptiste-Camille Corot, *Bridge on the Saône River at Mâcon*

Corot would generally spend the winters working on larger studio paintings. During the summers, he would often travel, making drawings and oil sketches like the view of the bridge at Mâcon, about 250 miles southeast of Paris.

Corot painted *Bridge on the Saône River at Mâcon* in 1834, but aspects of the scene remain recognizable to this day. While the painting is quiet and contemplative, it is apparent that Corot's brush skipped and danced around the surface. The speed, dexterity, and life of the marks are impressive, as is the overall crispness of color.

## Tips for the Project

For completing this lecture's project, a small, fine-tipped rigger or liner brush, with long and springy tufts, will be very useful. If you haven't used one much before, you might want to experiment with it on a scrap surface. It is likely that Corot used some sort of medium, so you could try a half-and-half mixture of linseed oil and OMS as you experiment with the brush.

### READING

The National Gallery, "Jean-Baptiste-Camille Corot." Available at [nationalgallery.org.uk/artists/jean-baptiste-camille-corot](http://nationalgallery.org.uk/artists/jean-baptiste-camille-corot).

### CARTOON

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on page 355, or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Project: Derain's Portrait of Matisse

**T**HIS LECTURE'S PROJECT IS A STUDY BASED ON ANDRÉ DERAINE'S ICONIC PORTRAIT OF HIS friend, Henri Matisse. This painting will involve your full palette, and it's not a bad idea to have some scrap pieces of canvas on hand. The scrap pieces can help you test different brushes, paint amounts, and strokes.



David Brody, after André Derain

## Background on the Painting

Derain's portrait is from 1905. He spent that summer with Matisse in Collioure, a small village on the Mediterranean in the south of France. At the time they were both experimenting with the use of bold, highly saturated primary and secondary colors.

Upon their return to Paris, they exhibited their new paintings at the Salon d'Automne. They were dubbed "wild beasts" by a disapproving Parisian critic. While the color may have looked wild to an early 20th-century Frenchman, there is solid visual thinking behind Derain's choices.

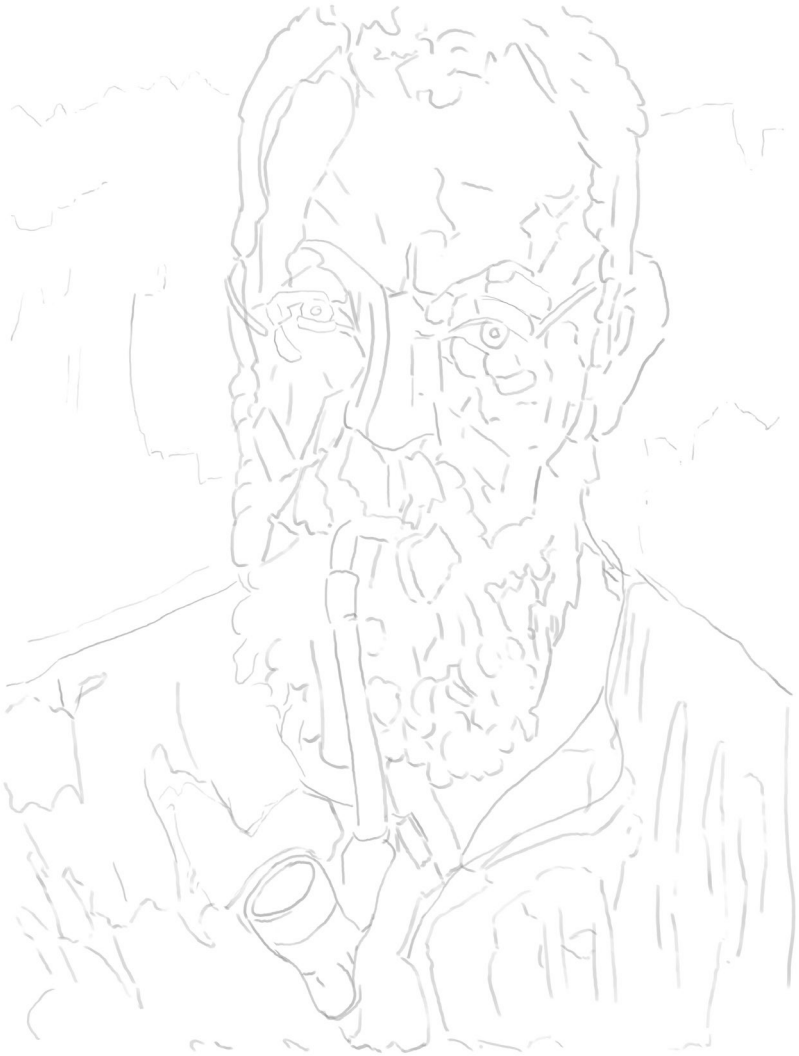
For instance, in Derain's painting, light is coming from the right. The planes facing the light are lighter. Those turned away are darker. Derain also modulates warmth to coolness, moving from yellow, orange, and pink to blue-greens and violets. The beard shifts from a warm burnt sienna to dark, cool colors. All in all, Derain creates the illusion of three dimensions by coupling a light-dark shift with a warm-cool one.

### READING

Tate, "Henri Matisse." Available at [tate.org.uk/art/artworks/derain-henri-matisse-t00165](https://www.tate.org.uk/art/artworks/derain-henri-matisse-t00165).

### CARTOON

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on page 362, or it can be downloaded from [thegreatcourses.com/painter](https://thegreatcourses.com/painter).



# Project: A Porter Self-Portrait

**T**HIS LECTURE'S PROJECT IS A STUDY BASED ON A SELF-PORTRAIT BY FAIRFIELD PORTER. THIS guidebook chapter provides some background information on the artist and painting.



David Brody, after Fairfield Porter

## Background on the Artist and Painting

Porter was born in 1907 in an affluent suburb north of Chicago. He attended Harvard as an undergraduate, majoring in art. He then moved to New York City and undertook further study at The Art Students League.

Porter's career spanned decades that coincided with the rise of many forms of abstraction. However, he leaned toward observational figurative painting, involving landscapes, interiors, and still life paintings.

His paintings rely on strong, abstract shape relationships. He took great care in his compositions, attending to the large structural elements. He also took the complexity of what he saw in three dimensions and interpreted it as interlocking shapes which, taken together, form the shape of the painting itself.

Porter's paintings evince a method that relies on abstracting from, or interpreting observed reality, as a grid of interlocking shapes. This approach to observational painting was fundamental to many late-19th- and 20th-century artists, including Claude Monet.

## Tips for the Project

To complete this lecture's project, it is recommended that you perform two passes. In the first, you'll brush through the painting's components generally. On the second pass, you'll refine what you created during the first pass. The second pass will have five areas of focus:

- 1 Adjusting the level of opacity. Many areas may need greater density.
- 2 Adjusting value. Some colors may need to become lighter or darker.
- 3 Adjusting chroma. Some colors may need to be made warmer, cooler, or more neutral.
- 4 Variations with an overall color area.
- 5 Edges, especially related to shapes and overlapping areas. Focus on the quality of each edge.

## READING

Smithsonian American Art Museum, "Fairfield Porter." Available at [americanart.si.edu/artist/fairfield-porter-3842](http://americanart.si.edu/artist/fairfield-porter-3842).

## CARTOON

The cartoon that follows is a scaled version of the image discussed in this lecture. A full-size rendition can be found in the Cartoon appendix on [page 371](#), or it can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).



# Painting's Evolution: Indirect Painting

**T**HIS LECTURE DISCUSSES SOME OF THE WAYS THAT OIL PAINTING HAS EVOLVED OVER ITS history. In particular, it looks at variations in the paint artists have used.

## Early Paint and Storage

By the 17th century, a common practice was to wrap paint in a piece of pig bladder and tie it up at the top with string. These confections were small out of necessity. No one had large amounts of oil paint.

Left unopened, the paint was good for a couple months, at best. These little sacks had to be stored carefully. They were delicate and easily ruptured.

The paint itself was made from powdered pigment. The powdered pigments were, in turn, derived from a number of sources, including rocks and minerals.

## The 1800s

Some significant changes occurred in the mid-1800s, which affected the way pigments and paint were made and stored. By 1850, artists could buy their oil paints readymade. This was not totally new, but it wasn't until the early to mid-1800s that full-fledged oil paint companies began to form.

Additionally, new chemical knowledge was directly applied to the commercial development of color. New dyes and pigments were needed by the textile and ceramic industries to make brightly colored goods for a rapidly expanding European middle class.

In the early 1800s, per-capita GDP began to take off like a rocket. Artists became the beneficiaries. As new dyes and pigments were invented for commercial goods, the new paint companies tested and adapted them for art purposes.

Eventually, artists could buy their paint in syringes and tubes. Tubes made oil colors easy to preserve. They kept for years, which was—and is—a huge advantage for artists.

## READING

Archives of American Art, "John Goffe Rand Patent." Available at [aaa.si.edu/collections/items/detail/john-goffe-rand-patent-improvement-construction-vessels-or-apparatus-preserving-paint--c-460](http://aaa.si.edu/collections/items/detail/john-goffe-rand-patent-improvement-construction-vessels-or-apparatus-preserving-paint--c-460).

Bomford, *Art in the Making: Underdrawings in Renaissance Paintings*.

Bomford, Kirby, and Roy, *Art in the Making: Rembrandt*.

Carlyle, *The Artist's Assistant*.

Harvard Art Museums, "Artists and Their Tools." Available at [harvardartmuseums.org/article/artists-and-their-tools](http://harvardartmuseums.org/article/artists-and-their-tools).

Harley, *Artists' Pigments c. 1600-1835*.

National Gallery, "Titian's Painting Technique from 1540," p. 16. Available at [nationalgallery.org.uk/media/24098/vol36-introessay.pdf](http://nationalgallery.org.uk/media/24098/vol36-introessay.pdf).

ResearchGate, "John Singer Sargent's Paint Box." Available at [researchgate.net/figure/John-Singer-Sargent-Sargents-paint-box-with-tube-paints-folding-rectangular-palette\\_fig17\\_299588629](http://researchgate.net/figure/John-Singer-Sargent-Sargents-paint-box-with-tube-paints-folding-rectangular-palette_fig17_299588629).

Townsend, "The Materials Used by British Oil Painters in the 19th Century." Available at [tate.org.uk/research/publications/tate-papers/02/the-materials-used-by-british-oil-painters-in-the-nineteenth-century](http://tate.org.uk/research/publications/tate-papers/02/the-materials-used-by-british-oil-painters-in-the-nineteenth-century).

Victoria and Albert Museum, "Tools and Materials." Available at [collections.vam.ac.uk/item/O118157/tools-and-materials-unknown/](http://collections.vam.ac.uk/item/O118157/tools-and-materials-unknown/).

Wallert, Hermens, and Peek, eds., *Historical Painting Techniques, Materials, and Studio Practice*

Winsor & Newton, "The History of the Metal Paint Tube." Available at [winsornewton.com/na/discover/articles-and-inspiration/from-the-archives-history-of-the-metal-paint-tube](http://winsornewton.com/na/discover/articles-and-inspiration/from-the-archives-history-of-the-metal-paint-tube).

# ***Nighthawks,* *The Scream,* and Other Projects**

**T**HIS LECTURE'S PROJECTS INVOLVE STUDIES BASED ON EDWARD HOPPER'S *NIGHTHAWKS* AND Edvard Munch's *The Scream*. This guidebook chapter contains background information on each.

## Background on *Nighthawks*

Edward Hopper was born in 1882 in Upper Nyack, New York. He showed artistic interest and aptitude from a young age. His parents encouraged him in this pursuit. After finishing high school, he enrolled at the New York School of Art and Design in New York City. Once he completed his time there, he worked as an illustrator for some years.

His painting *Nighthawks* (page 64) doesn't represent a specific place. Instead, it's a synthesis of a number of places he'd seen and noted on his walks around the city.

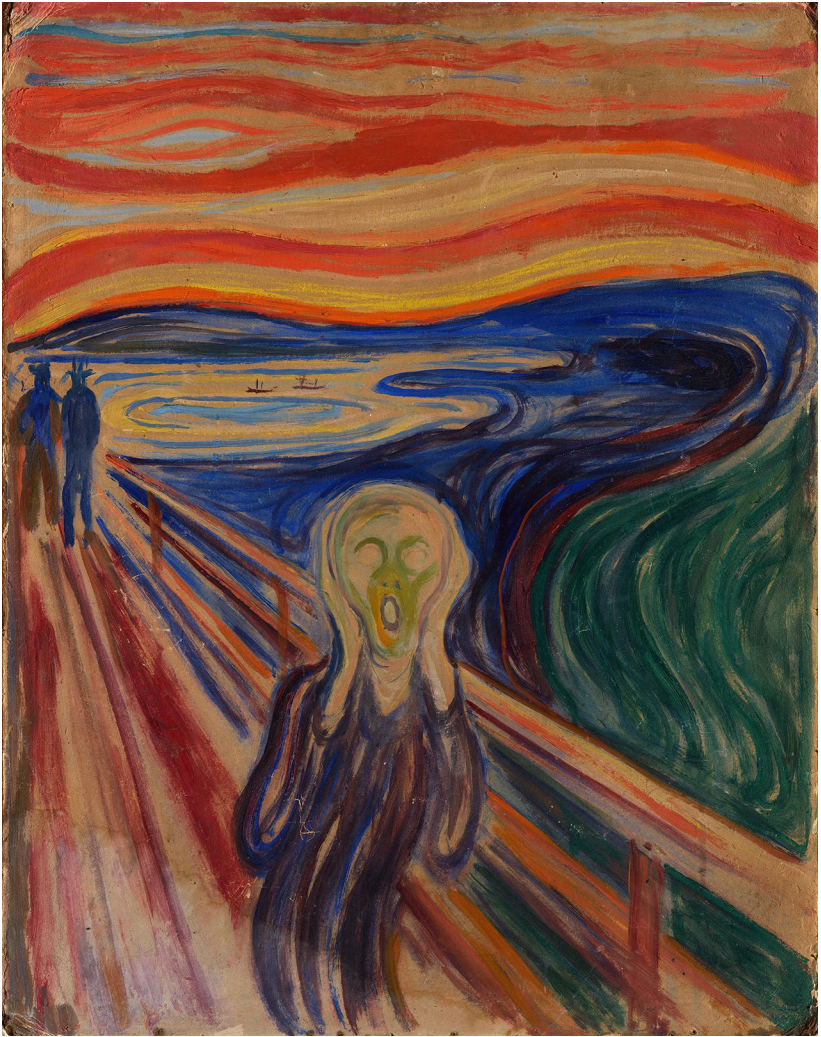
## Background on *The Scream*

In one sense, *The Scream* spans a group of at least eight works that Munch completed between 1891 and 1910. They include a drawing, oil and tempera paintings, pastels, and a lithograph. Three, dating from 1891 through 1894, were titled *Despair*. The other five, dating from 1893 through 1910, were titled *The Scream*.

All eight works share the same configuration, with the iconic bridge receding back into space on the left. There is a central foreground figure cropped mid-body. There are also two figures farther back on the left.

The spatial construction makes use of one-point perspective with many elements of the road and rail vanishing back toward a point on the horizon. In terms of color, it essentially uses a double-complementary orange-blue, red-green palette.

The 1910 version (page 175) is painted with tempera on cardboard. The color of the cardboard is visible throughout the painting. If you proceed with oil or acrylic on canvas for this project, try mixing a color to approximate the cardboard. Apply this as a colored ground before beginning the painting. If you are working with watercolor, try a tinted watercolor paper that is similar in color.



Edvard Munch, *The Scream*

## READING

Art Institute of Chicago, "Nighthawks."

Foster, *Hopper Drawing*, pp. 98-119.

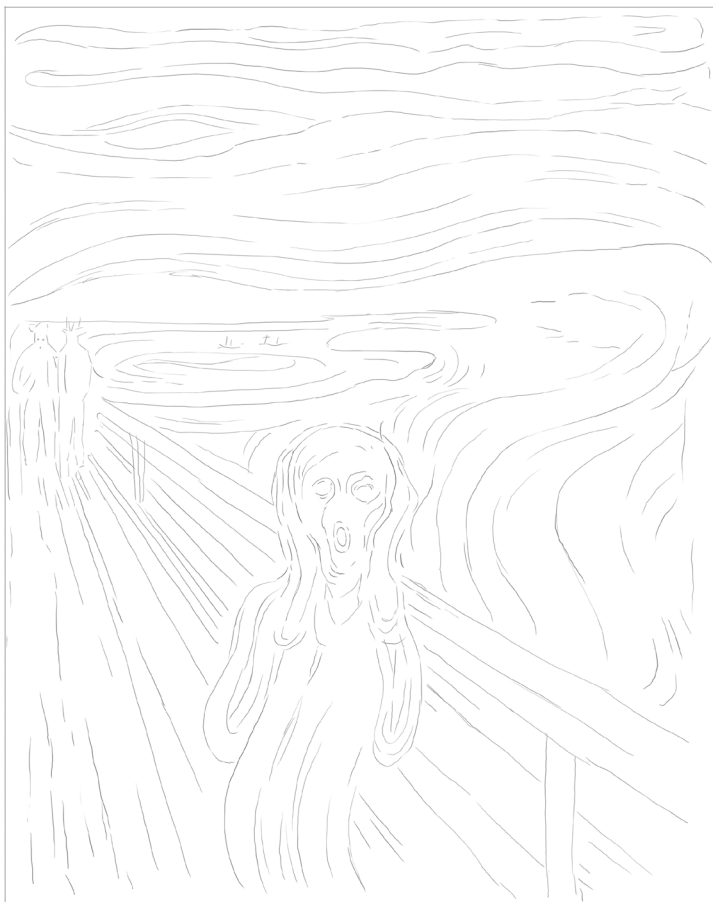
Gaffney, "Go Inside Edward Hopper's Greenwich Village Studio."

Google Arts and Culture, "The Scream."

Stephan, "Listening to Edward Hopper's Silence."

## CARTOONS

The cartoons that follow are scaled versions of the images discussed in this lecture. Full-size renditions can be found in the Cartoon appendix on [page 383](#), or they can be downloaded from [thegreatcourses.com/painter](http://thegreatcourses.com/painter).





# Additional Materials

## OIL PAINT

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- Dioxazine purple, PV23
- Ultramarine blue, PB29
- Phthalo blue, PB15
- Viridian green, PG18
- Arylide yellow, PY3
- Cadmium yellow medium, PY35 or PY37
- Cadmium orange (medium), PO20
- Cadmium red medium, PR108
- Quinacridone red, PV19

## DRYING OILS

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- Water-washed linseed oil
- Walnut, poppy seed, and safflower oils
- Sun-thickened oil
- Stand oil

## THINNERS, SOLVENTS, AND DILUENTS

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- Pure gum spirits of turpentine
- Oil of spike-lavender
- Oil of rosemary
- Citrus solvents, natural terpenes, turpentine substitutes

## RESINS AND VARNISHES

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- Damar varnish
- Alkyd resin
- Regalrez©1094

## BALSAMS

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- Venice turpentine
- Strasbourg, Burgundy, and Jura turpentine
- Canada balsam

## DRIERS

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- Siccatif of Haarlem
- Siccatif of Courtrai
- Cobalt drier

## RETARDANT

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- Oil of cloves

## OTHER MATERIALS

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- Wax and wax mediums
- Chalk (calcium carbonate)

## SIZES

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- Rabbit-skin glue
- Hard acrylic polymers
- PVA (polyvinyl acetate)

## FLEXIBLE SUPPORTS

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- Linen
- Cotton
- Polyester
- Paper
- Yupo

## RIGID SUPPORTS

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- Hardwoods (oak, poplar)
- Plywood
- HDF (high-density fiberboard)
- MDF (medium-density fiberboard)
- Copper
- ACM (aluminum composite panel)

## GROUNDS

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- Titanium oil grounds
- Alkyd oil grounds
- Lead oil grounds
- Acrylic gesso (acrylic dispersion medium)

## TOOLS

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- Rubber mallet
- Canvas pliers
- Stapler
- Paint can opener

## OTHER ITEMS

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- Wooden palette
- Peel-off disposable palette
- Palette cups
- Tube wringer
- Tube key
- Muller
- Empty paint tubes
- Brush soap

## HEALTH AND SAFETY ITEMS

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- Barrier cream
- Air purifier
- OSHA-approved fireproof cabinets
- Oily waste can

# Art Material Suppliers

These are the major online art material suppliers offering a broad range of products and brands.

Artists & Craftsman Supply . . . . .	<a href="http://artistcraftsman.com">artistcraftsman.com</a>
Art Supply Warehouse . . . . .	<a href="http://artsupplywarehouse.com">artsupplywarehouse.com</a>
Cheap Joe's Art Stuff . . . . .	<a href="http://cheapjoes.com">cheapjoes.com</a>
Curry's Art Store (Canada) . . . . .	<a href="http://currys.com">currys.com</a>
Dick Blick Art Materials . . . . .	<a href="http://dickblick.com">dickblick.com</a>
Jerry's Artarama . . . . .	<a href="http://jerrysartarama.com">jerrysartarama.com</a>
Plaza Artist Materials . . . . .	<a href="http://plazaart.com">plazaart.com</a>
Utrecht Art Supplies . . . . .	<a href="http://utrechtart.com">utrechtart.com</a>

You'll also find a broad range of products on Amazon. In addition, there are a number of specialty art supply retailers:

Art Treehouse . . . . .	<a href="http://arttreehouse.com/artstore">arttreehouse.com/artstore</a>
Big Duck Canvas . . . . .	<a href="http://bigduckcanvas.com">bigduckcanvas.com</a>
Earth Pigments . . . . .	<a href="http://earthpigments.com">earthpigments.com</a>
Fine Art Store . . . . .	<a href="http://fineartstore.com">fineartstore.com</a>
The Italian Art Store . . . . .	<a href="http://italianartstore.com">italianartstore.com</a>
Kama Pigments Artist's Materials . . . . .	<a href="http://kamapigment.com">kamapigment.com</a>
Kremer Pigments . . . . .	<a href="http://kremerpigments.com/en">kremerpigments.com/en</a>
Natural Pigments . . . . .	<a href="http://naturalpigments.com">naturalpigments.com</a>
Master Pigments . . . . .	<a href="http://masterpigments.com">masterpigments.com</a>
R & F Encaustics . . . . .	<a href="http://rfpaints.com">rfpaints.com</a>
RGH . . . . .	<a href="http://rghartistoilpaint.com">rghartistoilpaint.com</a>
Soho Art Materials . . . . .	<a href="http://sohoartmaterials.com">sohoartmaterials.com</a>
Zecchi (Italy) . . . . .	<a href="http://zecchi.it">zecchi.it</a>

You'll find a range of geometric solids, drawing casts, and planar heads via these links:

3Dtotalshop . . . . .	<a href="http://shop.3dtotal.com/3dtotal-anatomy-male-female-planar-busts">shop.3dtotal.com/3dtotal-anatomy-male-female-planar-busts</a>
Caproni Collection . . . . .	<a href="http://capronicollection.com">capronicollection.com</a>
Elements of Home . . . . .	<a href="http://elementsofhome.com/catalog/drawing-casts/06">elementsofhome.com/catalog/drawing-casts/06</a>
Fine Art Store . . . . .	<a href="http://fineartstore.com/s-2317-plaster-cast-models.aspx">fineartstore.com/s-2317-plaster-cast-models.aspx</a>
Orlandi . . . . .	<a href="http://orlandistatuary.com/catalog/drawing-casts/06">orlandistatuary.com/catalog/drawing-casts/06</a>
Planes of the Head . . . . .	<a href="http://planesofthehead.com">planesofthehead.com</a>
Statue.com . . . . .	<a href="http://statue.com/Products/Drawing-Casts">statue.com/Products/Drawing-Casts</a>

# Paintings Made and Their Dimensions

*Note:* The primary dimensions listed are the dimensions of the image area or format shape of each painting or exercise. If you are working on unstretched canvas and intend to stretch the canvas, you will need a piece of canvas that is approximately eight inches larger in each dimension. Where indicated, the dimensions in parentheses represent the size needed for stretching.

## LECTURE 1

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Each of the following studies requires one piece of  $8\frac{1}{2} \times 11$ -in paper:

- After a Kassena pattern from a painted house in Tiébélé, Burkina Faso, and after a floral pattern from Jan Vermeer's *Woman with a Pearl Necklace*
- After a mountain goat from a Chalcolithic ceramic
- After a figure from a wall painting from the tomb of Rekhmire
- After *Portrait of a Man with a Mole on His Nose*, Fayum

## LECTURE 5

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- Line and Mark Exercises #1,  $20 \times 24$  in ( $28 \times 32$  in)
- Line and Mark Exercises #2,  $20 \times 24$  in ( $28 \times 32$  in)

## LECTURE 6

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- Value, Scumbling, and Glazing Exercises,  $20 \times 24$  in ( $28 \times 32$  in)

## LECTURE 7

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Four surfaces,  $8\frac{1}{2} \times 11$  in ( $16\frac{1}{2} \times 19$  in):

- Block
- Sphere
- Cylinder
- Cone

## LECTURE 8

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- Value Scale, 18 × 22 in (26 × 30 in)

## LECTURE 9

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- After Norman Lundin, *Simple Still Life—Three Cups*, 2013, 11 × 24 in (19 × 32 in)
- Simple Still Life Variation, in which the size and shape are up to you

## LECTURE 11

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- Block, 8 × 10½ in (16 × 18½ in)
- Sphere, 8 × 10½ in (16 × 18½ in)

## LECTURE 12

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- After Luca Cambiaso's *Untitled Figure Drawing*, 16th century, 13⅜ × 9⅞ in (21⅜ × 17⅞ in)
- After Charles Bargue's *Antique Torso*, 19th century, 20 × 14 in (28 × 22 in)
- After Thomas Couture's *Juliette*, 1876, 18⅞ × 15 in (26⅞ × 23 in)

## LECTURE 13

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- Earth Tone Color Study, 10 × 18 in
- After Giorgio Morandi's, *Still Life*, 1951, 15⅜ × 17¾ in (23⅜ × 25¾ in)

## LECTURE 17

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- Still Life, 16 × 24 in (24 × 32 in)

## LECTURE 18

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- After Edgar Degas's *Nude Woman Drying Herself*, 14 × 19⅞ in (22 × 27⅞ in)
- After Vilhelm Hammershøi, *Moonlight, Strangade 30*, 16⅞ × 20⅞ in (24⅞ × 28⅞ in)

## LECTURE 20

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- A number of surfaces for limited palette exercises

## LECTURE 21

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- Color Mixing Exercise, 9 × 18 in
- Color Chart, same surface used for the value scale in Lecture 8

## LECTURE 28

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- After Amadeo Modigliani, *Portrait of a Young Girl (Jeanne Hébuterne)*, 18 <sup>11</sup>/<sub>16</sub> × 11 <sup>1</sup>/<sub>4</sub> in (26 <sup>11</sup>/<sub>16</sub> × 19 <sup>1</sup>/<sub>4</sub> in)

## LECTURE 29

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- After Edgar Degas, *The Ballerina*, 12 <sup>5</sup>/<sub>8</sub> × 9 <sup>3</sup>/<sub>8</sub> in (20 <sup>5</sup>/<sub>8</sub> × 17 <sup>3</sup>/<sub>8</sub> in)

## LECTURE 30

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- After Jean-Baptiste-Camille Corot, *Bridge on the Saône at Mâcon*, 9 <sup>13</sup>/<sub>16</sub> × 13 <sup>1</sup>/<sub>4</sub> in (17 <sup>13</sup>/<sub>16</sub> × 21 <sup>1</sup>/<sub>4</sub> in)

## LECTURE 31

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- After André Derain, *Henri Matisse*, 18 <sup>1</sup>/<sub>8</sub> × 13 <sup>3</sup>/<sub>4</sub> in (26 <sup>1</sup>/<sub>8</sub> × 21 <sup>3</sup>/<sub>4</sub> in)

## LECTURE 32

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- After Fairfield Porter, *Self Portrait in the Studio*, 22 × 17 <sup>15</sup>/<sub>16</sub> in (30 × 25 <sup>15</sup>/<sub>16</sub> in)

## LECTURE 34

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- After Edward Hopper, *Nighthawks*, 9 × 15 <sup>3</sup>/<sub>4</sub> in (17 × 23 <sup>3</sup>/<sub>4</sub> in)
- After Edvard Munch, *The Scream*, 32 <sup>11</sup>/<sub>16</sub> × 26 in (40 <sup>11</sup>/<sub>16</sub> × 34 in)

# Artworks Studied by Artist's Name

Anguissola, Sofonisba. *Self-Portrait at the Easel*, 1556, oil on canvas, 26 × 22¾ in, 66 × 57 cm, Łańcut Castle, Łańcut, Poland. [commons.wikimedia.org/wiki/File:Self-portrait\\_at\\_the\\_Easel\\_Painting\\_a\\_Devotional\\_Panel\\_by\\_Sofonisba\\_Anguissola.jpg](https://commons.wikimedia.org/wiki/File:Self-portrait_at_the_Easel_Painting_a_Devotional_Panel_by_Sofonisba_Anguissola.jpg).

Anonymous. *Construction of a Wall*, c. 1567–1320 BCE, Valley of the Nobles, Thebes, Egypt.

Anonymous. *Hevajra Mandala*, 15th century, distemper on cloth, 21 ½ × 17 ½ in, 54.6 × 44.5 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/toah/works-of-art/2015.551](https://metmuseum.org/toah/works-of-art/2015.551).

Anonymous. *Lion Hunt*, c. 1680, ink and color on paper, pounced for transfer, 9½ × 16⅞ in, 24.1 × 42.2 cm, Brooklyn Museum, Brooklyn, NY. [brooklynmuseum.org/opencollection/objects/46898](https://brooklynmuseum.org/opencollection/objects/46898).

Anonymous. *Portrait of a Man With a Mole on His Nose*, Fayum, c. 130–150 CE, encaustic on limewood, 15 ½ × 7 ⅝ in, 39.4 × 19.3 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/547857](https://metmuseum.org/art/collection/search/547857).

Anonymous. *Storage Jar Decorated with Mountain Goats*, c. 3800–3700 BCE, central Iran, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/324917](https://metmuseum.org/art/collection/search/324917).

- Anonymous. *Three Graces*, 1st century CE, 20 <sup>1</sup>/<sub>16</sub> × 18 <sup>1</sup>/<sub>2</sub> in, 53 × 47 cm, Museo Archeologico Nazionale di Napoli, Naples, Italy. [commons.wikimedia.org/wiki/File:The\\_Three\\_Graces,\\_from\\_Pompeii.jpg](https://commons.wikimedia.org/wiki/File:The_Three_Graces,_from_Pompeii.jpg).
- Anonymous. *Three Graces*, 3rd–4th century CE, marble mosaic, Museu d'Arqueologia de Catalunya, Barcelona, Spain. [macbarcelona.cat/ca/Col·leccions/Objectes-de-la-col·leccio/Mon-roma/Roma/Seleccio-d-objectes/Mosaic-de-les-Tres-Gracies](https://macbarcelona.cat/ca/Col·leccions/Objectes-de-la-col·leccio/Mon-roma/Roma/Seleccio-d-objectes/Mosaic-de-les-Tres-Gracies).
- Antonello da Messina, *Portrait of a Man*, c. 1475–1476, 14 × 10 in, 35.6 × 25.4 cm, National Gallery, London, England. [nationalgallery.org.uk/paintings/antonello-da-messina-portrait-of-a-man](https://nationalgallery.org.uk/paintings/antonello-da-messina-portrait-of-a-man).
- Bazille, Frédéric. *Self-Portrait*, oil on canvas, 1856–1857, 42 <sup>7</sup>/<sub>8</sub> × 28 <sup>3</sup>/<sub>8</sub> in, 108.9 × 71.1 cm, Art Institute, Chicago, IL. [artic.edu/artworks/110661/self-portrait](https://artic.edu/artworks/110661/self-portrait).
- Bellini, Giovanni. *Doge Leonardo Loredan*, 1501–1502, oil on poplar, 24 <sup>1</sup>/<sub>4</sub> × 17 <sup>3</sup>/<sub>4</sub> in, 61.6 × 45.1 cm, National Gallery, London. [nationalgallery.org.uk/paintings/giovanni-bellini-doge-leonardo-loredan](https://nationalgallery.org.uk/paintings/giovanni-bellini-doge-leonardo-loredan).
- Bihzad, Kamal al-Din. *Construction of the Castle of Khavarnaq*, 1494, British Museum, London, England. [commons.wikimedia.org/wiki/File:Kamal-ud-din\\_Bihzad\\_001.jpg](https://commons.wikimedia.org/wiki/File:Kamal-ud-din_Bihzad_001.jpg).
- Bosch, Hieronymous. *The Last Judgment*, c. 1482, oil on wood, 64 <sup>3</sup>/<sub>8</sub> × 97 <sup>3</sup>/<sub>16</sub> in, 163.7 × 247 cm, Academy of Fine Arts, Vienna, Austria. [commons.wikimedia.org/wiki/File:Last\\_judgement\\_Bosch.jpg](https://commons.wikimedia.org/wiki/File:Last_judgement_Bosch.jpg).

Botticelli, Sandro. *The Birth of Venus*, 1484–1486, tempera on canvas, 68 × 110 in, 172.5 × 278.9 cm, Le Gallerie degli Uffizi, Florence, Italy. [artsandculture.google.com/asset/the-birth-of-venus/MQEEq50LABEBVg?hl=en](https://artsandculture.google.com/asset/the-birth-of-venus/MQEEq50LABEBVg?hl=en).

———. *Primavera*, c. 1482, tempera on panel, 80 × 124 in, 202 × 314 cm, Le Gallerie degli Uffizi, Florence, Italy. [uffizi.it/opere/botticelli-primavera](https://uffizi.it/opere/botticelli-primavera).

Caillebotte, Gustave. *Paris Street Rainy Day*, 1877, oil on canvas, 94 × 73 in, 238.8 × 185.4 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/20684/paris-street-rainy-day](https://artic.edu/artworks/20684/paris-street-rainy-day).

———. *Sketch for Paris Street Rainy Day*, 1877, oil on linen, 21 ¼ × 25 ⅙ in × 65 cm, Musée Marmottan Monet, Paris, France. [wikiart.org/en/gustave-caillebotte/paris-a-rainy-day](https://wikiart.org/en/gustave-caillebotte/paris-a-rainy-day).

Cambiaso, Luca. *Untitled Figures*, date unknown, pen and bistre, 13 ⅜ × 9 ⅙ in, 34 × 24 cm, Gabinetto de Disegni e delle Stampe, Uffizi, Florence, Italy.

Canaletto. *Piazza San Marco*, late 1720s, 27 × 44 ¼ in, 68.6 × 112.4 cm, oil on canvas, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/435839](https://metmuseum.org/art/collection/search/435839).

Caravaggio. *David with the Head of Goliath*, 1606–1607, oil on canvas, 49 ⅜ × 39 ¾ in, 125 × 101 cm, Galleria Borghese, Rome, Italy. [galleriaborghese.beniculturali.it/it/opera/david-con-la-testa-di-golia-0](https://galleriaborghese.beniculturali.it/it/opera/david-con-la-testa-di-golia-0).

Castiglione, Giuseppe. *The Tartar Envoys Present their Horses to Emperor Qianlong*, 1757, Musée des Arts Asiatiques-Guimet, Paris, France.

Cassatt, Mary. *The Boating Party*, 1893–1894, oil on canvas, 35 $\frac{7}{16}$  × 46 $\frac{3}{16}$  in, 90 × 117.3 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46569.html](https://www.nga.gov/collection/art-object-page.46569.html).

Cézanne, Paul. *The Bathers*, 1898–1905, oil on canvas, 82 $\frac{1}{8}$  × 98 $\frac{3}{4}$  in, 210.5 × 250.8 cm, Philadelphia Museum of Art, Philadelphia, PA. [philamuseum.org/collections/permanent/104464.html](https://www.philamuseum.org/collections/permanent/104464.html).

———. *Three Pears*, 1878–1879, oil on canvas, 7 $\frac{7}{8}$  × 10 $\frac{1}{8}$  in, 20 × 25.7 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.136014.html](https://www.nga.gov/collection/art-object-page.136014.html).

———. *Montagne Sainte-Victoire, from near Gardanne*, c. 1887, oil on canvas, 26 $\frac{7}{16}$  × 35 $\frac{15}{16}$  in, 67.2 × 91.3 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.53122.html](https://www.nga.gov/collection/art-object-page.53122.html).

Chardin, Jean-Siméon. *Self-Portrait with a Visor*, c. 1776, 18 × 14 $\frac{3}{4}$  in, 45.7 × 37.4 cm, Art Institute, Chicago, IL. [artic.edu/artworks/102131/self-portrait-with-a-visor](https://www.artic.edu/artworks/102131/self-portrait-with-a-visor).

Chase, William Merritt. *The Young Orphan*, 1884, oil on canvas, 44 × 42 in, 111.8 × 106.7 cm, National Academy Museum, New York, NY. [commons.wikimedia.org/wiki/File:William\\_Merritt\\_Chase\\_-\\_The\\_Young\\_Orphan\\_\(1884\).jpg](https://commons.wikimedia.org/wiki/File:William_Merritt_Chase_-_The_Young_Orphan_(1884).jpg).

Collaert, Jan. *New Inventions of Modern Times*, c. 1600, engraving,  $10\frac{3}{8} \times 7\frac{7}{8}$  in,  $27 \times 20$  cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/659725](https://www.metmuseum.org/art/collection/search/659725).

Corot, Jean-Baptiste-Camille. *Bridge on the Saône River at Mâcon*, 1834, oil on paper on canvas,  $9\frac{13}{16} \times 13\frac{1}{4}$  in,  $25 \times 33.6$  cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.52166.html](https://www.nga.gov/collection/art-object-page.52166.html).

Courbet, Gustave. *Calm Sea*, 1866, oil on canvas,  $21\frac{5}{16} \times 25\frac{3}{16}$  in,  $54.1 \times 63.9$  cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.66408.html](https://www.nga.gov/collection/art-object-page.66408.html).

———. *Woman with a Parrot*, 1866, oil on canvas,  $51 \times 77$  in,  $129.5 \times 195.6$  cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/en/art/collection/search/436002](https://www.metmuseum.org/en/art/collection/search/436002).

Couture, Thomas. *Juliette*, 1876, oil on canvas,  $18\frac{1}{8} \times 15$  in,  $46 \times 38$  cm, Musée des Augustins, Toulouse. [augustins.org/fr/oeuvre/-/oeuvre/40398](https://www.augustins.org/fr/oeuvre/-/oeuvre/40398).

Cranach the Elder, Lucas. *The Last Judgment (after Bosch)*, c. 1524, oil on lime wood,  $73\frac{3}{4} \times 105\frac{3}{4}$  in,  $187.2 \times 268.5$  cm, Gemäldegalerie, Berlin. [lucascranach.org/DE\\_smbGG\\_563a](https://www.lucascranach.org/DE_smbGG_563a).

Da Vinci, Leonardo. *Drapery Study for a Kneeling Figure*, c. 1472–1475, brush and grey tempera,  $8\frac{1}{8} \times 11\frac{1}{16}$  in,  $20.6 \times 28.1$  cm, Musée du Louvre, Paris, France. [artres.com/C.aspx?VP3=ViewBox\\_VPage&VBID=2UN365XK6U4G0&IT=ZoomImageTemplate01\\_VForm&IID=2UNTWAN8TLPB&PN=9&CT=Search&SF=0](https://www.artres.com/C.aspx?VP3=ViewBox_VPage&VBID=2UN365XK6U4G0&IT=ZoomImageTemplate01_VForm&IID=2UNTWAN8TLPB&PN=9&CT=Search&SF=0).

- . *Last Supper*, c. 1495–1498, tempera on gesso, pitch, and mastic, 181 × 346 in, 460 × 880 cm, Santa Maria delle Grazie, Milan, Italy. [commons.wikimedia.org/wiki/File:C3%9Altima\\_Cena\\_-\\_Da\\_Vinci\\_5.jpg](https://commons.wikimedia.org/wiki/File:C3%9Altima_Cena_-_Da_Vinci_5.jpg).
- . *Portrait of Lisa Gherardini (Mona Lisa)*, c. 1503–1519, oil on wood (poplar), 30<sup>5</sup>/<sub>16</sub> × 20<sup>7</sup>/<sub>8</sub> in, 77 × 53 cm, Musée du Louvre, Paris, France. [artsandculture.google.com/asset/portrait-of-lisa-gherardini-wife-of-francesco-del-giocondo-known-as-monna-lisa-la-gioconda-or-mona-lisa-1503-1519/uQGZ28IYUJ3OGw](https://artsandculture.google.com/asset/portrait-of-lisa-gherardini-wife-of-francesco-del-giocondo-known-as-monna-lisa-la-gioconda-or-mona-lisa-1503-1519/uQGZ28IYUJ3OGw).
- . *La Scapiliata, Head of a Woman*, c. 1508, oil on wood, 9<sup>11</sup>/<sub>16</sub> × 8<sup>1</sup>/<sub>4</sub> in, 24.6 × 21 cm, Galleria Nazionale di Parma, Parma, Italy. [pilotta.beniculturali.it/2019/05/18/la-scapiliata-di-leonardo-da-vinci-mostra/#iLightbox/gallery\\_image\\_1/0](https://pilotta.beniculturali.it/2019/05/18/la-scapiliata-di-leonardo-da-vinci-mostra/#iLightbox/gallery_image_1/0).
- David, Jacques-Louis. *Madame Pastoret and Her Son*, 1791–1792, oil on canvas, 51<sup>1</sup>/<sub>8</sub> × 38<sup>1</sup>/<sub>16</sub> in, 129.8 × 96.6 cm, The Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/27307/madame-de-pastoret-and-her-son?q=David%2C%20Jacques-Louis.%20Madame%20Pastoret%20and%20Her%20Son](https://artic.edu/artworks/27307/madame-de-pastoret-and-her-son?q=David%2C%20Jacques-Louis.%20Madame%20Pastoret%20and%20Her%20Son).
- . *Madame Récamier*, 1800, oil on canvas, 68<sup>1</sup>/<sub>2</sub> × 88<sup>3</sup>/<sub>16</sub> in, 174 × 224 cm, Musée du Louvre, Paris, France. [louvre.fr/en/oeuvre-notices/madame-recamier](https://louvre.fr/en/oeuvre-notices/madame-recamier).
- . *Oath of the Horatii*, 1784, oil on canvas, 129<sup>1</sup>/<sub>16</sub> × 167<sup>3</sup>/<sub>16</sub> in, 329.8 × 424.8 cm, Musée du Louvre, Paris, France. [louvre.fr/en/oeuvre-notices/oath-horatii](https://louvre.fr/en/oeuvre-notices/oath-horatii).

- . *Portrait of Jean-Pierre Delahaye*, 1815, oil on panel, 24 × 19¼ in, 61 × 49 cm, Los Angeles County Museum of Art (Lacma), Los Angeles, CA. [lacma.org/art/exhibition/jacques-louis-david-portrait-jean-pierre-delahaye-rediscovered-masterpiece](https://lacma.org/art/exhibition/jacques-louis-david-portrait-jean-pierre-delahaye-rediscovered-masterpiece).
- Davis, Stuart. *Colonial Cubism*, 1954, oil on canvas, 45½ × 60¼ in, 114.6 × 153 cm, Walker Art Center, Minneapolis, MN. [walkerart.org/collections/artworks/colonial-cubism](https://walkerart.org/collections/artworks/colonial-cubism).
- Degas, Edgar. *After the Bath*, c. 1896, oil on canvas, 35¼ × 46 in, 89.5 × 116.8 cm, Philadelphia Museum of Art, Philadelphia, PA. [philamuseum.org/collections/permanent/74314.html](https://philamuseum.org/collections/permanent/74314.html).
- . *After the Bath, Woman Drying Her Hair*, 1893–1898, charcoal and brown chalk on pale pink wove paper, 19¼ × 28¼ in, 49.7 × 64.4 cm, Fogg Art Museum, Cambridge, MA. [harvardartmuseums.org/art/299831](https://harvardartmuseums.org/art/299831).
- . *The Ballerina*, c. 1876, oil on canvas, 12⅝ × 9⅜, 32.1 × 23.8 cm, San Diego Museum, San Diego, CA. [collection.sdmart.org/Obj2773?sid=521&x=40454](https://collection.sdmart.org/Obj2773?sid=521&x=40454).
- . *Dance Class at the Opera*, 1872, oil on canvas, 12¼ × 18½ in, 32 × 46 cm, Musée D'Orsay, Paris, France.
- . *The Dance Lesson*, c. 1879, pastel and black chalk on three pieces of wove paper joined together, 25⅝ × 22⅝ in, 64.5 × 56.2 cm, Metropolitan Museum of Art, New York, NY.

- . *Dancer Adjusting Her Slipper*, 1873, graphite heightened with black and white chalk on pink wove paper (now faded), 13 × 9<sup>5</sup>/<sub>8</sub> in, 33 × 24.4 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/toah/works-of-art/29.100.941/](https://www.metmuseum.org/toah/works-of-art/29.100.941/).
- . *The Infanta Margarita (after Velázquez)*, 1862–1864, etching and drypoint on wove paper, 6<sup>1</sup>/<sub>16</sub> × 4<sup>3</sup>/<sub>4</sub>, 17 × 12 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/334667](https://www.metmuseum.org/art/collection/search/334667).
- . *Madame Camus*, 1869–1870, oil on canvas, 28<sup>5</sup>/<sub>8</sub> × 36<sup>1</sup>/<sub>4</sub> in, 72.7 × 92.1 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46596.html](https://www.nga.gov/collection/art-object-page.46596.html).
- . *Nude Woman Drying Herself*, c. 1884–1886, oil on canvas, 59<sup>3</sup>/<sub>8</sub> × 84<sup>1</sup>/<sub>8</sub> in, 150.8 × 213.7 cm, Brooklyn Museum, Brooklyn, NY. [brooklynmuseum.org/opencollection/objects/4693](https://www.brooklynmuseum.org/opencollection/objects/4693).
- . *Oenoché en forme de tête de jeune homme*, c. 1855, oil on canvas, 11<sup>1</sup>/<sub>2</sub> × 8<sup>5</sup>/<sub>16</sub> in, 29.3 × 21.1 cm, Musée d'Orsay, Paris.
- . *Répétition d'un ballet sur la scene*, 1874, oil on canvas, 25<sup>9</sup>/<sub>16</sub> × 32 in, 65 × 81.5 cm, Musée D'Orsay, Paris, France. [artsandculture.google.com/asset/ballet-rehearsal-on-stage/3gHLPe4\\_LSLW8g?hl=en](https://artsandculture.google.com/asset/ballet-rehearsal-on-stage/3gHLPe4_LSLW8g?hl=en).
- De Gelder, Aert. *Self-Portrait at an Easel Painting an Old Woman*, oil on canvas, 1685, Städelches Kunstinstitut, Frankfurt, Germany. [wga.hu/html\\_m/g/gelder/self\\_por.html](https://www.wga.hu/html_m/g/gelder/self_por.html).

- De Hooch, Pieter. *Interior of the Council Chamber of Amsterdam Town Hall*, c. 1663–1665, oil on canvas, 44  $\frac{5}{16}$  × 39 in, 112.5 × 99 cm, Museo Thyssen-Bornemisza, Madrid, Spain. [museothyssen.org/en/collection/artists/hooch-pieter-hendricksz/interior-council-chamber-amsterdam-town-hall](https://museothyssen.org/en/collection/artists/hooch-pieter-hendricksz/interior-council-chamber-amsterdam-town-hall).
- Delacroix, Eugène. *The Edge of a Wood at Nohant*, c. 1842–1843, Watercolor, 6  $\frac{1}{8}$  × 8  $\frac{1}{16}$  in, 15.5 × 20.5 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.65828.html](https://nga.gov/collection/art-object-page.65828.html).
- Derain, André. *Henri Matisse*, 1905, oil on canvas, 18  $\frac{1}{8}$  × 13  $\frac{3}{4}$  in, 46 × 34.9 cm, Tate Gallery, London, England. [tate.org.uk/art/artworks/derain-henri-matisse-t00165](https://tate.org.uk/art/artworks/derain-henri-matisse-t00165).
- Desmarées, Georg. *Self-Portrait of the Artist with his Daughter Antonia*, c. 1750, oil on canvas, 62  $\frac{1}{2}$  × 46  $\frac{3}{8}$  in, 159 × 118 cm, Alte Pinakothek, Munich, Germany. [sammlung.pinakothek.de/en/artist/georg-desmarees/der-kuenstler-mit-seiner-tochter-antonia](https://sammlung.pinakothek.de/en/artist/georg-desmarees/der-kuenstler-mit-seiner-tochter-antonia).
- Dürer, Albrecht. *Self-Portrait*, 1500, oil on wood panel, 26  $\frac{3}{8}$  × 19  $\frac{3}{16}$  in, 67.1 × 48.9 cm, Alte Pinakothek, Maxvorstadt, Munich, Germany. [en.wikipedia.org/wiki/Self-Portrait\\_\(D%C3%BCrer,\\_Munich\)#/media/File:Albrecht\\_D%C3%BCrer\\_-\\_1500\\_self-portrait\\_\(High\\_resolution\\_and\\_detail\).jpg](https://en.wikipedia.org/wiki/Self-Portrait_(D%C3%BCrer,_Munich)#/media/File:Albrecht_D%C3%BCrer_-_1500_self-portrait_(High_resolution_and_detail).jpg).
- . *Study of Drapery*, 1508, India ink, gouache on prepared green paper, 10.12 × 7.56 in, 25.7 × 19.2 cm, Musée du Louvre, Paris, France. [commons.wikimedia.org/wiki/File:Albrecht\\_D%C3%BCrer\\_-\\_Study\\_of\\_a\\_Drapery\\_-\\_WGA07066.jpg](https://commons.wikimedia.org/wiki/File:Albrecht_D%C3%BCrer_-_Study_of_a_Drapery_-_WGA07066.jpg).

- Eakins, Thomas. *John Biglin in a Single Skull*, 1873, Watercolor, 16 $\frac{7}{8}$  × 23 $\frac{1}{16}$  in, 42.9 × 60.8 cm, Yale University Art Gallery, New Haven, CT. [artgallery.yale.edu/collections/objects/75112](http://artgallery.yale.edu/collections/objects/75112).
- . *Wrestlers*, 1899, oil on canvas, 48 $\frac{3}{8}$  × 60 in, 122.9 × 152.4 cm, Los Angeles County Museum of Art (Lacma), Los Angeles, CA. [collections.lacma.org/node/212740](http://collections.lacma.org/node/212740).
- . *Sketch for "The Writing Master"*, 1882, oil on panel, 8 $\frac{1}{4}$  × 10 $\frac{1}{8}$  in, 20.9 × 25.7 cm, Philadelphia Museum of Art, Philadelphia, PA. [commons.wikimedia.org/wiki/File:Sketch\\_for\\_The\\_Writing\\_Master\\_-\\_Portrait\\_of\\_Benjamin\\_Eakins.png](http://commons.wikimedia.org/wiki/File:Sketch_for_The_Writing_Master_-_Portrait_of_Benjamin_Eakins.png).
- . *The Writing Master*, 1882, oil on canvas, 30 × 34 $\frac{1}{4}$  in, 76.2 × 87 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/toah/works-of-art/17.173/](http://metmuseum.org/toah/works-of-art/17.173/).
- Fantin-Latour, Henri. *Still Life: Corner of a Table*, 1873, oil on canvas, 37 $\frac{1}{16}$  × 49 $\frac{3}{16}$  in, 96.4 × 125 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/75507/still-life-corner-of-a-table?q=Fantin-Latour%2C%20Henri.%20Still%20Life](http://artic.edu/artworks/75507/still-life-corner-of-a-table?q=Fantin-Latour%2C%20Henri.%20Still%20Life).
- . *A Studio at Les Batignolles*, oil on canvas, 1870, 80 $\frac{5}{16}$  × 107 $\frac{1}{2}$  in, 204 × 273 cm, Musée D'Orsay, Paris, France. [artsandculture.google.com/asset/a-studio-at-les-batignolles/PwGDbjLwp5UCWw?hl=en](http://artsandculture.google.com/asset/a-studio-at-les-batignolles/PwGDbjLwp5UCWw?hl=en).
- Fragonard, Jean Honoré. *Young Girl Reading*, c. 1769, oil on canvas, 31 $\frac{1}{16}$  in × 25 $\frac{1}{2}$  in, 81.1 × 64.8 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46303.html](http://nga.gov/collection/art-object-page.46303.html).

- Giacometti, Alberto. *Diego*, oil on canvas, 1959, 24 × 19<sup>1</sup>/<sub>16</sub> in, 61 × 49.8 cm, Tate Gallery, London, England. [tate.org.uk/art/artworks/giacometti-diego-t00358](https://www.tate.org.uk/art/artworks/giacometti-diego-t00358).
- Giotto di Bondone, *Lamentation*, c. 1304–1306, fresco, 78<sup>1</sup>/<sub>16</sub> × 72<sup>13</sup>/<sub>16</sub> in, 200 × 185 cm, Scrovegni Chapel, Padova, Italy. [en.wikipedia.org/wiki/Lamentation\\_of\\_Christ#/media/File:Giotto\\_-\\_Scrovegni\\_-\\_36\\_-\\_Lamentation\\_\(The\\_Mourning\\_of\\_Christ\)\\_adj.jpg](https://en.wikipedia.org/wiki/Lamentation_of_Christ#/media/File:Giotto_-_Scrovegni_-_36_-_Lamentation_(The_Mourning_of_Christ)_adj.jpg).
- Glackens, William. *Pears and Oranges in a Bowl*, 1915, oil on canvas, 10 × 13 in, 25.4 × 33 cm, Brooklyn Museum, Brooklyn, NY. [brooklynmuseum.org/opencollection/objects/2375](https://www.brooklynmuseum.org/opencollection/objects/2375).
- Goya, (Francisco de Goya y Lucientes). *The Painter Francisco de Goya*, oil on canvas, 1826, 37 × 30<sup>11</sup>/<sub>16</sub> in, 94 × 78 cm, Museo del Prado, Madrid, Spain. [museodelprado.es/en/the-collection/art-work/the-painter-francisco-de-goya/d24dba94-d730-44c5-8b46-1f1732d2b571](https://www.museodelprado.es/en/the-collection/art-work/the-painter-francisco-de-goya/d24dba94-d730-44c5-8b46-1f1732d2b571).
- . *A Prison Scene*, 1810–1814 (or 1793–1794), oil on tin, 16<sup>7</sup>/<sub>8</sub> × 12<sup>5</sup>/<sub>8</sub> in, 43 × 32 cm, Bowes Museum, Teesdale, England. [commons.wikimedia.org/wiki/File:Francisco\\_de\\_Goya\\_y\\_Lucientes\\_-\\_A\\_Prison\\_Scene\\_-\\_WGA10071.jpg](https://commons.wikimedia.org/wiki/File:Francisco_de_Goya_y_Lucientes_-_A_Prison_Scene_-_WGA10071.jpg).
- . *Three Salmon Steaks*, 1808–1812, 17<sup>3</sup>/<sub>4</sub> × 24<sup>3</sup>/<sub>8</sub> in, 45 × 62 cm, oil on canvas, Museum Oskar Reinhart, Winterthur, Switzerland. [roemerholz.ch/sor/en/home/museum/the-collection/periods/italy-and-spain--14th-to-19th-century/francisco-jose-de-goya-y-lucientes--still-life-with-three-salmon.html](https://www.roemerholz.ch/sor/en/home/museum/the-collection/periods/italy-and-spain--14th-to-19th-century/francisco-jose-de-goya-y-lucientes--still-life-with-three-salmon.html).

- Greuze, Jean-Baptiste. *Aegina Visited By Jupiter*, 1767–1769, oil on canvas, 57 7/8 × 77 1/8 in, 147 × 195.9 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/436580](https://www.metmuseum.org/art/collection/search/436580).
- Hals, Frans. *Laughing Boy*, 1625, 12 in diameter, 30.45 cm diameter, oil on panel, Mauritshuis, The Hague, Netherlands. [mauritshuis.nl/en/explore/the-collection/artworks/laughing-boy-1032/](https://www.mauritshuis.nl/en/explore/the-collection/artworks/laughing-boy-1032/).
- Hammershøi, Vilhelm. *Moonlight, Strangade 30*, 1900–1906, oil on canvas, 16 1/8 × 20 1/8 in, 41 × 51.1 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/441933](https://www.metmuseum.org/art/collection/search/441933).
- Henri, Robert. *Snow in New York*, 1902, oil on canvas, 32 × 25 13/16 in, 81.3 × 65.5 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.42929.html](https://www.nga.gov/collection/art-object-page.42929.html).
- Homer, Winslow. *Boys in a Pasture*, 1874, oil on canvas, 15 7/8 × 22 7/8 in, 40.32 × 58.1 cm, Museum of Fine Arts, Boston, MA. [collections.mfa.org/objects/33506/boys-in-a-pasture;jsessionid=E8843B96C40351F460F14407FEAE60D2?ctx=c2ff0d55-d291-4d3d-a648-f69c552490be&idx=3](https://collections.mfa.org/objects/33506/boys-in-a-pasture;jsessionid=E8843B96C40351F460F14407FEAE60D2?ctx=c2ff0d55-d291-4d3d-a648-f69c552490be&idx=3).
- . *The Veteran in a New Field*, 1865, oil on canvas, 24 1/8 × 38 1/8 in, 61.3 × 96.8 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/11145](https://www.metmuseum.org/art/collection/search/11145).
- Hopper, Edward. *Nighthawks*, 1942, oil on canvas, 33 1/8 × 60 in, 84.1 × 152.4 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/111628/nighthawks?q=Hopper%2C%20Edward.%20Nighthawks](https://artic.edu/artworks/111628/nighthawks?q=Hopper%2C%20Edward.%20Nighthawks).

- Houdon, Jean-Antoine. *L'Écorché*, 1767. [commons.wikimedia.org/wiki/File:C3%89corch%C3%A9\\_Houdon\\_\(3\)\\_1767.jpg](https://commons.wikimedia.org/wiki/File:C3%89corch%C3%A9_Houdon_(3)_1767.jpg).
- Ingres, Jean-Auguste-Dominique. *Study for "Roger Freeing Angelica"*, 1818, oil on canvas, 14 5/8 × 18 1/2 in, 37.2 × 47 cm, Fogg Art Museum, Harvard, Cambridge, MA. [artsandculture.google.com/asset/study-for-roger-freeing-angelica/GQGSe7LpFD5fLw](https://artsandculture.google.com/asset/study-for-roger-freeing-angelica/GQGSe7LpFD5fLw).
- . *Odalisque in Grisaille*, c. 1824–1834, oil on canvas, 32 3/4 × 43 in, 83.2 × 109.2 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/toah/works-of-art/38.65/](https://metmuseum.org/toah/works-of-art/38.65/).
- Jacopo de' Barbari (attributed), *Portrait of Luca Pacioli*, c. 1500, 38 1/2 × 42 1/2 in, 98 × 108 cm, Capodimonte Museum, Naples, Italy. [en.wikipedia.org/wiki/Portrait\\_of\\_Luca\\_Pacioli#/media/File:Pacioli.jpg](https://en.wikipedia.org/wiki/Portrait_of_Luca_Pacioli#/media/File:Pacioli.jpg).
- Kahlo, Frida. *Self-Portrait with Necklace*, 1933, oil on metal, 13 3/4 × 11 7/16 in, 35 × 29 cm, the Jacques and Natasha Gelman Collection, Banco de México Diego Rivera Frida Kahlo Museums Trust. [curiator.com/art/frida-kahlo/self-portrait-with-necklace](https://curiator.com/art/frida-kahlo/self-portrait-with-necklace).
- Kollwitz, Käthe. *Self-Portrait*, 1908, charcoal, 12 5/8 × 16 1/2 in, 32.1 × 42 cm, The Albertina Museum, Vienna, Austria. [akg-images.co.uk/archive/Self-portait-in-three-quarter-profile-to-the-left-2UMDHUKTY3J6.html](https://akg-images.co.uk/archive/Self-portait-in-three-quarter-profile-to-the-left-2UMDHUKTY3J6.html).
- Labille-Guiard, Adélaïde. *Self-Portrait with Two Pupils*, 1785, oil on canvas, 83 × 59 1/2 in, 210.8 × 151.1 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/toah/works-of-art/53.225.5/](https://metmuseum.org/toah/works-of-art/53.225.5/).

- Le Brun, Élisabeth Louise Vigée. *Self-Portrait*, oil on canvas, 1790, 39  $\frac{3}{8}$  × 31  $\frac{7}{8}$  in, 100 × 81 cm, Le Gallerie degli Uffizi, Florence, Italy. [metmuseum.org/art/collection/search/656845](https://www.metmuseum.org/art/collection/search/656845).
- Leyster, Judith. *Self-Portrait*, c. 1630, oil on canvas, 29  $\frac{3}{8}$  × 25  $\frac{5}{8}$  in, 75.6 × 65.1 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.37003.html](https://www.nga.gov/collection/art-object-page.37003.html).
- Liotard, Jean-Étienne. *The Three Graces*, 1737, pastel on parchment, 23  $\frac{3}{8}$  × 17  $\frac{7}{8}$  in, 59.4 × 45.4 cm, Rijksmuseum, Amsterdam. [rijksmuseum.nl/en/collection/SK-A-242](https://www.rijksmuseum.nl/en/collection/SK-A-242).
- Lundin, Norman. *Simple Still Life—Three Cups*, 2013, oil on canvas, 11 × 24 in, 27.9 × 61 cm, Private Collection. [www.normanlundin.com/artwork/simple-still-life-three-cups-2013-oil-canvas-11-x-24](http://www.normanlundin.com/artwork/simple-still-life-three-cups-2013-oil-canvas-11-x-24).
- Manet, Édouard. *Le déjeuner sur l'herbe*, 1863, oil on canvas, 51  $\frac{3}{8}$  × 74  $\frac{1}{16}$  in, 208 × 264.5 cm, Musée d'Orsay, Paris, France. [artsandculture.google.com/asset/luncheon-on-the-grass/twELHYoc3ID\\_VA?hl=en](https://artsandculture.google.com/asset/luncheon-on-the-grass/twELHYoc3ID_VA?hl=en).
- . *Henri Rochefort*, 1881, oil on canvas, 32 × 26  $\frac{1}{8}$  in, 81.5 × 66.5 cm, Kunsthalle, Hamburg, Germany. [commons.wikimedia.org/wiki/File:%C3%89douard\\_Manet\\_-\\_Portrait\\_Henri\\_Rochefort2.jpg](https://commons.wikimedia.org/wiki/File:%C3%89douard_Manet_-_Portrait_Henri_Rochefort2.jpg).
- . *Music in the Tuileries Gardens*, 1862, 30 × 46  $\frac{1}{2}$  in, 76 × 118 cm, National Gallery, London, England. [nationalgallery.org.uk/paintings/edouard-manet-music-in-the-tuileries-gardens](https://www.nationalgallery.org.uk/paintings/edouard-manet-music-in-the-tuileries-gardens).

- . *Olympia*, 1863, oil on canvas, 51 ¾ × 74 13/16 in, 130.5 × 190 cm, Musée d'Orsay, Paris, France. [artsandculture.google.com/asset/olympia/ywFEI4rxgCSO1Q?hl=en](https://artsandculture.google.com/asset/olympia/ywFEI4rxgCSO1Q?hl=en).
- Manuel, Niklaus. *Saint Luke Painting the Madonna*, 1515, tempera on wood panel, 46 1/8 × 32 5/16 in, 117 × 82 cm, Kunstmuseum, Bern, Switzerland. [commons.wikimedia.org/wiki/File:Niklaus\\_Manuel\\_-\\_St\\_Luke\\_Painting\\_the\\_Madonna\\_\(detail\)-\\_WGA14033.jpg](https://commons.wikimedia.org/wiki/File:Niklaus_Manuel_-_St_Luke_Painting_the_Madonna_(detail)-_WGA14033.jpg).
- Masanobu, Okumura. *Large Perspective Picture of the Face-Showing at the Stage Performance of a Drama (Shibai kyōgen butai kaomise ōukie)*, 1745, Hand-colored woodcut, 17 ½ × 26 ¼ in, 44.5 × 66.7 cm, Philadelphia Museum of Art, Philadelphia, PA. [philamuseum.org/collections/permanent/144194.html?mulR=395931121](https://philamuseum.org/collections/permanent/144194.html?mulR=395931121).
- Mǎ Yuǎn. *Watching the Deer by a Pine Shaded Stream*, 1127–1279, 13 ¼ × 15 ½ in, 33.7 × 39.3 cm, Album leaf, ink, and color on silk, Cleveland Museum of Art, Cleveland, OH. [www.clevelandart.org/art/1997.88](http://www.clevelandart.org/art/1997.88).
- Michelangelo (Buonaroti). *The Creation of Adam*, c. 1511, fresco, 189 × 90 5/8 in, 480.1 × 230.1 cm, Sistine Chapel, Vatican. [en.wikipedia.org/wiki/The\\_Creation\\_of\\_Adam#/media/File:Michelangelo\\_-\\_Creation\\_of\\_Adam\\_\(cropped\).jpg](https://en.wikipedia.org/wiki/The_Creation_of_Adam#/media/File:Michelangelo_-_Creation_of_Adam_(cropped).jpg).
- . *Study for Adam*, 1511, red chalk, 11 5/8 × 8 ½ in, 29.5 × 21.6 cm, British Museum, London, England. [britishmuseum.org/research/collection\\_online/collection\\_object\\_details/collection\\_image\\_gallery.aspx?partid=1&assetid=18191001&objectid=716122](https://britishmuseum.org/research/collection_online/collection_object_details/collection_image_gallery.aspx?partid=1&assetid=18191001&objectid=716122).

- Millet, Jean-Francois. *The Gleaners*, 1857, oil on canvas, 33 × 44 in, 83.8 × 111.8 cm, Musée d'Orsay. [artsandculture.google.com/asset/gleaners/GgHsT2RumWxbtw?hl=en](https://artsandculture.google.com/asset/gleaners/GgHsT2RumWxbtw?hl=en).
- Modigliani, Amadeo. *Portrait of a Young Girl (Jeanne Hébuterne)*, 1918, oil on canvas, 18 <sup>11</sup>/<sub>16</sub> × 11 <sup>1</sup>/<sub>4</sub>, 46 × 29 cm, private collection. [en.wikipedia.org/wiki/Jeanne\\_H%C3%A9buterne#/media/File:Jeanne\\_Hebuterne\\_by\\_Amedeo\\_Modigliani.jpg](https://en.wikipedia.org/wiki/Jeanne_H%C3%A9buterne#/media/File:Jeanne_Hebuterne_by_Amedeo_Modigliani.jpg).
- Mondrian, Piet. *Composition with Yellow, Blue and Red*, 1937–1942, oil on canvas, 25 <sup>5</sup>/<sub>8</sub> × 27 <sup>1</sup>/<sub>4</sub> in, 72.7 × 69.2 cm, Tate Gallery, London, England. [tate.org.uk/art/artworks/mondrian-composition-with-yellow-blue-and-red-t00648](https://tate.org.uk/art/artworks/mondrian-composition-with-yellow-blue-and-red-t00648).
- Monet, Claude. *Impression Sunrise*, 1872, oil on canvas, 18 <sup>7</sup>/<sub>8</sub> × 24 <sup>13</sup>/<sub>16</sub> in, 48 × 63 cm, Musée Marmottan Monet, Paris, France. [commons.wikimedia.org/wiki/File:Monet\\_-\\_Impression,\\_Sunrise.jpg](https://commons.wikimedia.org/wiki/File:Monet_-_Impression,_Sunrise.jpg).
- . *Palazzo da Mula*, Venice, 1908, oil on canvas, 24 <sup>3</sup>/<sub>16</sub> × 31 <sup>11</sup>/<sub>16</sub> in, 61.4 × 80.5 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46657.html](https://nga.gov/collection/art-object-page.46657.html).
- . *La Rue Bavole, Honfleur*, 1864, oil on canvas, 22 × 24 in, 55.9 × 61 cm, Museum of Fine Arts, Boston, MA. [artsandculture.google.com/asset/rue-de-la-bavole-honfleur/cQFZkMkyAPGgPQ?hl=en](https://artsandculture.google.com/asset/rue-de-la-bavole-honfleur/cQFZkMkyAPGgPQ?hl=en).

- . *Seagulls, the River Thames and the Houses of Parliament*, 1904, oil on canvas, 31.8 × 36.2 in, 81 × 92 cm, Pushkin Museum, Moscow, Russia. [commons.wikimedia.org/wiki/File:Seagulls,\\_the\\_Thames\\_%26\\_Houses\\_of\\_Parliament\\_by\\_Claude\\_Monet,\\_Pushkin\\_Museum.JPG](https://commons.wikimedia.org/wiki/File:Seagulls,_the_Thames_%26_Houses_of_Parliament_by_Claude_Monet,_Pushkin_Museum.JPG).
- . *View of Rouen*, 1883, black chalk on blued white Gillot paper, 12<sup>15</sup>/<sub>16</sub> × 18<sup>11</sup>/<sub>16</sub> in, 31.3 × 47.5 cm, The Clark Museum, Williamstown, MA. [clarkart.edu/Collection/11043](http://clarkart.edu/Collection/11043).
- . *Waterloo Bridge London, at Dusk*, 1904, oil on canvas, 25<sup>7</sup>/<sub>8</sub> × 40 in, 65.7 × 101.6 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.61377.html](https://nga.gov/collection/art-object-page.61377.html).
- . *Wheatstacks, Snow Effect, Morning*, 1891, oil on canvas, 25<sup>1</sup>/<sub>2</sub> × 39<sup>1</sup>/<sub>4</sub> in, 64.8 × 99.7 cm, J. Paul Getty Museum, Los Angeles, CA. [www.getty.edu/art/collection/objects/900/claude-monet-wheatstacks-snow-effect-morning-meules-effet-de-neige-le-matin-french-1891/](http://www.getty.edu/art/collection/objects/900/claude-monet-wheatstacks-snow-effect-morning-meules-effet-de-neige-le-matin-french-1891/).
- Morandi, Giorgio. *Still Life*, 1951, oil on canvas, 15<sup>3</sup>/<sub>8</sub> × 17<sup>3</sup>/<sub>4</sub> in, 39 × 45 cm, Museo D'Arte Moderna di Bologna, Bologna, Italy.
- Morse, Samuel F. B. *Gallery of the Louvre*, 1831–1833, oil on canvas, 73<sup>3</sup>/<sub>4</sub> × 108 in, 187.3 × 274.3 cm, Terra Foundation for American Art, Chicago. [collection.terraamericanart.org/view/objects/asitem/id/243](http://collection.terraamericanart.org/view/objects/asitem/id/243).
- Munch, Edvard. *The Scream*, 1910, tempera on cardboard, 32<sup>11</sup>/<sub>16</sub> × 26 in, 83 × 66 cm, Munch Museum, Oslo, Norway. [artsandculture.google.com/asset/the-scream/eQFdRTFKDtVQ1A?hl=en](https://artsandculture.google.com/asset/the-scream/eQFdRTFKDtVQ1A?hl=en).

- Oudry, Jean-Baptiste. *Rhinoceros*, 1749, oil on canvas, 122 × 179½ in, 310 × 456 cm, Staatliche Museum, Schwerin, Germany. [museum-schwerin.de/en/museum/highlights/oudry/](http://museum-schwerin.de/en/museum/highlights/oudry/).
- Peale, Raphaelle. *Cutlet and Vegetables*, 1816, oil on panel, 18¼ × 24¼ in, 46.4 × 61.5 cm, Timken Museum, San Diego, CA. [www.timkenmuseum.org/collection/cutlet-and-vegetables/](http://www.timkenmuseum.org/collection/cutlet-and-vegetables/).
- Picasso, Pablo. *Guernica*, 1937, oil on canvas, 138 × 306 in, 350.5 × 777.2 cm, Museo Reina Sofia, Madrid, Spain. [museoreinasofia.es/en/collection/artwork/Guernica](http://museoreinasofia.es/en/collection/artwork/Guernica).
- . *Les Femmes d'Alger (O. J. M.)*, 1911, oil on canvas, 298 × 216 in, 756.9 × 549.1 cm, Museum of Modern Art, New York, NY. [mom.org/collection/works/79766](http://mom.org/collection/works/79766).
- . *Madame Picasso*, 1923, oil on linen, 39½ × 32⅝, 100.3 × 82 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46669.html](http://nga.gov/collection/art-object-page.46669.html).
- . *Phillip IV (after Velázquez)*, 1897, oil on canvas, Picasso Museum, Barcelona, Spain. [pablo-ruiz-picasso.net/work-3725.php](http://pablo-ruiz-picasso.net/work-3725.php).
- . *Self-Portrait*, 1906, oil on canvas, 36¾ × 28⅞, 91.9 × 73.3 cm, Philadelphia Museum of Art, Philadelphia, PA. [philamuseum.org/collections/permanent/50947.html](http://philamuseum.org/collections/permanent/50947.html).

- . *Torse Antique (after Barge)*, 1893–1894, 18 $\frac{1}{16}$  × 12 $\frac{3}{8}$  in, 49 × 31.5 cm, Musée Picasso, Paris, France. [khanacademy.org/humanities/art-1010/cubism-early-abstract/cubism/a/picassos-early-work](https://khanacademy.org/humanities/art-1010/cubism-early-abstract/cubism/a/picassos-early-work).
- . *The Weeping Woman*, 1937, oil on canvas, 23 $\frac{1}{2}$  × 19 $\frac{1}{16}$  in, 60.8 × 50 cm, Tate Gallery, London, England. [tate.org.uk/art/artworks/picasso-weeping-woman-t05010](https://tate.org.uk/art/artworks/picasso-weeping-woman-t05010).
- Pissarro, Camille. *The Boulevard Montmartre on a Winter Morning*, 1897, oil on canvas, 25 $\frac{1}{2}$  × 32 in, 64.8 × 81.3 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/437310](https://metmuseum.org/art/collection/search/437310).
- Porter, Fairfield. *Self Portrait in the Studio*, 1948, oil on masonite, 22 × 17 $\frac{1}{2}$  in, 56 × 45.5 cm, Private Collection. [curiator.com/art/fairfield-porter/self-portrait-in-the-studio](https://curiator.com/art/fairfield-porter/self-portrait-in-the-studio).
- Pratt, Matthew. *The American School*, 1765, oil on canvas, 36 × 50 $\frac{1}{4}$  in, 91.4 × 127.6 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/en/art/collection/search/11797](https://metmuseum.org/en/art/collection/search/11797).
- Prud'hon, Pierre-Paul. *Head of Vengeance*, c. 1804, chalk on paper, 20 × 15 $\frac{1}{16}$  in, 50.8 × 39.9 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/76635/head-of-vengeance?q=Prud%E2%80%99hon%2C%20Pierre-Paul.%20Head%20of%20Vengeance](https://artic.edu/artworks/76635/head-of-vengeance?q=Prud%E2%80%99hon%2C%20Pierre-Paul.%20Head%20of%20Vengeance).
- Raphael (Raffaello Sanzio). *An Allegory (Vision of a Knight)*, c. 1504, oil on poplar, 6 $\frac{3}{4}$  × 6 $\frac{1}{16}$  in, 17.1 × 17.3 cm, The National Gallery, London, England. [nationalgallery.org.uk/paintings/raphael-an-allegory-vision-of-a-knight](https://nationalgallery.org.uk/paintings/raphael-an-allegory-vision-of-a-knight).

- . *An Allegory (Vision of a Knight)*, c. 1504, drawing/cartoon,  $7\frac{3}{16} \times 8\frac{7}{16}$  in,  $18.2 \times 21.4$  cm, The British Museum, London, England. [britishmuseum.org/research/collection\\_online/collection\\_object\\_details/collection\\_image\\_gallery.aspx?partid=1&assetid=18462001&objectid=722359](https://britishmuseum.org/research/collection_online/collection_object_details/collection_image_gallery.aspx?partid=1&assetid=18462001&objectid=722359).
- . *Esterházy Madonna*, c. 1508, tempera and oil on wood,  $11\frac{1}{4} \times 8\frac{1}{2}$  in,  $28.5 \times 21.5$  cm, Museum of Fine Arts, Budapest, Hungary. [en.wikipedia.org/wiki/Esterhazy\\_Madonna#/media/File:Raffael\\_029.jpg](https://en.wikipedia.org/wiki/Esterhazy_Madonna#/media/File:Raffael_029.jpg).
- . *The School of Athens*, 1509–1511, fresco, 16 ft 5 in  $\times$  25 ft 2 in,  $500 \times 770$  cm, Apostolic Palace, Vatican. [en.wikipedia.org/wiki/The\\_School\\_of\\_Athens#/media/File:%22The\\_School\\_of\\_Athens%22\\_by\\_Raffaello\\_Sanzio\\_da\\_Urbino.jpg](https://en.wikipedia.org/wiki/The_School_of_Athens#/media/File:%22The_School_of_Athens%22_by_Raffaello_Sanzio_da_Urbino.jpg).
- . *The Three Graces*, 1504–1505, oil on panel,  $6.7 \times 6.7$  in,  $17 \times 17$  cm, Musée Condé, Chantilly, France. [wga.hu/html\\_m/r/raphael/2firenze/1/21graces.html](https://wga.hu/html_m/r/raphael/2firenze/1/21graces.html).
- Redon, Odilon. *Village by the Sea in Brittany*, c. 1880, oil on cardboard on hardboard,  $9\frac{7}{8} \times 12\frac{3}{4}$  in,  $25.08 \times 32.39$  cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.157928.html](https://nga.gov/collection/art-object-page.157928.html).
- Regnault, Jean-Baptiste. *The Three Graces*, 1797–1798, oil on canvas,  $80\frac{3}{16} \times 60\frac{1}{4}$  in,  $204 \times 153$  cm, Louvre, Paris. [commons.wikimedia.org/wiki/File:Jean-Baptiste\\_Regnault\\_-\\_The\\_Three\\_Graces\\_-\\_WGA19037.jpg](https://commons.wikimedia.org/wiki/File:Jean-Baptiste_Regnault_-_The_Three_Graces_-_WGA19037.jpg).

- Rembrandt (van Rijn). *Beggar Woman Leaning on a Stick*, 1628/1630, brush and brown wash on laid paper, 5 ¼ × 4 1¼ in, 13.4 × 11.9 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.9846.html](https://nga.gov/collection/art-object-page.9846.html).
- . *The Night Watch*, 1642, oil on canvas, 142.9 × 172 in, 363 × 437 cm, Rijksmuseum, Amsterdam. [commons.wikimedia.org/wiki/File:La\\_ronda\\_de\\_noch\\_e,\\_por\\_Rembrandt\\_van\\_Rijn.jpg](https://commons.wikimedia.org/wiki/File:La_ronda_de_noch_e,_por_Rembrandt_van_Rijn.jpg).
- . *Titus in a Monk's Habit*, 1660, oil on canvas, 31 5/16 × 26 3/8 in, 9.5 × 67.7 cm, Rijksmuseum, Amsterdam. [commons.wikimedia.org/wiki/File:Rembrandt\\_Harmensz.\\_van\\_Rijn\\_103.jpg](https://commons.wikimedia.org/wiki/File:Rembrandt_Harmensz._van_Rijn_103.jpg).
- . *A Woman Bathing in a Stream*, 1654, oil on oak panel, 24 5/16 × 18 1/2 in, 61.8 × 47 cm, National Gallery, London, England. [nationalgallery.org.uk/paintings/rembrandt-a-woman-bathing-in-a-stream-hendrickje-stoffels](https://nationalgallery.org.uk/paintings/rembrandt-a-woman-bathing-in-a-stream-hendrickje-stoffels).
- Rubens, Peter Paul. *The Three Graces*, 1639, oil on wood, Museo del Prado, Madrid, Spain. [museodelprado.es/en/the-collection/art-work/the-three-graces/145eadd9-0b54-4b2d-affe-09af370b6932](https://museodelprado.es/en/the-collection/art-work/the-three-graces/145eadd9-0b54-4b2d-affe-09af370b6932).
- Ryder, Albert Pinkham. *Moonlight Marine*, 1870–1890, 11 ½ × 12 in, 29.2 × 30.5 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/11979](https://metmuseum.org/art/collection/search/11979).
- Sargent, John Singer. *An Out-of-Doors Study*, 1889, oil on canvas, 25 15/16 × 31 3/4 in, 65.9 × 80.6 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/21407](https://metmuseum.org/art/collection/search/21407).

- . *Claude Monet Painting by the Edge of a Wood*, c. 1885, oil on canvas, 21 ¼ × 25 ½ in, 54 × 64.8 cm, Tate Gallery, London, England. [tate.org.uk/art/artworks/sargent-claude-monet-painting-by-the-edge-of-a-wood-n04103](https://www.tate.org.uk/art/artworks/sargent-claude-monet-painting-by-the-edge-of-a-wood-n04103).
- . *Head of Aesop (after Velázquez)*, 1879, oil on canvas, 18 ¼ × 14 ⅝ in, 46.4 × 37.2 cm, Ackland Art Museum, Chapel Hill, NC. [jssgallery.org/Paintings/Head\\_of\\_Aesop\\_Copy\\_after\\_Velazquez.htm](https://www.jssgallery.org/Paintings/Head_of_Aesop_Copy_after_Velazquez.htm).
- . *Portrait of Madame X (Madame Pierre Gautreau)*, 1883–1884, oil on canvas, 82 ½ × 43 ¼ in, 208.6 × 109.9 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/en/art/collection/search/12127](https://www.metmuseum.org/en/art/collection/search/12127).
- . *Street in Venice*, 1882, oil on wood, 17 ¾ × 21 ¼ in, 45.1 × 53.9 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.46428.html](https://www.nga.gov/collection/art-object-page.46428.html).
- Seurat, Georges. *At the Concert Européen*, c. 1886–1888, conté crayon and gouache on paper, 12 ¼ × 9 ⅜ in, 31.1 × 23.8 cm, Museum of Modern Art, New York, NY. [moma.org/collection/works/34183](https://www.moma.org/collection/works/34183).
- . *A Sunday on La Grande Jatte*, 1884, oil on canvas, 6 ft 10 in × 10 ft 1 in, 208.3 × 307.4 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/27992/a-sunday-on-la-grande-jatte-1884?q=Seurat%2C%20Georges.%20A%20Sunday%20on%20La%20Grande%20Jatte](https://www.artic.edu/artworks/27992/a-sunday-on-la-grande-jatte-1884?q=Seurat%2C%20Georges.%20A%20Sunday%20on%20La%20Grande%20Jatte).
- . *Study for "A Sunday on La Grande Jatte,"* 1884, oil on canvas, 27 ¾ × 41 in, 70.5 × 104.1 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/437658](https://www.metmuseum.org/art/collection/search/437658).

- Sesshu Toyo, *Autumn Landscape*, 15th century, Muromachi Period, 18  $\frac{13}{16}$  × 11  $\frac{7}{8}$  in, 47.8 × 30.2 cm, Tokyo National Museum, Tokyo. [tnm.jp/modules/r\\_collection/index.php?controller=other\\_img&size=L&colid=A1398&img\\_id=1&t=](http://tnm.jp/modules/r_collection/index.php?controller=other_img&size=L&colid=A1398&img_id=1&t=).
- Soutine, Chaim. *Portrait of a Man (Émile Lejeune)*, oil on canvas, c. 1922, 21  $\frac{7}{8}$  × 18  $\frac{5}{16}$  in, 55.5 × 46.5 cm, Musée de L'Orangerie, Paris, France. [musee-orangerie.fr/en/artwork/portrait-man-emile-lejeune](http://musee-orangerie.fr/en/artwork/portrait-man-emile-lejeune).
- Toulouse-Lautrec, Henri de. *At the Moulin Rouge*, 1892–1895, oil on canvas, 48 × 55 in, 123 × 140 cm, Art Institute of Chicago, Chicago, IL. [artic.edu/artworks/61128/at-the-moulin-rouge?q=Toulouse-Lautrec%2C%20Henri%20de.%20At%20the%20Moulin%20Rouge](http://artic.edu/artworks/61128/at-the-moulin-rouge?q=Toulouse-Lautrec%2C%20Henri%20de.%20At%20the%20Moulin%20Rouge).
- Uglo, Euan. *Pyramid*, 1995–1996, oil on board, 50.8 × 55.9 cm, private collection. [curiator.com/art/euan-uglow/pyramid](http://curiator.com/art/euan-uglow/pyramid).
- Van Dyck, Sir Anthony. *A Bearded Man, A Study*, oil on paper laid down on panel, 16  $\frac{3}{4}$  × 15  $\frac{1}{8}$  in, 42.5 × 38.3 cm, private collection. [christies.com/img/LotImages/2007/NYR/2007\\_NYR\\_01822\\_0057\\_000\(\).jpg](http://christies.com/img/LotImages/2007/NYR/2007_NYR_01822_0057_000().jpg).
- Van Eyck, Jan. *The Madonna with Canon van der Paele*, 1436, oil on wood, 332.4 × 23.6 in, 122 × 157 cm, Groeninge Museum, Bruges, Belgium. [wga.hu/html\\_m/e/eyck\\_van/jan/21paele/index.html](http://wga.hu/html_m/e/eyck_van/jan/21paele/index.html).
- . *Portrait of a Man*, 1433, oil on oak panel, 10 × 7  $\frac{1}{2}$  in, 26 × 19 cm, National Gallery, London, England. [nationalgallery.org.uk/paintings/jan-van-eyck-portrait-of-a-man-self-portrait](http://nationalgallery.org.uk/paintings/jan-van-eyck-portrait-of-a-man-self-portrait).

- . *Saint Barbara*, 1437, metalpoint, brush drawing, and oil on chalk ground on oak panel,  $12\frac{3}{16} \times 7\frac{1}{16}$  in,  $31 \times 18$  cm, Koninklijk Museum voor Schone Kunsten/Royal Museum of Fine Arts, Antwerp, Belgium.  
[nationalgallery.org.uk/paintings/jan-van-eyck-saint-barbara](http://nationalgallery.org.uk/paintings/jan-van-eyck-saint-barbara).
- Van Gogh, Vincent. *A Pair of Shoes*, 1886, oil on canvas,  $14\frac{3}{4} \times 17\frac{3}{4}$  in,  $37.5 \times 45$  cm, Van Gogh Museum, Amsterdam. [vangoghmuseum.nl/en/collection/s0011V1962?v=1](http://vangoghmuseum.nl/en/collection/s0011V1962?v=1).
- . *The Potato Eaters*, 1885, oil on canvas,  $32\frac{5}{16} \times 44\frac{7}{8}$  in,  $82 \times 114$  cm, Van Gogh Museum, Amsterdam. [artsandculture.google.com/asset/the-potato-eaters/7gFcKarE9QeaXw?hl=en](http://artsandculture.google.com/asset/the-potato-eaters/7gFcKarE9QeaXw?hl=en).
- . *Self-Portrait as a Painter*, 1887–1888, oil on canvas,  $25\frac{5}{8} \times 19\frac{11}{16}$  in,  $65.1 \times 50$  cm, Van Gogh Museum, Amsterdam. [vangoghmuseum.nl/en/collection/s0022V1962](http://vangoghmuseum.nl/en/collection/s0022V1962).
- . *The Starry Night*, 1889, oil on canvas,  $29 \times 36\frac{1}{4}$  in,  $73.7 \times 92.1$  cm, Museum of Modern Art, New York, NY. [artsandculture.google.com/asset/the-starry-night/bgEuwDxel93-Pg?hl=en](http://artsandculture.google.com/asset/the-starry-night/bgEuwDxel93-Pg?hl=en).
- . *Sunflowers*, 1888, oil on canvas,  $37\frac{3}{8} \times 28\frac{3}{4}$  in,  $95 \times 73$  cm, Van Gogh Museum, Amsterdam. [artsandculture.google.com/asset/sunflowers/hwEGmsM-FoHAwA?hl=en](http://artsandculture.google.com/asset/sunflowers/hwEGmsM-FoHAwA?hl=en).
- Van Mieris, Frans. *Pictura (An Allegory of Painting)*, 1661, oil on copper,  $5 \times 3\frac{1}{2}$  in,  $12.7 \times 8.9$  cm, J. Paul Getty Museum, Los Angeles, CA. [www.getty.edu/art/collection/objects/705/frans-van-mieris-the-elder-pictura-an-allegory-of-painting-dutch-1661/](http://www.getty.edu/art/collection/objects/705/frans-van-mieris-the-elder-pictura-an-allegory-of-painting-dutch-1661/).

- Van Musscher, Michiel. *Portrait of an Artist in His Studio*, mid-1660s, oil on panel, 18¾ × 14½ in, 47.5 × 37 cm, Liechtenstein Museum, The Princely Collections, Vienna, Austria. [upload.wikimedia.org/wikipedia/commons/4/40/Portrait\\_of\\_an\\_Artist\\_in\\_His\\_Studio\\_by\\_Michiel\\_van\\_Musscher.jpg](https://upload.wikimedia.org/wikipedia/commons/4/40/Portrait_of_an_Artist_in_His_Studio_by_Michiel_van_Musscher.jpg).
- Van Tilborgh the Younger, Gillis. *Self-Portrait in the Studio*, c. 1645, 4¼ × 3½ in, 10.8 × 8.9 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.128004.html](https://nga.gov/collection/art-object-page.128004.html).
- Velázquez, Diego. *Aesop*, oil on canvas, 1639–1640, 70⅞ × 36⅞ in, 180 × 93 cm, Museo del Prado, Madrid, Spain. [museodelprado.es/en/the-collection/art-work/aesop/014e0cb2-128c-42d7-a380-df7527e734ce](https://museodelprado.es/en/the-collection/art-work/aesop/014e0cb2-128c-42d7-a380-df7527e734ce).
- . *Equestrian Portrait of Philip IV*, 1635–1636, oil on canvas, Museo del Prado, Madrid, Spain. [en.wikipedia.org/wiki/Equestrian\\_Portrait\\_of\\_Philip\\_IV#/media/File:Diego\\_Vel%C3%A1zquez\\_053.jpg](https://en.wikipedia.org/wiki/Equestrian_Portrait_of_Philip_IV#/media/File:Diego_Vel%C3%A1zquez_053.jpg).
- . *Infanta Margarita Teresa*, 1655, oil on canvas, 27⅞ × 23⅜ in, 70 × 59 cm, Musée du Louvre, Paris, France. [commons.wikimedia.org/wiki/Category:Infanta\\_Margarita\\_Teresa\\_by\\_Velazquez\\_\(Louvre,\\_1653\)#/media/File:Retrato\\_de\\_la\\_infanta\\_Margarita\\_\(4\),\\_by\\_Diego\\_Vel%C3%A1zquez.jpg](https://commons.wikimedia.org/wiki/Category:Infanta_Margarita_Teresa_by_Velazquez_(Louvre,_1653)#/media/File:Retrato_de_la_infanta_Margarita_(4),_by_Diego_Vel%C3%A1zquez.jpg).
- . *Las Meninas*, 1656, oil on canvas, 10 ft 5 in × 9 ft, 318 × 276 cm, Museo del Prado, Madrid, Spain. [upload.wikimedia.org/wikipedia/commons/3/31/Las\\_Meninas%2C\\_by\\_Diego\\_Vel%C3%A1zquez%2C\\_from\\_Prado\\_in\\_Google\\_Earth.jpg](https://upload.wikimedia.org/wikipedia/commons/3/31/Las_Meninas%2C_by_Diego_Vel%C3%A1zquez%2C_from_Prado_in_Google_Earth.jpg).

- . *Phillip IV*, c. 1654, oil on canvas, 27  $\frac{3}{16}$  × 22 in, 69 × 56 cm, Museo del Prado, Madrid, Spain. [museodelprado.es/en/the-collection/art-work/philip-iv/34601a9f-c7b0-4d0a-893c-8b9dee52ab63](https://museodelprado.es/en/the-collection/art-work/philip-iv/34601a9f-c7b0-4d0a-893c-8b9dee52ab63).
- Vermeer, Jan. *Woman Holding a Balance*, 1664, oil on canvas, 15  $\frac{5}{8}$  × 14 in, 39.7 × 35.5 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.1236.html](https://nga.gov/collection/art-object-page.1236.html).
- . *Young Woman with a Pearl Necklace*, 1662, oil on canvas, 21  $\frac{1}{16}$  × 17  $\frac{1}{16}$  in, 55 × 45 cm, Gemäldegalerie, Berlin, Germany. [artsandculture.google.com/asset/young-woman-with-a-pearl-necklace/kQFMVJh6zAXoxQ?hl=en](https://artsandculture.google.com/asset/young-woman-with-a-pearl-necklace/kQFMVJh6zAXoxQ?hl=en).
- Vuillard, Edouard. *Landscape of the Ile-de France*, c. 1894, oil on cardboard, 7  $\frac{3}{4}$  × 9  $\frac{15}{16}$  in, 19.7 × 25.3 cm, National Gallery of Art, Washington DC. [nga.gov/collection/art-object-page.92999.html](https://nga.gov/collection/art-object-page.92999.html).
- Waldo, Samuel Lovett. *Self-Portrait*, c. 1815, oil on wood, 33 × 22  $\frac{1}{2}$  in, 83.8 × 57.2 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/13105](https://metmuseum.org/art/collection/search/13105).
- Wallis, Alfred. *Steamboat with Two Sailors, Lighthouse and Rocks*, oil and graphite on card, 7  $\frac{3}{8}$  × 10  $\frac{15}{16}$  in, 18.8 × 27.8 cm, Kettle's Yard, University of Cambridge. [wikiart.org/en/alfred-wallis/steamboat-with-two-sailors-lighthouse-and-rocks](https://wikiart.org/en/alfred-wallis/steamboat-with-two-sailors-lighthouse-and-rocks).
- Whistler, James Abbott McNeil. *Alice Butt*, c. 1895, oil on canvas, 20  $\frac{3}{8}$  × 15 in, 51.7 × 38.1 cm, National Gallery of Art, Washington, DC. [nga.gov/collection/art-object-page.35081.html](https://nga.gov/collection/art-object-page.35081.html).

———. *Nocturne in Blue and Silver: The Lagoon, Venice*, 1879–1880, oil on canvas, 19¾ × 25¾ in, 50.16 × 65.4 cm, Museum of Fine Arts, Boston, MA. [collections.mfa.org/objects/32837](https://collections.mfa.org/objects/32837).

Xià Guī, *Mountain Market, Clear With Rising Mist*, early 13th century, ink on silk, 9¾ × 8¾, 24.8 × 21.3 cm, Metropolitan Museum of Art, New York, NY. [metmuseum.org/art/collection/search/36005](https://metmuseum.org/art/collection/search/36005).

# Bibliography

## GENERAL ART RESOURCES

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A wealth of publications on art and other related resources are available for free at these sites.

Archive.org . . . . .	<a href="https://archive.org/">https://archive.org/</a>
Art Is Creation . . . . .	<a href="https://artiscreation.com/books.html">artiscreation.com/books.html</a>
Getty Research Institute . . . . .	<a href="https://getty.edu/conservation/publications_resources/">getty.edu/conservation/ publications_resources/</a>
Hathi Trust Digital Library . . . . .	<a href="https://babel.hathitrust.org/cgi/mb?a=listcs&amp;colltype=featured">babel.hathitrust.org/cgi/ mb?a=listcs&amp;colltype=featured</a>
MetPublications . . . . .	<a href="https://metmuseum.org/art/metpublications/titles-with-full-text-online">metmuseum.org/art/ metpublications/titles-with-full-text-online</a>

## RESOURCES ON GENERAL DRAWING

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Aristides, Juliette. *Classical Drawing Atelier*. Watson-Guptill, 2006.

———. *Lessons in Classical Drawing*. Watson-Guptill, 2011. A third volume from Aristides that includes a DVD tutorial.

Bothwell, Dorr, and Marlys Mayfield. *Notan: The Dark-Light Principle of Design*. Dover, 1991.

Boyer, Sheri Lynn. “A Theory of Light and Shade.” [artinstructionblog.com/  
drawing-lesson-a-theory-of-light-and-shade](https://artinstructionblog.com/drawing-lesson-a-theory-of-light-and-shade).

Brody, David. *How to Draw*. The Great Courses, 2015.

- Chaet, Bernard. *The Art of Drawing*. 3rd ed. Harcourt Brace Jovanovich, 1983.
- Character Design. [pinterest.com/characterdesigh/](https://www.pinterest.com/characterdesigh/).
- Curtis, Brian. *Drawing from Observation*. McGraw-Hill, 2009.
- Eagle, Ellen. *Pastel Painting Atelier*. Watson-Guptill, 2013.
- Enstice, Wayne, and Melody Peters. *Drawing: Space, Form and Expression*. 2nd ed. Prentice Hall, 1995.
- Faber, David L., and Daniel M. Mendelowitz. *A Concise Guide to Drawing*, 8th ed. Cengage Learning, 2012.
- Goldstein, Nathan. *The Art of Responsive Drawing*. 3rd ed. Prentice Hall, 1984.
- Guptill, Arthur L.,. *Drawing With Pen and Ink And A Word Concerning The Brush*. Reinhold Publishing, 1949.
- . *Freehand Drawing: Self-Taught with emphasis on the techniques of different media*. Harper & Brothers, 1933.
- . *Rendering in Pen and Ink*. Watson-Guptill, 1997. This is a later version of “*Drawing With Pen and Ink And A Word Concerning The Brush*”.
- . *Rendering in Pencil*. Watson-Guptill, 1977. This book on drawing provides clear explanations.
- . *Sketching and Rendering in Pencil*. The Pencil Points Press, Inc, 1922. This is the book that “*Rendering in Pencil*” was primarily based on.

———. *Sketching as a Hobby*. Harper & Brothers, 1936. A fair amount of overlap with his other drawing books, but, nonetheless, a useful volume.

Hamm, Jack. *Drawing Scenery: Landscapes and Seascapes*. Perigee Trade, 1988. Hamm starts out with many basics about composition.

———. *First Lessons in Drawing and Painting*. Perigee Trade, 1988. Although this book is not comprehensive, it includes plenty of excellent information.

———. *How to Draw Animals*. Perigee Trade, 1983. If you want to draw animals, this is a good place to start.

The J. Paul Getty Museum. “Formal Analysis.” [getty.edu/education/teachers/building\\_lessons/formal\\_analysis.html](http://getty.edu/education/teachers/building_lessons/formal_analysis.html). This link provides an introduction to formal analysis.

The Kennedy Center. “Formal Visual Analysis.” [artsedge.kennedy-center.org/educators/how-to/from-theory-to-practice/formal-visual-analysis](http://artsedge.kennedy-center.org/educators/how-to/from-theory-to-practice/formal-visual-analysis). This site lists many formal language terms with concise definitions.

Lee, Stan. *How To Draw Comics The Marvel Way*. Simon & Schuster, 1978. A great book from the comic book master.

Loomis, Andrew. *Fun with a Pencil*. Titan Books, 2013. There’s a fair degree of overlap in Loomis’s books, but they all have excellent information.

———. *Successful Drawing*. Titan Books, 2012. An excellent book with good sections on basic forms, form in light, linear perspective, and relating the figure to perspective.

- Mendelowitz, Daniel M. *Drawing*. Holt, Rinehart and Winston, 1967. This is a good introduction to the history of (mostly) Western drawing.
- Mendelowitz, Daniel, David L. Faber, and Duane Wakeman. *A Guide to Drawing*. 7th ed. Cengage Learning, 2006.
- Rockman, Deborah. *Drawing Essentials*. Oxford University Press, 2009. A well-thought-out book with chapters on all the major topics generally covered in a college-level drawing course.
- Rousar, Darren R. *Cast Drawing Using the Sight-Size Approach*. Velatura Press, 2007. A good introduction to drawing casts from observation.
- Sale, Teel, and Claudia Betti. *Drawing: A Contemporary Approach*. 5th ed. Thomson Wadsworth, 2004. A fairly comprehensive book, with many good explanations and illustrations.
- Smagula, Howard J. *Creative Drawing*. 2nd ed. McGraw-Hill, 2002.
- Stevens, Peter, S. *A Handbook of Regular Patterns*. MIT Press, 1981. An excellent and comprehensive book on pattern.
- Young, Cliff. *Drawing Drapery From Head to Toe*. Dover, 2007

## RESOURCES ON LINEAR PERSPECTIVE

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- Auvil, Kenneth W. *Perspective Drawing*. 2nd ed. McGraw-Hill, 1996.
- Cole, Rex Vicat. *Perspective for Artists*. J. B. Lippincot, 1921. This is an excellent and comprehensive book on linear perspective.

- D'Amelio, Joseph. *Perspective Drawing Handbook*. Dover, 2004. This book is well illustrated.
- Montague, John. *Basic Perspective Drawing*. 6th ed. Wiley, 2013. Among the clearest and most thorough books on linear perspective.
- Norling, Ernest R. *Perspective Made Easy*. Dover Publications, 1999. Both the text and illustrations communicate the essential points in a vivid way.
- Robertson, Scott, and Thomas Berling. *How to Draw*. Design Studio Press, 2013. A good recent book on perspective.
- Veltman, Kim H. *Linear Perspective and the Visual Dimensions of Science and Art*. Deutscher Kunstverlag, 1986.

## RESOURCES ON FIGURE DRAWING AND ANATOMY

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- Bridgman, George B. *Bridgman's Complete Guide to Drawing from Life*. Sterling, 1952. Bridgman taught figure drawing and anatomy at The Art Students League in New York City for many years.
- Brown, Clint, and Cheryl McLean. *Drawing from Life*. 2nd ed. Harcourt Brace, 1997. A comprehensive guide to figure drawing.
- Goldstein, Nathan. *Figure Drawing*. 4th ed. Prentice Hall, 1993. A good overview of figure drawing.
- Hale, Robert Beverly. *Master Class in Figure Drawing*. Watson-Guptill, 1991. This text is distilled from Hale's anatomy classes.
- . *Lectures on Artistic Anatomy and Figure Drawing*. [jo-an.com/art\\_video.htm](http://jo-an.com/art_video.htm). These videos of Hale teaching provide excellent material.

- Hale, Robert Beverly, and Jacob Collins. *Drawing Lessons from the Great Masters*. Watson-Guptill, 1989. This book analyzes artists' drawings.
- Hamm, Jack. *Cartooning the Head and Figure*. Perigee Trade, 1986. As the title suggests, this book is all about cartooning.
- . *Drawing the Head and Figure*. Perigee Trade, 1988. A great introduction to constructive figure drawing.
- Loomis, Andrew. *Drawing the Head and Hands*. Titan Books, 2011. An excellent introduction to the subject.
- . *Figure Drawing for All It's Worth*. Titan Books, 2011. Contains a great deal of good information about measure, anatomy, constructing the figure from blocks, and drawing from observation.
- MusclePremium and SkeletonPremium. Apps available from [VisibleBody.com](http://VisibleBody.com). These apps let you move through all the important bones and muscles, which are rendered in three dimensions.
- Reed, Walt. *The Figure*. 30th ed. North Light Books, 1984. An excellent book with chapters on figure construction and anatomy.
- Thomson, Arthur. *A Handbook of Anatomy for Art Students*. 5th ed. Dover, 2011. This book is primarily text with some illustrations.
- Vanderpoel, John H. *The Human Figure*. Dover, 1958. Considered one of the early 20th-century classics on the subject.
- Winslow, Valerie L. *Classic Human Anatomy*. Watson-Guptill, 2009. Among the most recent and comprehensive books on anatomy for the artist.

## GENERAL PAINTING RESOURCES

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- Albala, Mitchell. *Landscape Painting*. Watson-Guptill, 2009. This contemporary text touches on a number of different aspects of landscape painting.
- Bouleau, Charles. *The Painter's Secret Geometry: A Study of Composition in Art*. Dover, 2014. A well-known text on composition and geometry.
- Carlson, John F. *Carlson's Guide To Landscape Painting*. Dover, 1973. Contains good information specifically related to landscape painting.
- Churchill, Winston S. *Painting As a Pastime*. Unicorn Press, 2013. This work is a rumination on what painting meant to Churchill.
- Constable, W. G. *The Painter's Workshop*. Dover, 1954. This book examines historical European materials and methods.
- Neddo, Nick. *The Organic Artist*. Quarry Books, 2015. This represents a good introduction to making your own paints, paper, and brushes from natural materials.
- Price, Michael. *Renaissance Mysteries, Volume II: Proportion and Composition*. Passat Press, 2017. This book centers on geometry and composition.
- Pumphrey, Richard. *The Elements of Art*. Prentice Hall College Division, 1996. Provides an excellent introduction to formal language and many important aspects of two-dimensional art.
- Robertson, Jean, and Craig McDaniel. *Painting as a Language*. Cengage Learning, 1999. This book provides a solid introduction to formal language.

Rousar, Darren R. *Cast Painting Using the Sight-Size Approach*. Velatura Press, 2009. If you're interested in painting antique casts from observation, this is a good introduction to one method.

Webster, Sandy. *Earthen Pigments*. Schiffer, 2012. This text shows you how to gather and process natural pigments to turn them into a number of different types of paint and crayons.

## RESOURCES ON OIL PAINTING

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Aristides, Juliette. *Classical Painting Atelier*. Watson-Guptill, 2008. Aristides's book makes good use of historical examples.

Elliott, Virgil. *Traditional Oil Painting: Advanced Techniques and Concepts from the Renaissance to the Present*. Watson-Guptill, 2007. A good book on traditional oil painting.

Guptill, Arthur L. *Oil Painting Step-By-Step*. 9th ed. Watson-Guptill, 1978. Contains useful information that's clearly presented.

Wilcox, Michael. *Glazing*. School of Color Publications, 2014. Has good information on historical methods and materials.

## RESOURCES ON WATERCOLOR PAINTING

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Guptill, Arthur L. *Watercolor Painting Step-By-Step*. 2nd ed. Watson-Guptill, 1968. This book is well organized and contains a lot of excellent information.

Mackenzie, Gordon. *The Complete Watercolorists Essential Notebook*. North Light Books, 2010. An informative book on the subject.

Reardon, Michael. *Watercolor Techniques: Painting Light and Color in Landscapes and Cityscapes*. North Light Books, 2016. This book provides a good overview for those interested in landscapes and cityscapes.

Robinson, Mario Andres. *Lessons in Realistic Watercolor*. Monacelli, 2016. This beautifully illustrated book covers materials and techniques.

## PAINTING WEBSITES

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Painters' Table . . . . .	<a href="http://painters-table.com/posts/all">painters-table.com/posts/all</a>
Painting OWU . . . . .	<a href="http://paintingowu.wordpress.com">paintingowu.wordpress.com</a>
Painting Perceptions . . . . .	<a href="http://paintingperceptions.com">paintingperceptions.com</a>
Painting: Powers of Observation . . . . .	<a href="http://powersofobservation.com">powersofobservation.com</a>
Perceptual Painters . . . . .	<a href="http://perceptualpainters.com">perceptualpainters.com</a>
Wet Canvas . . . . .	<a href="http://wetcanvas.com">wetcanvas.com</a>

## PAINTING AND DRAWING: COLOR

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“A Breakdown of Color in Film Stills.” [imgur.com/a/PyRly](http://imgur.com/a/PyRly). This gallery breaks down the color palettes in film stills into swatches.

Albers, Josef. *Interaction of Color*. Yale University Press, 2006. Albers's book has become one of the standards used in art schools and universities in the United States.

Art is Creation. [artiscreation.com](http://artiscreation.com). This site contains an exhaustive color index pigment information database and more.

Birren, Faber. *Principles of Color: A Review of Past Traditions and Modern Theories of Color Harmony*. Van Nostrand Rheinhold, 1969. An introductory text to its subject.

- Bomford, David, and Ashok Roy. *A Closer Look: Colour*. National Gallery, 2009. This volume focuses on color and paint in European painting spanning the 15th to 19th centuries.
- Itten, Johannes, and Faber Birren. *The Elements of Color*. Van Nostrand Reinhold Company, 1970. Along with Albers's book, Itten's is one of those most used in US academia today.
- Guptill, Arthur L. *Color in Sketching and Rendering*. Reinhold Publishing, 1943. As with all of Guptill's books, you'll find a wealth of great information here.
- Gurney, James. *Color and Light: A Guide for the Realist Painter*. Andrews McMeel Publishing, 2010. This book has helped many students understand more about color.
- Hope, Augustine, and Margaret Walch. *The Color Compendium*. Van Nostrand Reinhold, 1990. A useful text to consult on pigments and on the way color connects to many other fields.
- Long, Jim. *The New Munsell® Student Color Set*. 3rd ed. Fairchild Books, 2011. A contemporary take on Albert Munsell's theories and color exercises.
- Loomis, Andrew. *Creative Illustration*. Titan Books, 2012. There is excellent information here on many aspects of drawing.
- Munsell, Albert. *A Color Notation*. Geo. H. Ellis Co., 1905. Available at <https://archive.org/details/acolornotation00munsgoog/page/n75>. Munsell was an artist and teacher best known for his invention of the Munsell color system.

- . *Atlas of the Munsell Color System*. Wadsworth, Howland & Co., 1915. Available at [archive.org/details/AtlasMunsellcol00Muns](https://archive.org/details/AtlasMunsellcol00Muns). This book was published 10 years after *A Color Notation*. It contains multiple color charts illustrating his color system.
- . *A Grammar of Color: Arrangements of Strathmore Papers in a Variety of Printed Color Combinations According to The Munsell Color System*. Strathmore Paper Company, 1921. Available at [archive.org/details/gri\\_c00033125006531145/page/n1](https://archive.org/details/gri_c00033125006531145/page/n1). This book was published posthumously. It contains an introduction by Munsell followed by text and diagrams by the designer and illustrator Thomas Maitland Cleland.
- Wilcox, Michael. *Blue and Yellow Don't Make Green: Or, How To Mix the Colour You Really Want—Every Time*. North Light Books, 1994. A good beginning book on color and color mixing.

## PAINTING AND DRAWING: MATERIALS

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- Many of the books on drawing and painting listed above have excellent chapters on materials. Those listed below concentrate fully on the subject.
- Chaet, Bernard. *An Artist's Notebook: Techniques and Materials*. Holt, Rinehart, and Winston, 1979. This book has very good chapters on drawing and painting materials. It also includes a chapter on color.
- Chieffo, Clifford T. *The Contemporary Oil Painter's Handbook: A Complete Guide to Oil Painting*. Van Nostrand Reinhold Company, 1982. This is a clear and concise book covering oil painting materials.
- Doerner, Max. *The Materials of the Artist*. Mariner Books, 1949. This book deals primarily with painting materials.

- Gettins, Rutherford J., and George L. Stout. *Painting Materials*. Dover Art Instruction, 2011. This is a technical work with extensive information on pigments, mediums, and supports.
- Gottsegen, Mark David. *The Painter's Handbook*. Watson-Guption, 2006. This book covers many commonly used painting and drawing materials.
- Hiler, Hilaire. *Painter's Pocket Book of Methods and Materials*. Watson-Guption, 1970. First published 1937, this book contains useful information on painting and drawing materials.
- Just Paint. [justpaint.org/archive/](http://justpaint.org/archive/). This page contains an archive of articles published by Golden Artist Colors.
- Kay, Reed. *The Painter's Guide to Studio Methods and Materials*. Prentice-Hall, 1983. This book covers a lot of ground with sections on oil, acrylic, watercolor, tempera, casein, and pastel, among other media.
- Maroger, Jacques. *The Secret Formulas and Techniques of the Masters*. Studio Publications, 1948. Most of Maroger's conclusions have been debunked by the findings of conservation scientists. However, this text had some historical importance.
- Massey, Robert. *Formulas for Painters*. Watson-Guption, 1967. This book contains several hundred recipes for sizes, grounds, paints, mediums, glazes, varnishes, and the like. It is clearly written and easy to use. Caution should be exercised on two counts. First, some of the recipes would be dangerous to make in most home studios. Second, a number of the recipes use materials or processes that can negatively affect the paint film.
- Mayer, Ralph. *The Artist's Handbook*. 5th ed. Viking, 1991. First published in 1940, this book remains one of the standard references in the field.

———. *The Painter's Craft*. Penguin, 1948. A more abbreviated text by Mayer on painting materials and methods.

Pigments through the Ages. [webexhibits.org/pigments](http://webexhibits.org/pigments). This site chronicles the history of many of the important pigments used by artists over the centuries.

Price, Michael. *Renaissance Mysteries, Volume I: Natural Colour*. Passat Press, 2017. This well-illustrated book centers on the preparation of pigment and paint from natural rocks and crystals.

Sands, Sarah, and Amy Mckinnon. "Preparing a Canvas for Oil Painting." [justpaint.org/preparing-a-canvas-for-oil-painting](http://justpaint.org/preparing-a-canvas-for-oil-painting). This article compares the pros and cons of a number of canvas prep options.

Smith, Ray. *The Artist's Handbook*. DK Publishing, 2009. This book has sections on drawing, painting, printmaking, photography, digital media, framing, and conservation.

Turner, Jacques. *Brushes: A Handbook for Artists*. Design Press, 1992. A fairly comprehensive look at brushes used with a wide range of materials.

———. *Colors and Materials for Oil Painting*. Design Books, 1993. A concise yet comprehensive discussion of the subject.

Wehlte, Kurt. *The Materials and Techniques of Painting*. 1960. This book is comprehensive, running close to 700 pages.

## PAINTING AND DRAWING: HISTORICAL SOURCES

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People have been writing about art materials and methods for a very long time. Many of the following texts are no longer copyright protected and are readily available to read online or download. If a URL is not provided, an online search may lead you to a digital version of many of these works.

Abendschein, Albert. *The Secrets of the Old Masters*. D. Appleton and Company, 1916. [archive.org/details/secretofoldmaste00abenia/page/n6](https://archive.org/details/secretofoldmaste00abenia/page/n6).

Ackerman, Gerald, and Graydon Parrish. *Charles Barye and Jean-Leon Gérôme Drawing Course*. ACR, 2011. This is a reprint of the 19th-century *Cours de Dessin* of Charles Barye.

Alberti, Leon Battista, and Martin Kemp. *On Painting*. Penguin, 1991. This text was originally published in 1435 and is considered a classic Renaissance text on drawing and painting.

Augsburg, De Reseo Leo. *Augsburg's Drawing, Book 1*. Educational Publishing Company, 1901. [ia800201.us.archive.org/21/items/cu31924014453967/cu31924014453967.pdf](https://ia800201.us.archive.org/21/items/cu31924014453967/cu31924014453967.pdf).

———. *Augsburg's Drawing, Book 2*. Educational Publishing Company, 1901. [archive.org/details/augsburgsdrawing02augs/page/n4](https://archive.org/details/augsburgsdrawing02augs/page/n4).

———. *Augsburg's Drawing, Book 3*. Educational Publishing Company, 1902. [archive.org/details/augsburgsdrawing03augs](https://archive.org/details/augsburgsdrawing03augs).

———. *Drawing Simplified*. Educational Publishing Company, 1892. [ia800700.us.archive.org/22/items/drawingsimplifi00augsgoog/drawingsimplifi00augsgoog.pdf](https://ia800700.us.archive.org/22/items/drawingsimplifi00augsgoog/drawingsimplifi00augsgoog.pdf).

- . *Elementary Drawing Simplified*. Educational Publishing Company, 1891. [archive.org/details/elementarydrawin00augspage/n4](https://www.archive.org/details/elementarydrawin00augspage/n4).
- . *The New Augsburg's Drawing, Sixth Year Book*. Educational Publishing Company, 1912. [ia600207.us.archive.org/16/items/newaugsburgsdraw06aug/newaugsburgsdraw06aug.pdf](https://ia600207.us.archive.org/16/items/newaugsburgsdraw06aug/newaugsburgsdraw06aug.pdf).
- . *The New Augsburg's Drawing, Eighth Year Book*. Educational Publishing Company, 1912. [ia600205.us.archive.org/8/items/newaugsburgsdraw08aug/newaugsburgsdraw08aug.pdf](https://ia600205.us.archive.org/8/items/newaugsburgsdraw08aug/newaugsburgsdraw08aug.pdf).
- Bisagno, Francesco Domenico. *Trattato della pittura*. 1642. A 17th-century Italian treatise on painting.
- Boulinger, Jules César. *De Pictura, Plastica, Statuaria Libri Duo*. Sumptibus Ludovici Prost, Haeredis Roville, 1627. A 17th-century Latin text on painting and sculpture.
- Bouvier, M. Pierre Louis. *Manuel des Jeunes Artistes Et Amateurs en Peinture*. 1827. This was a very popular early 19th-century French text on oil painting. There are some terrific illustrations at the back of the book.
- Bradley, Milton. *Elementary Color*. 1895. This book on color was intended for use in general school instruction.
- Cennini, Cennino d'Andrea. *Il Libro dell'arte*. Among the best-known of the European manuals on artistic materials and procedures. This text has been republished over the centuries and widely translated.
- Clarke, Mark. *Medieval Painters' Materials and Techniques: The Montpellier Liber diversarum arcium*. Archetype, 2011. This is one of the most extensive art technical treatises from medieval Europe.

- Couture, Thomas. *Conversations on Art Methods*. This is an English translation of the French original.
- Da Vinci, Leonardo. *A Treatise on Painting*. c. 1540. [archive.org/details/davincionpainting00leon/page/n6](#). This is an English translation of a text compiled by Francesco Melzi, one of Leonardo's students.
- De Honnecourt, Villard. *The Sketchbook of Villard de Honnecourt*. [archive.org/details/facsimileofsketc00vill/page/n4](#). A 13th-century sketchbook of drawings with subjects spanning figures, animals, and architecture.
- De Vries, Jan Vredeman. *Studies in Perspective*. Dover, 1968. In 1604, de Vries published this collection of engravings illustrating the application of linear perspective to complex architectural subjects.
- Du Fresnoy, Charles-Alphonse. *De arte graphica/The Art of Painting*. Seventeenth century. [archive.org/details/deartegraphicaar00dufr/page/n6](#). Du Fresnoy was a French painter best remembered for his Latin poem about painting. The famous British poet, John Dryden, wrote his own preface to the work and made a prose translation that was published in 1695.
- Dürer, Albrecht. *Das Skizzenbuch von Albrecht Dürer (The Dresden Sketchbook)*. Early 16th century. [archive.org/details/dasskizzenbuchv00brucgoog](#). This contains many figure studies, geometric and architectural studies, and other drawings.
- Dürer, Albrecht, and Walter Strauss. *The Human Figure by Albrecht Dürer: The Complete Dresden Sketchbooks*. Dover, 1972. A collection of many of Dürer's annotated figure studies.

- Eakins, Thomas. *A Drawing Manual*. Philadelphia Museum of Art, 2005. This is an unfinished book written by Eakins. Though fragmentary, it shows the kind of analytical and quantitative thinking that engaged him.
- Eastlake, Sir Charles Lock. *Methods and Materials of Painting of the Great Schools and Masters*. 1847. While Lock was well read in painting's literature, many of his conclusions about methods and materials haven't stood the test of time.
- Fels, Donald. *Lost Secrets of Flemish Painting*. Alchemist, 2001. This book contains a translation of the Mayerne manuscript as well as Fels's conclusions regarding 16th and 17th century painting practices.
- Fielding, Theodore Henry. *On Painting in Oil and Water Colours for Landscape and Portraits*. Ackermann and Co., 1839. A very readable 19th-century text that covers a number of painting media.
- Hayter, Charles. *A New Practical Treatise on the Three Primitive Colours Assumed as a Perfect System of Rudimentary Information*. John Booth, 1826. [archive.org/details/newpracticalrea00hayt/page/n3](https://archive.org/details/newpracticalrea00hayt/page/n3). This book describes how many varied colors can be mixed from yellow, red, and blue.
- . *An Introduction to Perspective, Drawing and Painting in a Series of Pleasing and Familiar Dialogues Between the Author's Children*. Black, Kingsbury, Parbury and Allen, 1820. This book covers linear perspective, figure, color, light, and a range of other topics.
- Huàzhùàn, Jièzìyuán. *The Mustard Seed Garden Manual of Painting*. Princeton, 1978. This is a facsimile of the 1887–1888 Shanghai edition with an English translation by Mai-Mai Sze.

- Koller, E. L. *Light, Shade, and Shadow*. Dover, 2008. This book was originally published in 1914. Though a slim volume, it covers the perspective of shadows in some detail.
- Laurie, A. P. *Facts about Processes, Pigments and Vehicles: A Manual for Art Students*. Macmillan and Co., 1895. [babel.hathitrust.org/cgi/pt?id=nyp.33433022909398](http://babel.hathitrust.org/cgi/pt?id=nyp.33433022909398). The book contains explanations and descriptions followed by experiments.
- . *The Painter's Methods and Materials*. Dover, 1926. [ia802705.us.archive.org/9/items/paintersmethodsm00lauruoft/paintersmethods\\_m00lauruoft.pdf](http://ia802705.us.archive.org/9/items/paintersmethodsm00lauruoft/paintersmethods_m00lauruoft.pdf). Here, Laurie seeks to trace the history of the materials and methods used in oil, tempera, and fresco painting from very early times and makes suggestions based on his analysis.
- . *The Pigments and Mediums of the Old Masters*. Macmillan and Co., 1914. [babel.hathitrust.org/cgi/pt?id=mdp.39015013749463&view=1up&seq=11](http://babel.hathitrust.org/cgi/pt?id=mdp.39015013749463&view=1up&seq=11). This book focuses on the application of scientific method, including microscopy and chemistry, to the study of pigments, medium and historical paintings.
- Mappae Clavicula*. American Philosophical Society, 1974. [jstor.org/stable/pdf/1006317.pdf](http://jstor.org/stable/pdf/1006317.pdf). This is an English translation of a Latin text by Cyril Stanley Smith and John G. Hawthorne.
- Moxon, Joseph. *Practical Perspective*. 1670. [archive.org/details/practicalperspec00moxo/page/n3](http://archive.org/details/practicalperspec00moxo/page/n3). A British 17th-century text on linear perspective with quite a number of intriguing illustrations.

- Osborn, Laughton. *A Handbook of Young Artists and Amateurs in Oil Painting*. Wiley and Putnam, 1845. [ia601900.us.archive.org/33/items/gri\\_33125002389019/gri\\_33125002389019.pdf](https://ia601900.us.archive.org/33/items/gri_33125002389019/gri_33125002389019.pdf). This English-language text is based on a number of earlier French texts.
- Pacioli, Luca. *De Divina Proportione (On the Divine Proportion)*. 2005. [docgo.net/detail-doc.html?utm\\_source=tennenbaum-pacioli-divine-proportion-pdf](https://docgo.net/detail-doc.html?utm_source=tennenbaum-pacioli-divine-proportion-pdf). Paccioli's 1509 book concerns itself with the relationship of mathematics to the arts. This is an English translation by Dr. Jonathan Tennenbaum, John P. Scialdone, and Richard Sanders.
- Parkhurst, Daniel Burleigh. *The Painter in Oil*. Lee and Shepherd, 1898. [archive.org/details/cu31924008636155/](https://archive.org/details/cu31924008636155/). There is a lot of great information in this book, especially if you're interested in traditional figurative painting.
- Pliny the Elder. *Chapters on the History of Art*. Cornell, 2009. This is commonly regarded as the first extant art historical text. It was written between 77 and 79 CE by the Roman Pliny the Elder.
- Pozzo, Andrea. *Perspective in Architecture and Painting*. Dover, 1989
- Rodler, Hieronymus. *Eyn schön nützlich büchlin und underweisung der kunst des Messens*. 1531. [archive.org/details/eyschnntzlichbc00rodll/page/1](https://archive.org/details/eyschnntzlichbc00rodll/page/1). Even if you don't read German, you can enjoy this work's many woodcuts illustrating the use of one-point perspective.
- Ruskin, John. *The Elements of Drawing*. Routledge & Sons, 1857. Also published by Dover in 1971. [archive.org/details/in.ernet.dli.2015.264111](https://archive.org/details/in.ernet.dli.2015.264111). This book is heavier on text and has fewer illustrations than most contemporary books on drawing. However, much of the information is relevant.

- . *The Laws of Féssole*. A Familiar Treatise on the Elementary Principles and Practice of Drawing and Painting. George Allen, 1879. Also published by Alworth Press in 1996. [archive.org/details/lawssoleafamil00ruskgoog/page/n10](https://archive.org/details/lawssoleafamil00ruskgoog/page/n10). Ruskin's underlying idea is that the goal of drawing and painting is to make people appreciate nature.
- Solomon, Solomon J. *The Practice of Oil Painting and Drawing*. J. B. Lippincott Company, 1910. In this book, Solomon proceeds from line, to shade, to color with emphasis on the figure.
- Speed, Harold. *Oil Painting Techniques and Materials*. Dover, 1987. First published in 1924, this book is regarded by many as a classic, covering traditional oil painting materials and techniques.
- . *The Practice and Science of Drawing*. Seeley, Service & Co., 1917. [archive.org/details/practicescienceo00speerich/page/n10](https://archive.org/details/practicescienceo00speerich/page/n10). This is a well-known text on drawing, much of it dealing with line and mass.
- Strasburg Manuscript: A Medieval Painter's Handbook Translated from the Old German*. Alec Tiranti, 1966. This manuscript represents one of the best-known medieval art recipe books. This edition is a mid-20th-century translation by Viola and Rosamund Borradaile.
- Tingry, Pierre François. *The Painter and Varnisher's Guide*. Kearsley, 1804. [archive.org/details/paintervarnisher00ting/](https://archive.org/details/paintervarnisher00ting/). This is an English translation of the original author's French text, which concerns the substances and processes used in making varnishes.
- Vasari, Giorgio. *Lives of the Artists*. Oxford University Press, 2008. This is a modern English translation of the art historical classic.

———. *Vasari on Technique*. J.M. Dent, 1907. <https://archive.org/details/cu31924020624742/page/n12>. This is an English translation by Louisa S. Maclehouse of Vasari's text on methods in architecture, sculpture, painting, and design.

Ward, James. *History and Methods of Ancient & Modern Painting*. Chapman and Hall, 1913. Ward was an Irish artist, teacher, and author.

## PAINTING AND DRAWING: HEALTH AND SAFETY

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Dick Blick Art Materials. "Health and Safety." [dickblick.com/productinfo/healthsafety](http://dickblick.com/productinfo/healthsafety).

Local Hazardous Waste Management Program in King County. "Art Hazards." [hazwastehelp.org/ArtHazards/paintingwaste.aspx](http://hazwastehelp.org/ArtHazards/paintingwaste.aspx).

McCann, Michael. *Artist Beware*. Lyons Press, 2005. This book has become a standard in the field.

———. *Health Hazards Manual for Artists*. The Lyons Press, 2008. This is a less exhaustive volume than *Artist Beware*, but it still contains useful information.

Princeton University Environmental Health and Safety. "Art Safety." [ehs.princeton.edu/health-safety-the-campus-community/art-theater-safety/art-safety](http://ehs.princeton.edu/health-safety-the-campus-community/art-theater-safety/art-safety).

Rossol, Monona. *The Artist's Complete Health and Safety Guide*. Allworth Press, 2001. Along with McCann's books, this is a well-reviewed and highly regarded text on the subject.

US Consumer Product Safety Commission. *Art and Craft Safety Guide*. [cpsc.gov/s3fs-public/5015.pdf](http://cpsc.gov/s3fs-public/5015.pdf).

## ART HISTORY, CRITICISM, AND REFERENCE WORKS

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This short list contains texts and links referenced in the course and a few others that are comprehensive or will serve as introductions to aspects of art history or criticism.

Davies, Penelope. *Janson's History of Art*. 8th ed. Pearson, 2010. One of the standards used in university art history survey courses.

Fineberg, Jonathan. *Art since 1940*. 3rd ed. Pearson, 2010. As the title indicates, this book covers art since 1940. Though not comprehensive, this is a readable overview.

Foster, Carter E. *Hopper Drawing*. The Whitney Museum of American Art, 2013.

Getty Research Institute. *Art & Architecture Thesaurus® Online*. [getty.edu/research/tools/vocabularies/aat/](http://getty.edu/research/tools/vocabularies/aat/). This is a terrific online art thesaurus.

Gombrich, Ernst. *The Story of Art*. 16th ed. Phaidon Press, 1995. Well written and accessible.

*Grove Dictionary of Art*. Oxford University Press, 1996. This 34-volume work is as comprehensive as anything available. Major libraries will have a copy.

Hickey, Dave. *Air Guitar: Essays on Art and Democracy*. Art Issues Press, 1997. A collection of essays that can serve as an introduction to some contemporary thought on art.

Hockney, David. *Secret Knowledge*. Studio, 2006. Artist David Hockney advances the theory that the great changes evidenced in the Renaissance were traceable to the use of such optical devices as the camera lucida and camera obscura.

- Hockney, David, and Martin Gayford. *A History of Pictures*. Harry N. Abrams, 2016. In this book, Hockney carries on a discussion about painting and related topics with the writer and art critic Martin Gayford.
- Hughes, Robert. *Nothing if Not Critical*. Penguin Books, 1992. Hughes was the art critic for *TIME* magazine for many years and one of the most prominent art critics of the late 20th century.
- . *The Shock of the New*. Knopf, 1991. An excellent introduction for anyone interested in beginning to understand modern art.
- Kemp, Martin. *The Science of Art*. Yale University Press, 1992. This is a fascinating book for those interested in many of the more quantitative aspects of art.
- Kleiner, Fred S. *Gardner's Art through the Ages: A Global History*. 2 vols. 14th ed. Wadsworth, 2012. Another comprehensive text used in university art history courses.
- Schwartz, Gary, "Ars Moriendi: The Mortality of Art." *Art in America*, November 1996, pp. 72–75. [garyschwartzarthistorian.nl/ars-moriendi-the-mortality-of-art](http://garyschwartzarthistorian.nl/ars-moriendi-the-mortality-of-art). This article is discussed in Lecture 6.
- Sewell, Darrel, ed. *Thomas Eakins*. Philadelphia Museum of Art, 2001. Includes several excellent articles on Eakins's working methods, including his use of photography.
- Stokstad, Marilyn, and Michael Cothren. *Art History*. 4th ed. Pearson, 2010. An inclusive world history of art.

## HISTORY OF MATERIALS, TECHNICAL ART HISTORY, AND CONSERVATION STUDIES

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- Berrie, Barbara H., ed. *Artists' Pigments*. Vol. 4. Archetype, 2007.
- Bomford, David. *Art in the Making: Underdrawings in Renaissance Paintings*. National Gallery Publications, 2002. Each of the books in the *Art in the Making* series accompanied an exhibition at London's National Gallery.
- Bomford, David, Jill Dunkerton, Dillian Gordon, and Ashok Roy. *Art in the Making: Italian Painting Before 1400*. National Gallery Publications, 1990.
- Bomford, David, Jo Kirby, and Ashok Roy. *Art in the Making: Rembrandt*. National Gallery Publications, 2006.
- Bomford, David, Jo Kirby, John Leighton, and Ashok Roy. *Art in the Making: Impressionism*. National Gallery Publications, 1990.
- Bomford, David, Sarah Herring, and Jo Kirby. *Art in the Making: Degas*. National Gallery Publications, 2004.
- Carlyle, Leslie. *The Artist's Assistant*. Archetype Books, 2007. This is a fascinating book that centers on the materials available to oil painters in 19th-century England.
- Church, A.H. *The Chemistry of Paints and Painting*. Seeley, Service & Co. Limited, 1915. [archive.org/details/chemistryofpaint00churuoft/page/n6](https://www.archive.org/details/chemistryofpaint00churuoft/page/n6). This book was first published in 1890 and went through several editions and reprints.
- Clarke, Mark. *The Art of All Colors*. Archetype, 2007. This is a scholarly text on medieval artists treatises, materials, and processes.

- Crook, Jo, and Tom Lerner. *Impact of Modern Paints*. Watson-Guptill, 2000. This text deals with changes in paint and technology in the 20th century.
- Dunkerton, Jill. “The Restoration and Technical Examination of Jan Van Eyck’s *Margaret, the Artist’s Wife*.” *Flemish Primitives*. [vlaamseprimitieven.vlaamsekunstcollectie.be/en/research/webpublications/the-restoration-and-technical-examination-of-jan-van-eycks-margaret-the-art](http://vlaamseprimitieven.vlaamsekunstcollectie.be/en/research/webpublications/the-restoration-and-technical-examination-of-jan-van-eycks-margaret-the-art). This article can serve as a great introduction to the work of art conservators and technical art historians.
- Eastaugh, Nicholas. *Pigment Compendium*. Routledge, 2013. This is an encyclopedic volume on pigments.
- Harley, R. D. *Artists’ Pigments c. 1600–1835*. 2nd ed. Butterworth Scientific. This is a rigorous study.
- National Gallery. *Technical Bulletin*. [nationalgallery.org.uk/research/research-resources/technical-bulletin](http://nationalgallery.org.uk/research/research-resources/technical-bulletin). Since 1977, London’s National Gallery has published the *Technical Bulletin* on a yearly basis. These are all available online. Each edition includes articles by conservators, curators, and scientists.
- Stoner, Joyce Hill, and Rebecca Rushfield, ed. *Conservation of Easel Paintings*. Routledge, 2012. This volume and features 49 articles by a group of 75 authorities on conservation and technical art history.
- Thompson, Daniel V. *The Materials and Techniques of Medieval Painting*. Dover, 2015. This text concerns itself with the grounds, binding media and pigments used by medieval artists.

- Townsend, Joyce H. “The Materials Used by British Oil Painters in the Nineteenth Century.” Tate Papers. [tate.org.uk/research/publications/tate-papers/02/the-materials-used-by-british-oil-painters-in-the-nineteenth-century](https://www.tate.org.uk/research/publications/tate-papers/02/the-materials-used-by-british-oil-painters-in-the-nineteenth-century). This article contains some great pictures of artists’ palettes, pigments, and paints from the period.
- Townsend, Joyce, Jaqueline Ridge and Stephen Hackney. “Pre-Raphaelite Painting Techniques.” 2004. This is an analytic study by two conservation scientists of 20 pre-Raphaelite paintings.
- Van de Wetering, Ernst. *Rembrandt: The Painter at Work*. University of California Press, 2009. A fascinating book that examines Rembrandt’s materials and painting methods.
- Wallert, Arie, Erma Hermens, and Marja Peek, eds. *Historical Painting Techniques, Materials, and Studio Practice*. Oxford University Press, 1995. [getty.edu/conservation/publications\\_resources/pdf\\_publications/historical\\_paintings.html](https://www.getty.edu/conservation/publications_resources/pdf_publications/historical_paintings.html). The book contains articles from several dozen contributors.

## ARTISTS’ WRITINGS, INTERVIEWS WITH ARTISTS, AND ARTIST VIDEO CLIPS

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- Ashton, Dore. *Picasso on Art*. De Capo Press, 1988.
- Bacon, Francis. “Fragments of a Portrait.”  
[youtube.com/watch?v=xoFMH\\_D6xLk](https://www.youtube.com/watch?v=xoFMH_D6xLk).
- . “Francis Bacon’s Last Interview.”  
[youtube.com/watch?v=p-d9TdRYUaQ](https://www.youtube.com/watch?v=p-d9TdRYUaQ).
- . “Francis Bacon Rare Interview, 1971.”  
[youtube.com/watch?v=aFDiemYxuvA](https://www.youtube.com/watch?v=aFDiemYxuvA).

Baselitz, Georg. "Georg Baselitz Talks about *Farewell Bill*."

[youtube.com/watch?v=A6ipu0KzUds](https://www.youtube.com/watch?v=A6ipu0KzUds).

Cembalest, Robin. "How Edward Hopper Storyboarded *Nighthawks*."

[artnews.com/2013/07/25/how-edward-hopper-storyboarded-nighthawks/](https://www.artnews.com/2013/07/25/how-edward-hopper-storyboarded-nighthawks/).

Da Vinci, Leonardo. *The Notebooks of Leonardo da Vinci*. 2 vols. Edited by Jean Paul Richeter. Dover, 1970.

Dalí, Salvador. *Fifty Secrets of Magic Craftsmanship*. Dover, 1992. Originally published in 1948.

Delacroix, Eugene, and Hubert Wellington. *Journal of Delacroix*. Phaidon Press, 1995.

Desiderio, Vincent. "LCAD Vincent Desiderio Painting Demo."

[youtube.com/watch?v=GxRN9tcN6pQ&list=PLnCjvdddc6\\_45u4kYcwZJCbj\\_xmWcyfbr](https://www.youtube.com/watch?v=GxRN9tcN6pQ&list=PLnCjvdddc6_45u4kYcwZJCbj_xmWcyfbr).

De Vliegheer, Jan. "*Zieta! Max met kunstschilder*."

[youtube.com/watch?v=-T4ZW8NZOeA&feature=youtu.be](https://www.youtube.com/watch?v=-T4ZW8NZOeA&feature=youtu.be).

Fischl, Eric. "Dive Deep: Eric Fischl and the Process of Painting."

[youtube.com/watch?v=MWpYD4LWpVc](https://www.youtube.com/watch?v=MWpYD4LWpVc).

Freud, Lucian. "An Exclusive Tour of Freud's Studio."

[youtube.com/watch?v=4YMV4EyaPMM](https://www.youtube.com/watch?v=4YMV4EyaPMM).

———. "Lucian Freud's Rarest Interview."

[youtube.com/watch?v=i5KcT4PBh2M](https://www.youtube.com/watch?v=i5KcT4PBh2M).

- Gauguin, Paul. *The Writings of a Savage*. Viking, 1978.
- Henri, Robert. *The Art Spirit*. Basic Books, 2007.
- Hockney, David. *David Hockney by David Hockney*. Abrams, 1977.
- . “I Am a Space Freak.”  
[channel.louisiana.dk/video/david-hockney-i-am-space-freak](https://channel.louisiana.dk/video/david-hockney-i-am-space-freak).
- . “Photoshop Is Boring.”  
[www.youtube.com/watch?v=oAx\\_aYGmpoM](https://www.youtube.com/watch?v=oAx_aYGmpoM).
- . “Who Gets to Call It Art?”  
[youtube.com/watch?v=CjfIKymXMa4](https://youtube.com/watch?v=CjfIKymXMa4).
- Hopper, Edward, Deborah Lyons, and Brian O’Doherty. *Edward Hopper: A Journal of His Work*. W. W. Norton & Company, 1997.
- Kahlo, Frida, with an introduction by Carlos Fuentes. *Diary of Frida Kahlo*. Bloomsbury, 1995.
- Katz, Alex. Online interview published by *The Guardian*.  
[youtube.com/watch?v=p1bA6Sbk24Y](https://youtube.com/watch?v=p1bA6Sbk24Y).
- Kiefer, Anselm. “Behind the Scene: Anselm Kiefer.”  
[youtube.com/watch?v=qmn-w2J68pU](https://youtube.com/watch?v=qmn-w2J68pU).
- Klee, Paul. *Diaries of Paul Klee*. University of California Press, 1968.
- Kuspit, Donald. *Fischl: An Interview with Eric Fischl*. Vintage, 1987.

Lundin, Norman, and David Brody. *Norman Lundin: Selections from Three Decades of Drawing and Painting*. University of Washington Press, 2006.

Matisse, Henri. *Matisse on Art*. Phaidon, 1973.

Munch, Edvard. *The Private Journals of Edvard Munch*. University of Wisconsin Press, 2005.

Redon, Odilon. *To Myself: Notes on Life, Art, and Artists*. George Braziller, 1996.

Richter, Gerhard. “Gerhard Richter Painting.”  
[youtube.com/watch?v=yF6EluMNR14](https://www.youtube.com/watch?v=yF6EluMNR14).

Richter, Gerhard, and Hans Ulbrich-Obrist. *The Daily Practice of Painting*. The MIT Press, 1995.

Shan, Ben. *The Shape of Content*. Harvard University Press, 1992

Sylvester, David. *The Brutality of Fact: Interviews with Francis Bacon*. Thames and Hudson, 1990.

Van Gogh, Vincent. *Letters of Vincent Van Gogh*. Penguin, 1998.

Wellington, Hubert. *The Journal of Eugene Delacroix*. Phaidon, 1995.

## COMPILATIONS OF ARTISTS' WRITINGS

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Chipp, Herschel B. *Theories of Modern Art*. University of California Press, 1984.

Goldwater, Robert, and Marco Treves. *Artists on Art*. Pantheon, 1974.

Harrison, Charles, and Paul Wood. *Art in Theory, 1900–1990*. Blackwell, 1995.

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# Cartoons

The following pages contain all of the cartoons or underdrawings referenced in this course.

- Scaled versions are  $8\frac{1}{2} \times 11$  inches.
- Tiled versions are also sized to  $8\frac{1}{2} \times 11$  inches to enable you to reproduce the full-size cartoon on your home printer. Simply print them out and tape them together.
- Full-size versions are provided as well. These are meant to be printed on a commercial plotter.

For additional guidance on working with the underdrawings, including preparing them, refer to the video component for Lecture 9.

# Lecture 1









# Lecture 7










# Lecture 9





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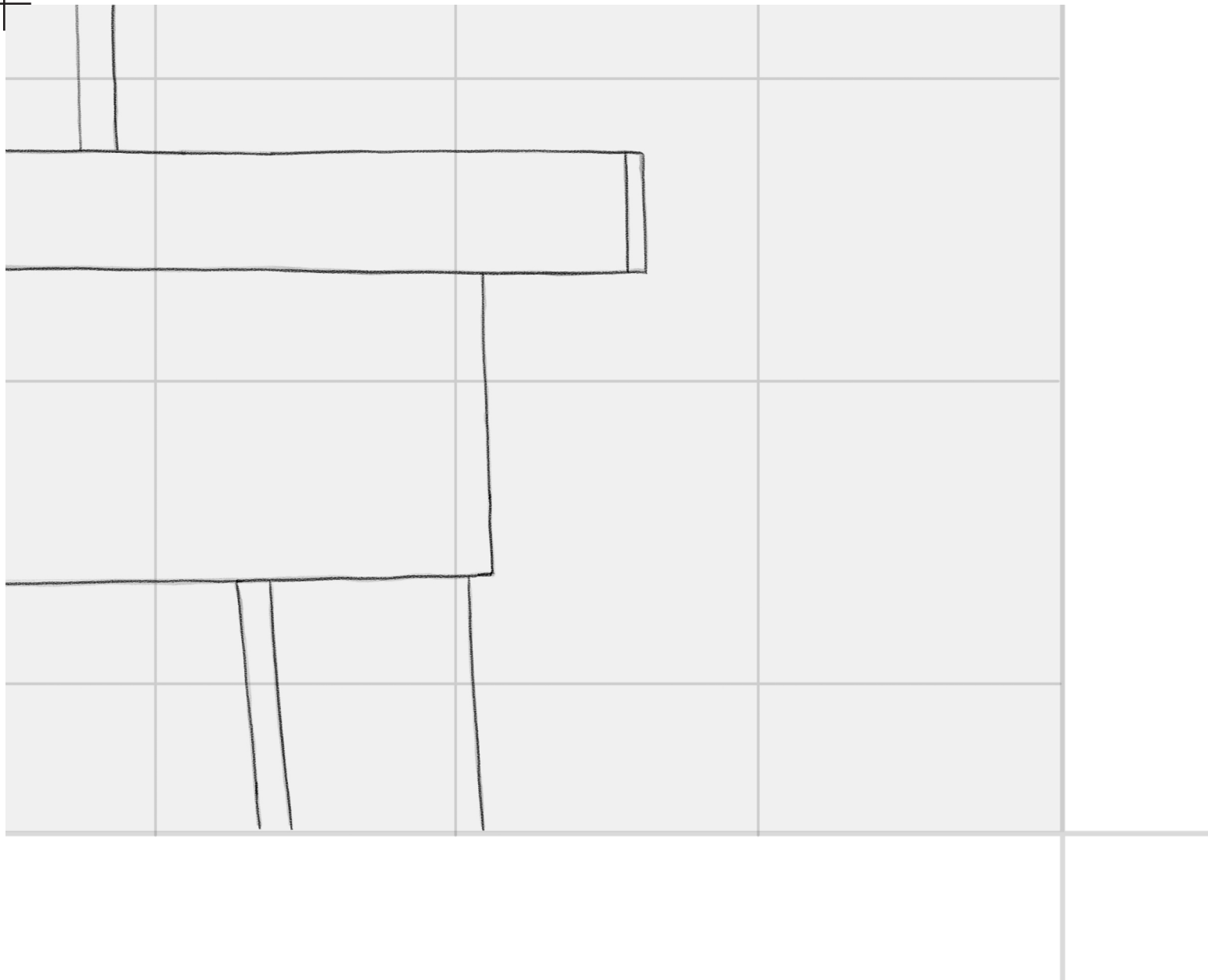
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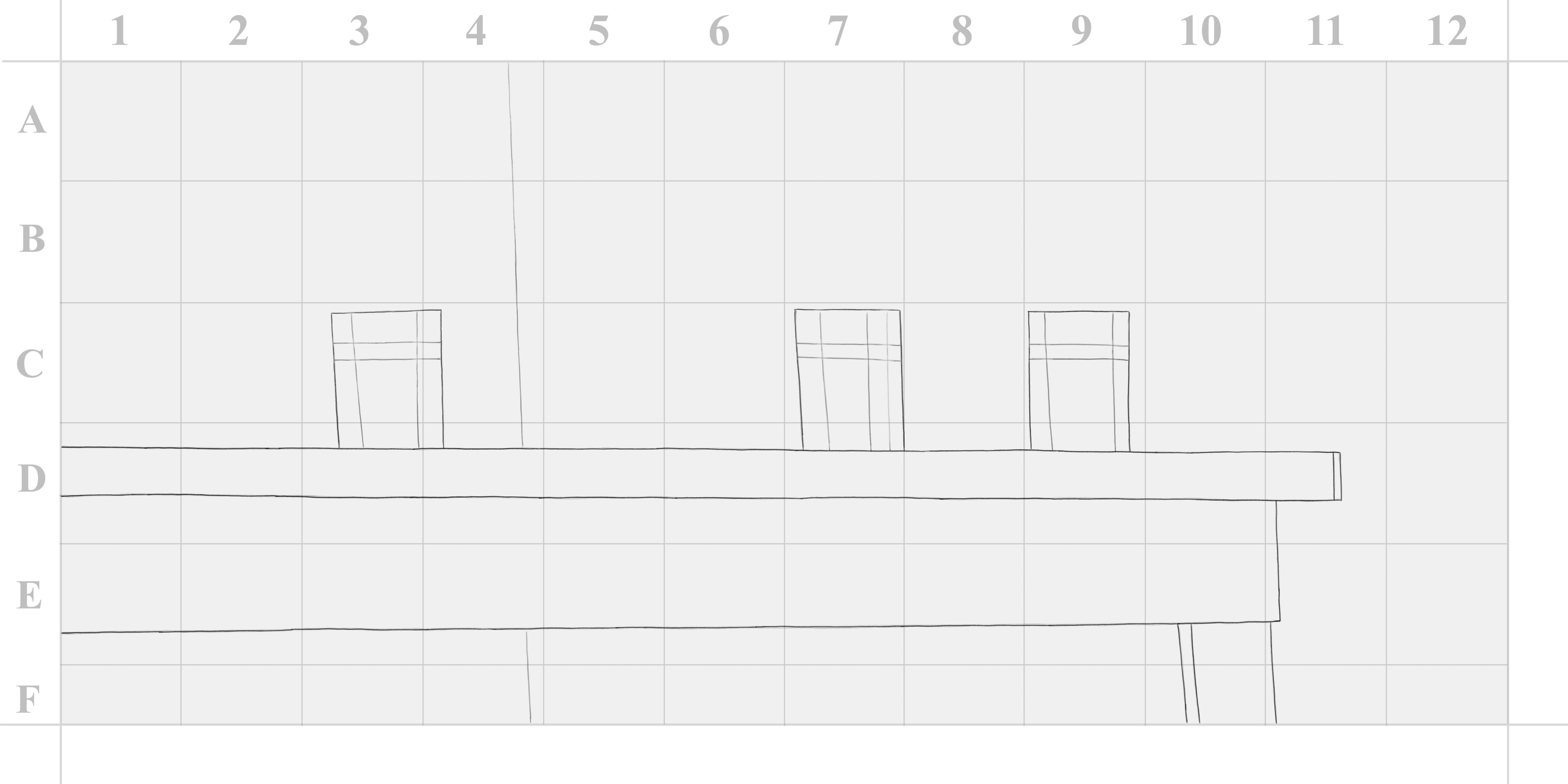
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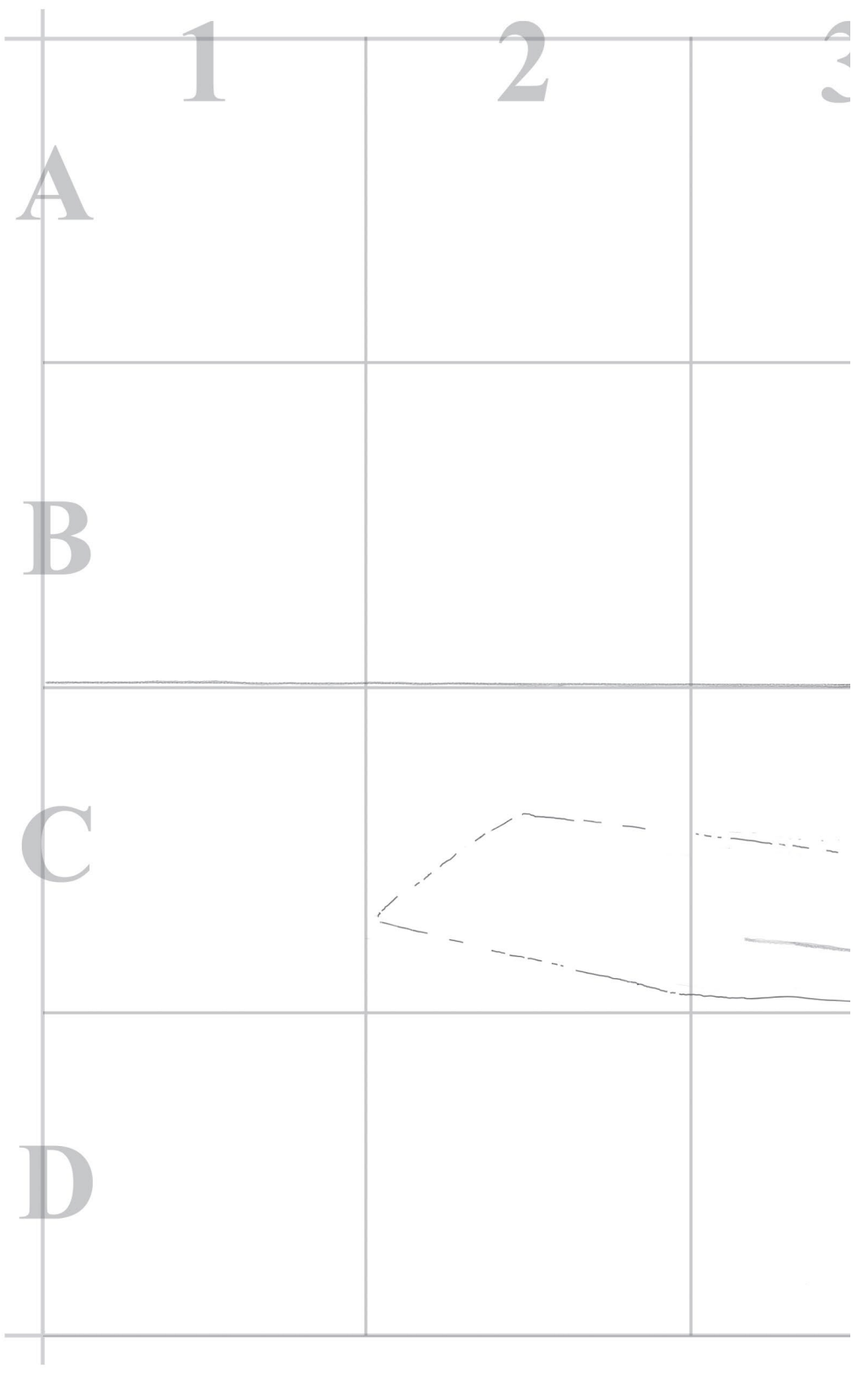


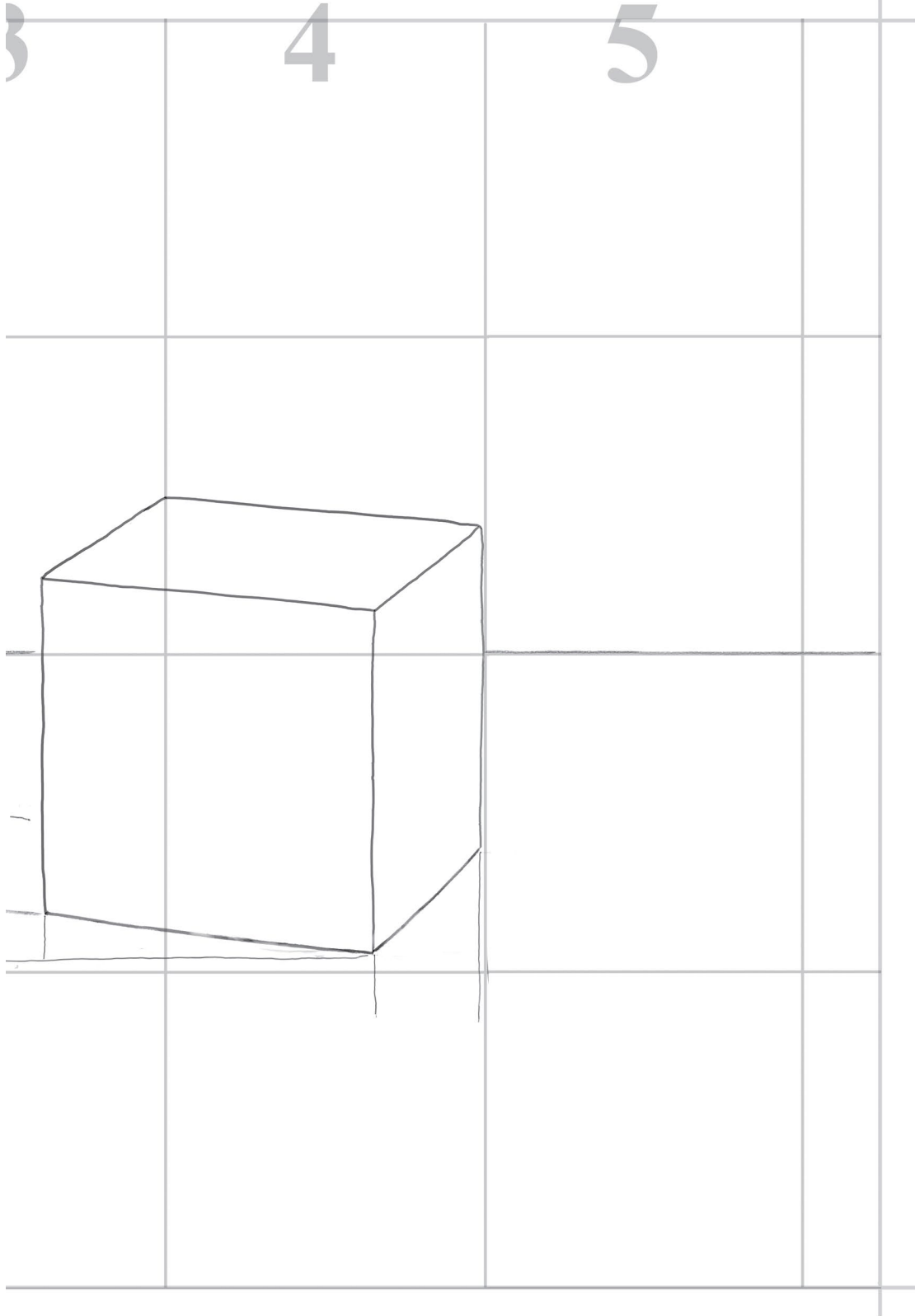


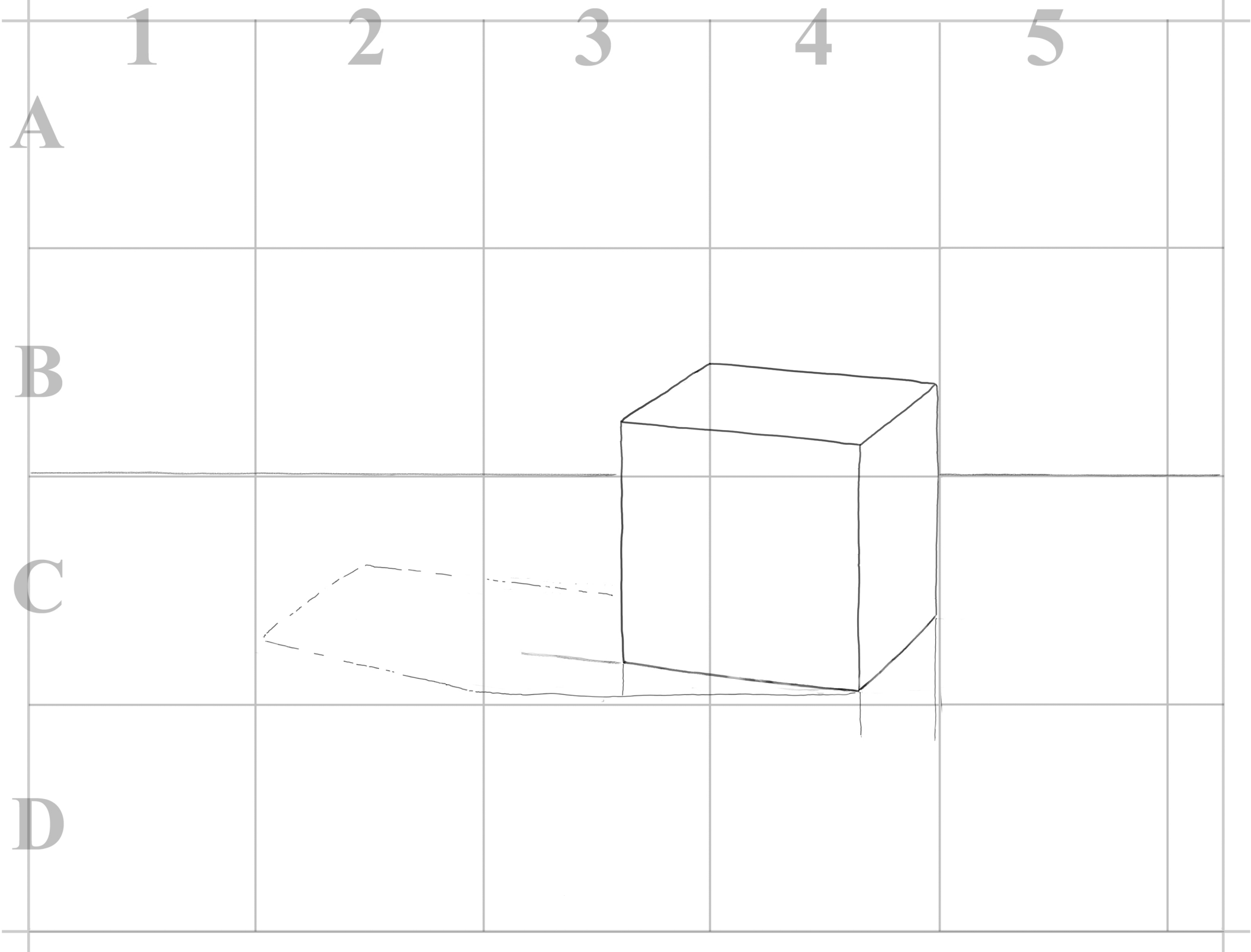


# Lecture 11












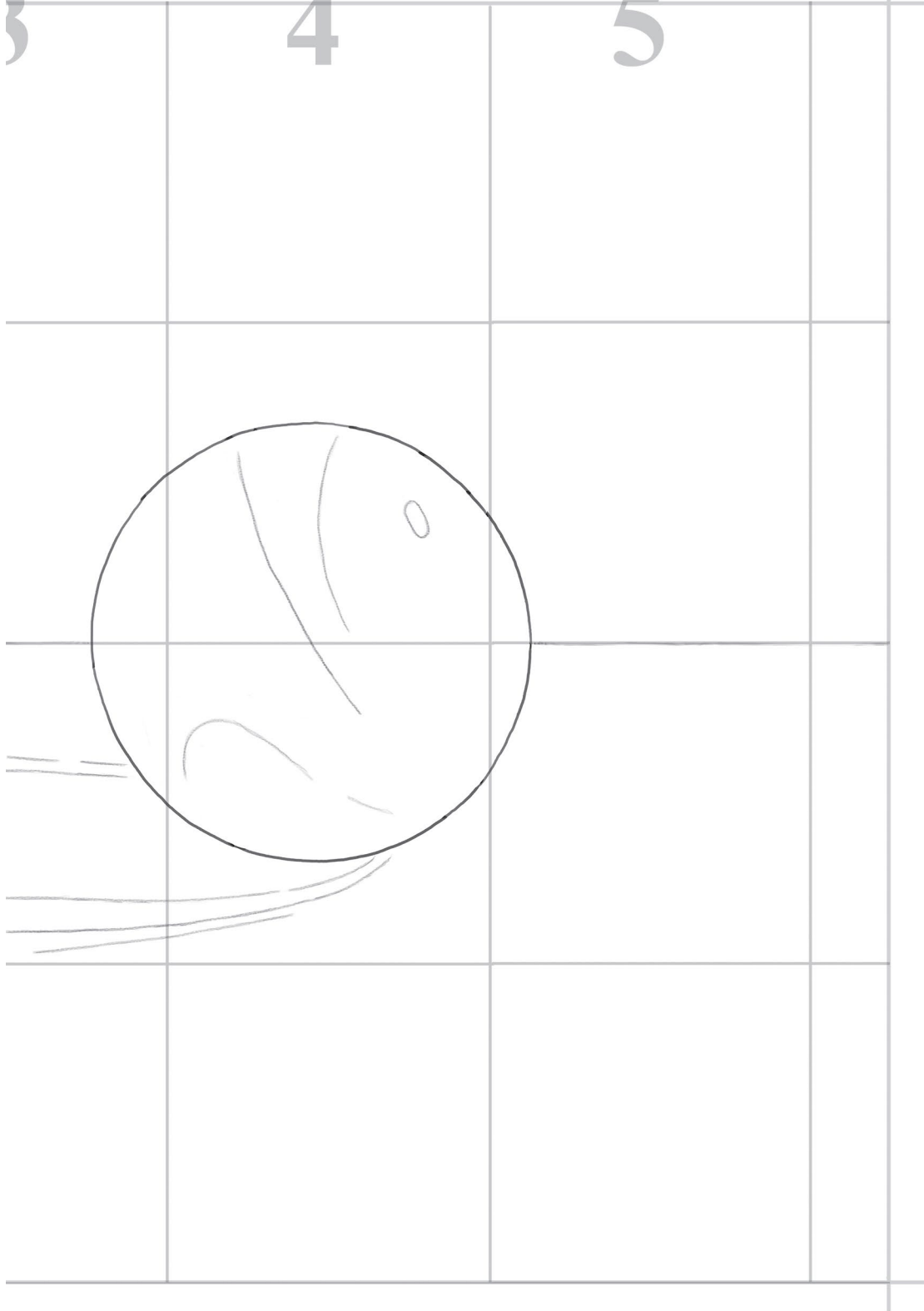


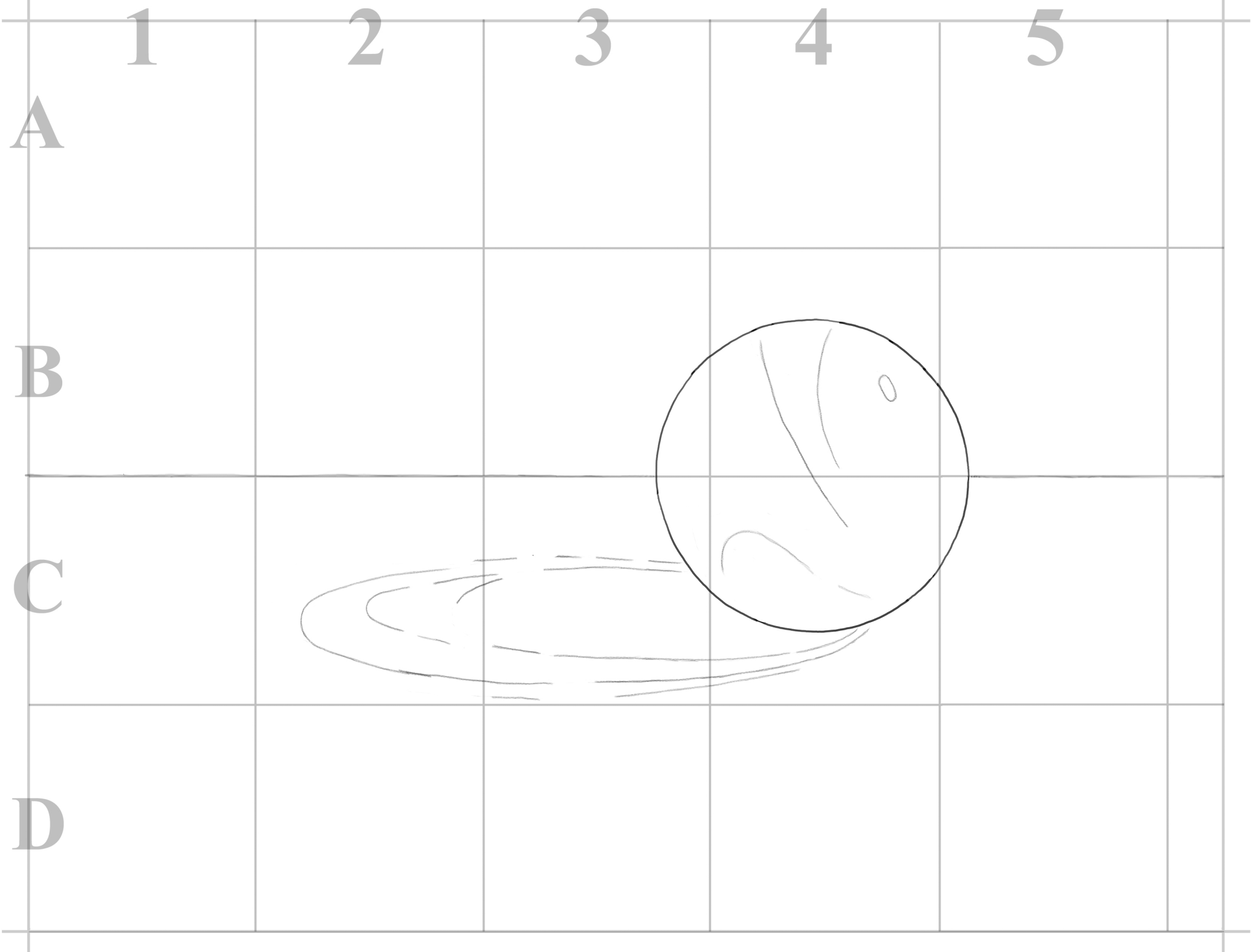
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# Lecture 12





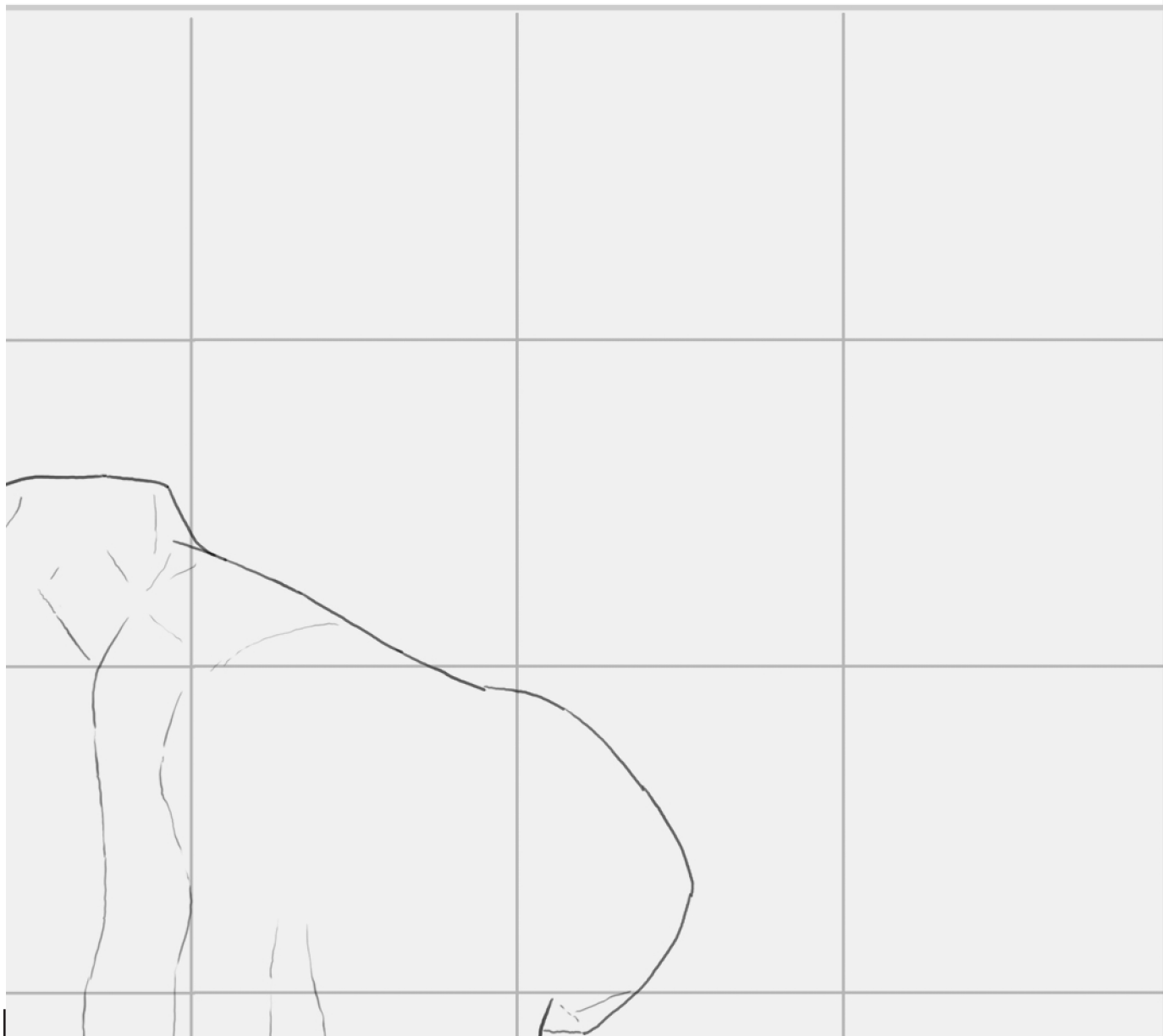


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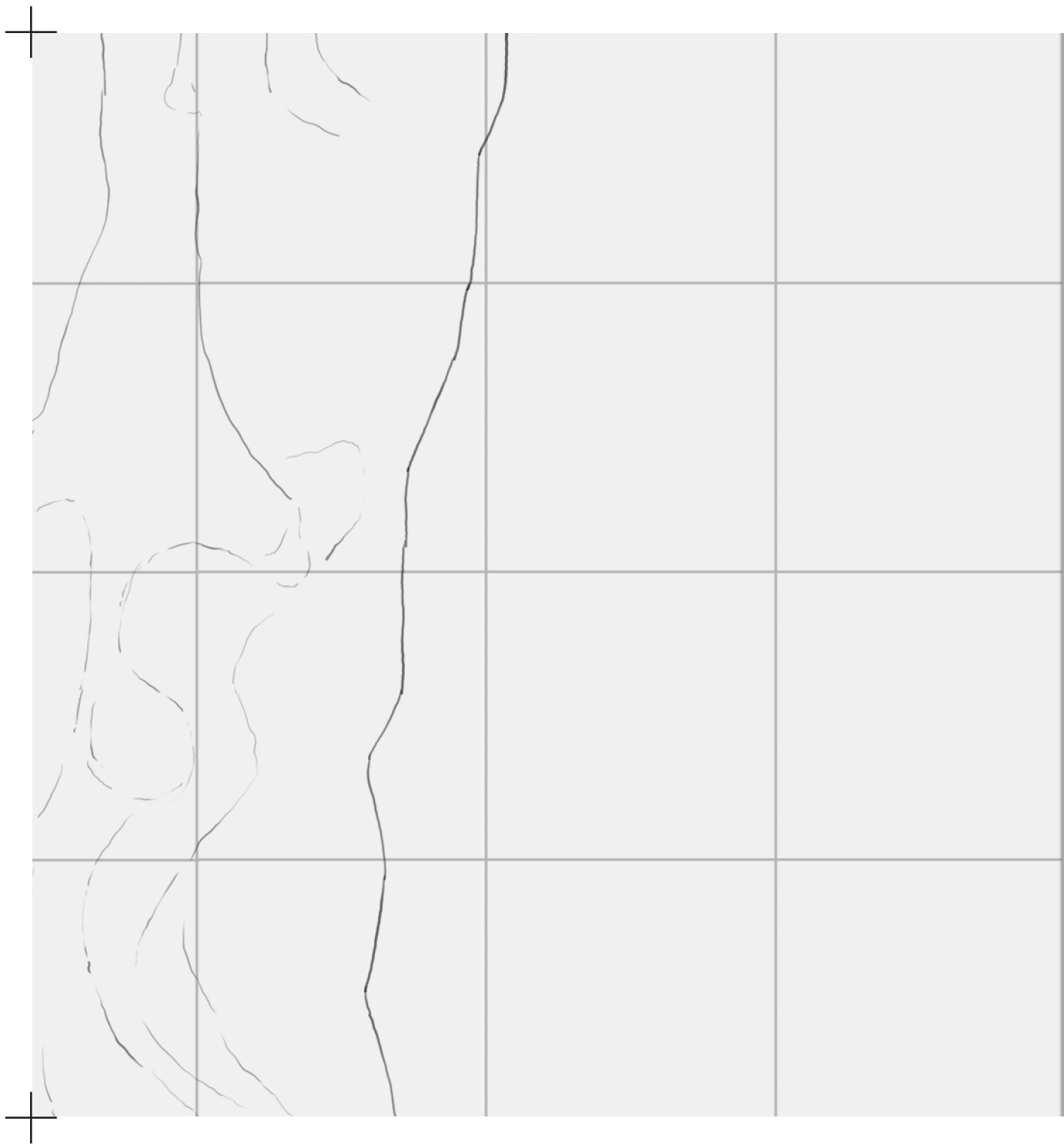
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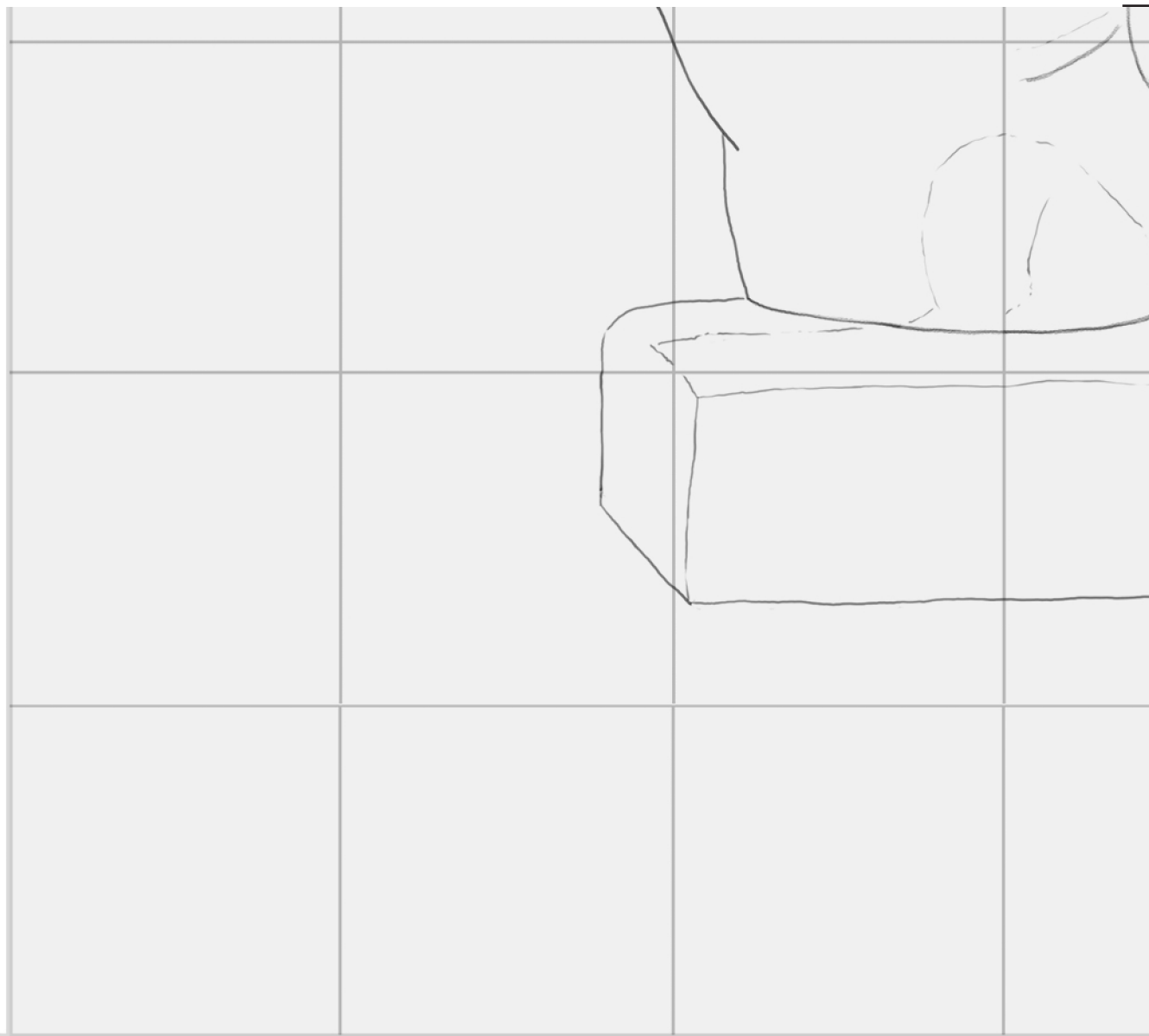




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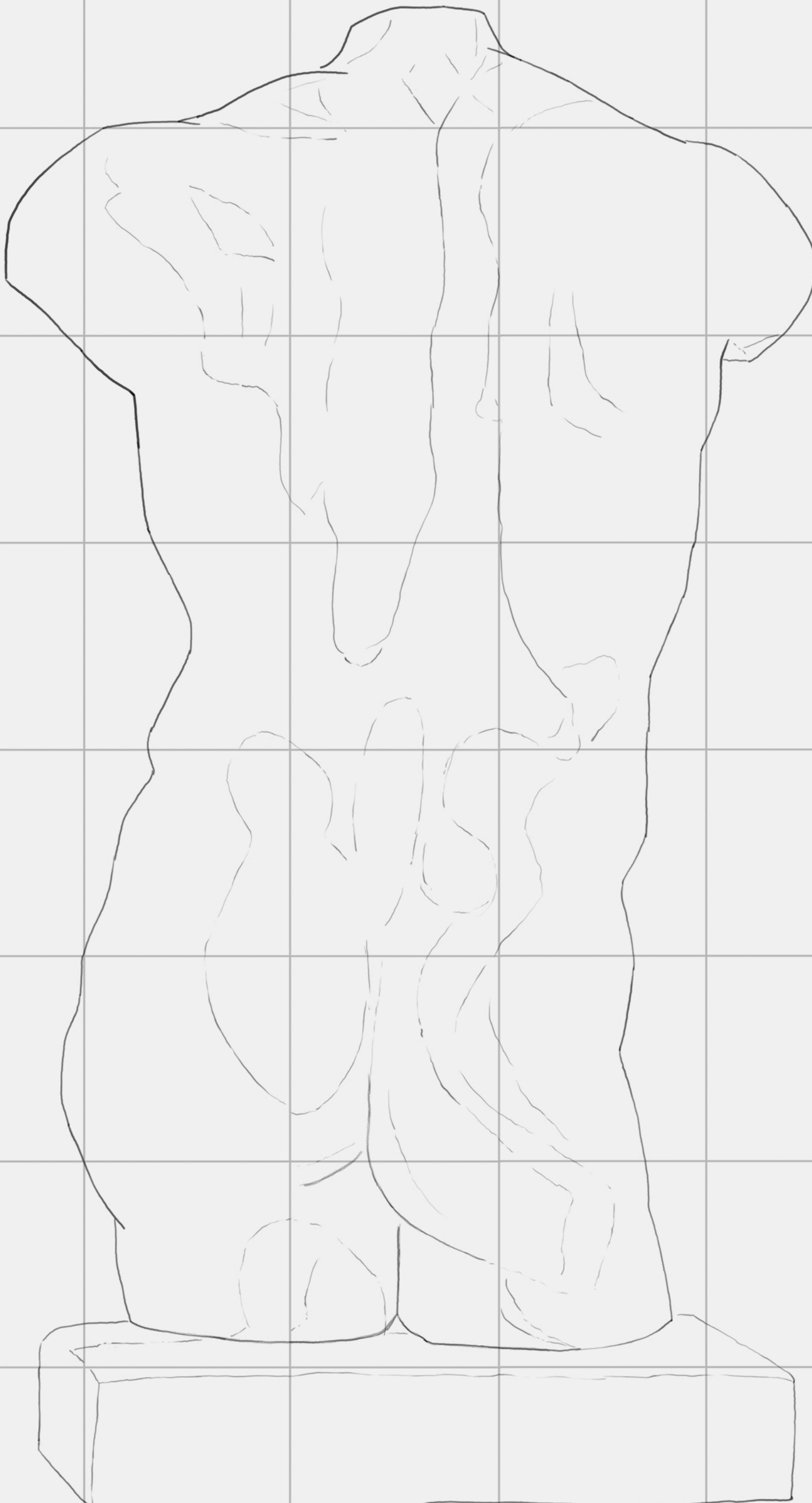
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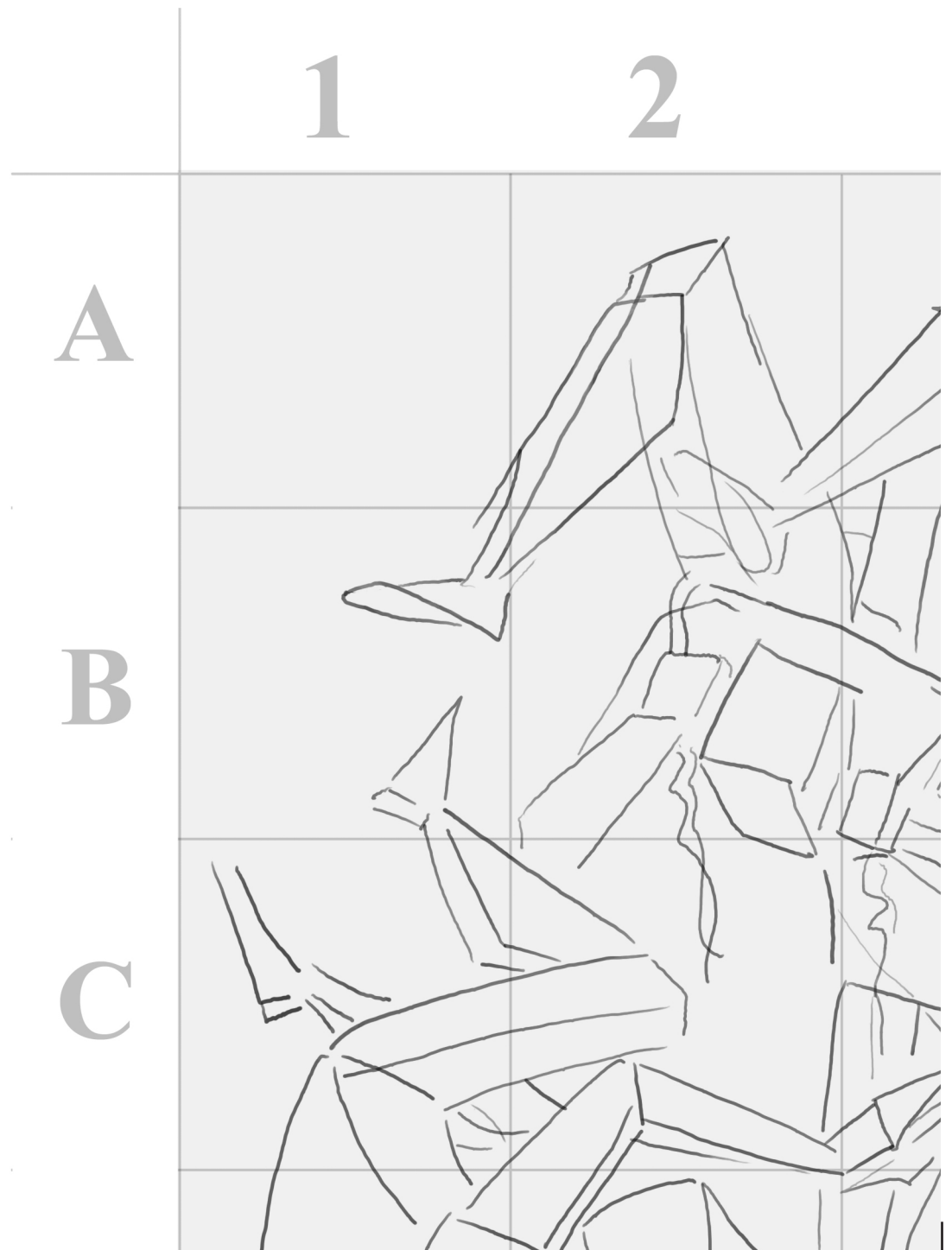
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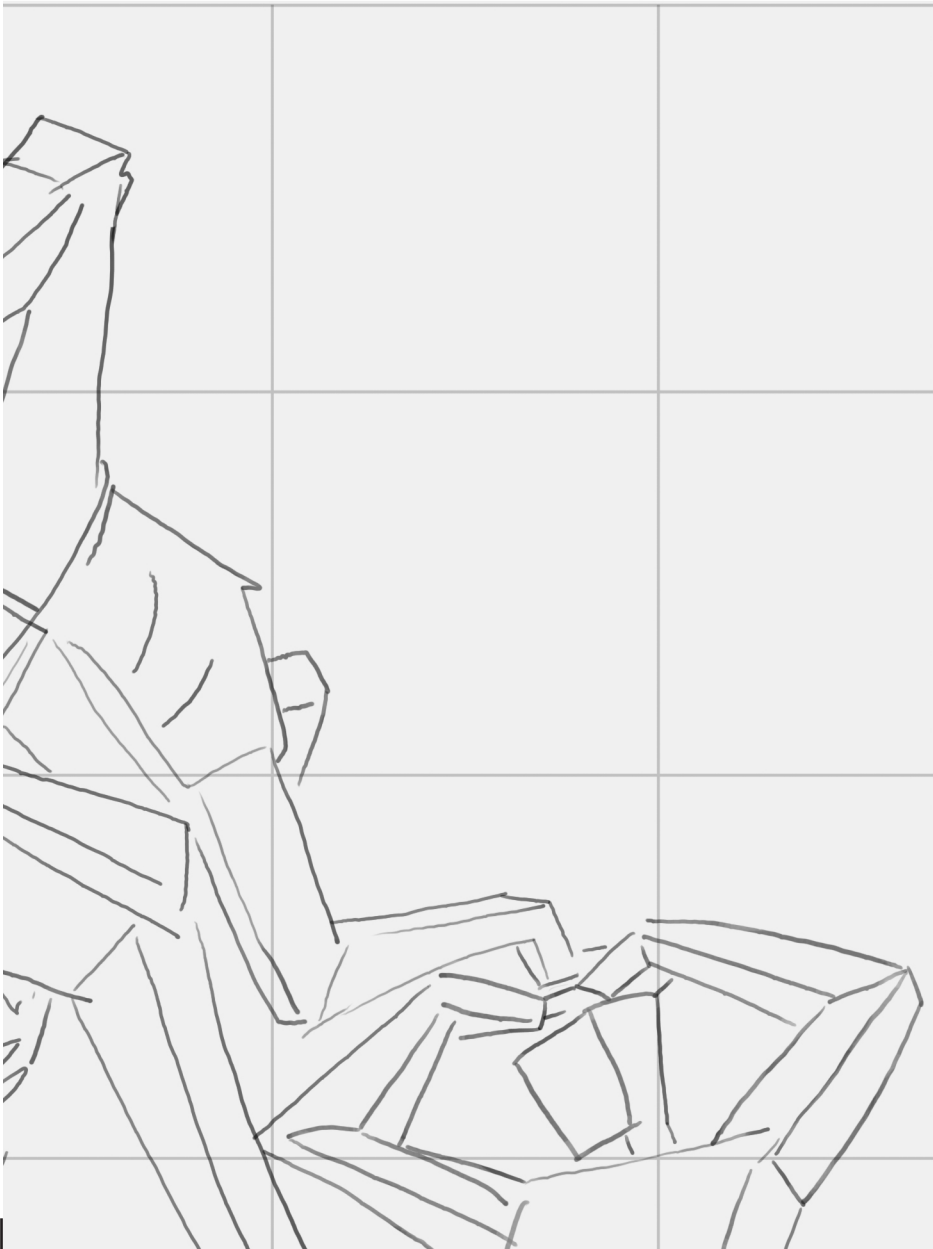




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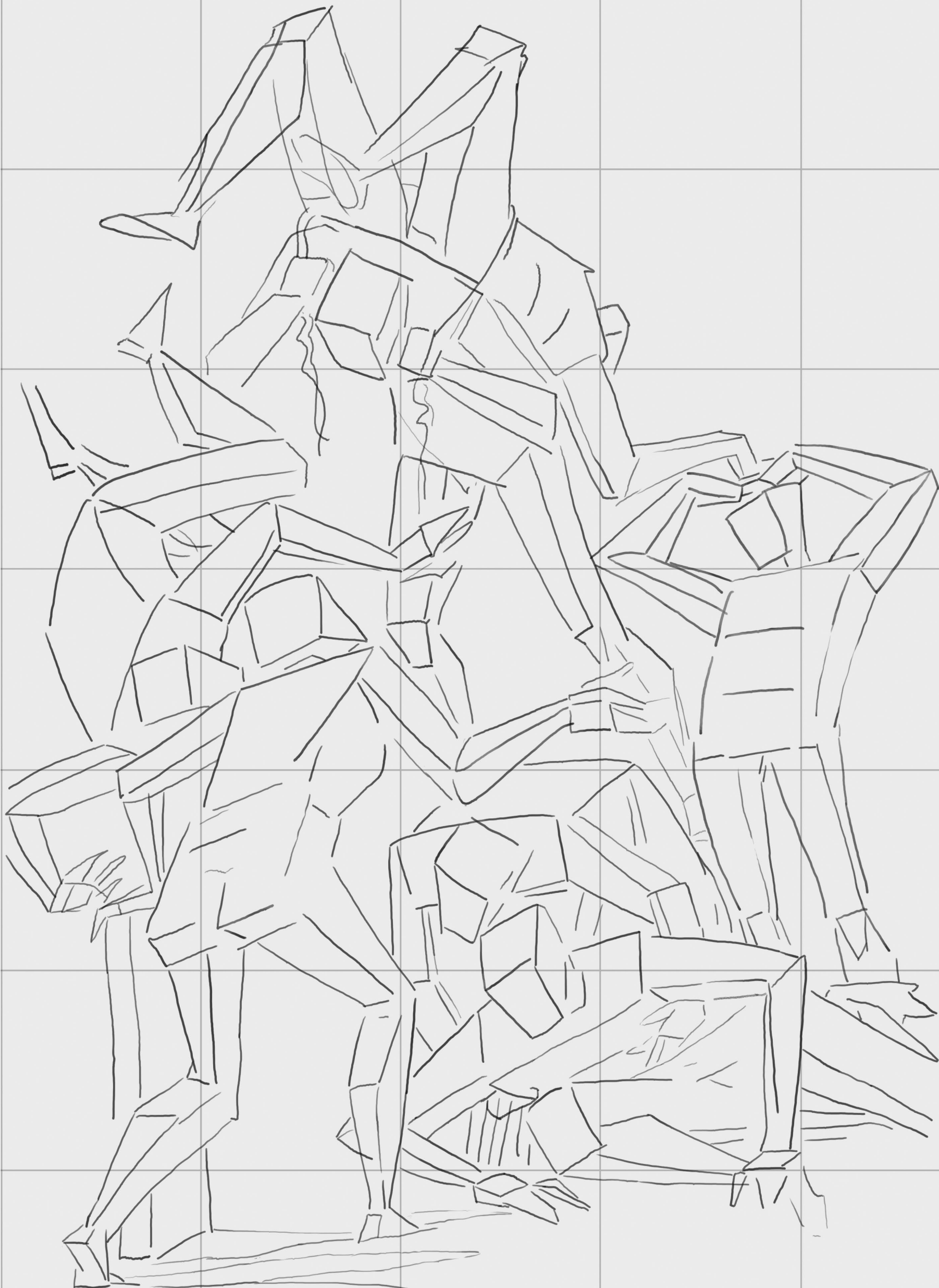
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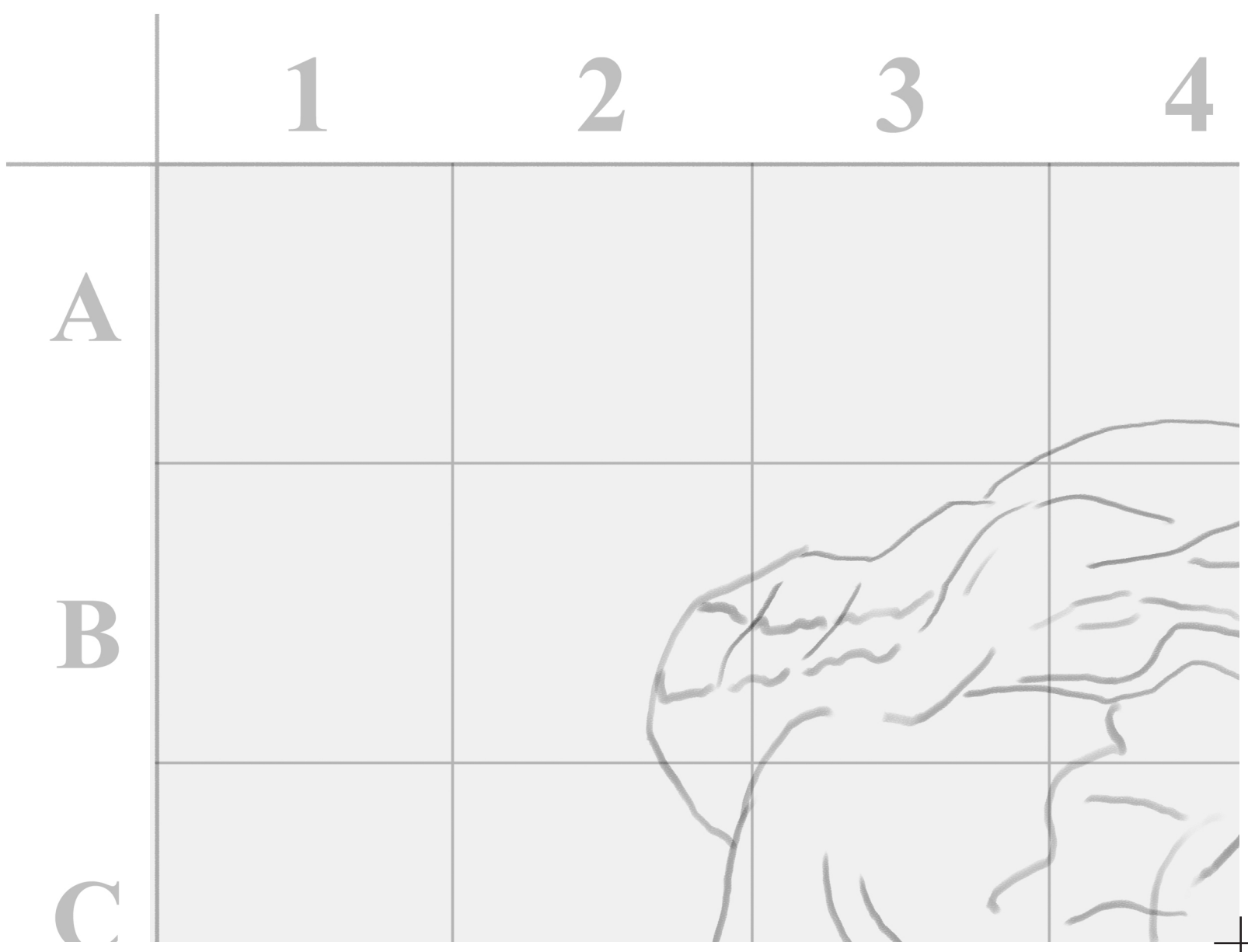
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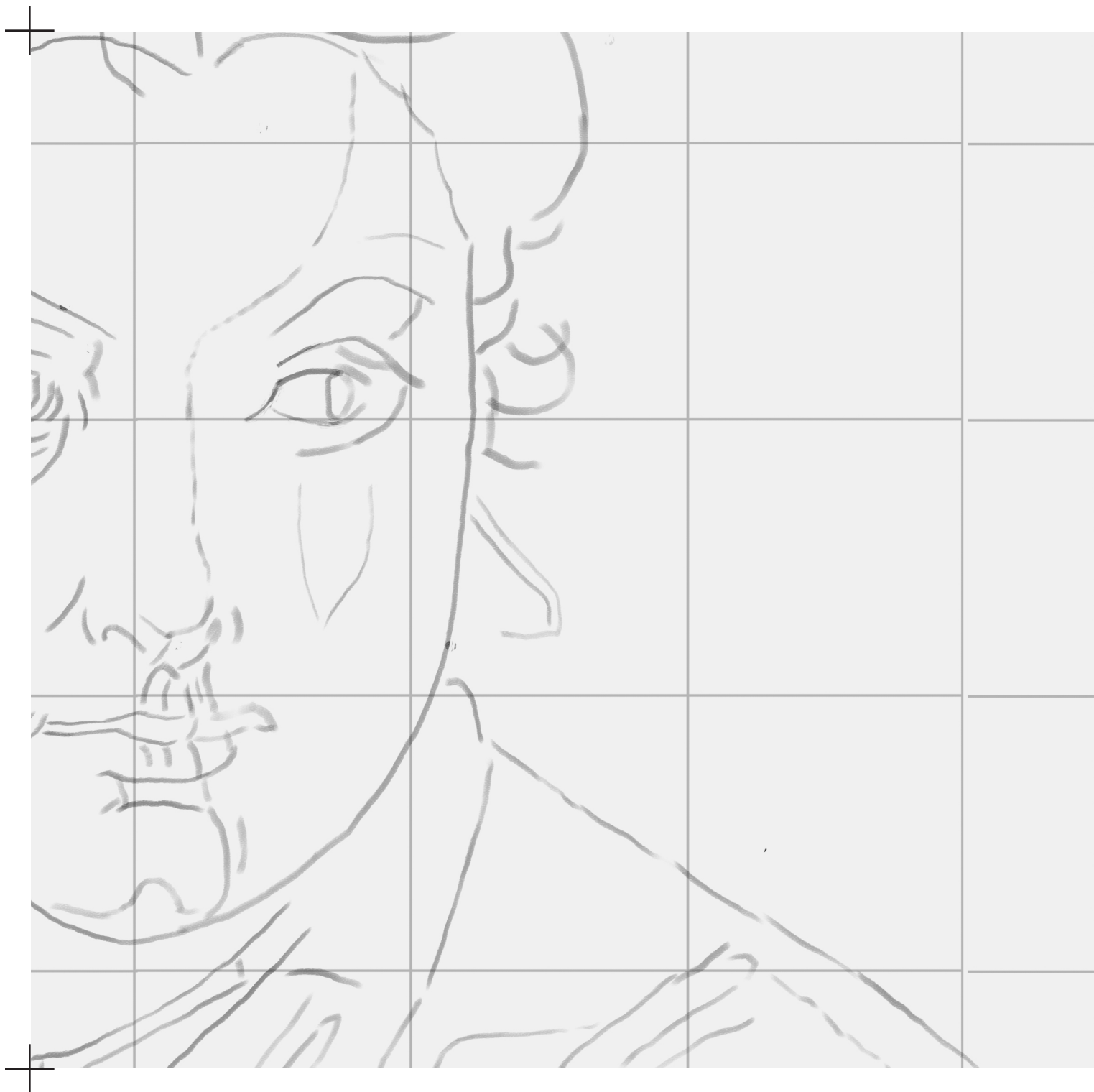
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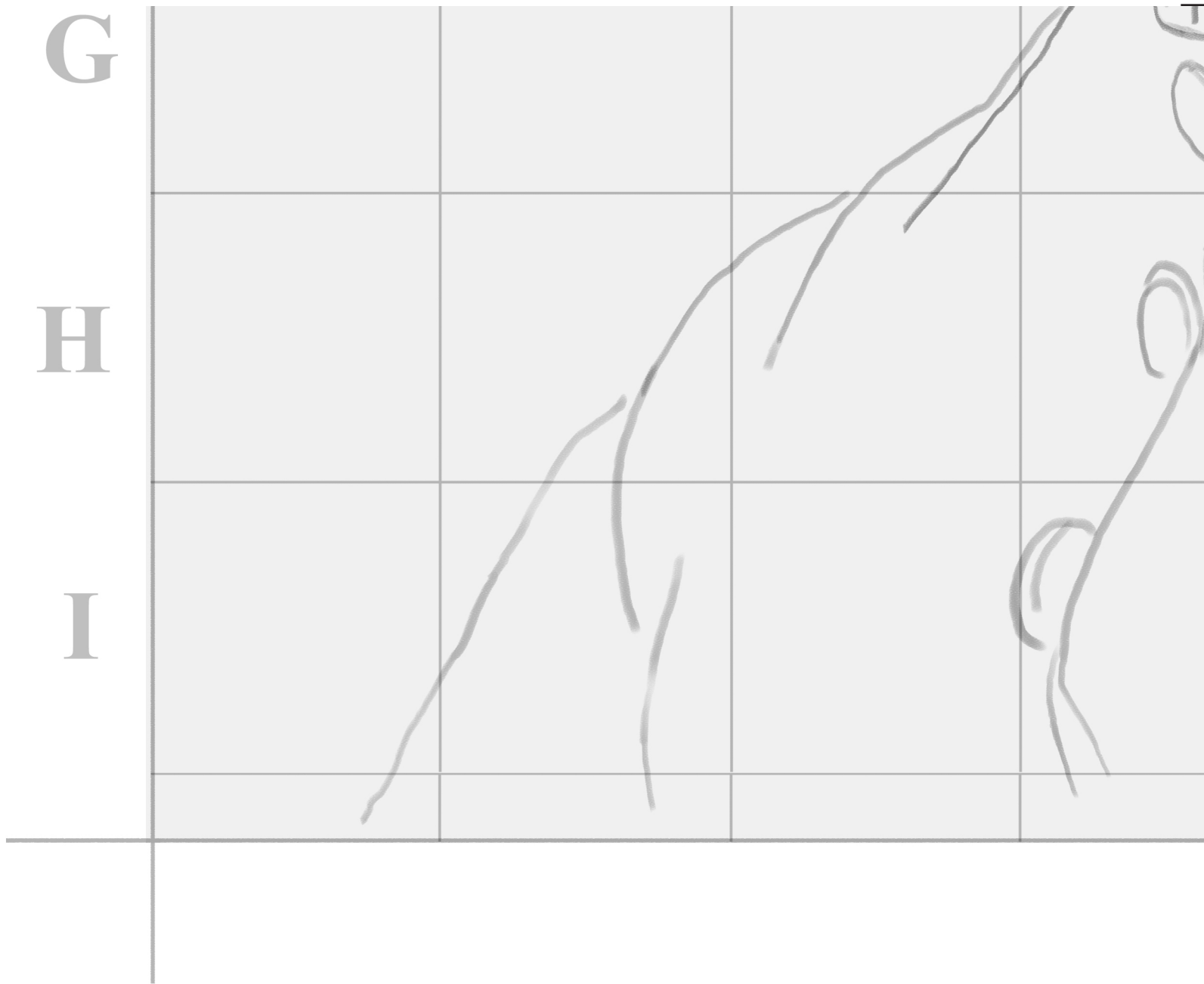


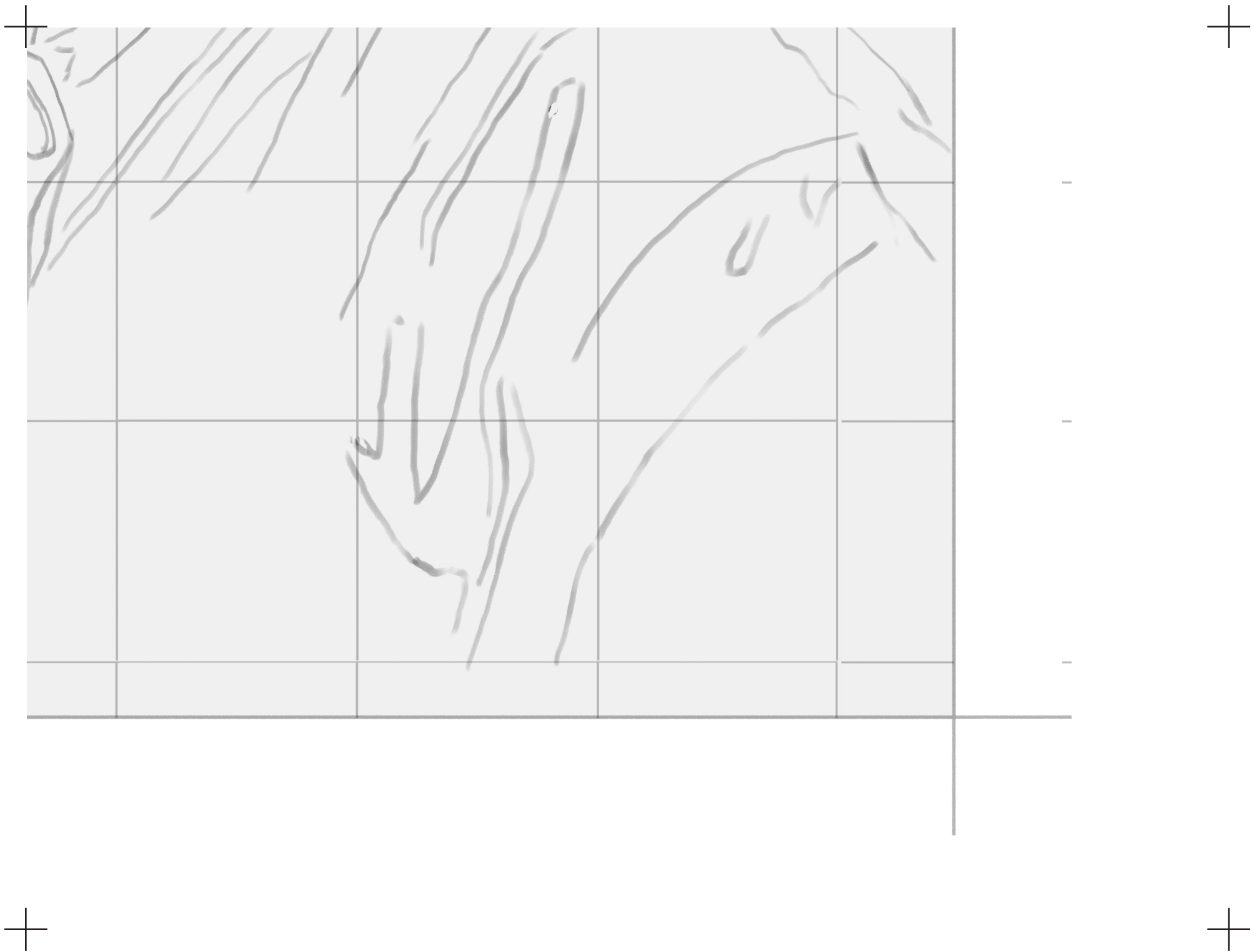


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# Lecture 13





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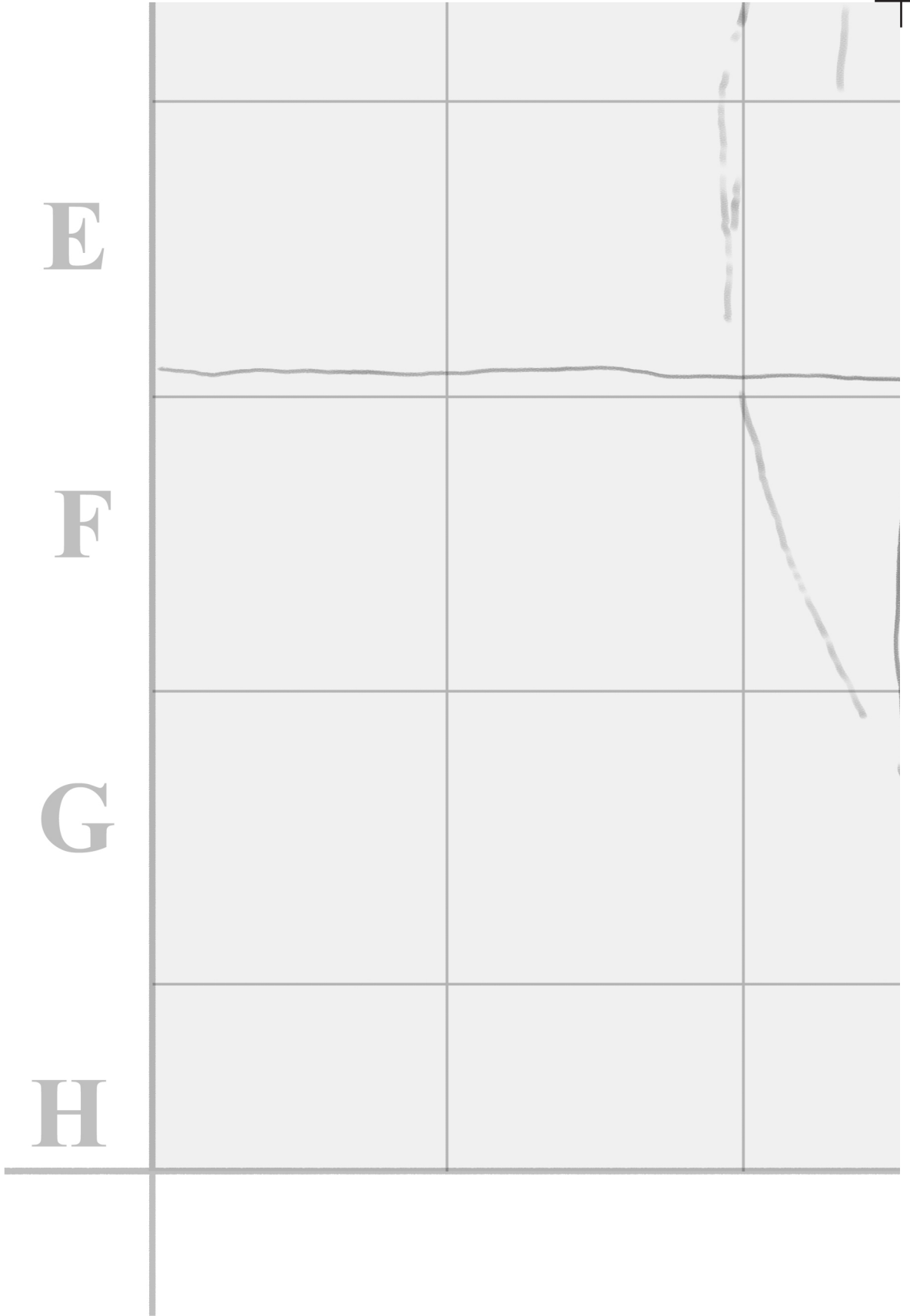


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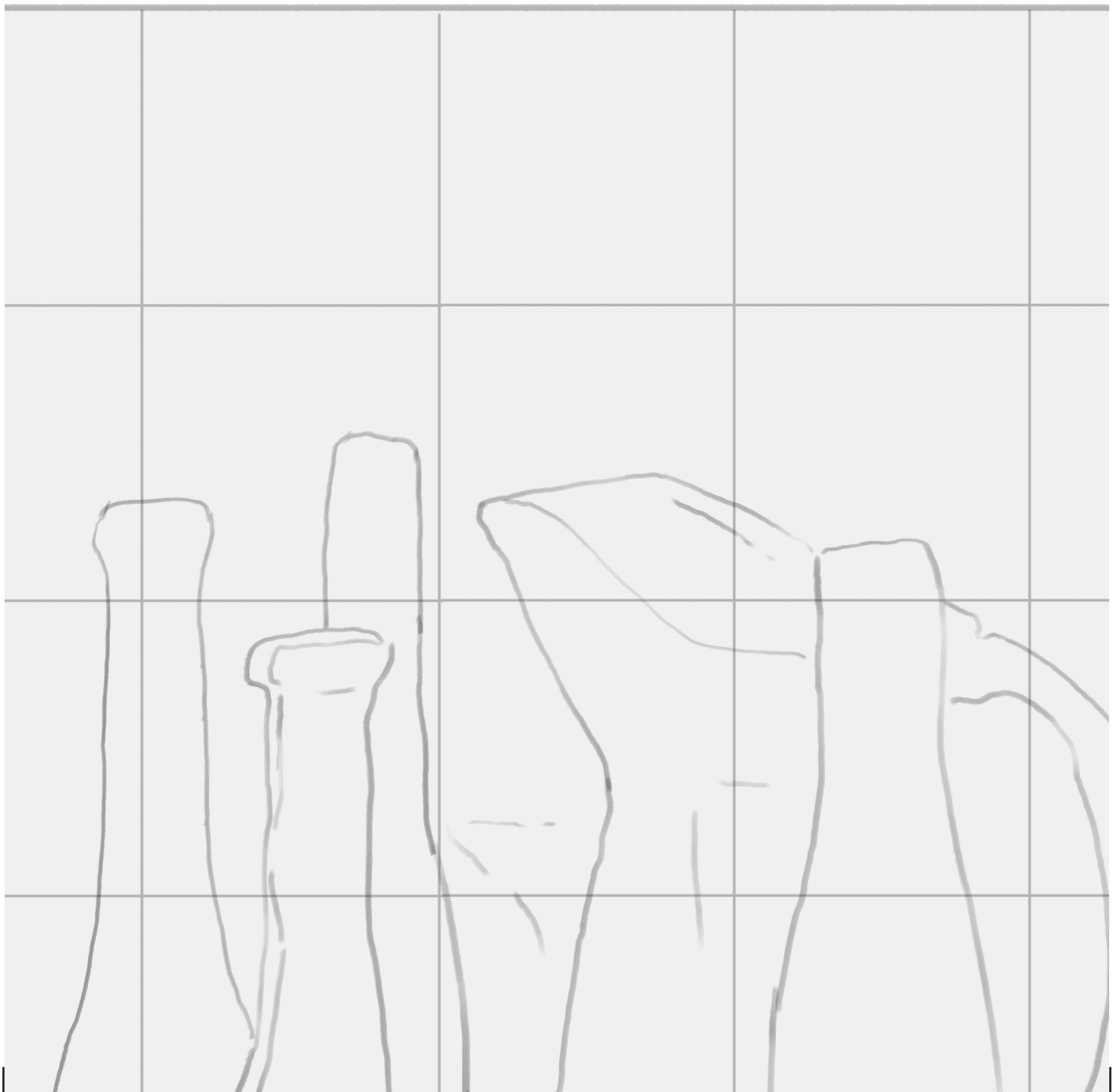


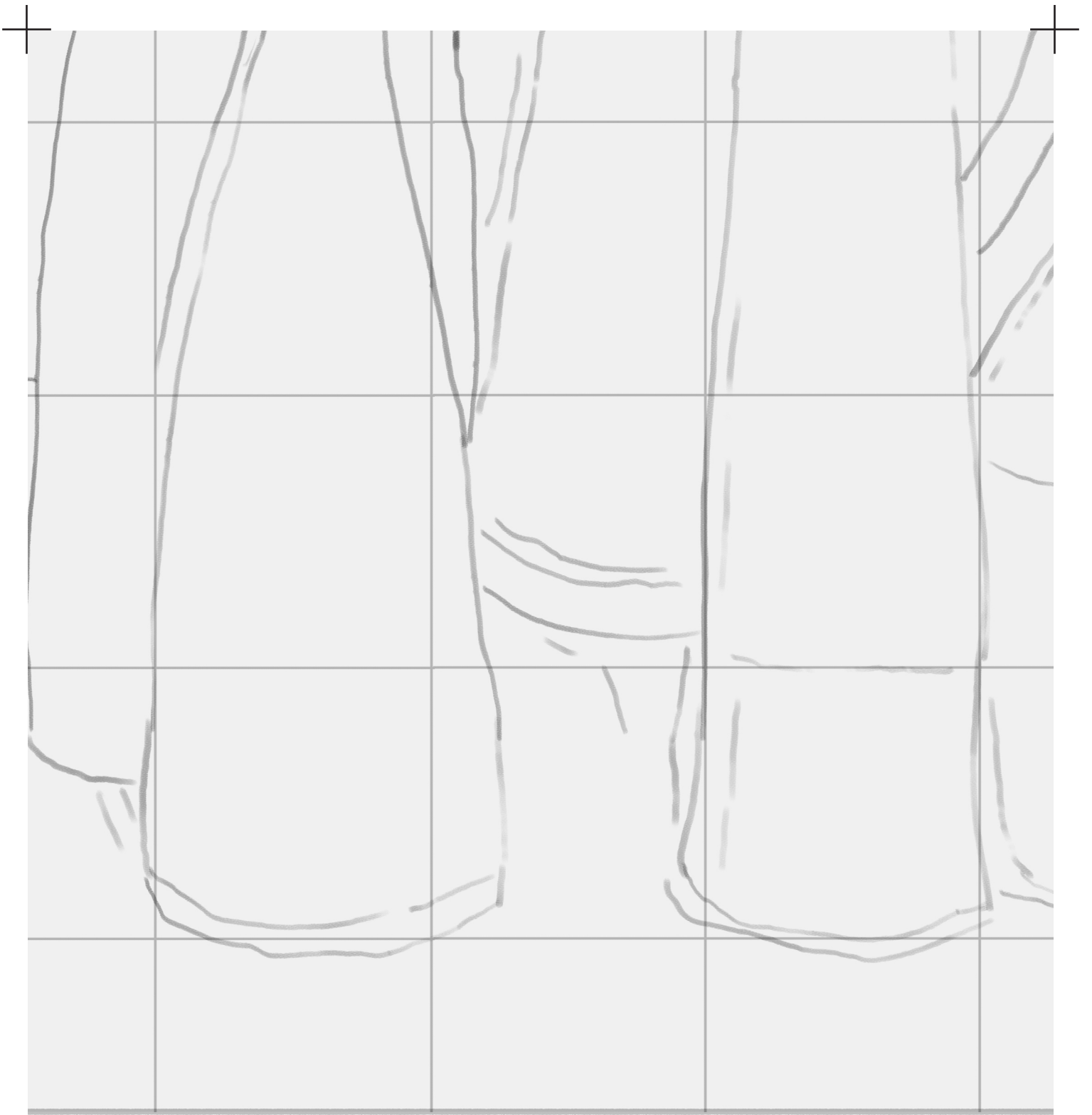


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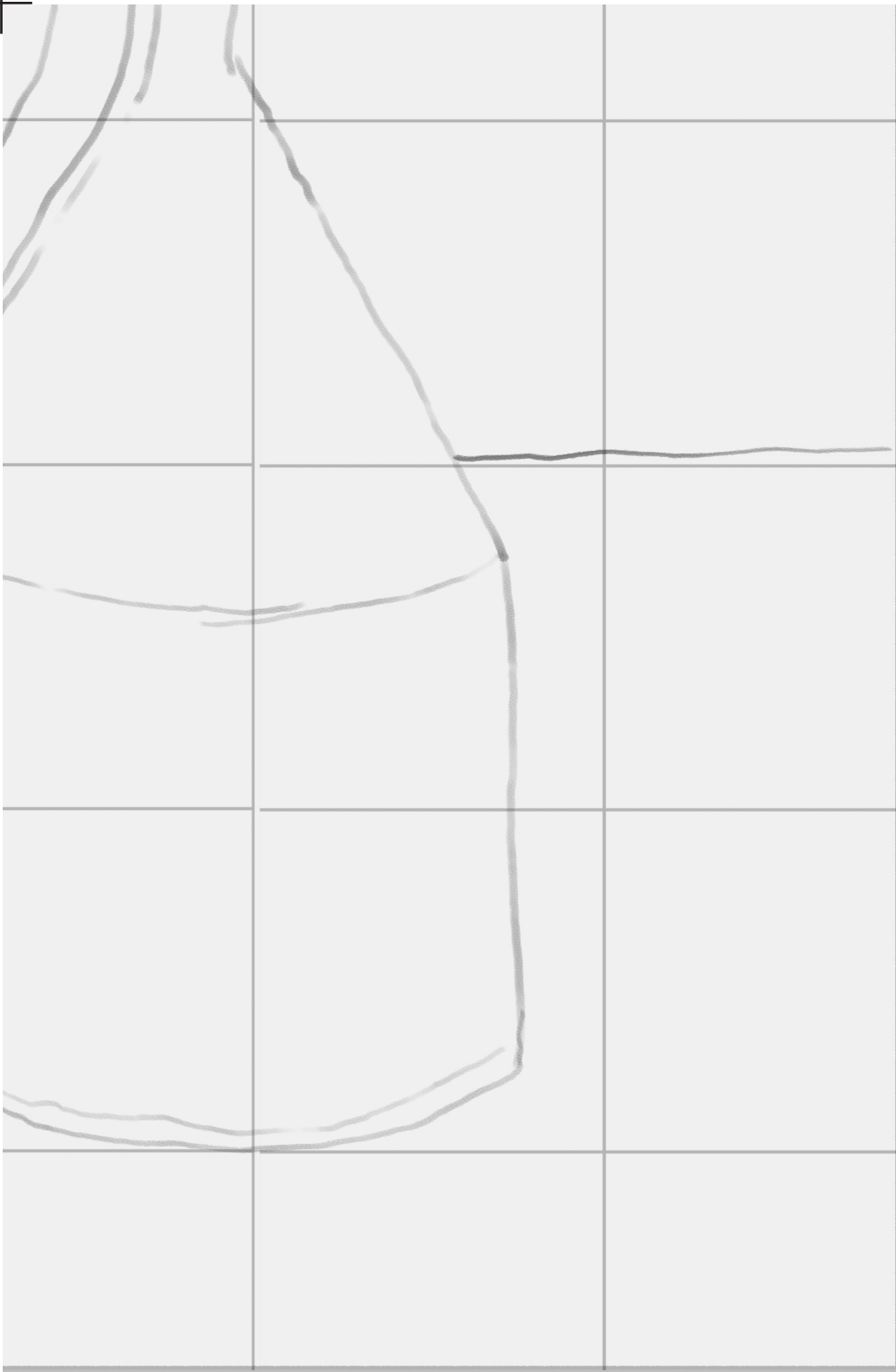


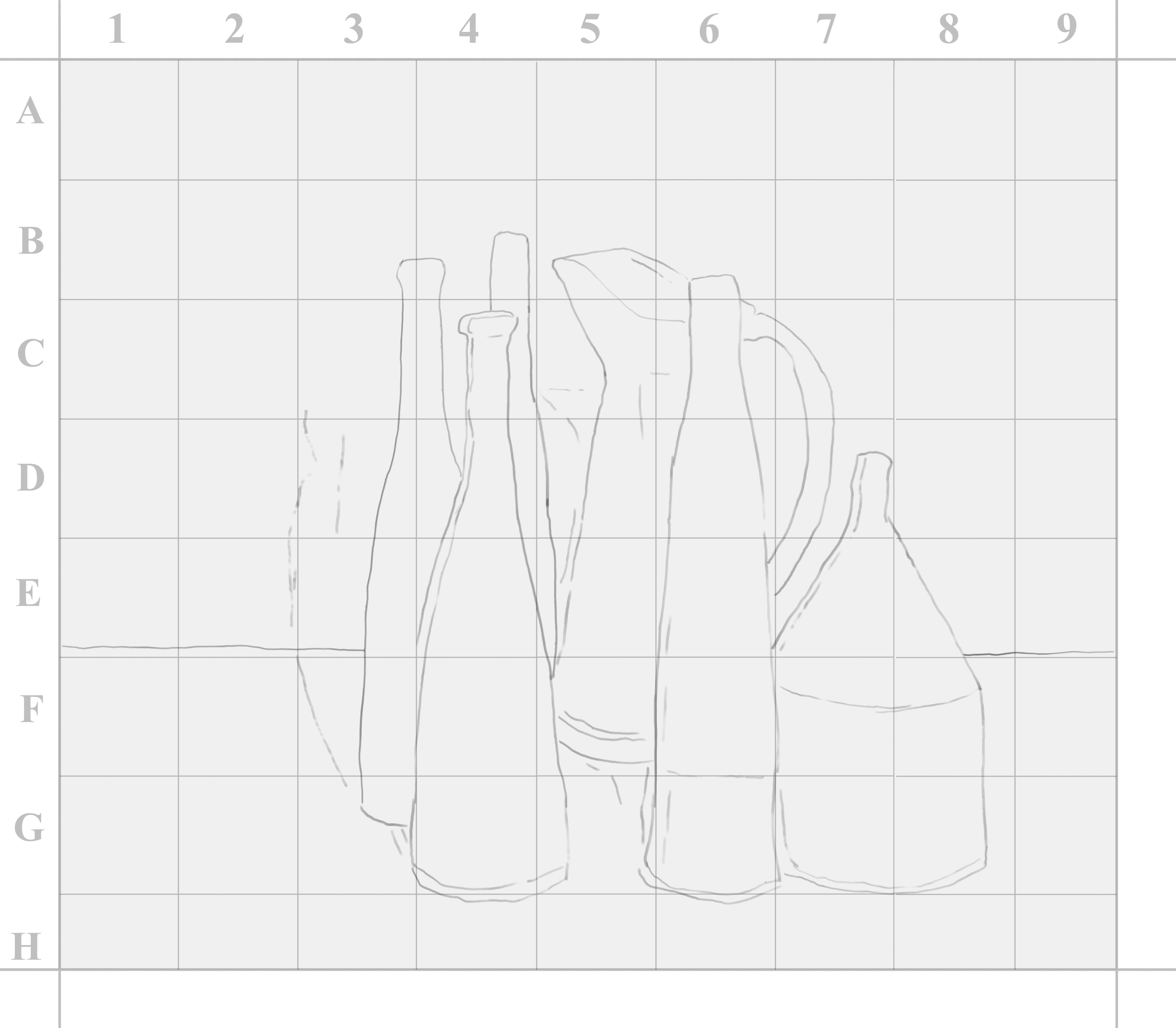
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# Lecture 17





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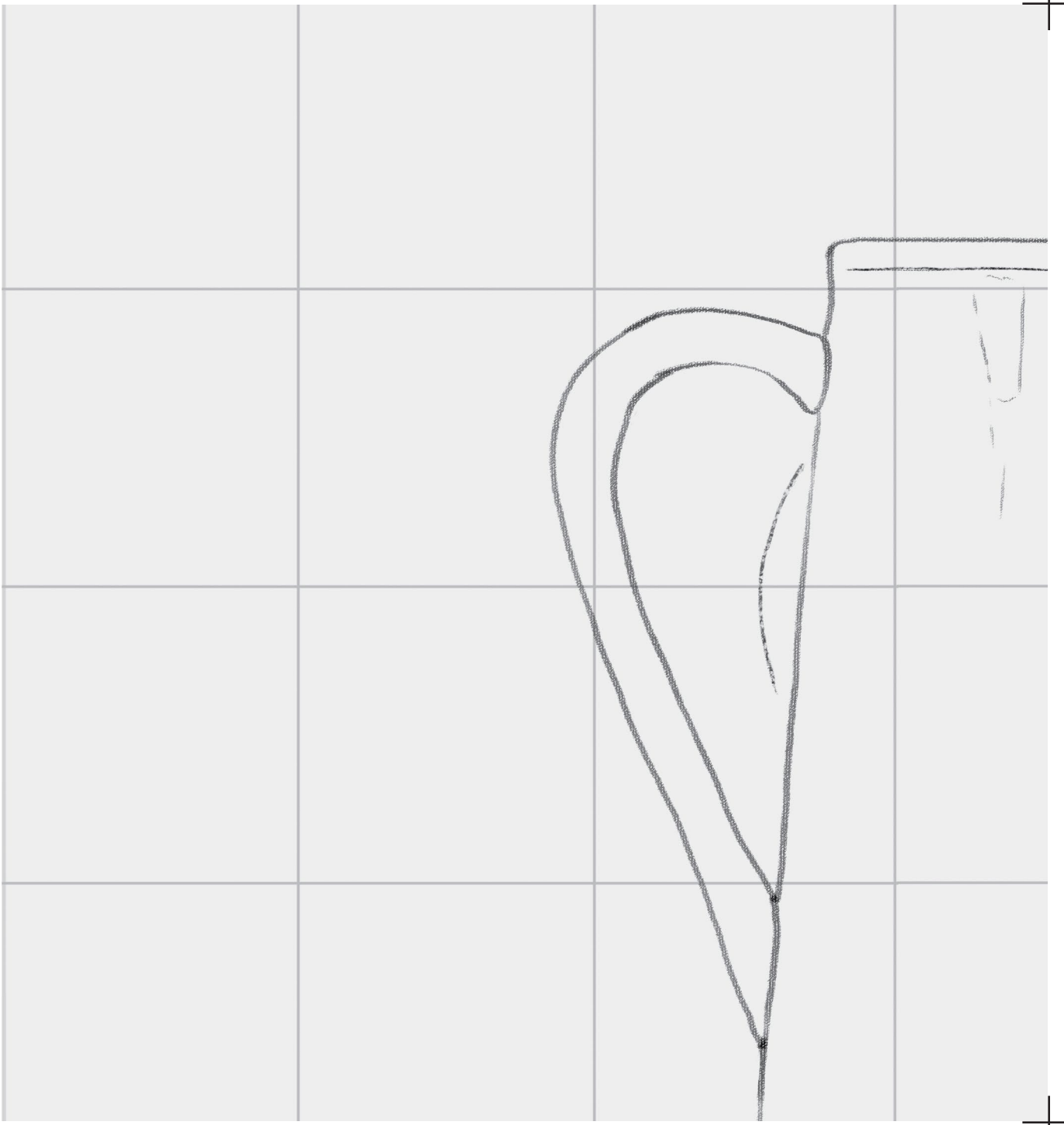


**C**

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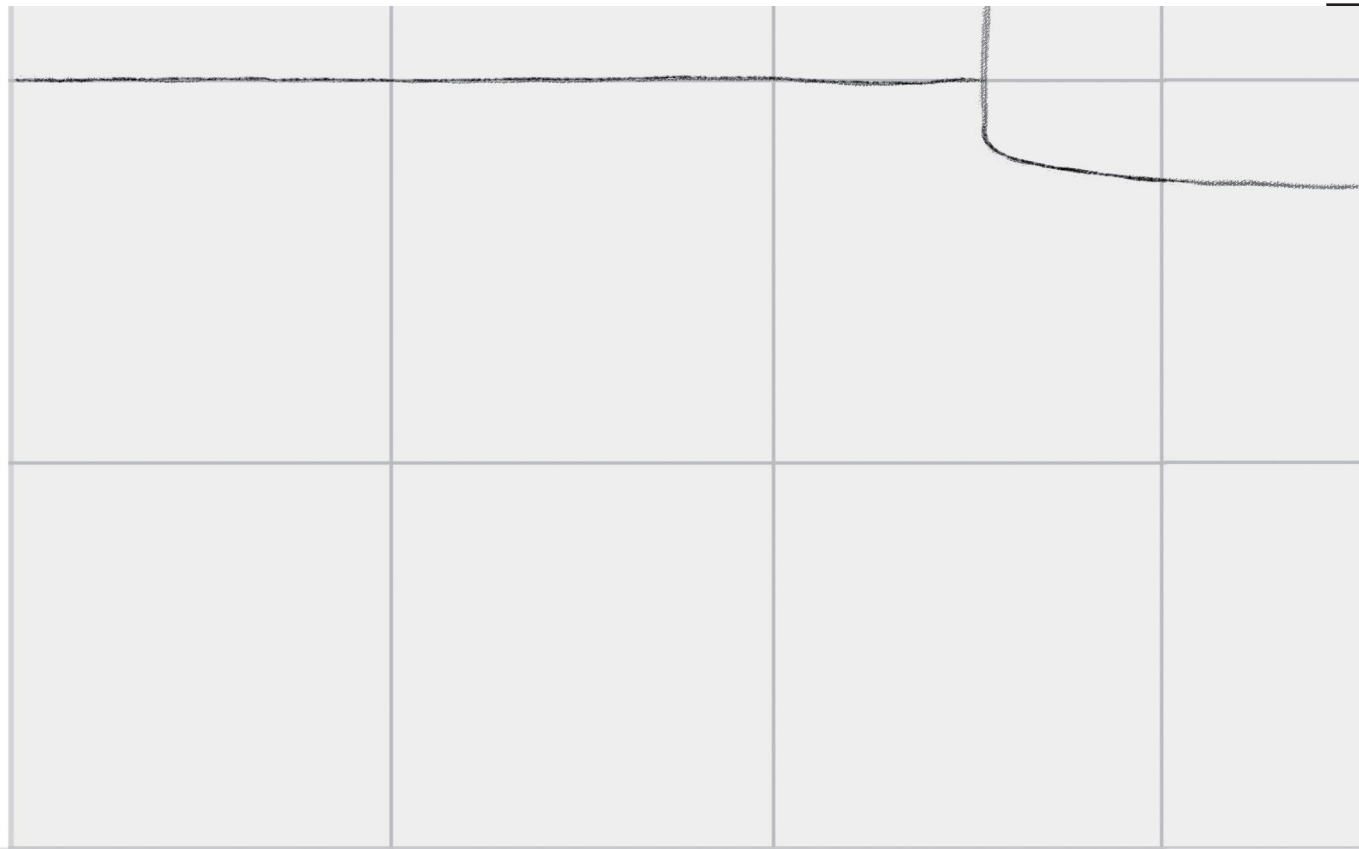
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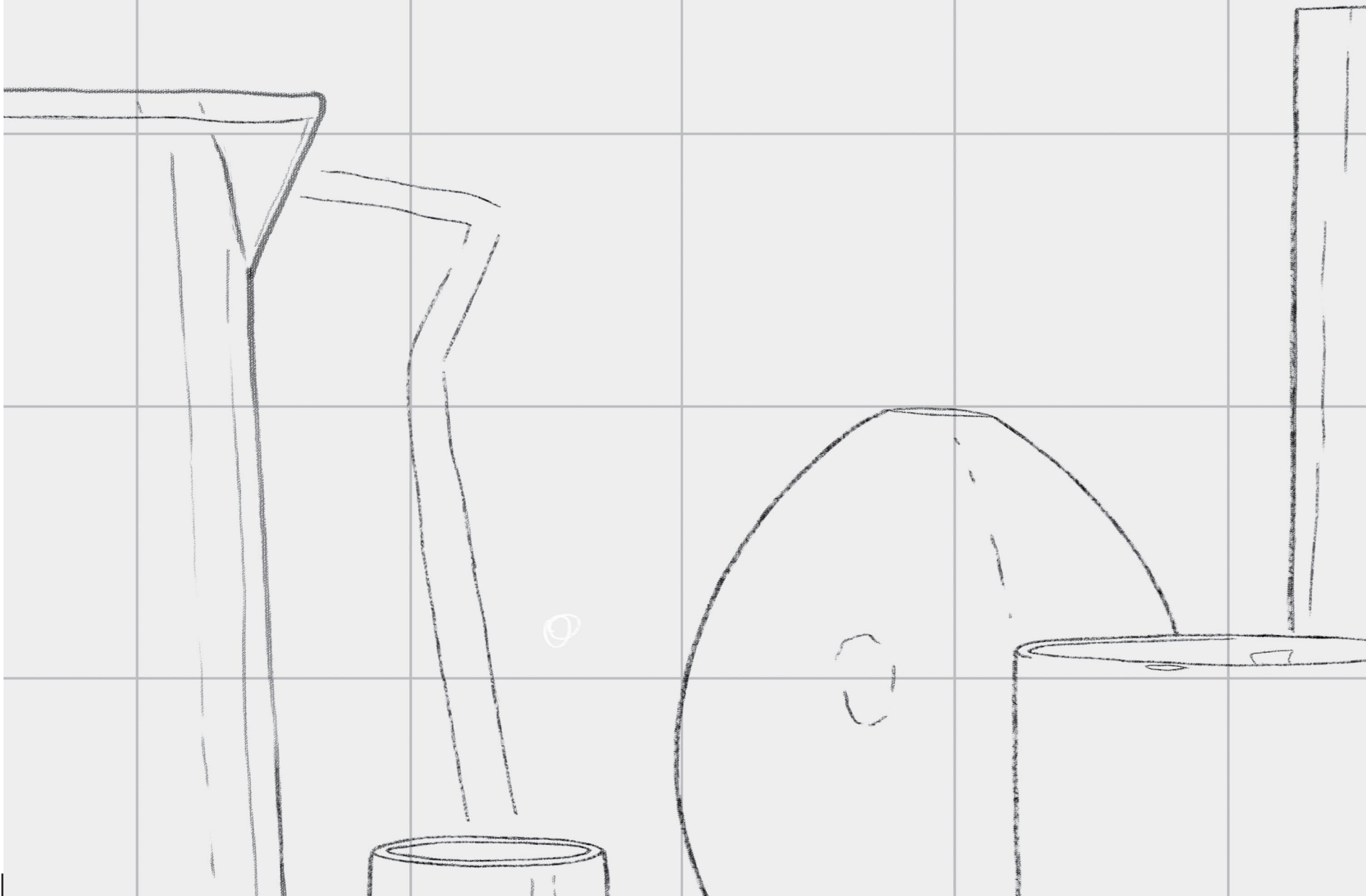
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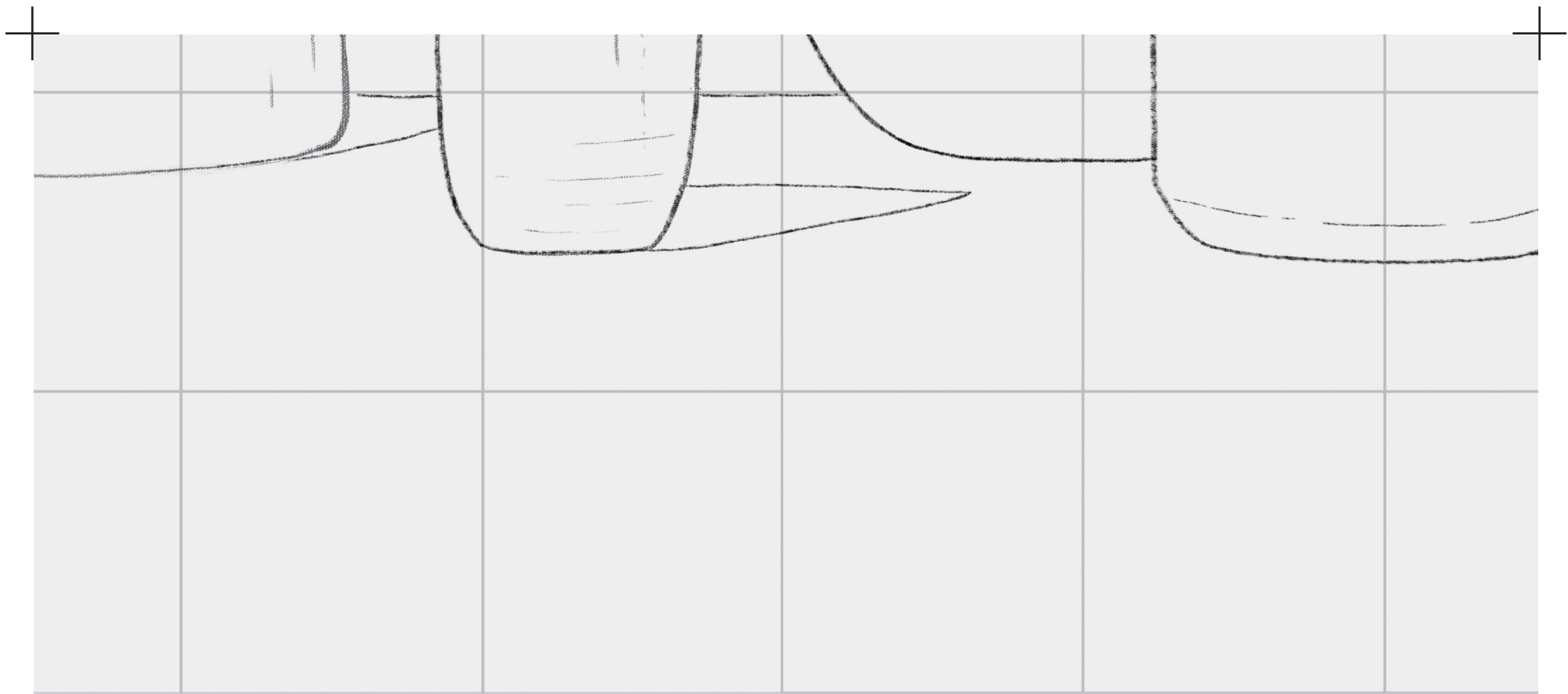
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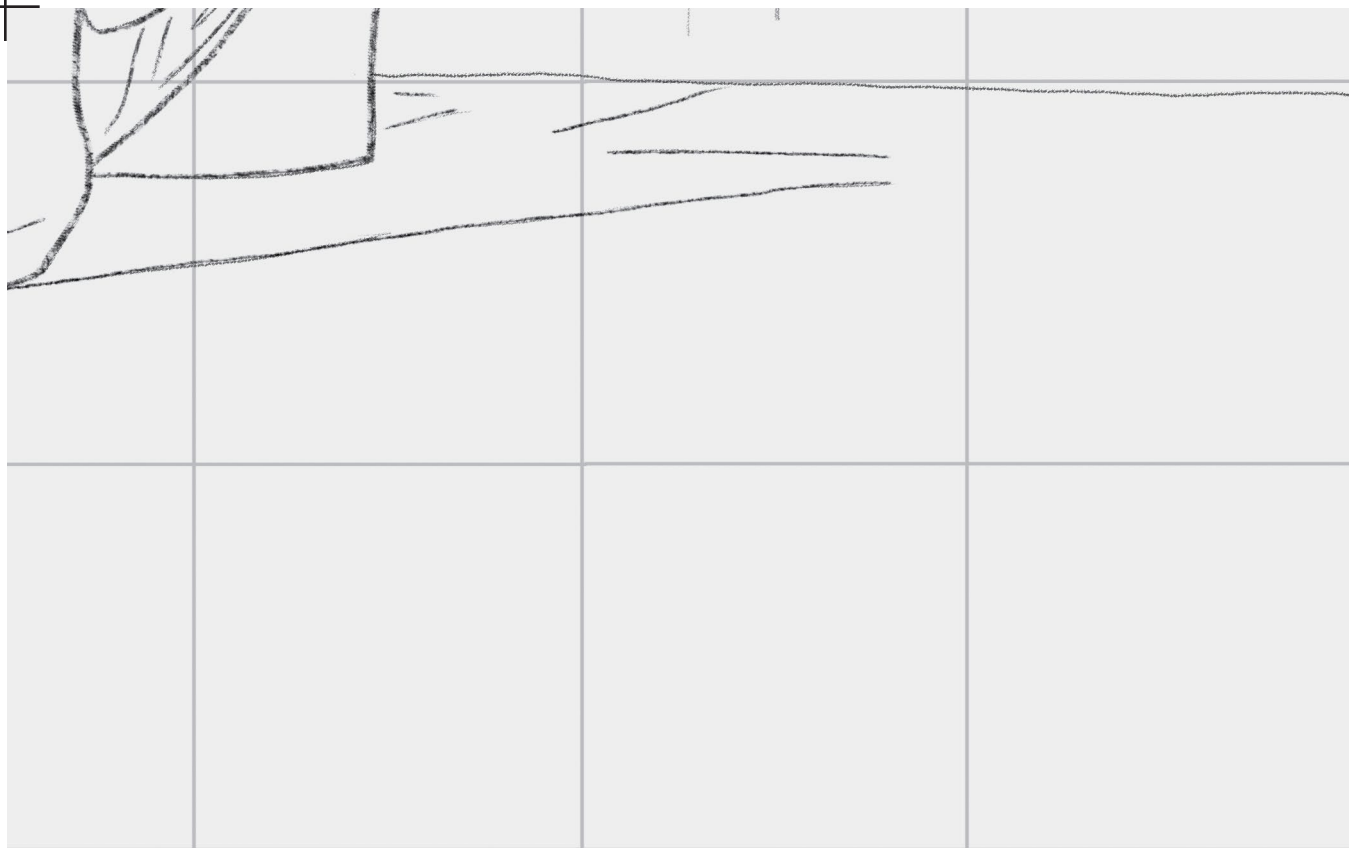
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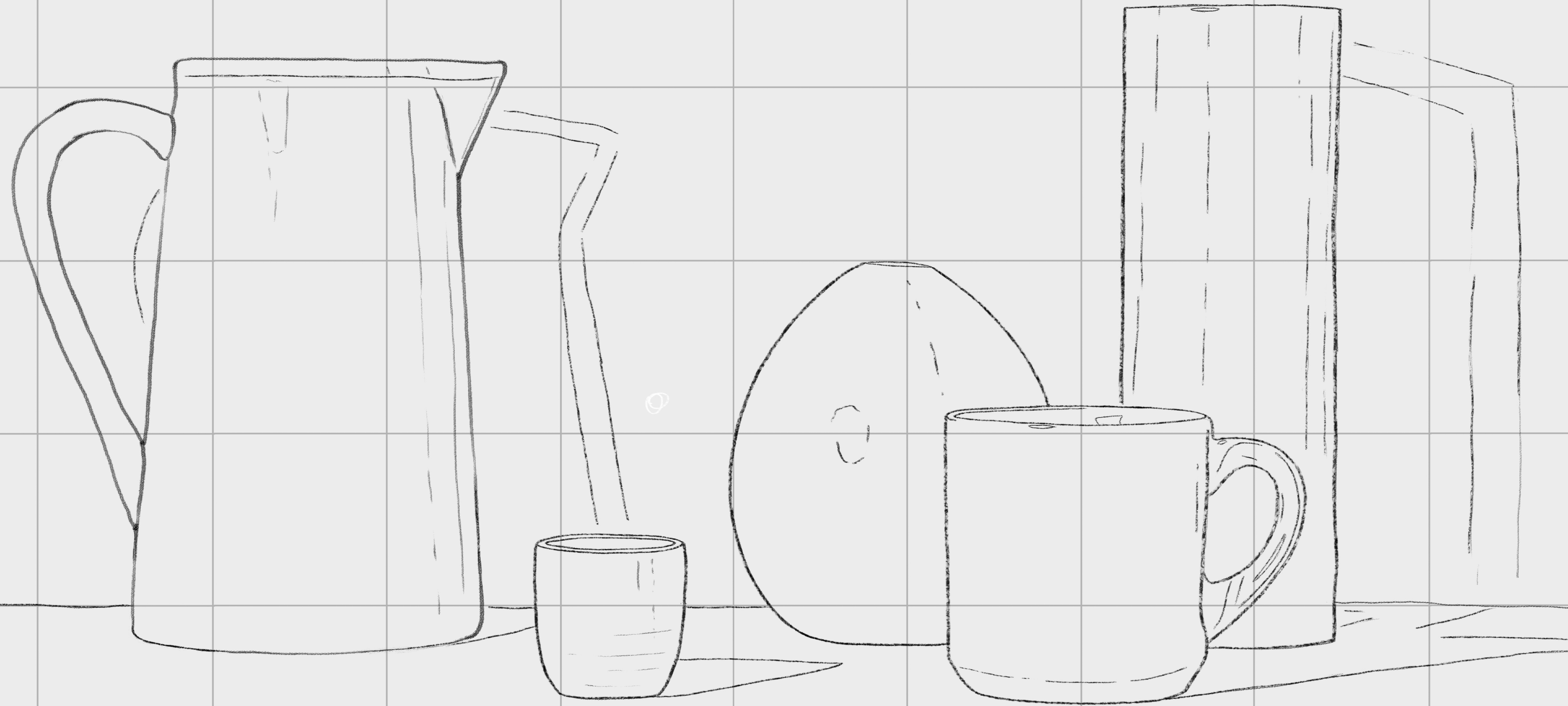
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# Lecture 18





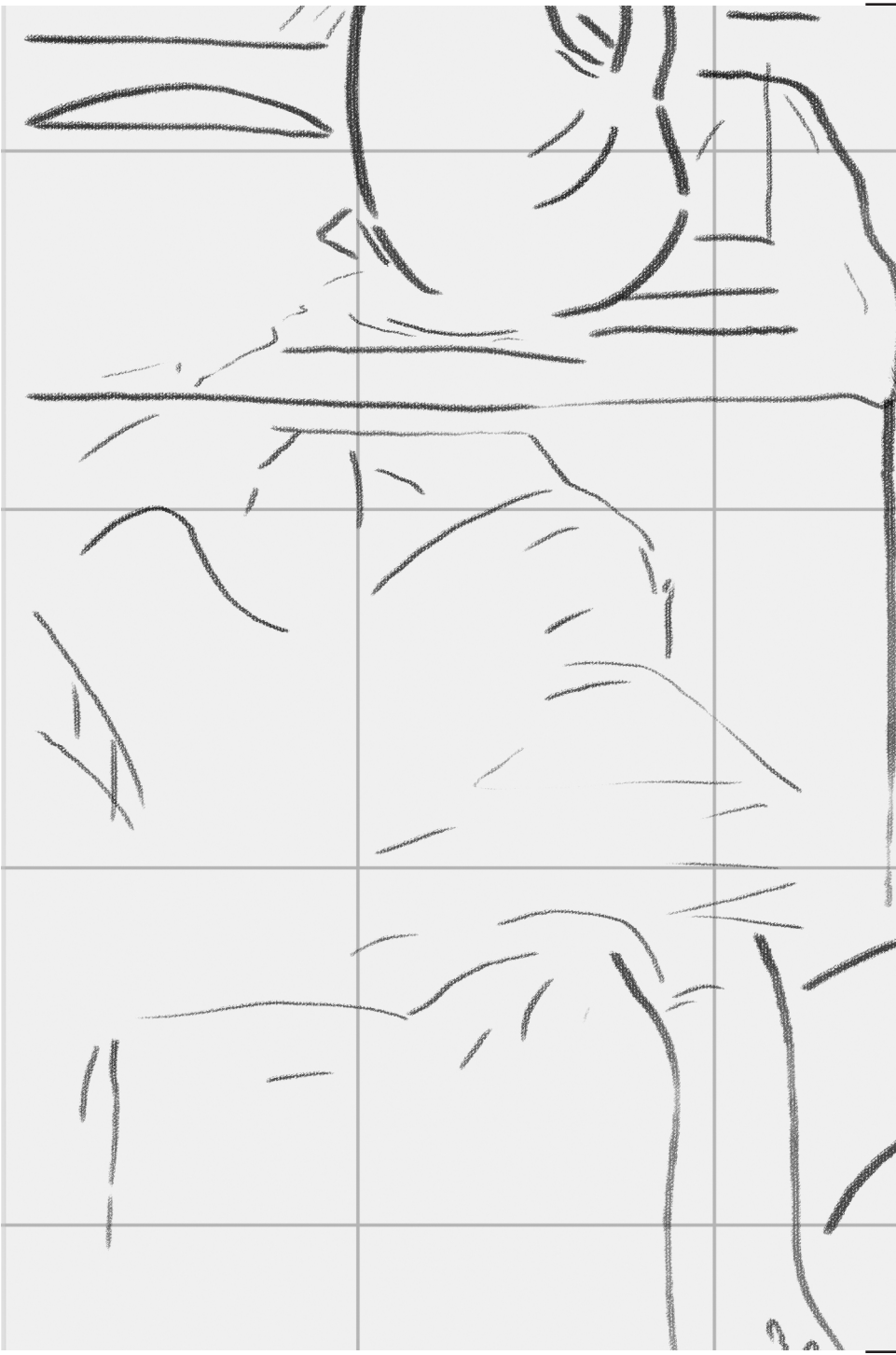


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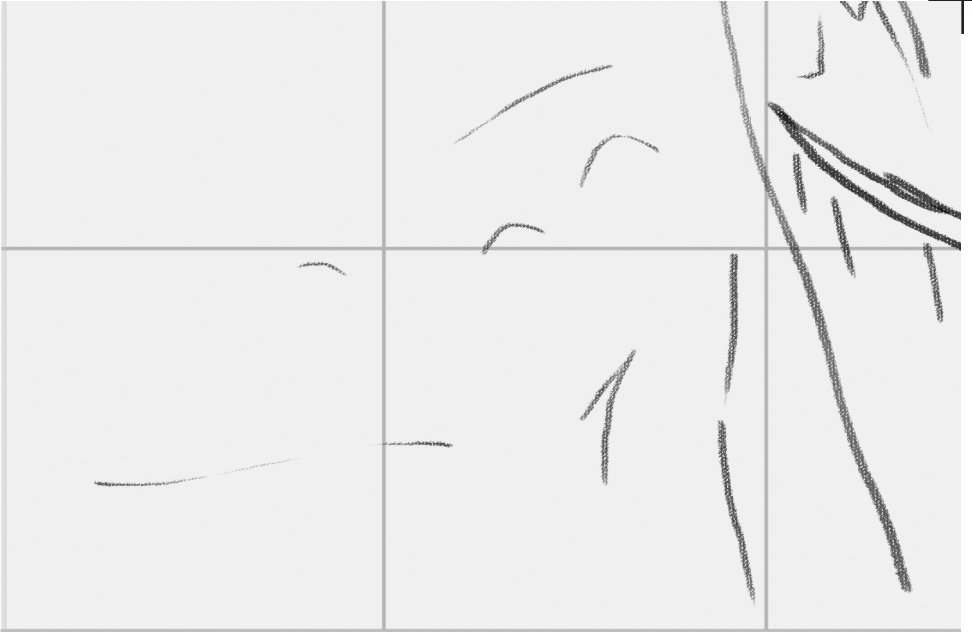
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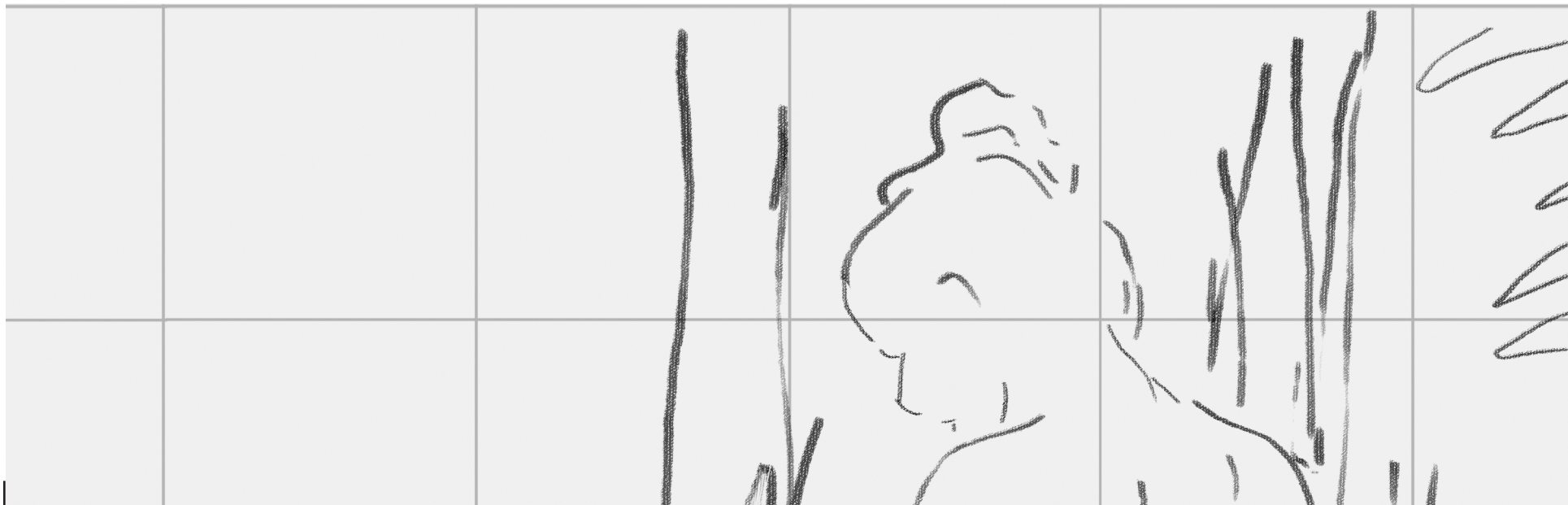
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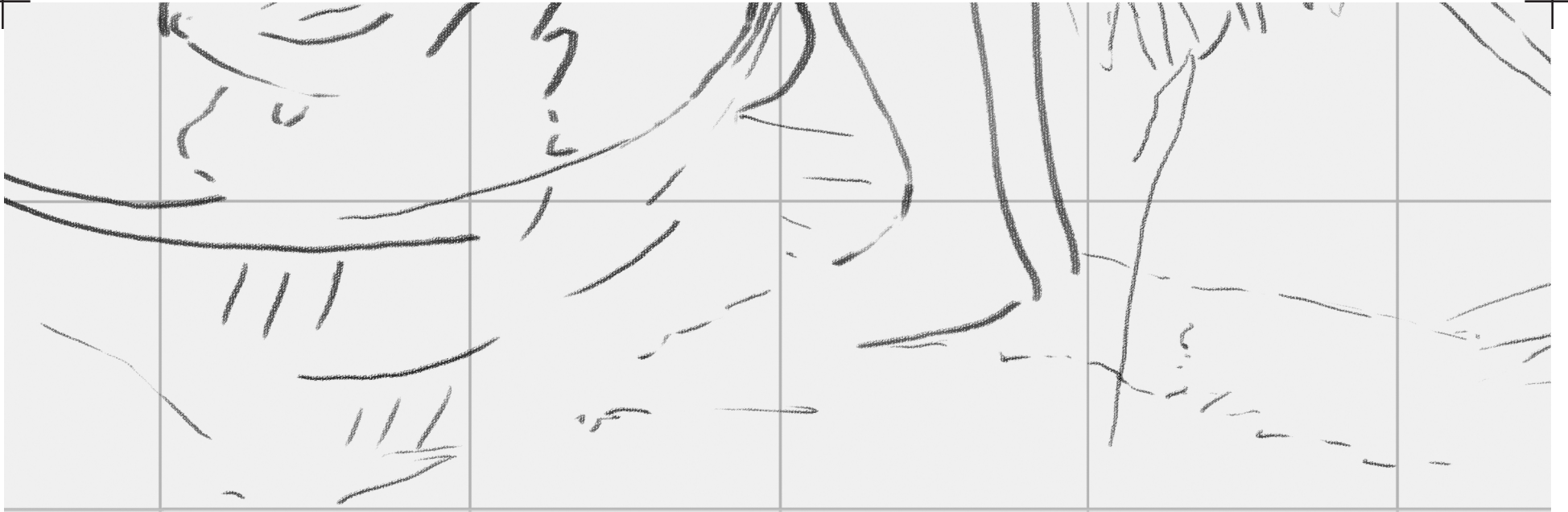
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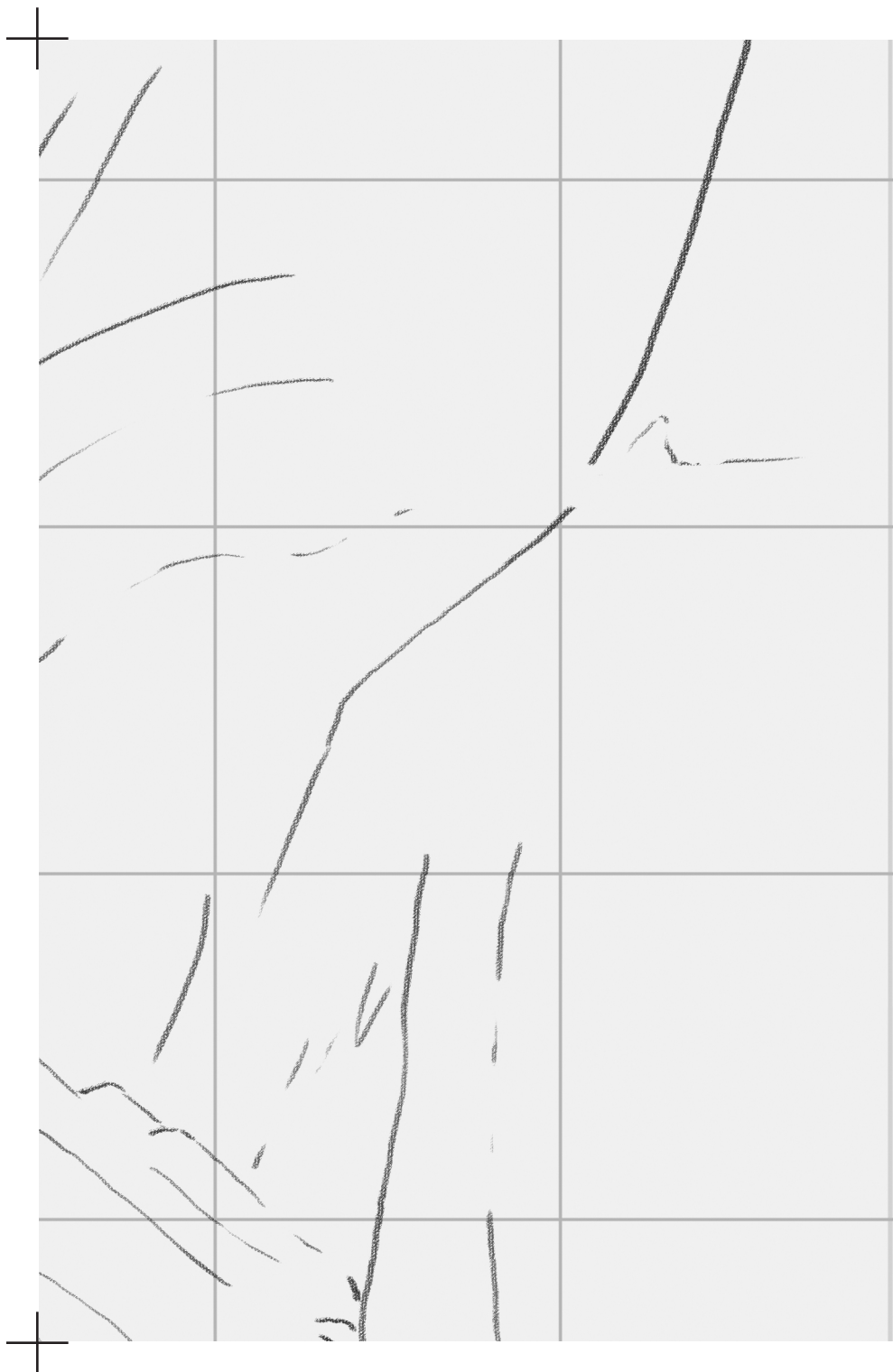


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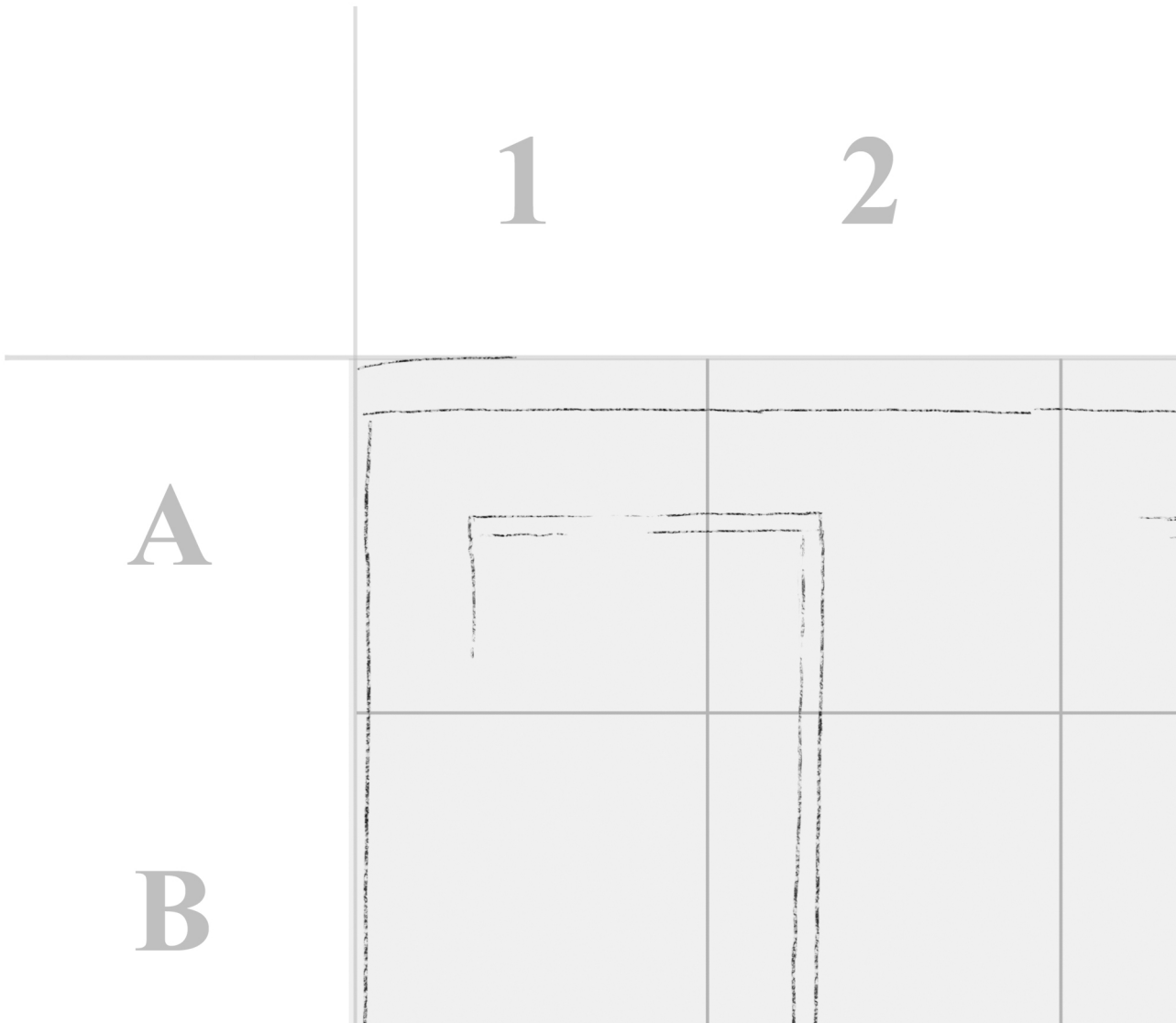
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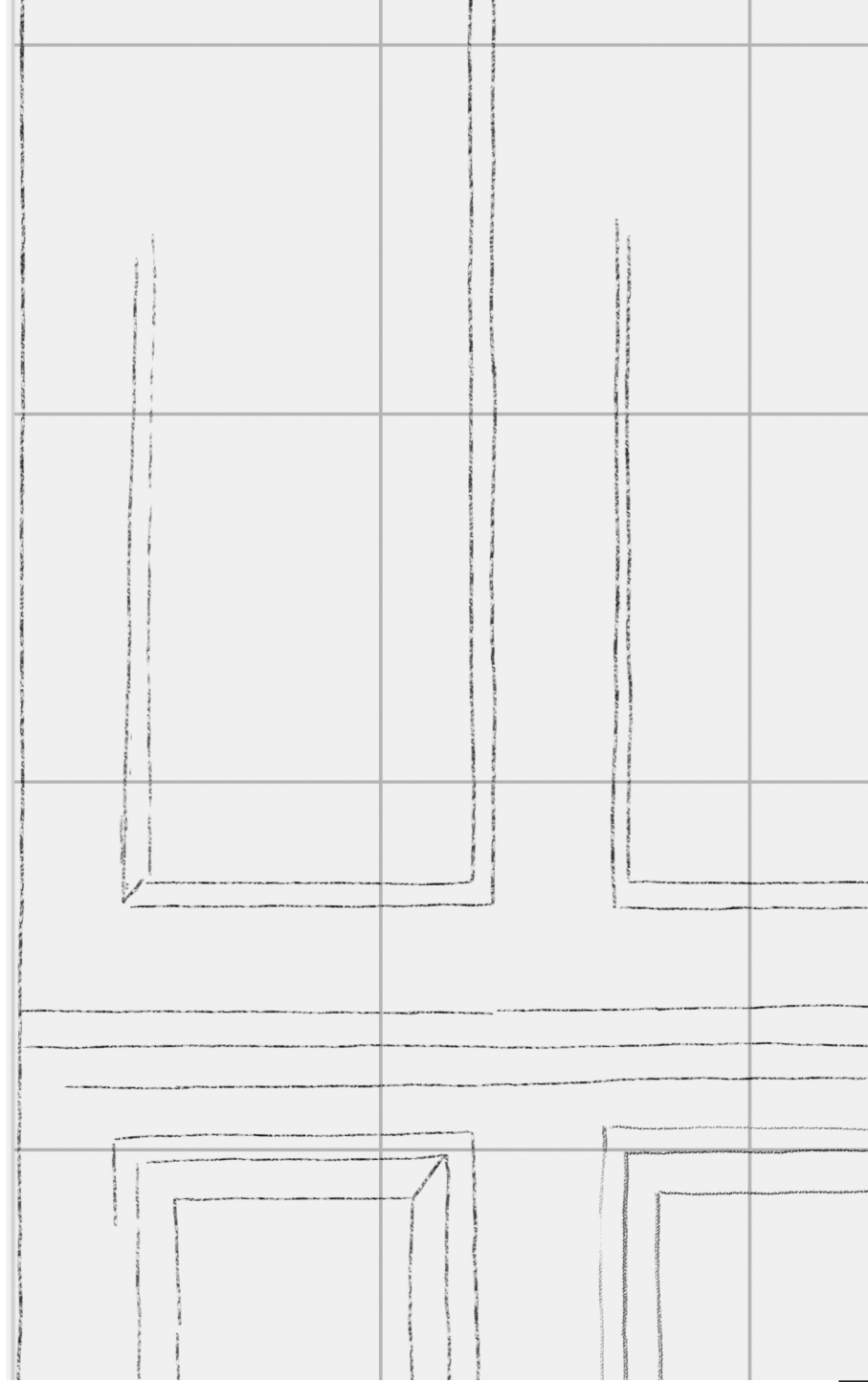


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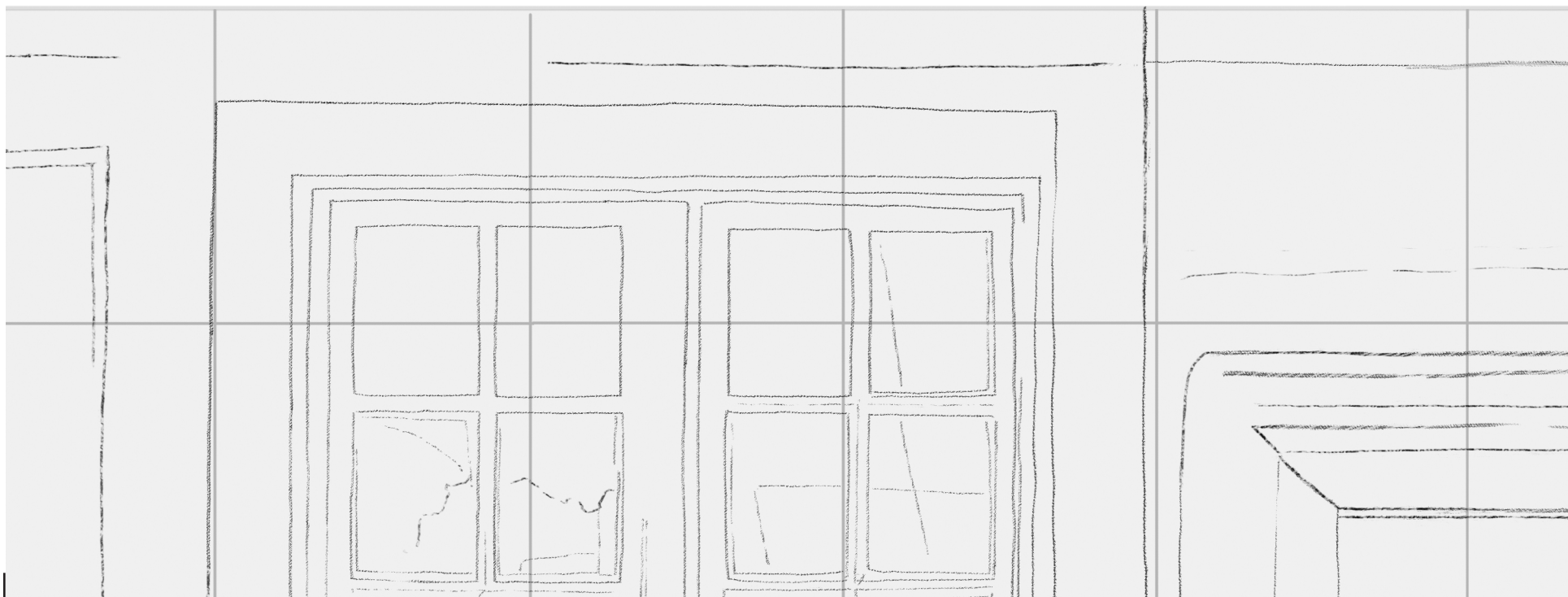
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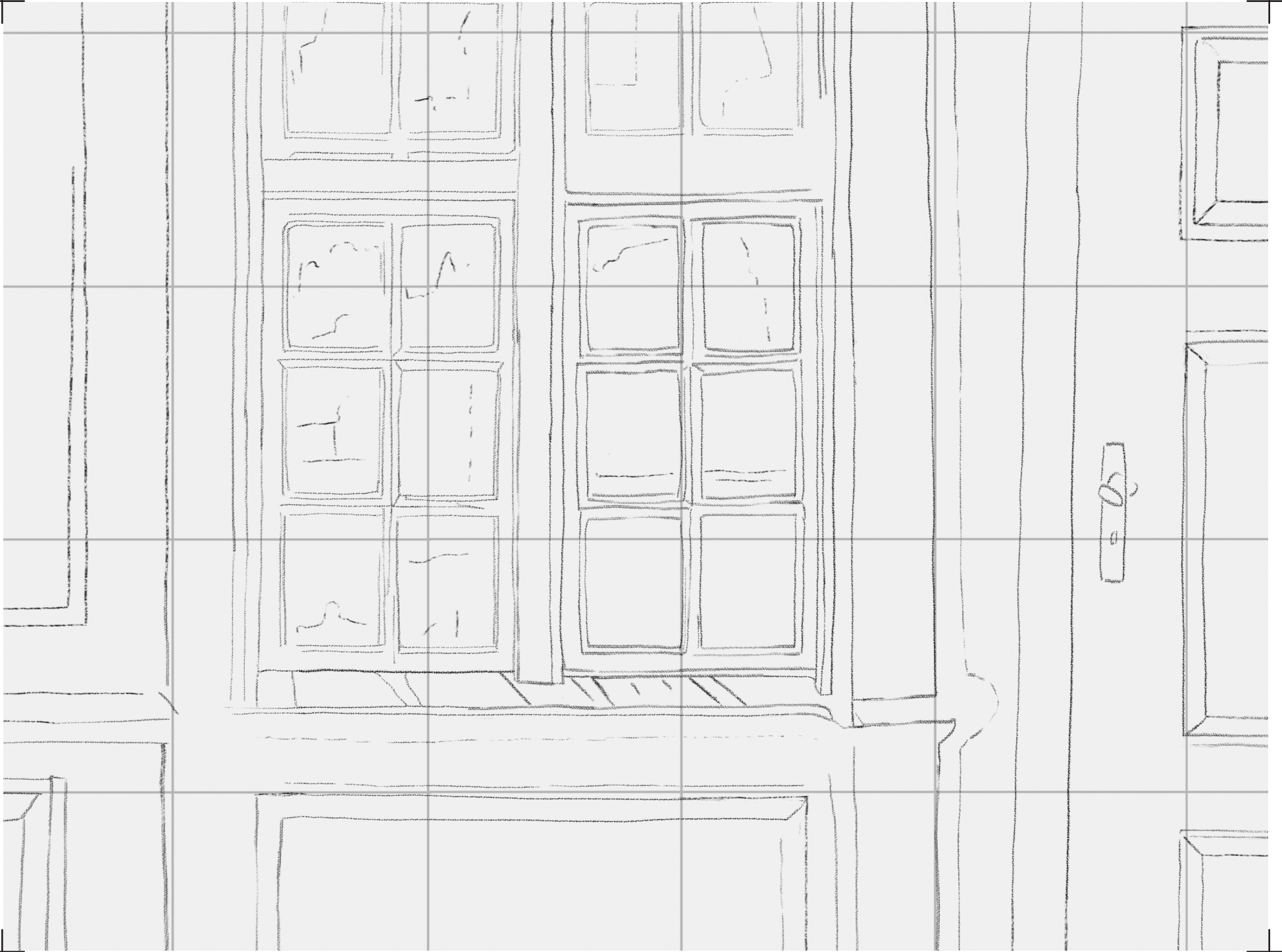
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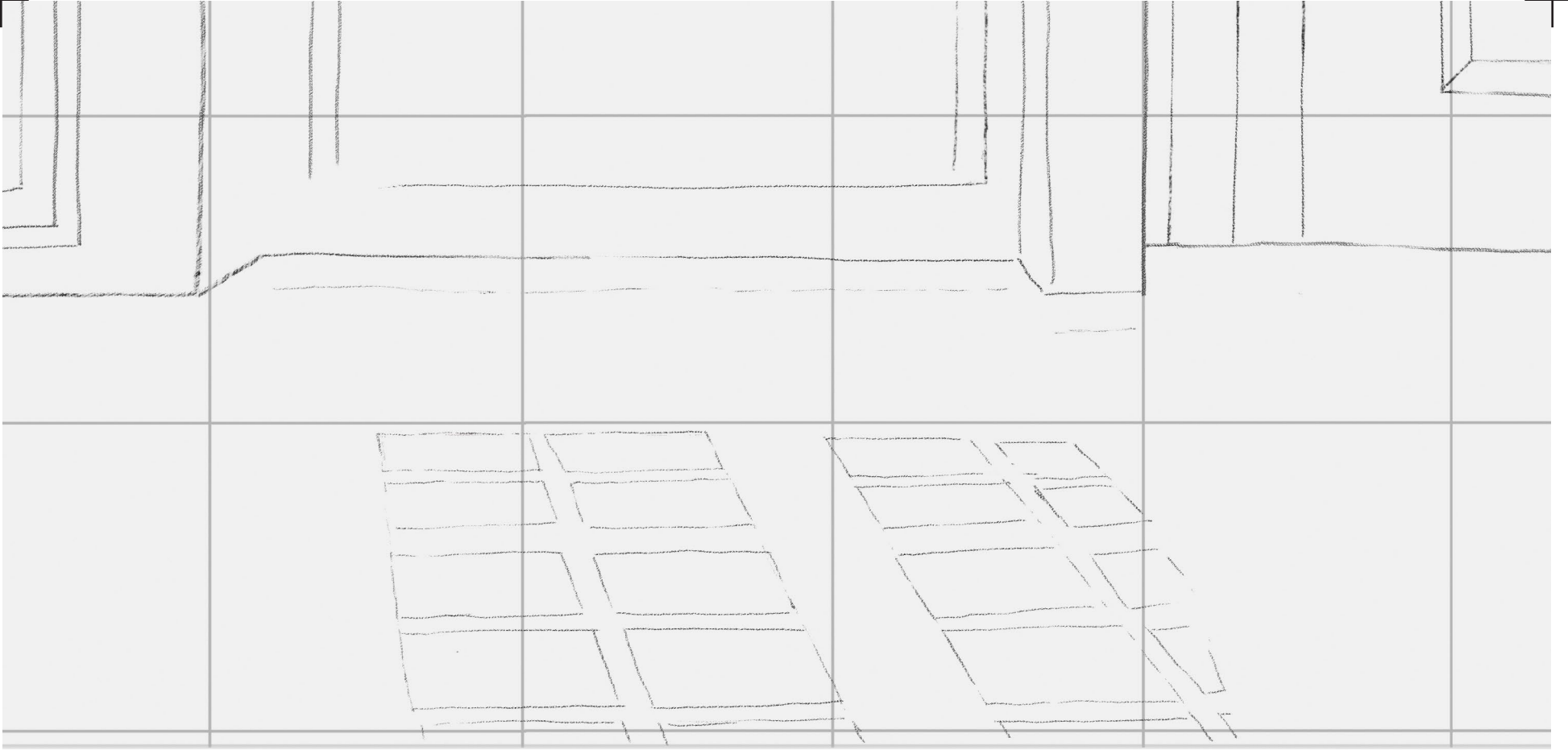
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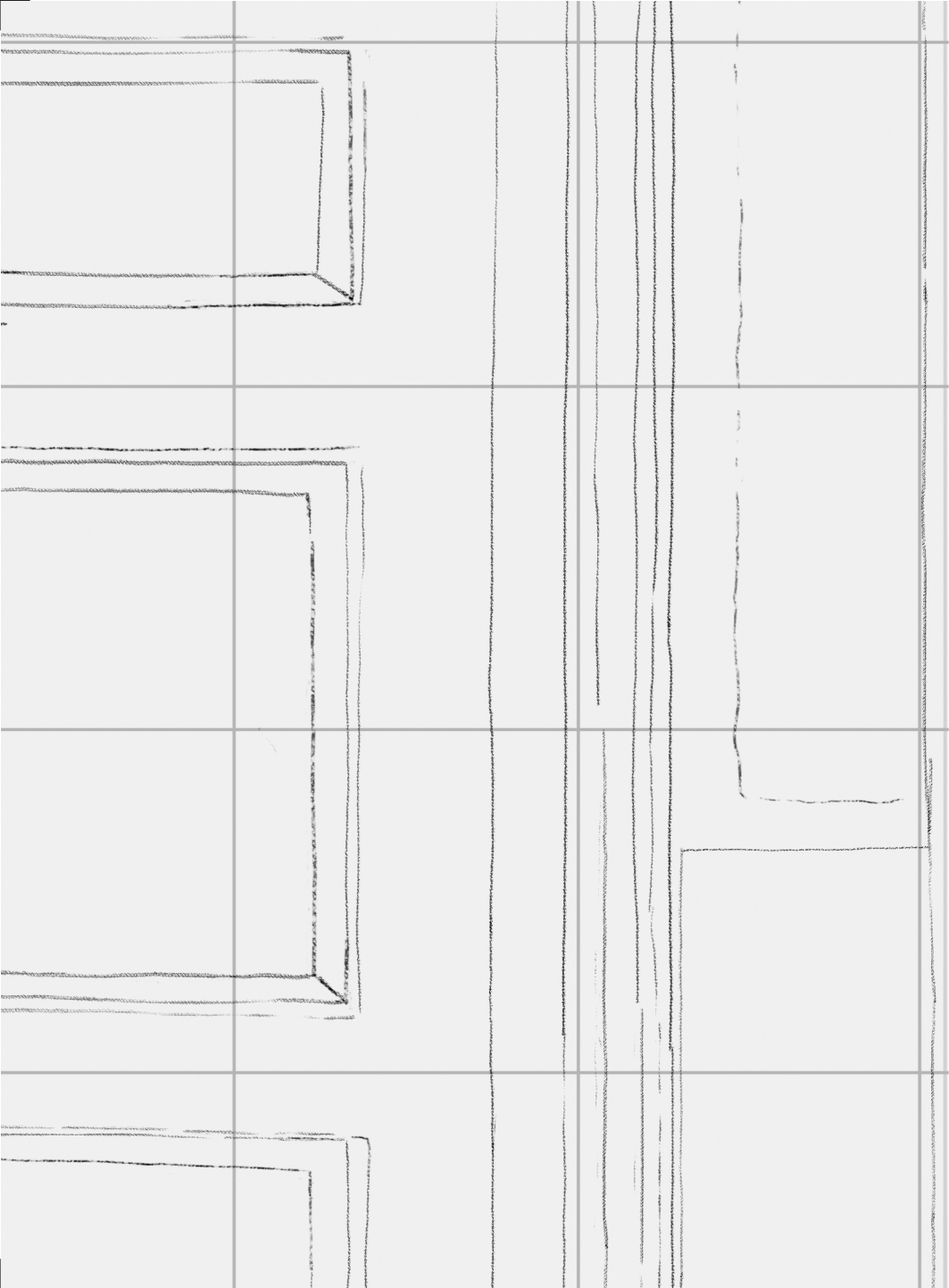


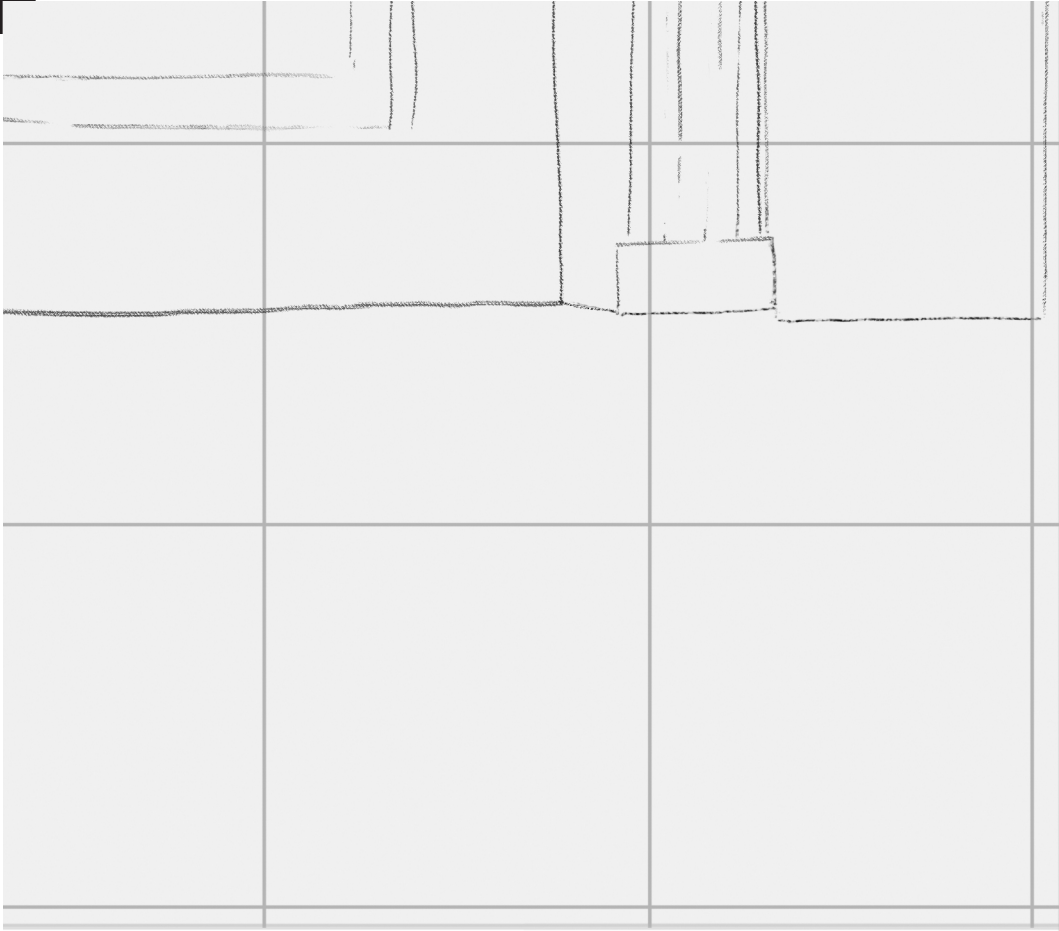
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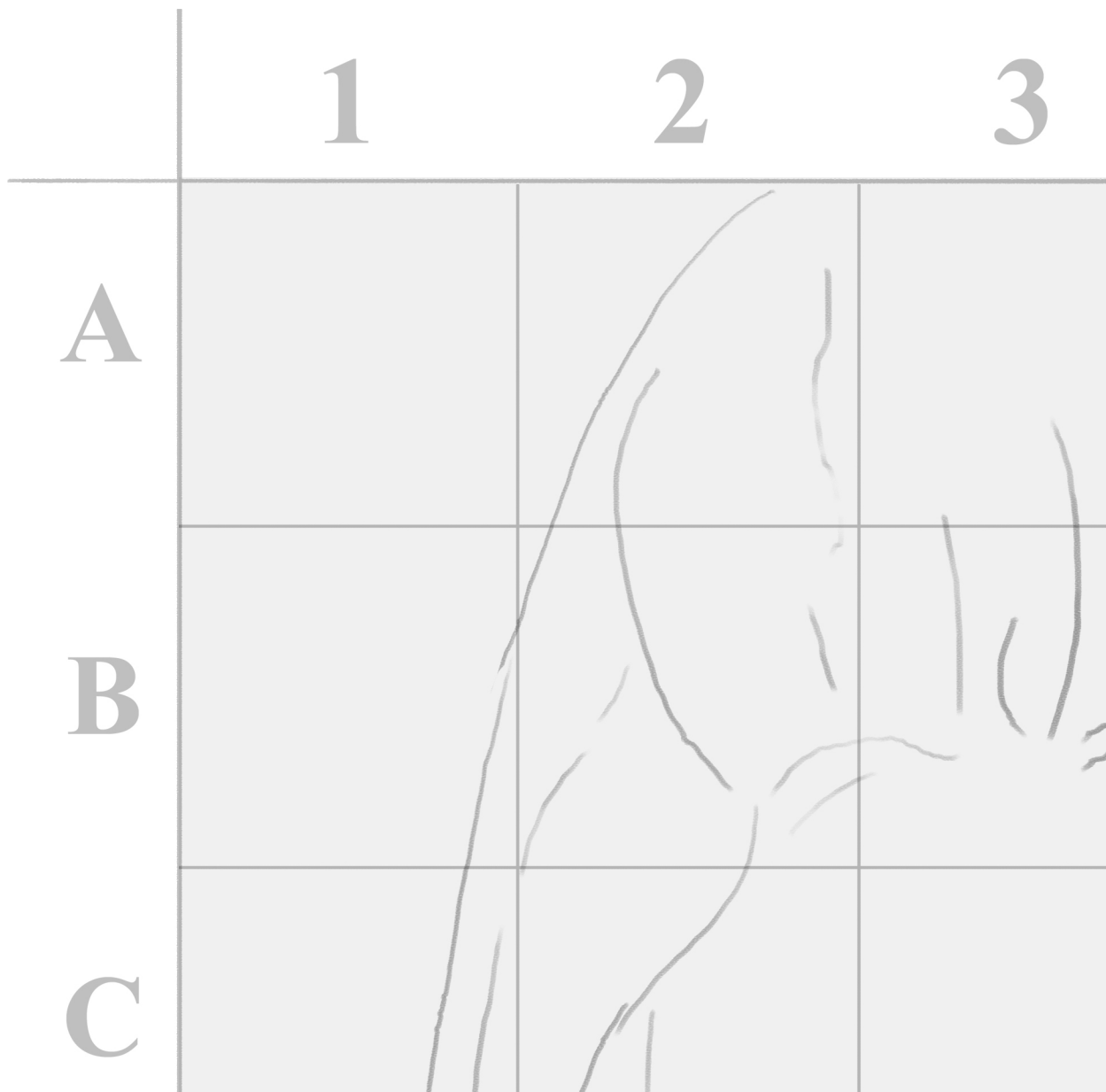
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# Lecture 28





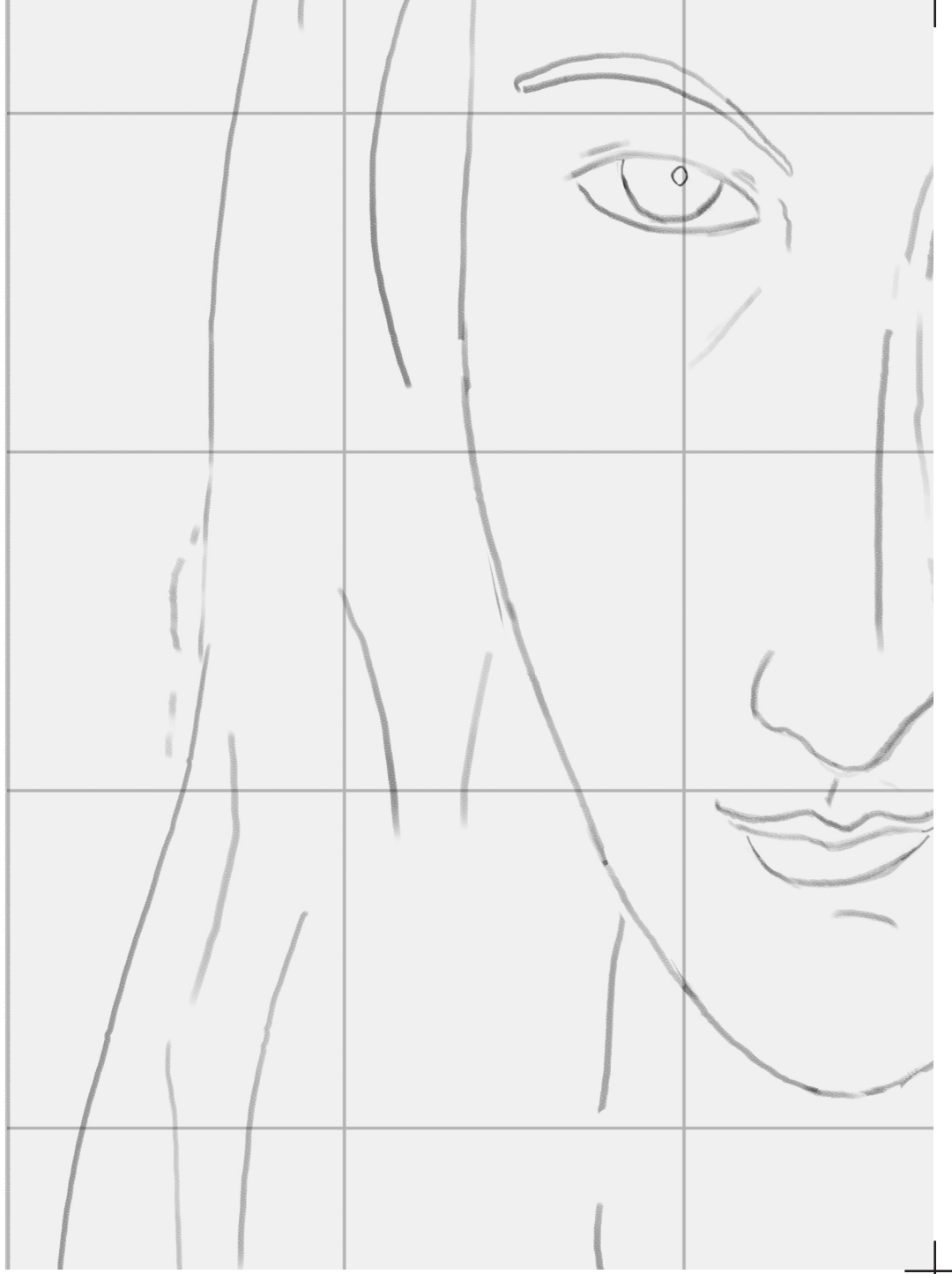


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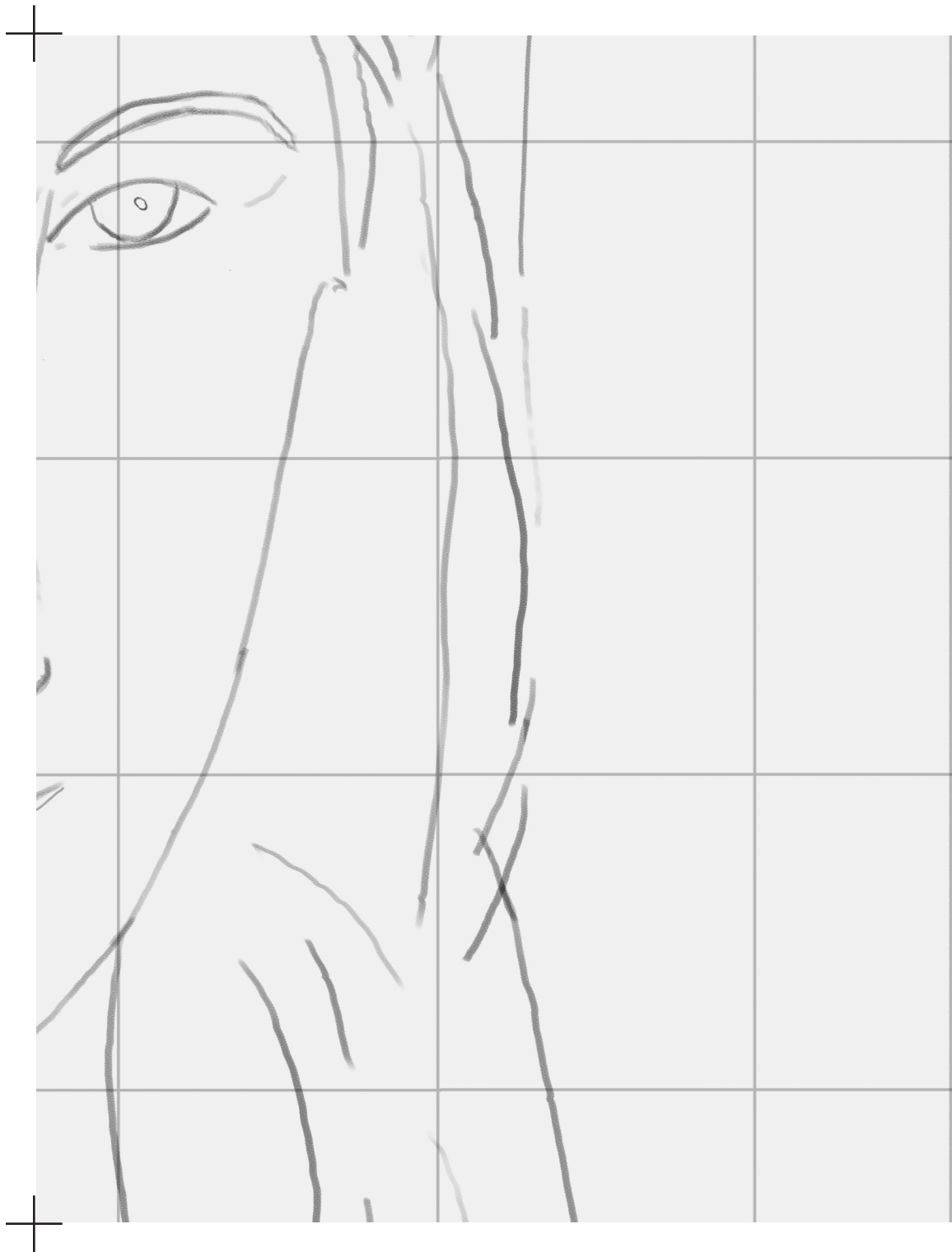


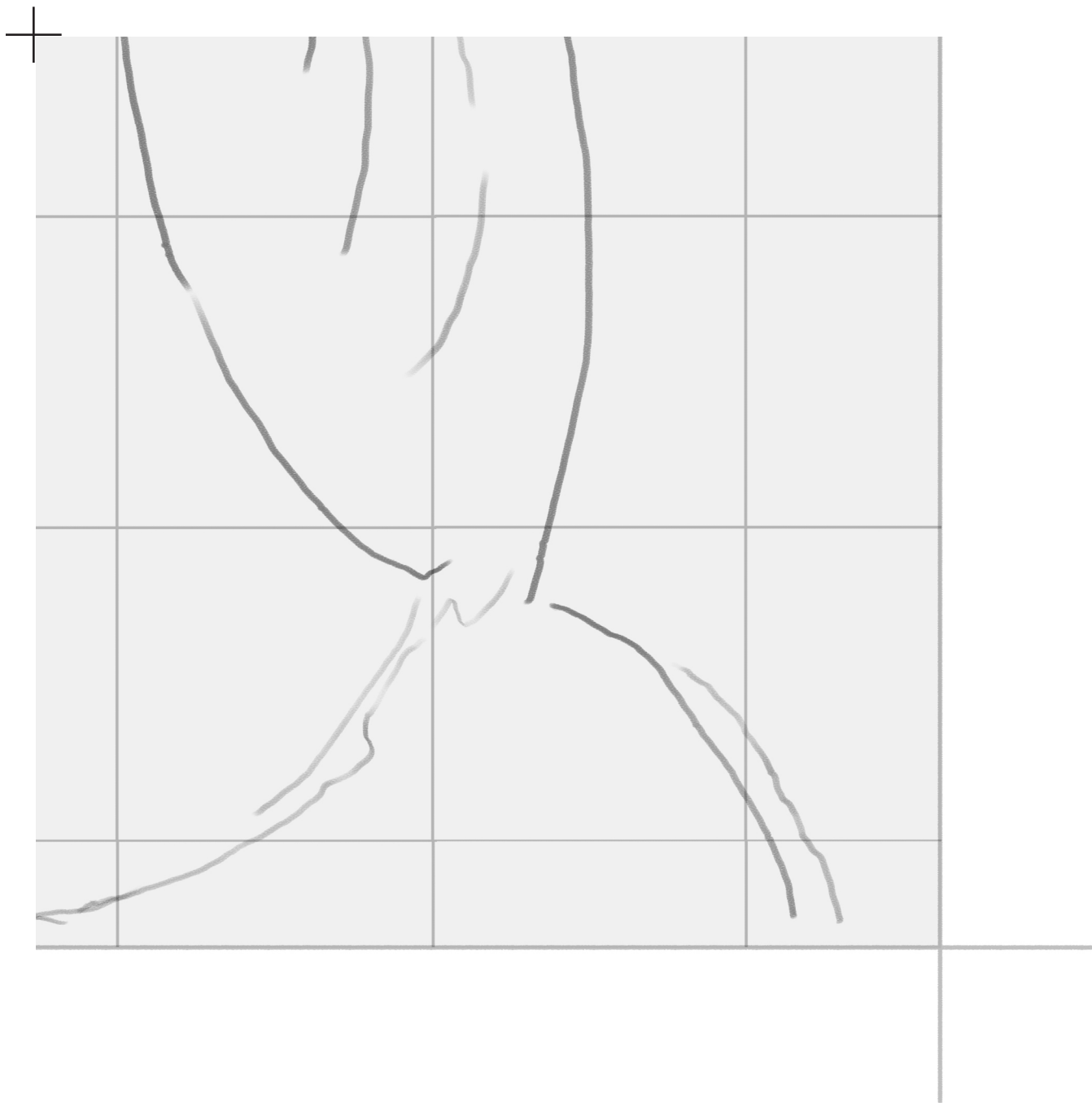
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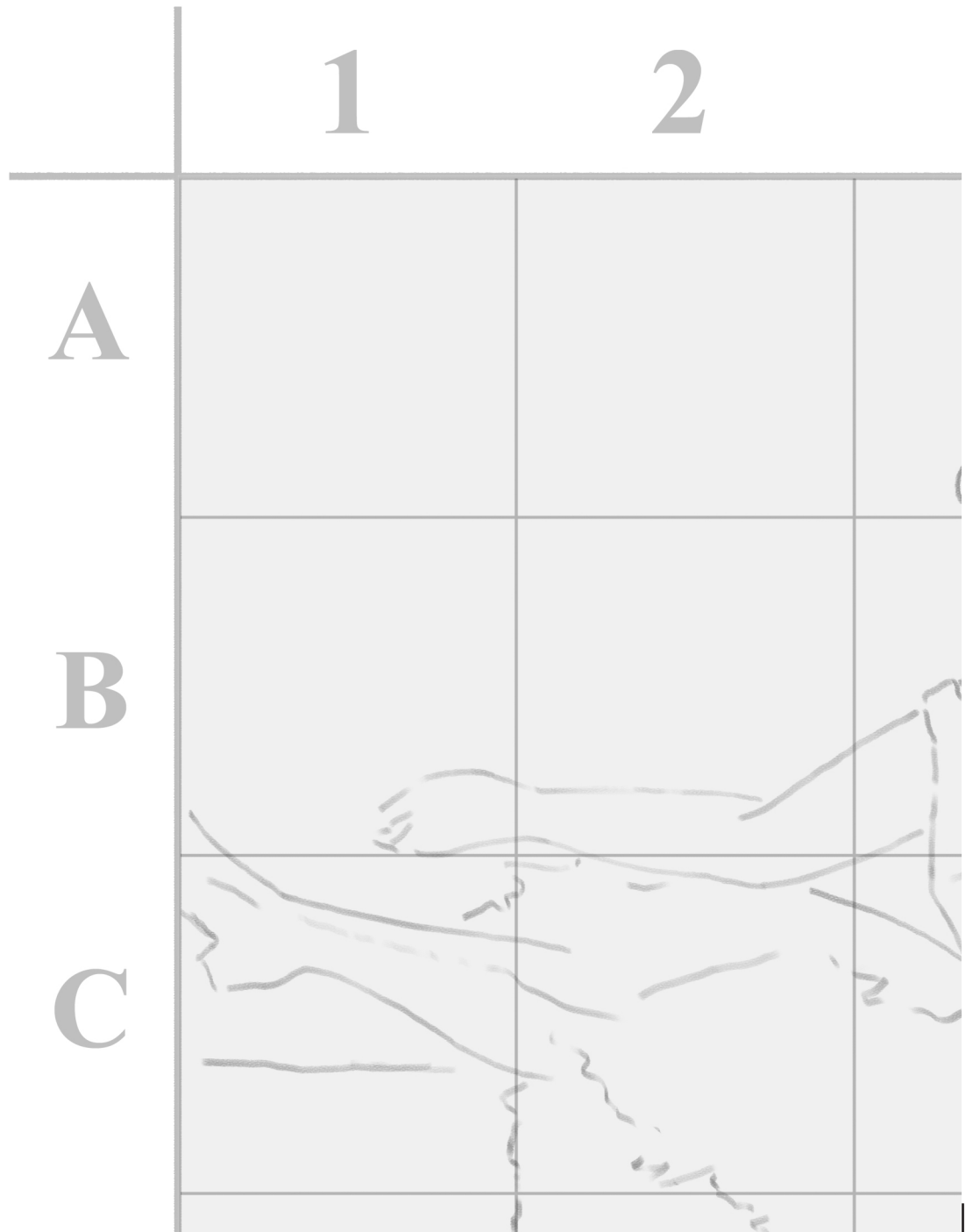
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# Lecture 29





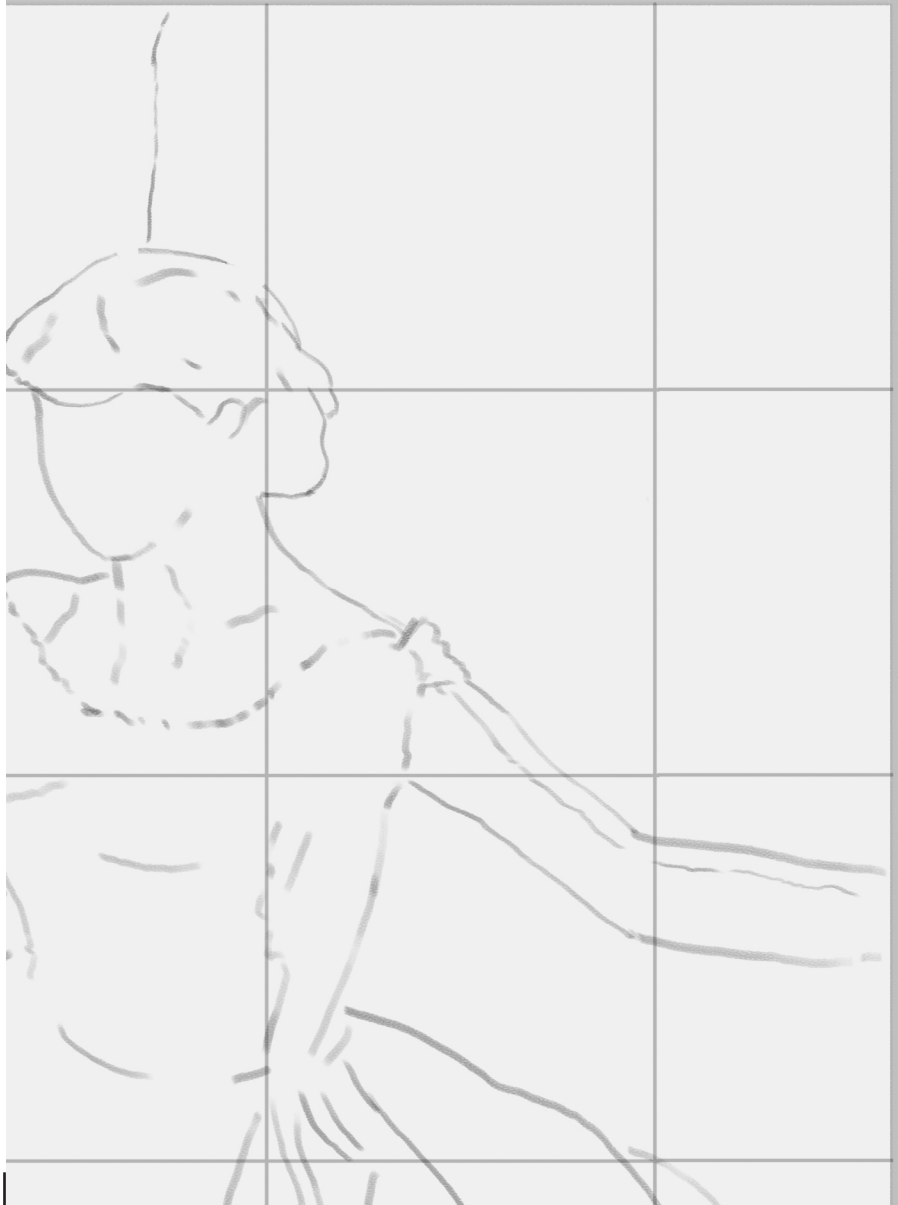




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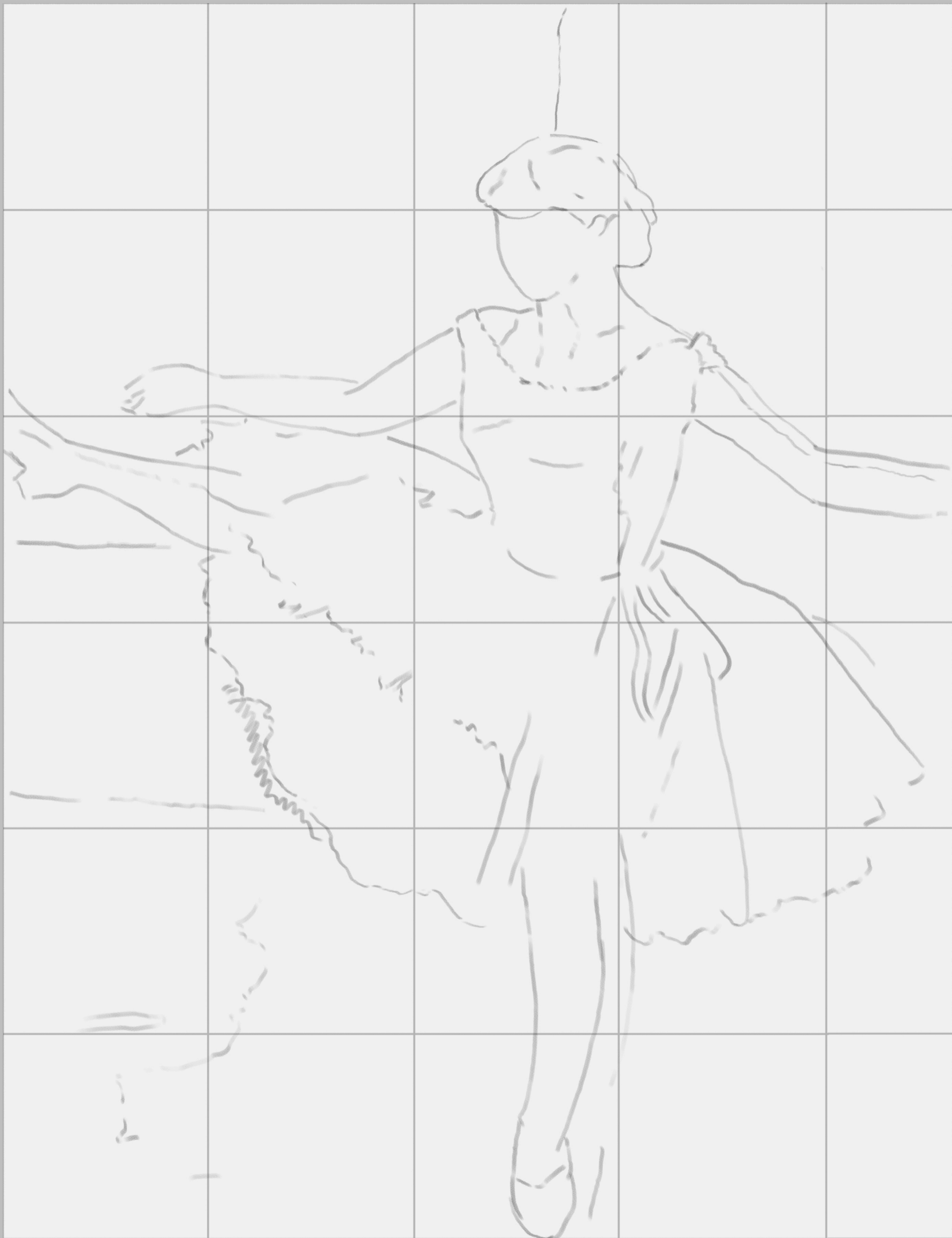
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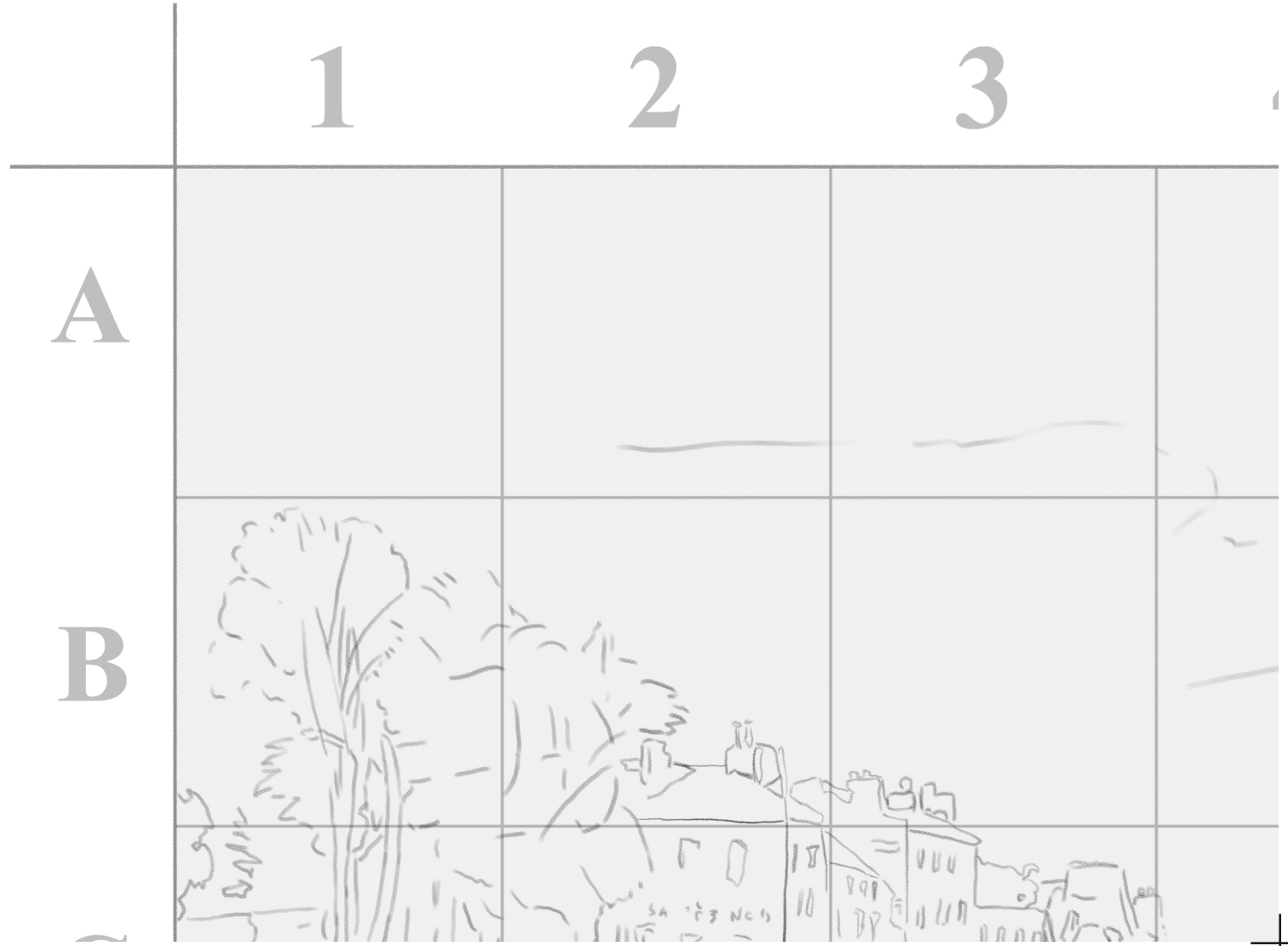
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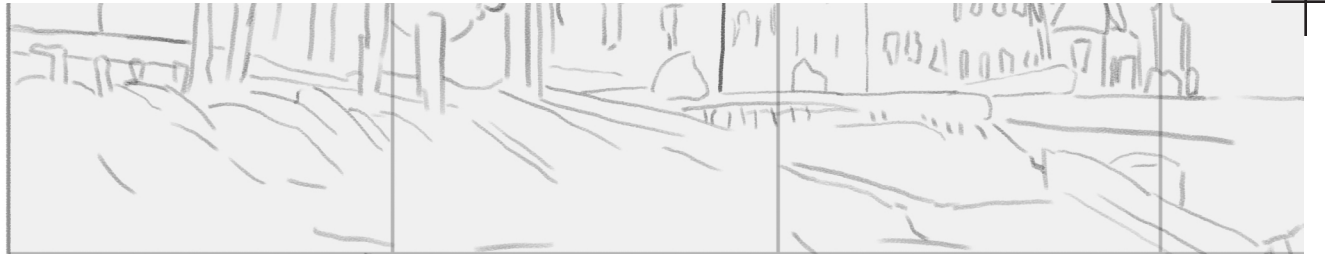
# Lecture 30



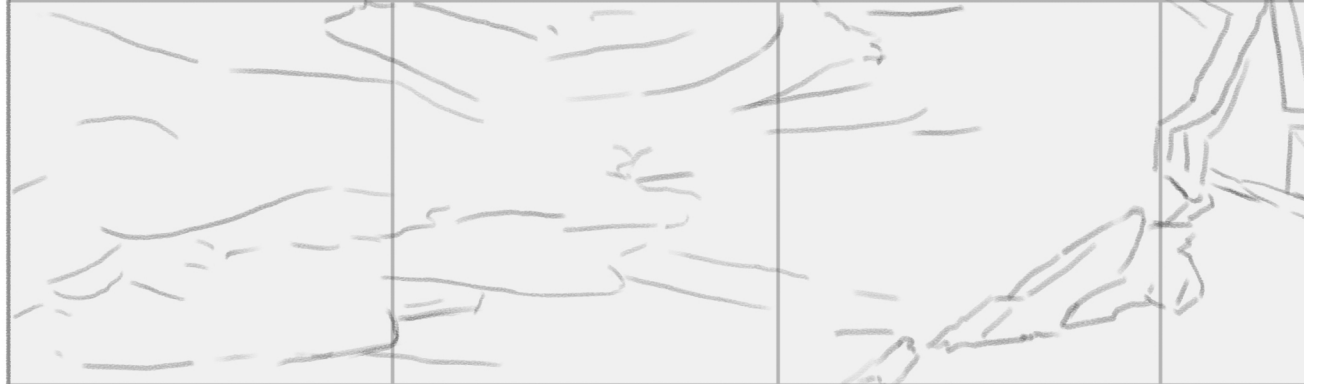




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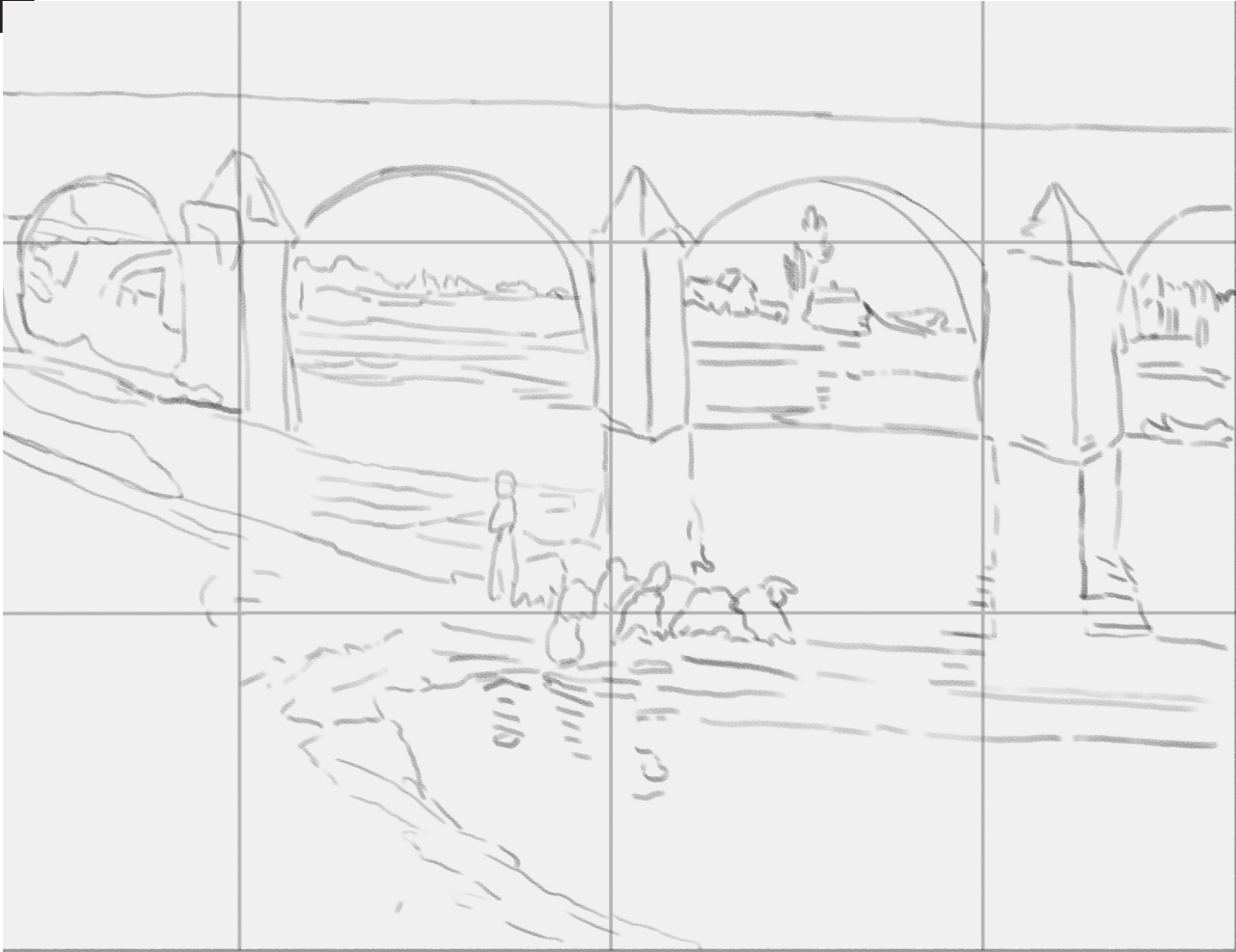
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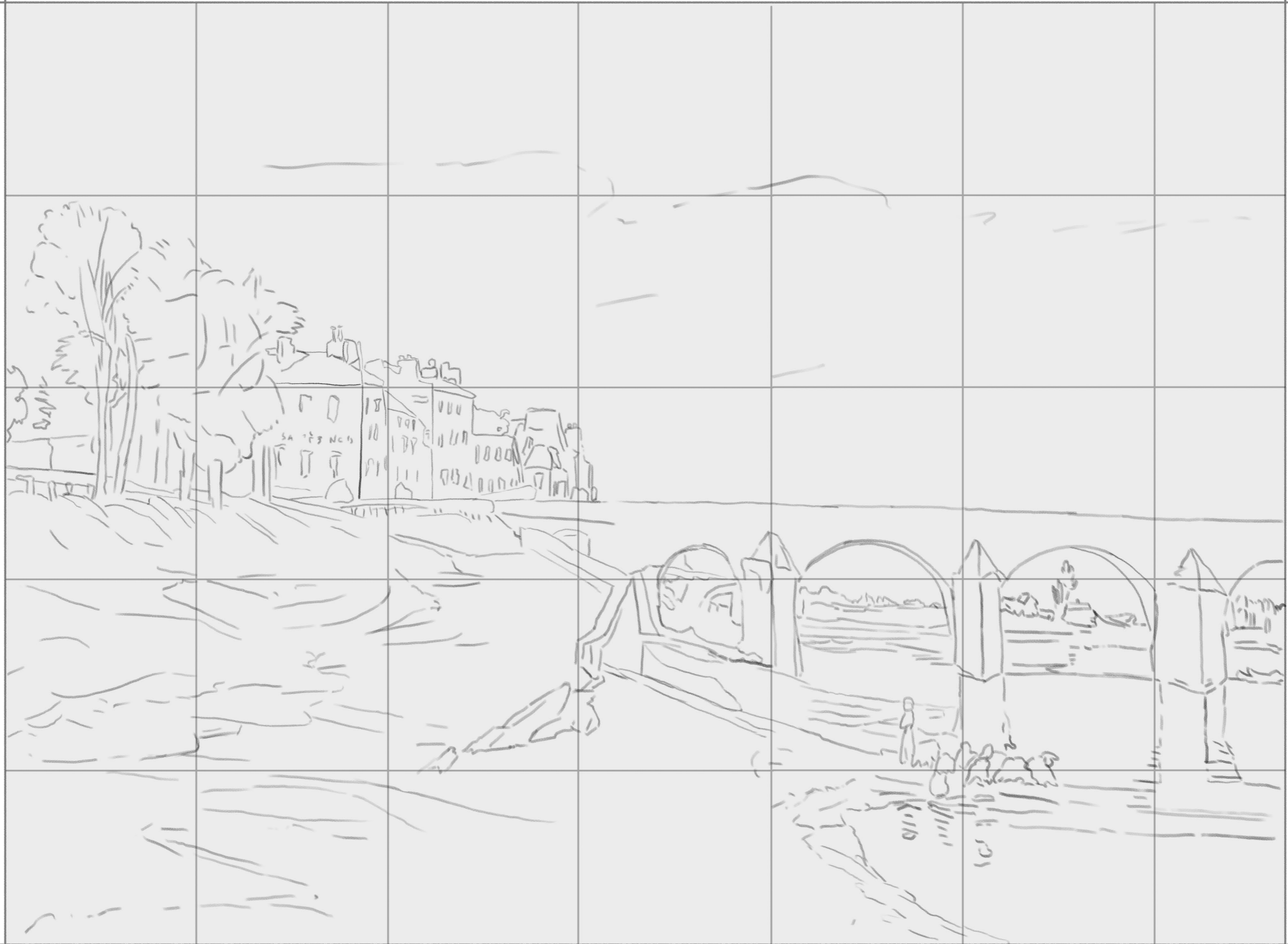
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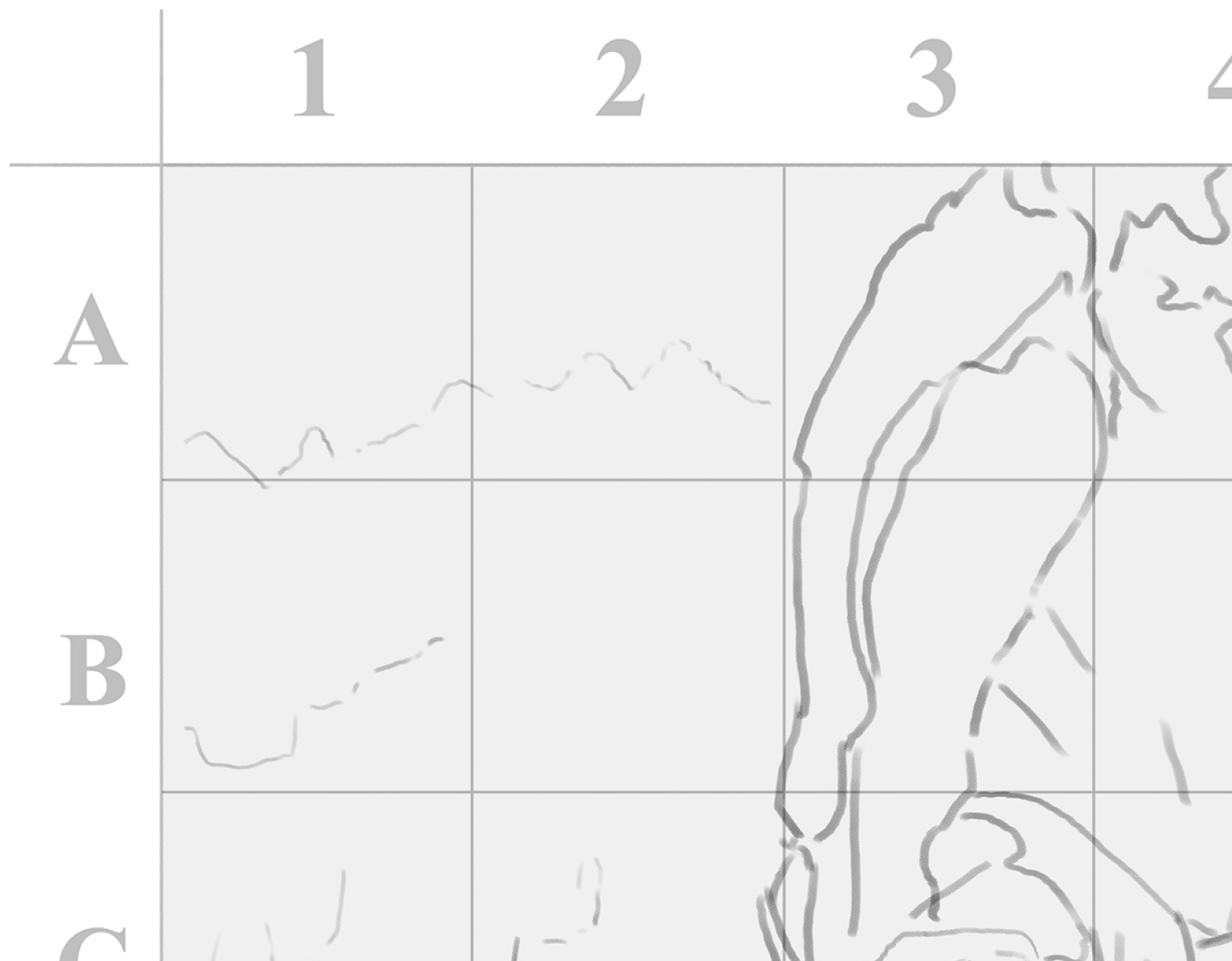
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# Lecture 31







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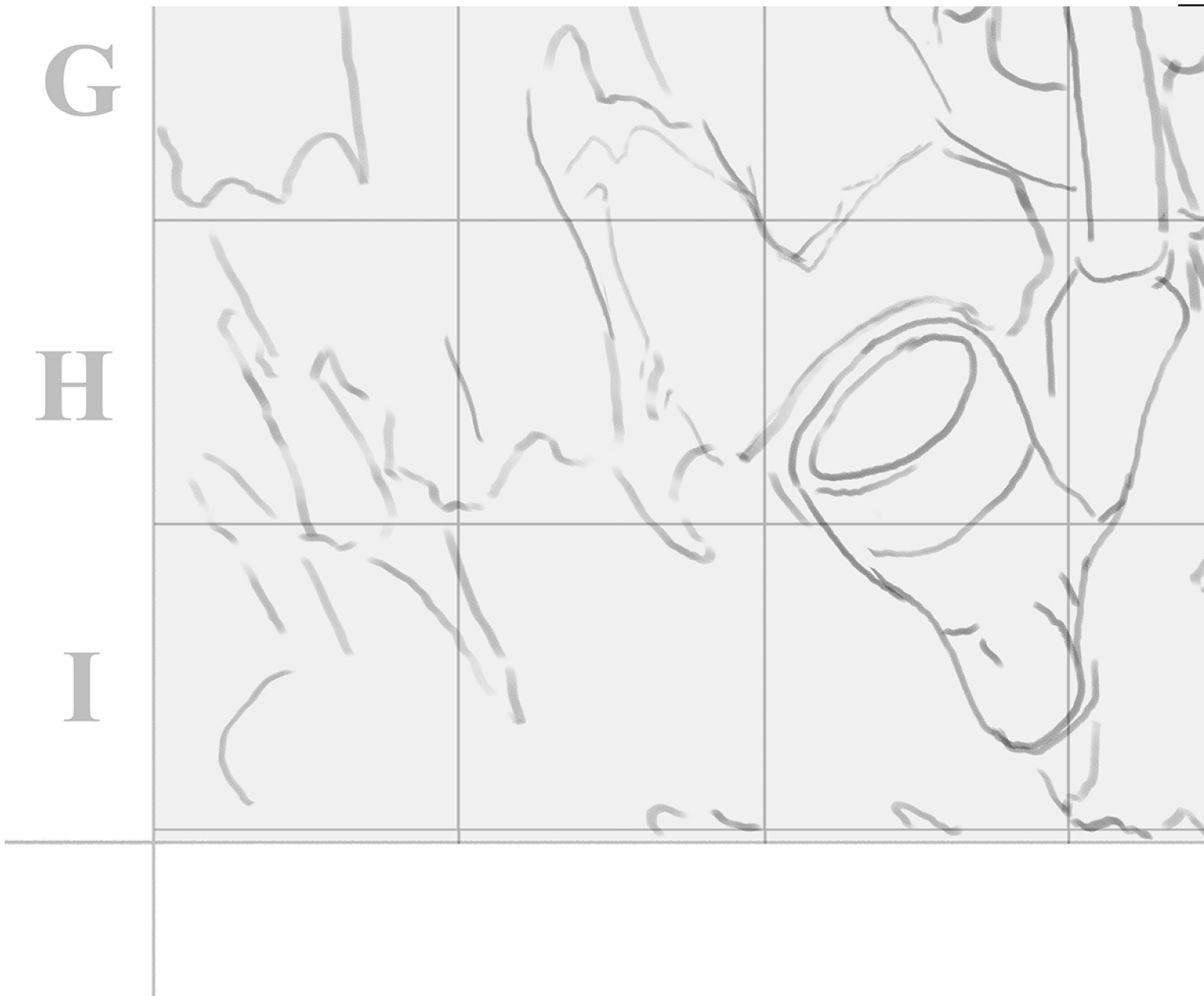




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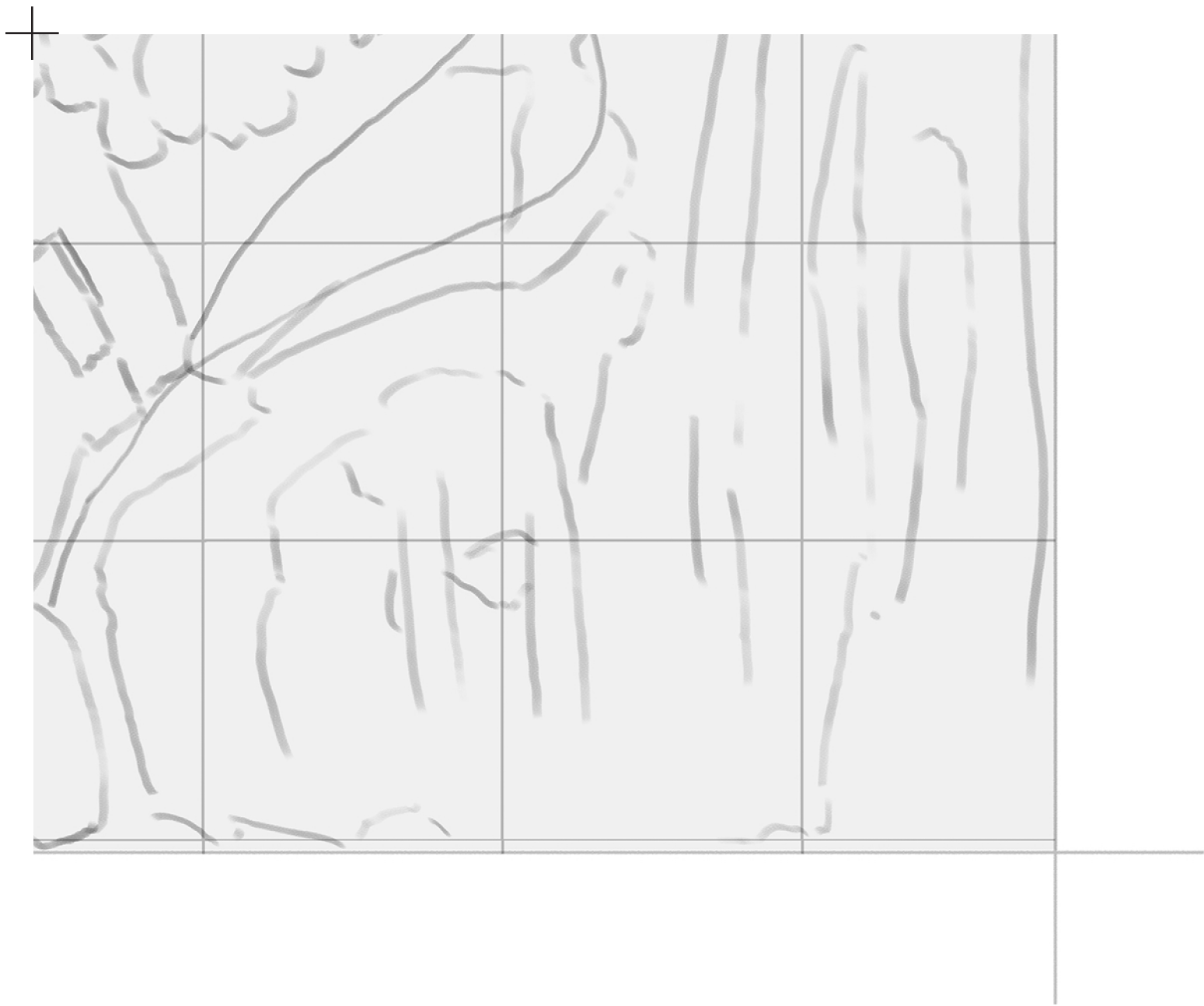
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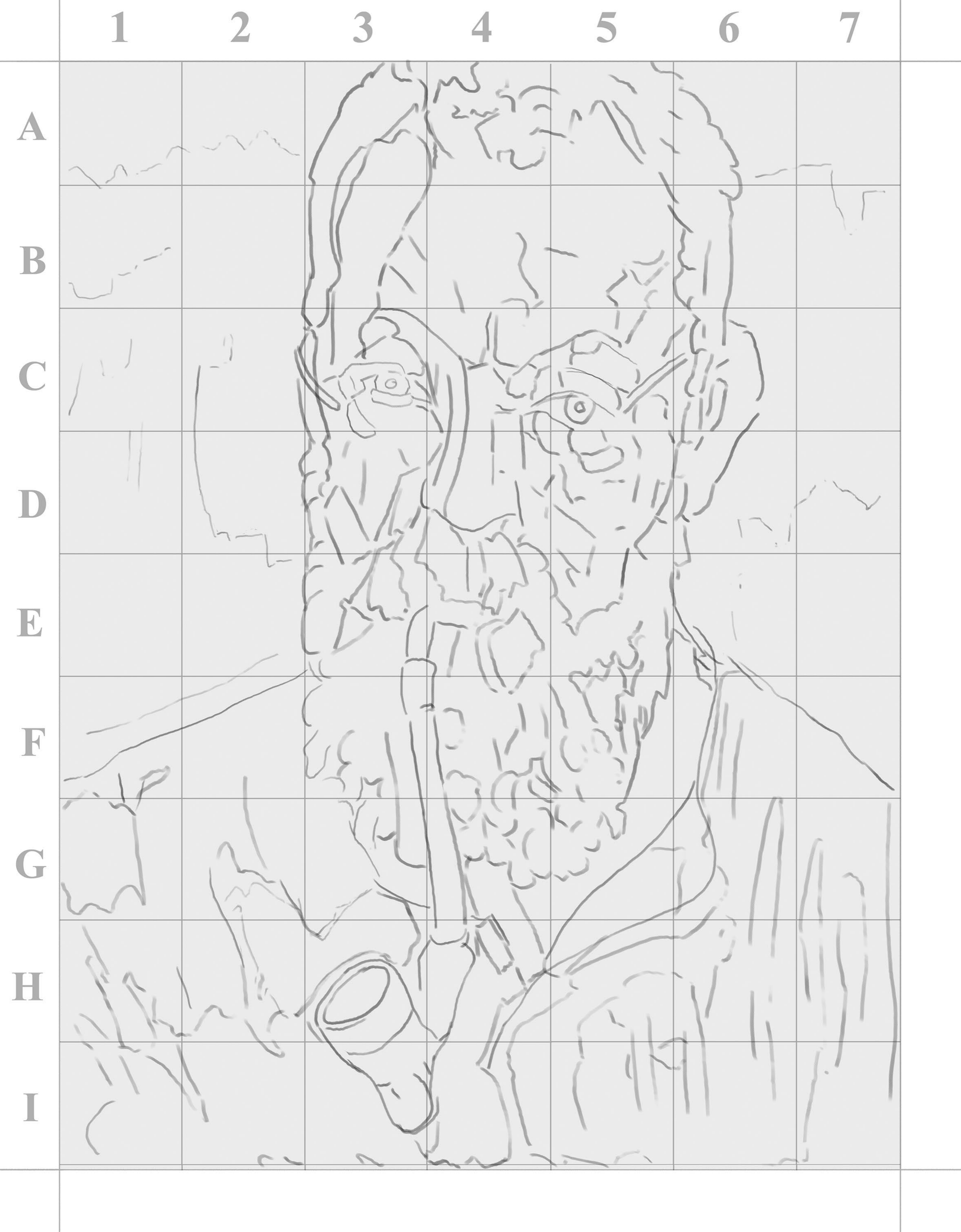
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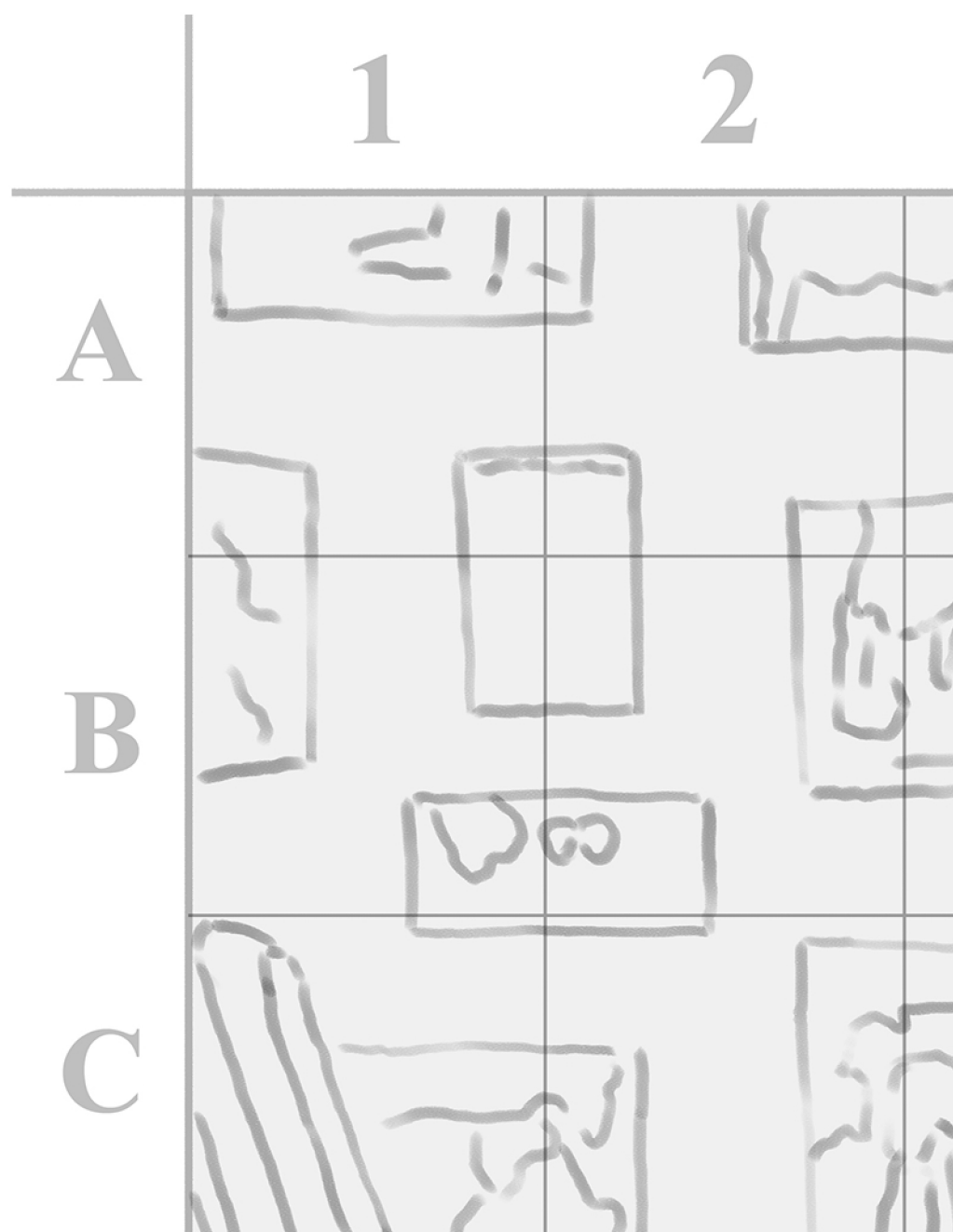
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# Lecture 32







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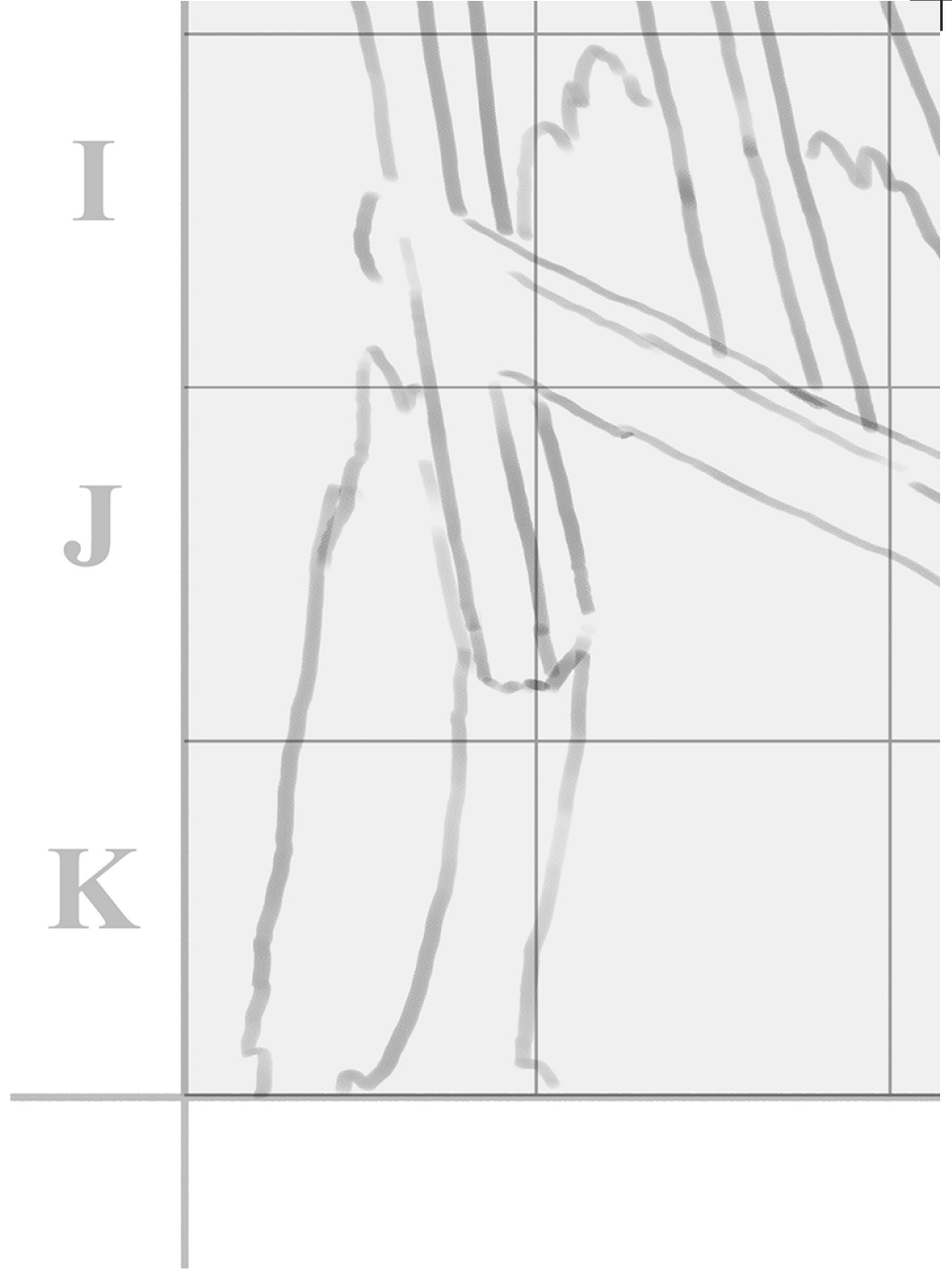
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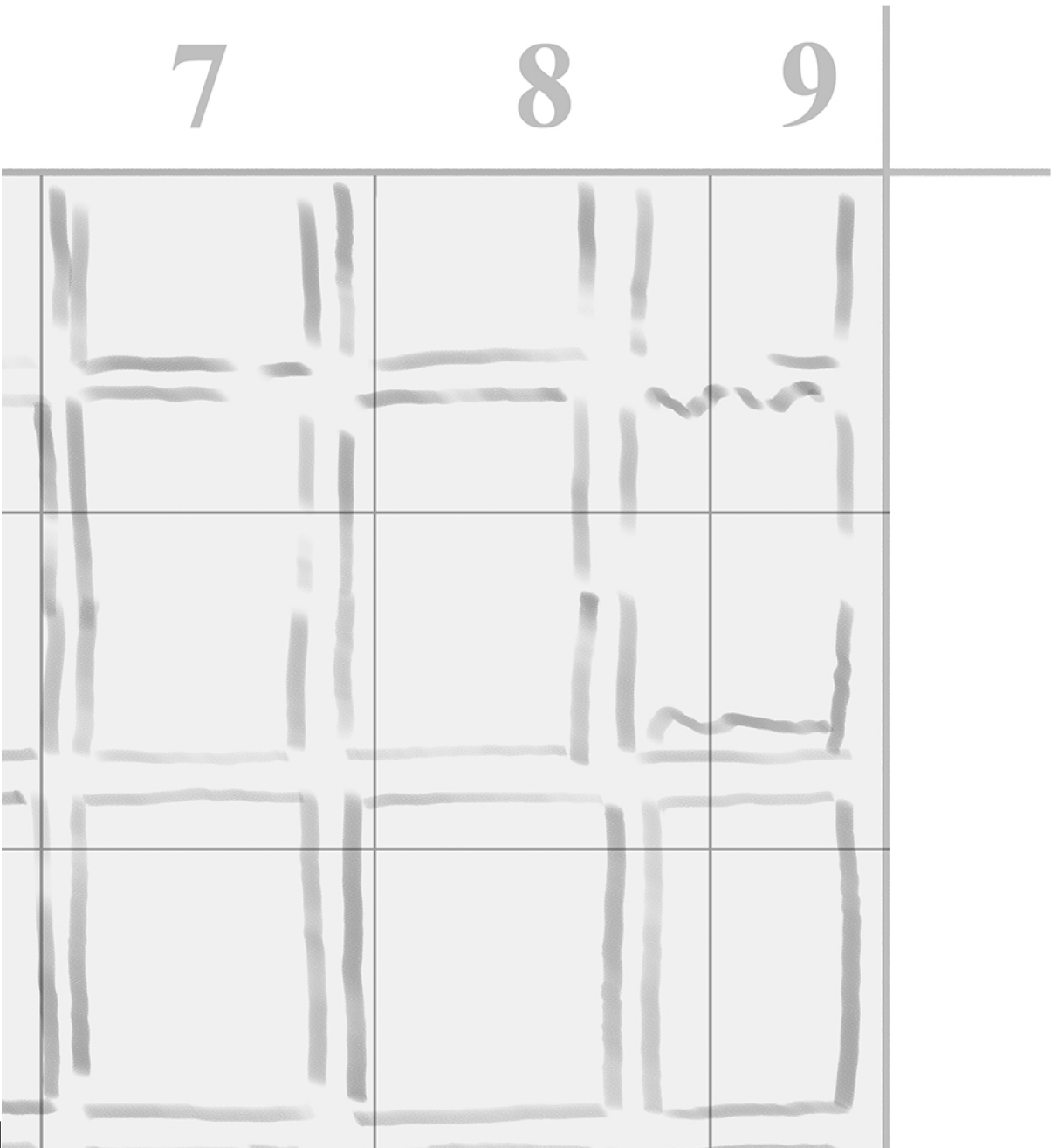


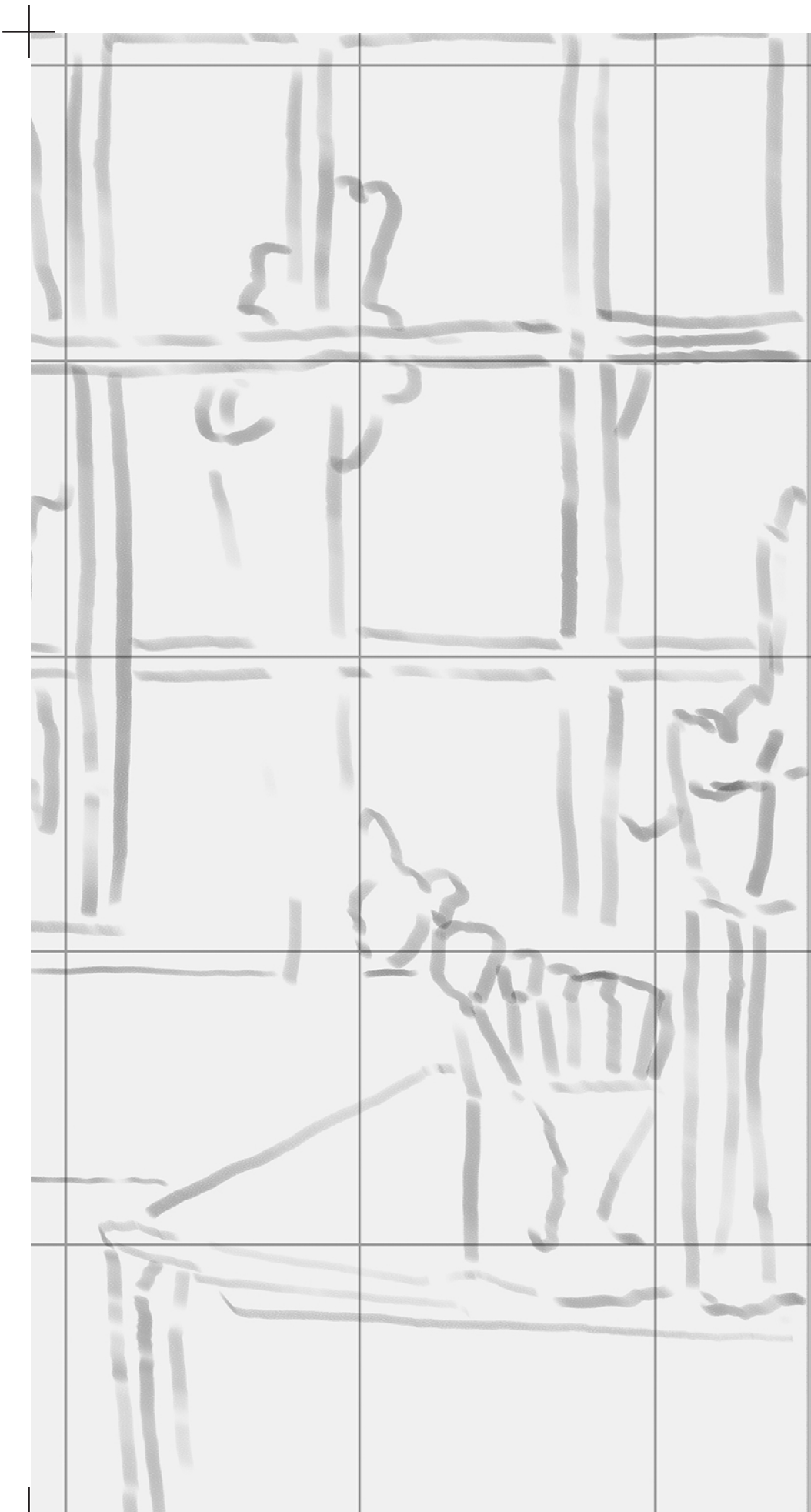


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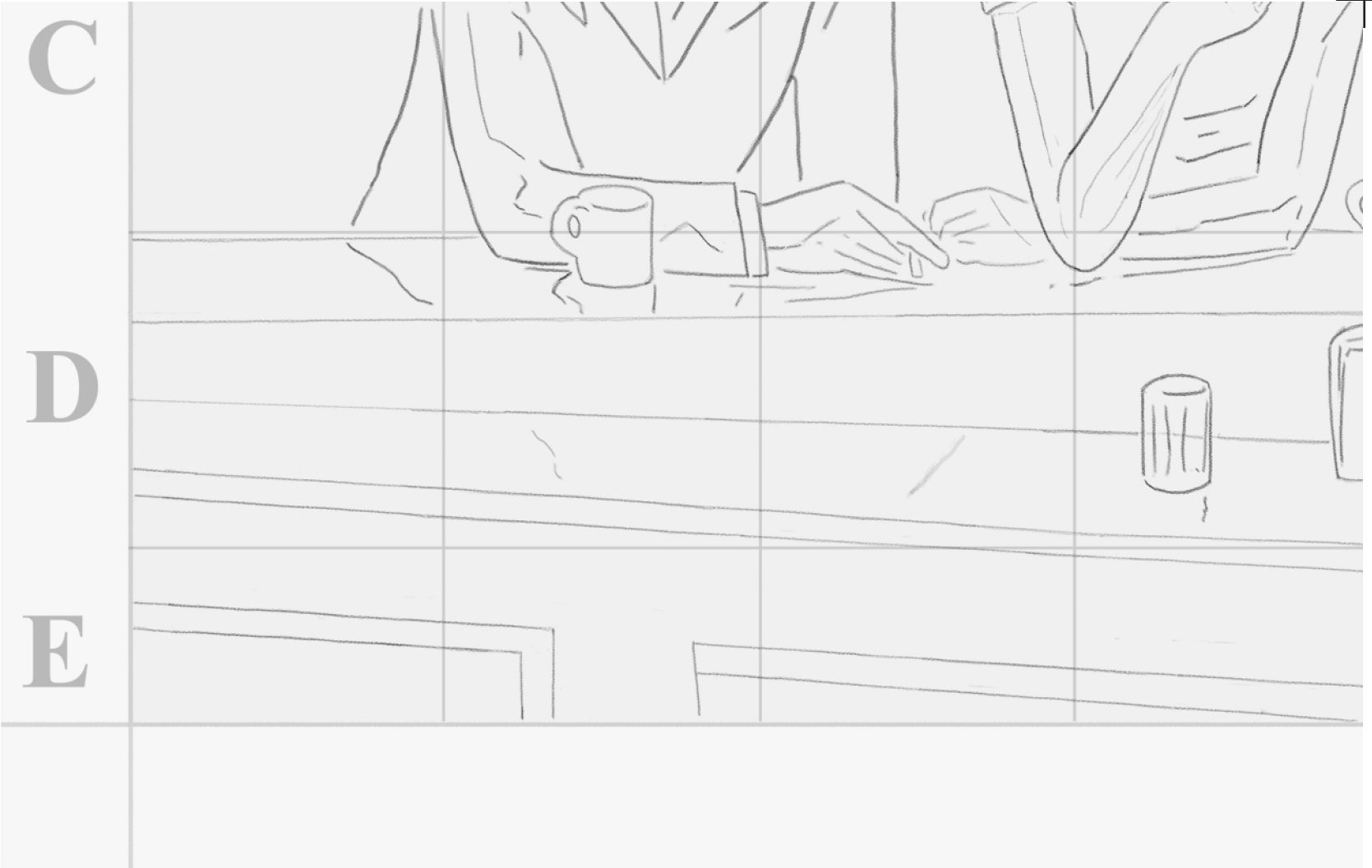
# Lecture 34





	1	2	3	4
A				
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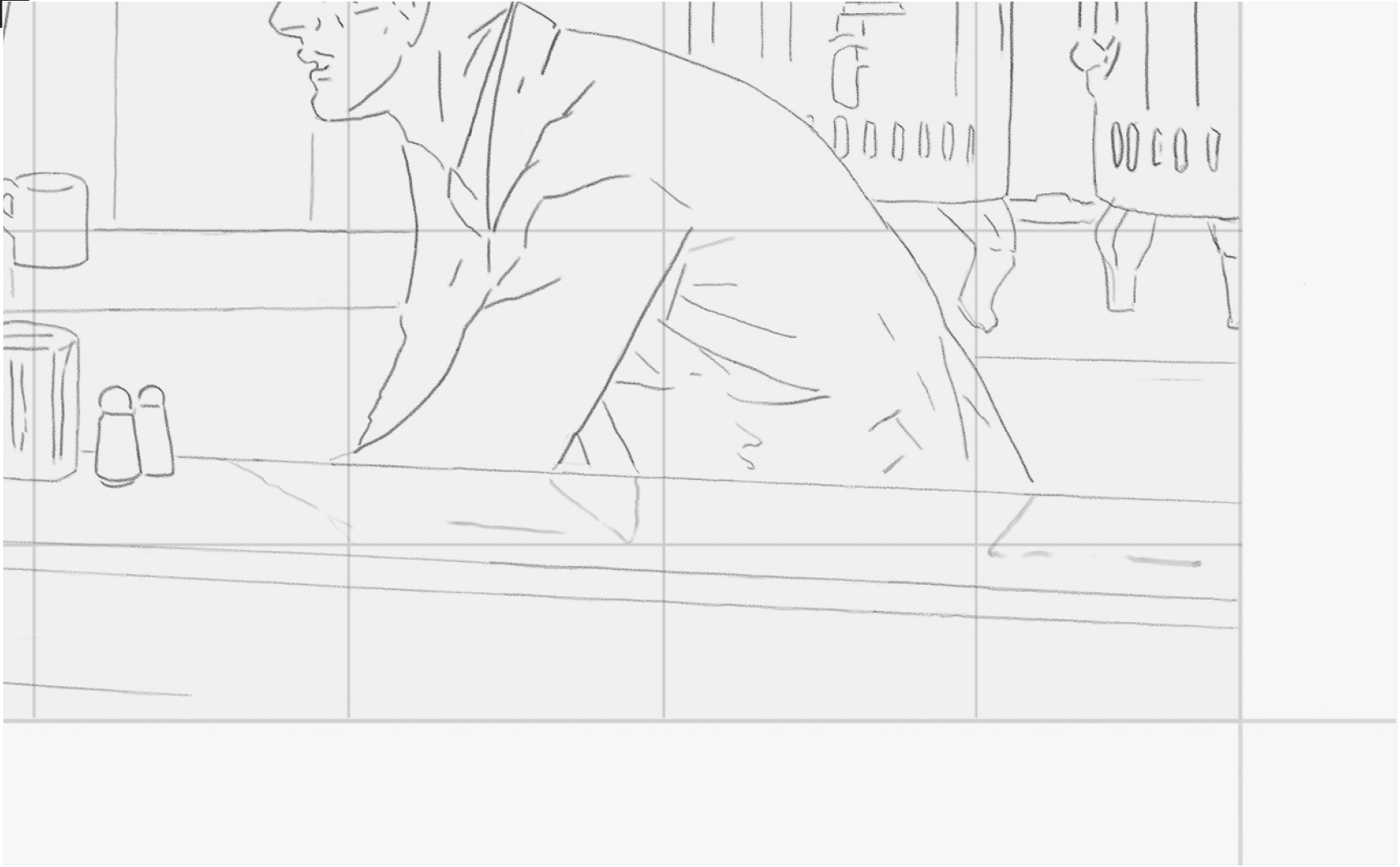
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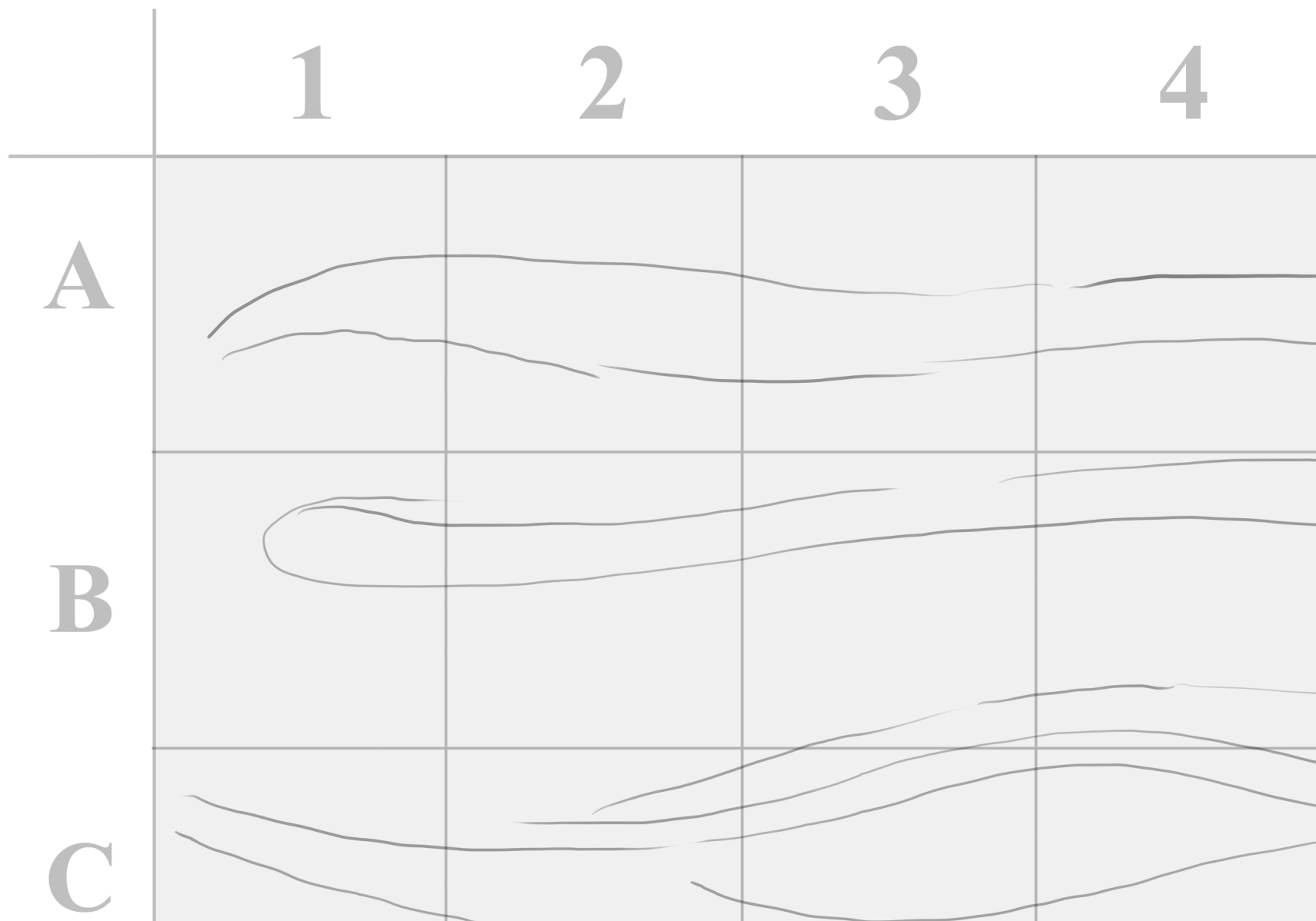
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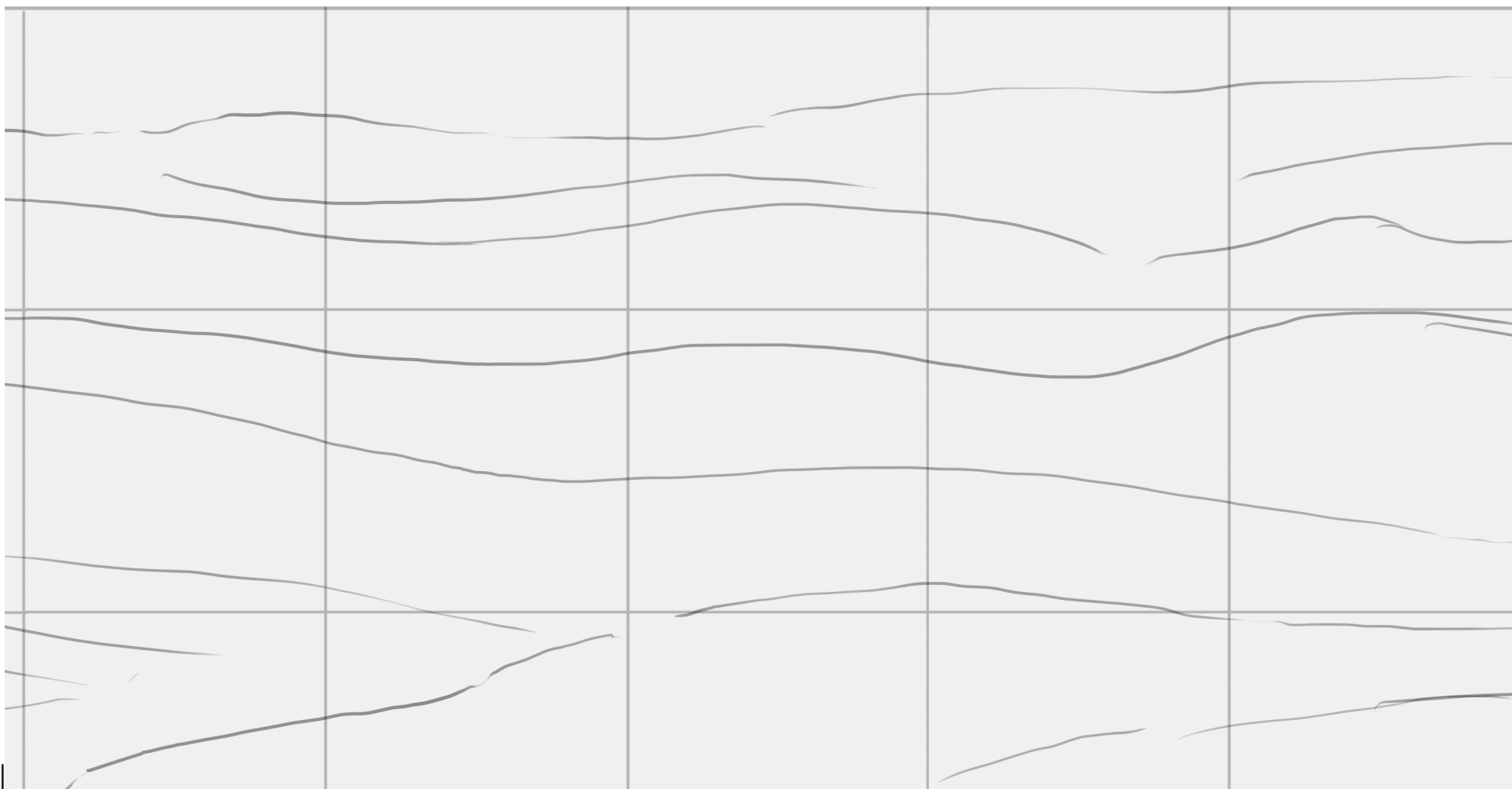
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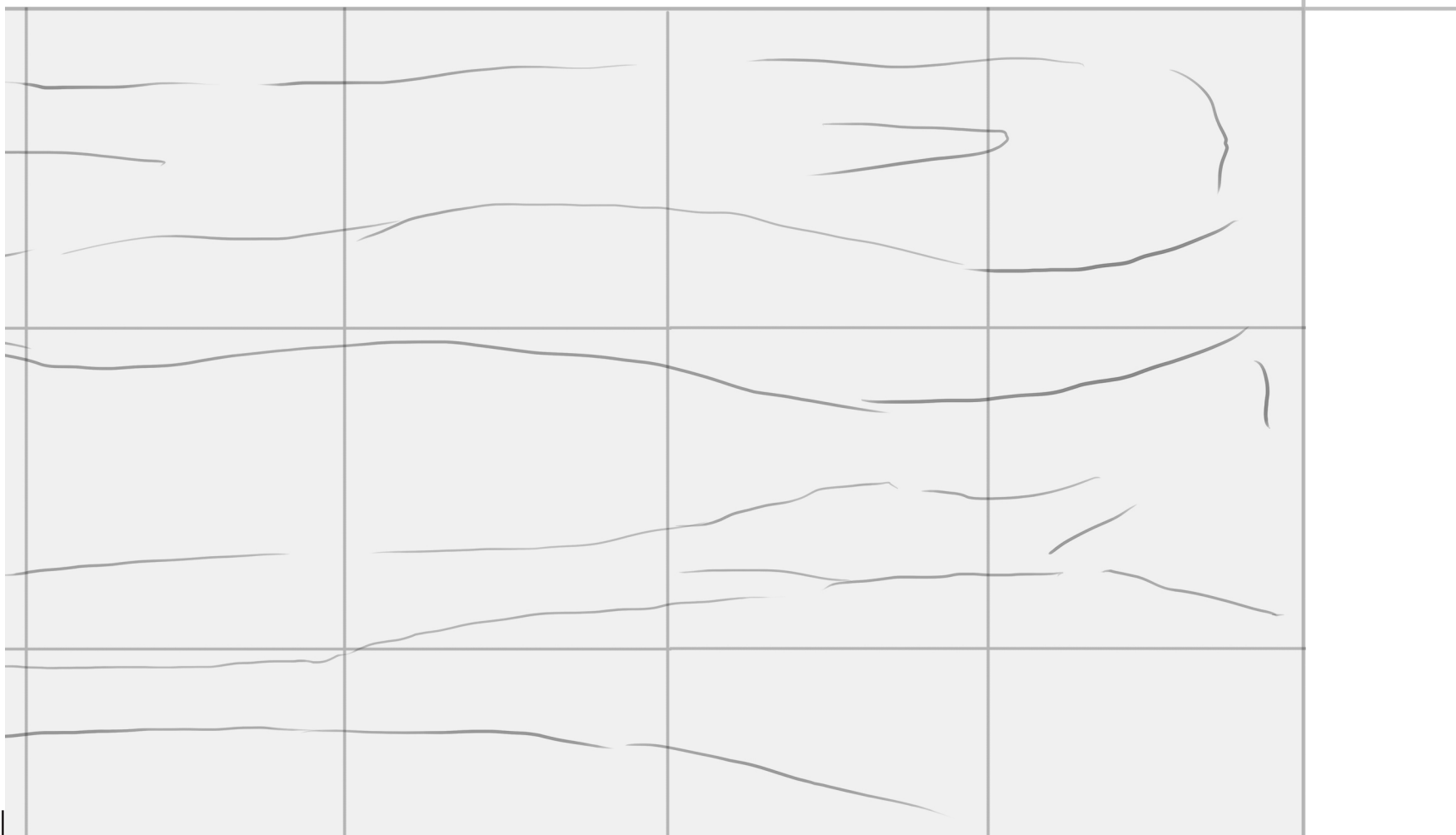


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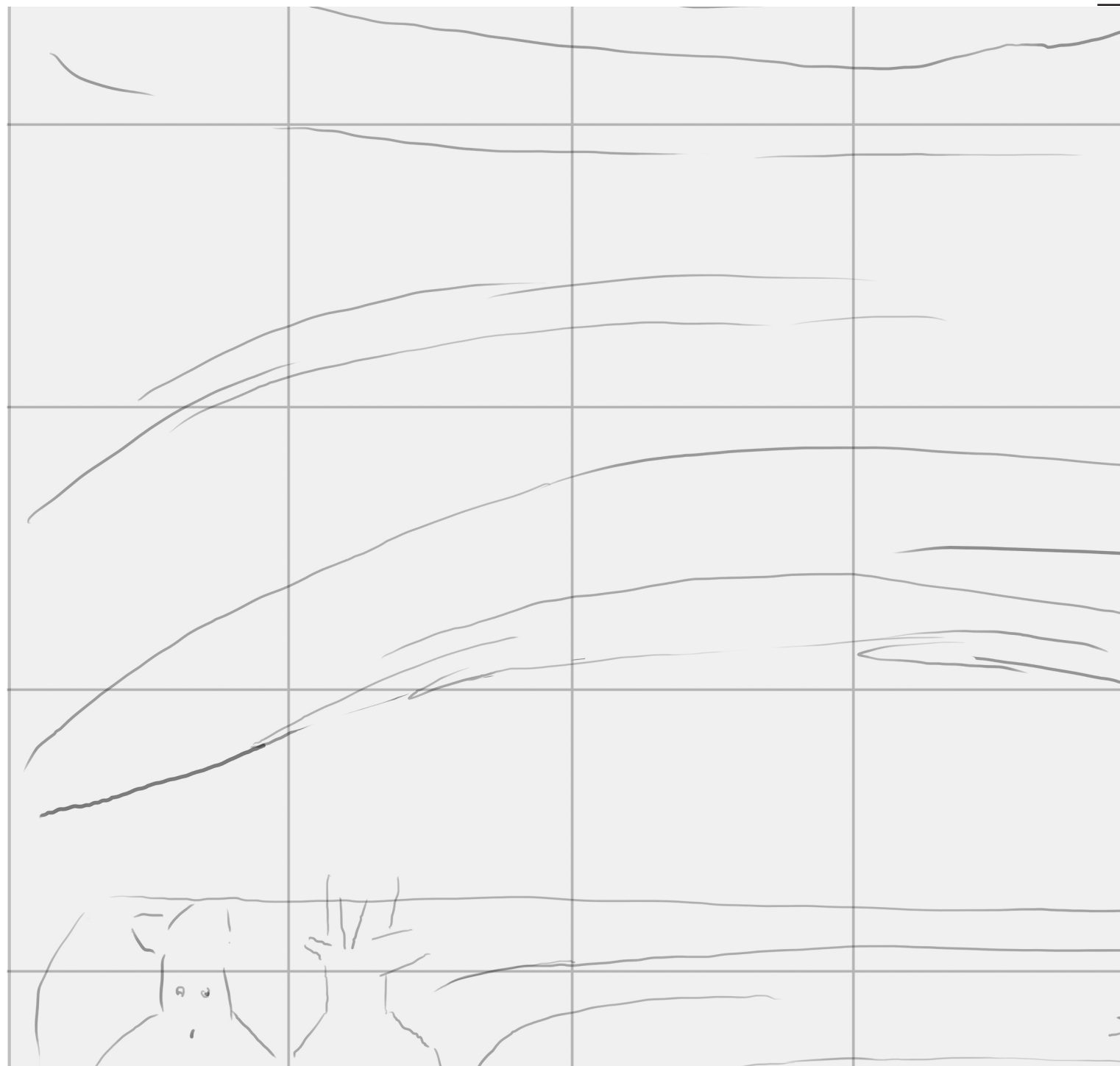


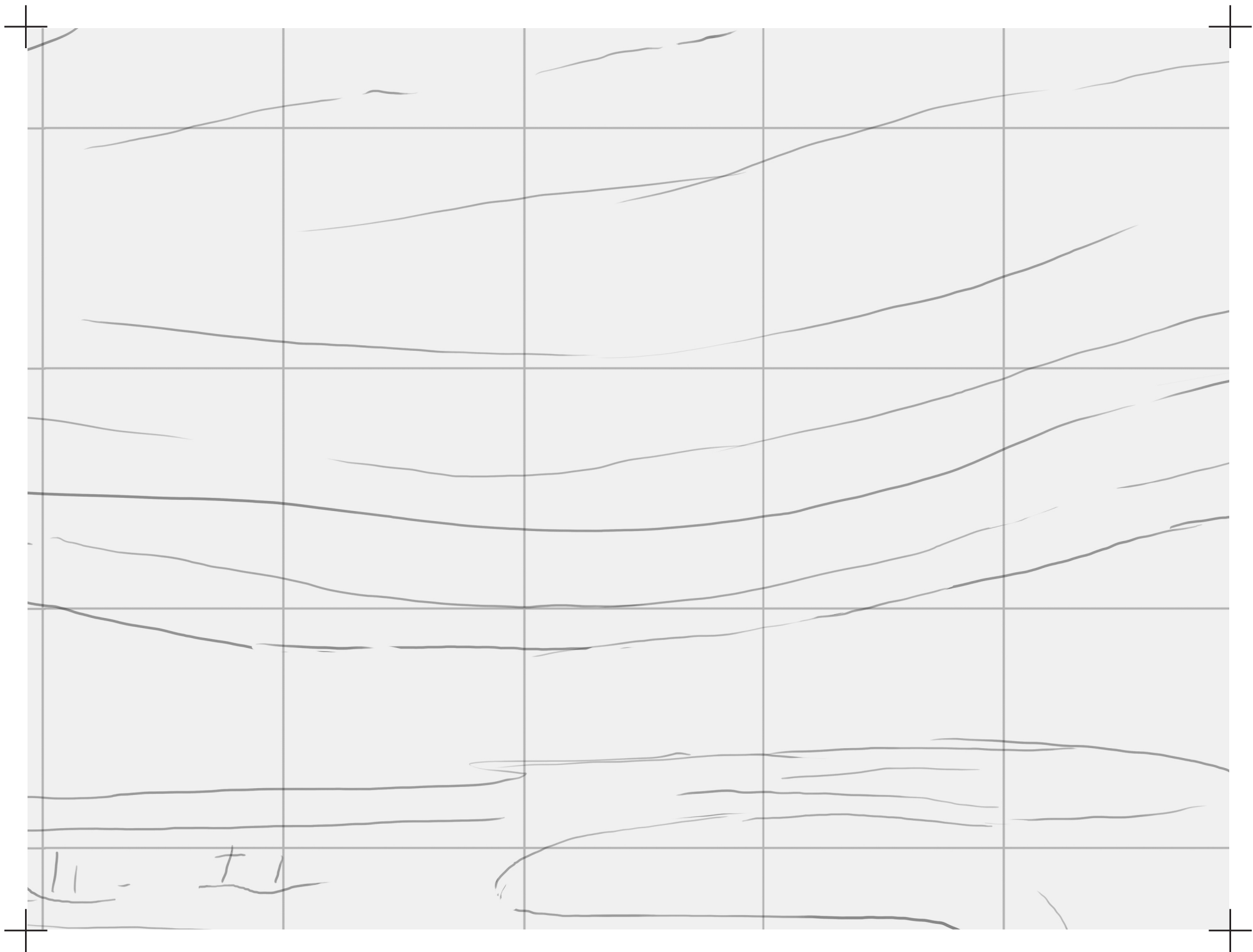
**D**

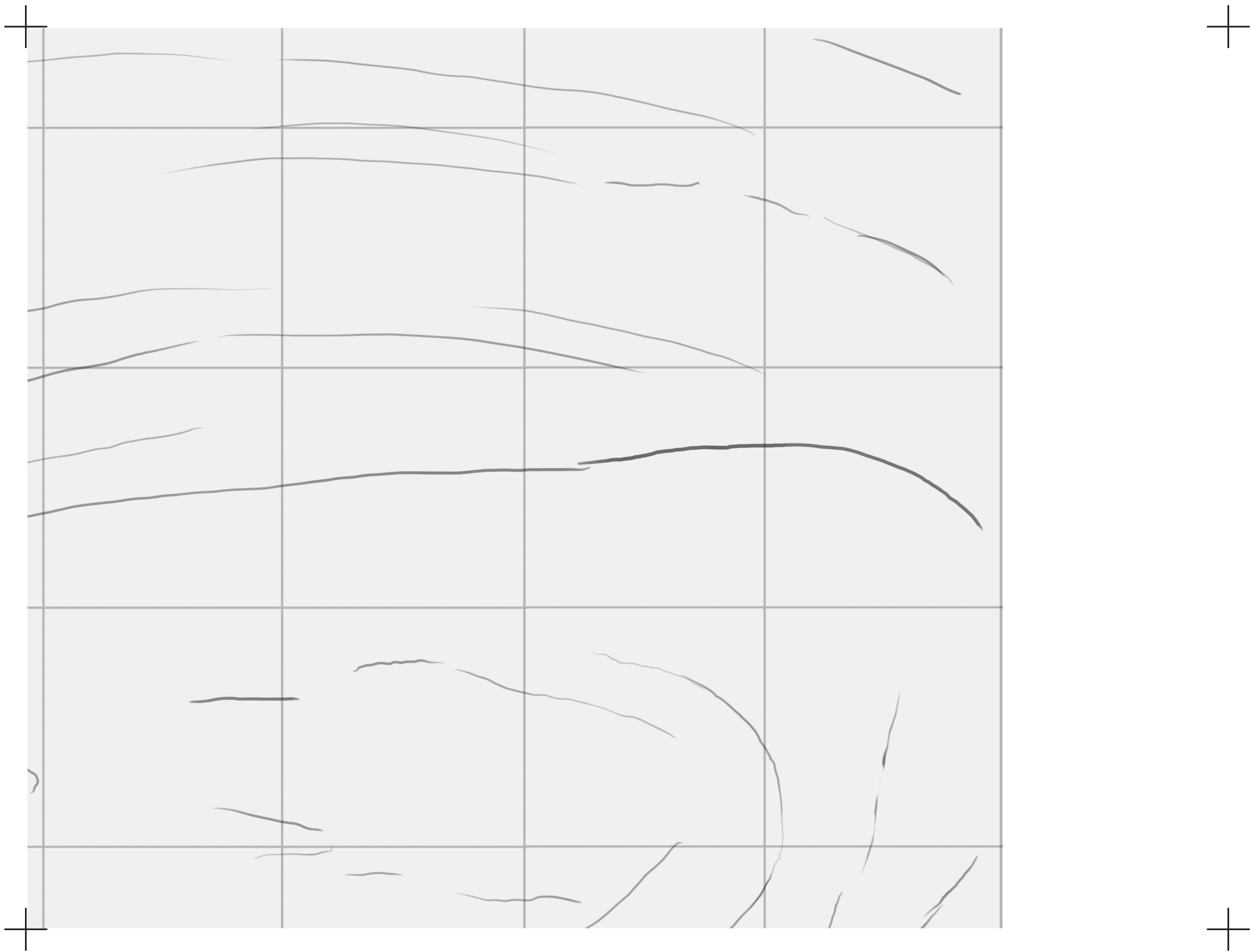
**E**

**F**

**G**







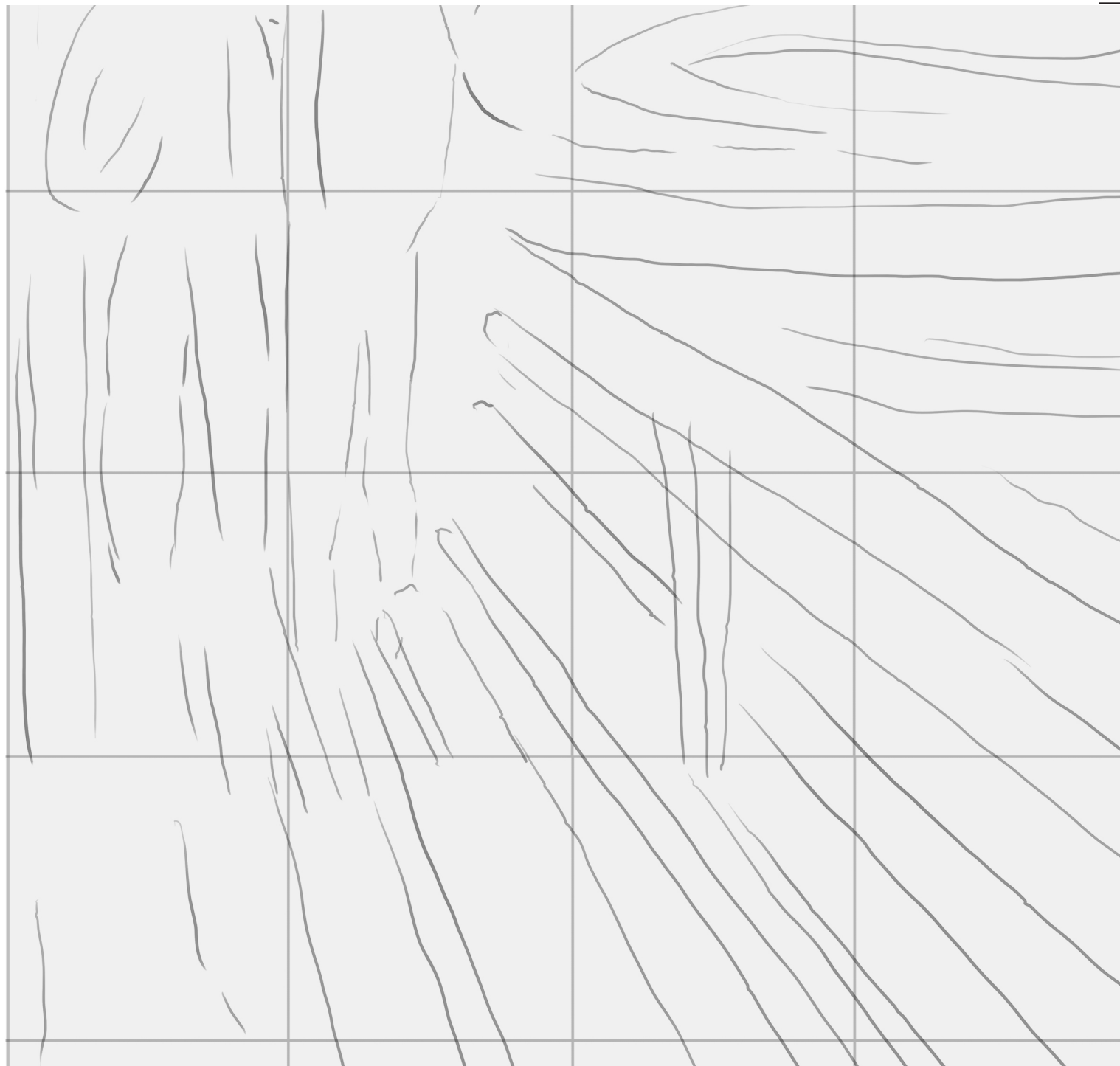


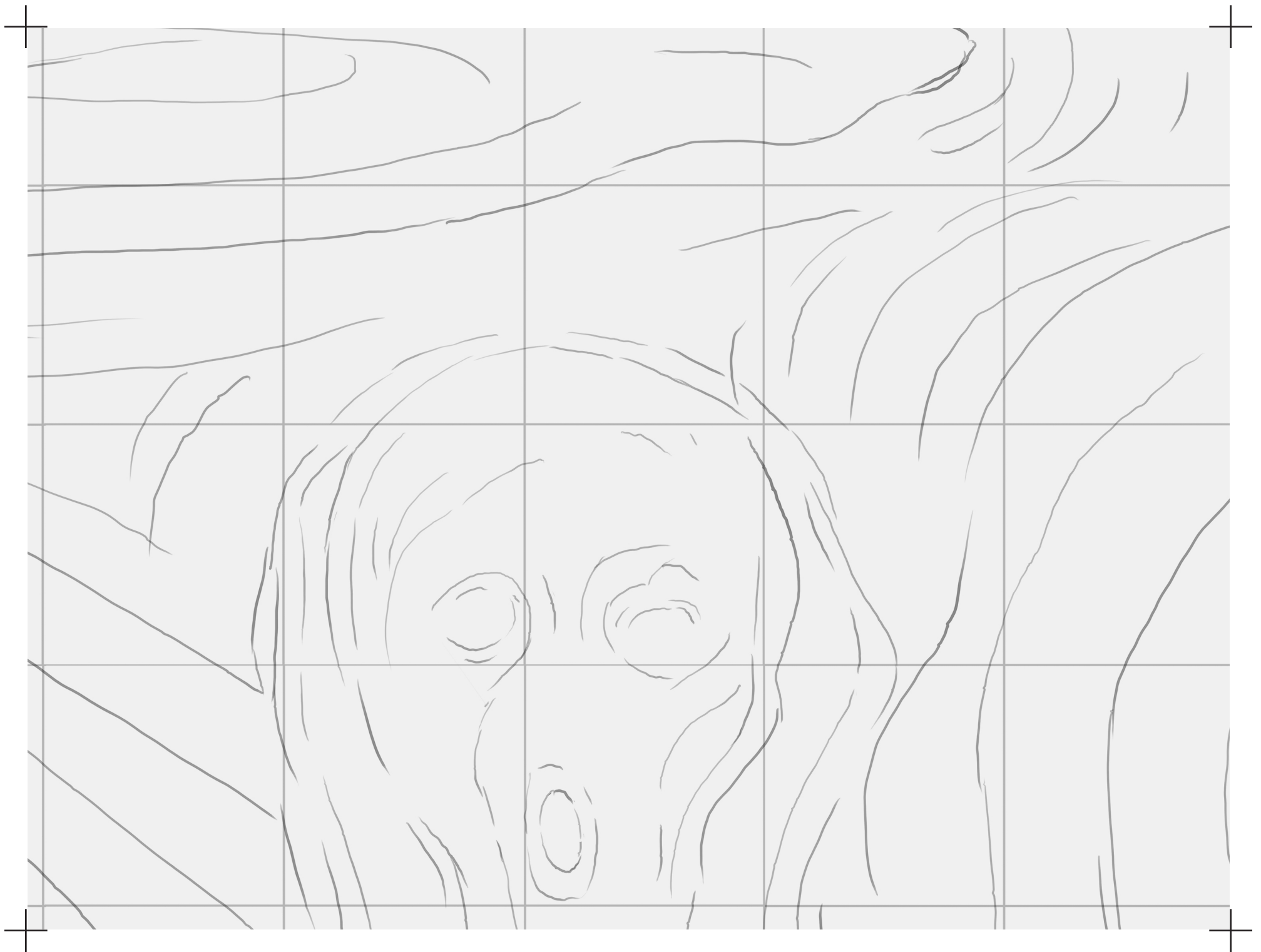
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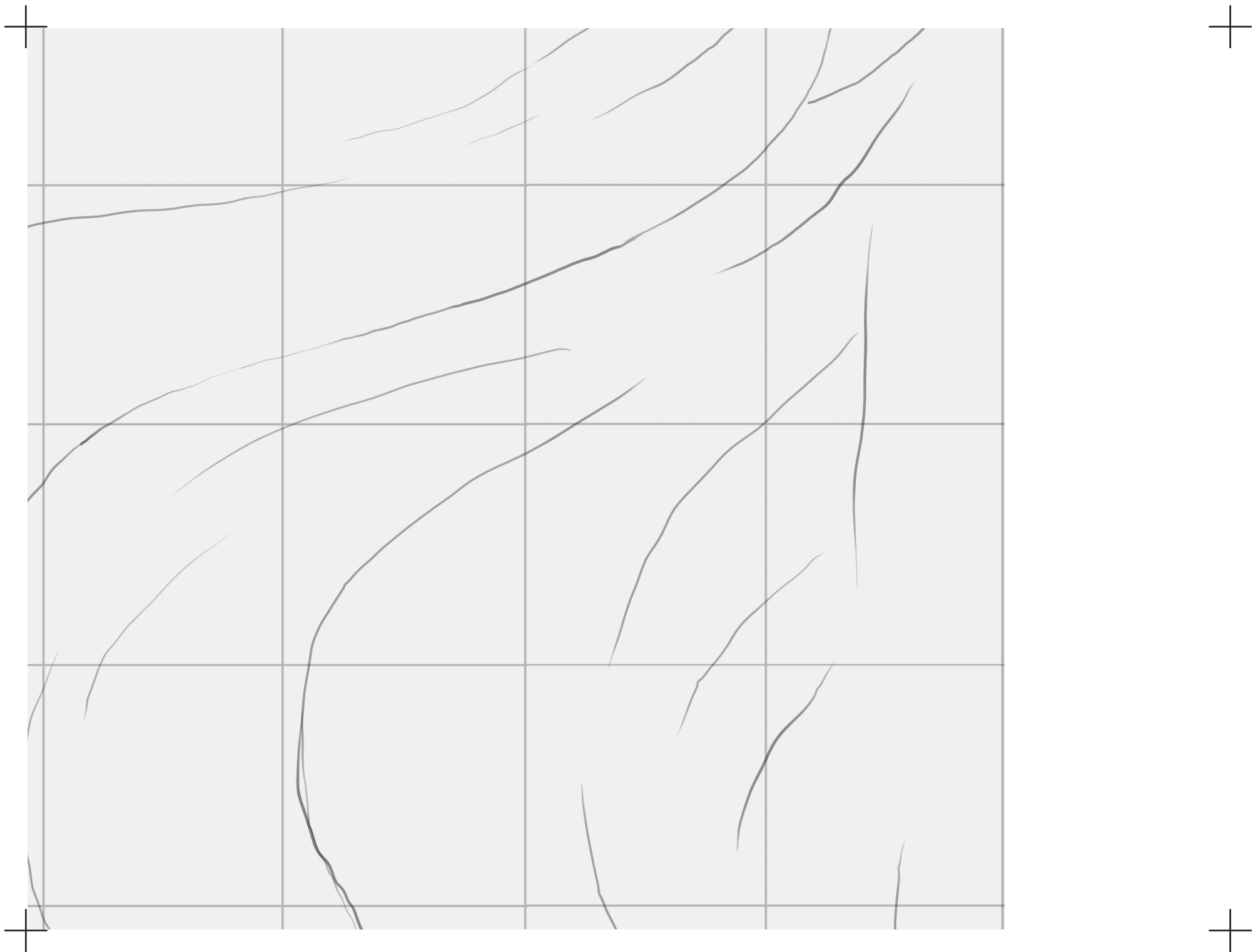
**H**

**I**

**J**







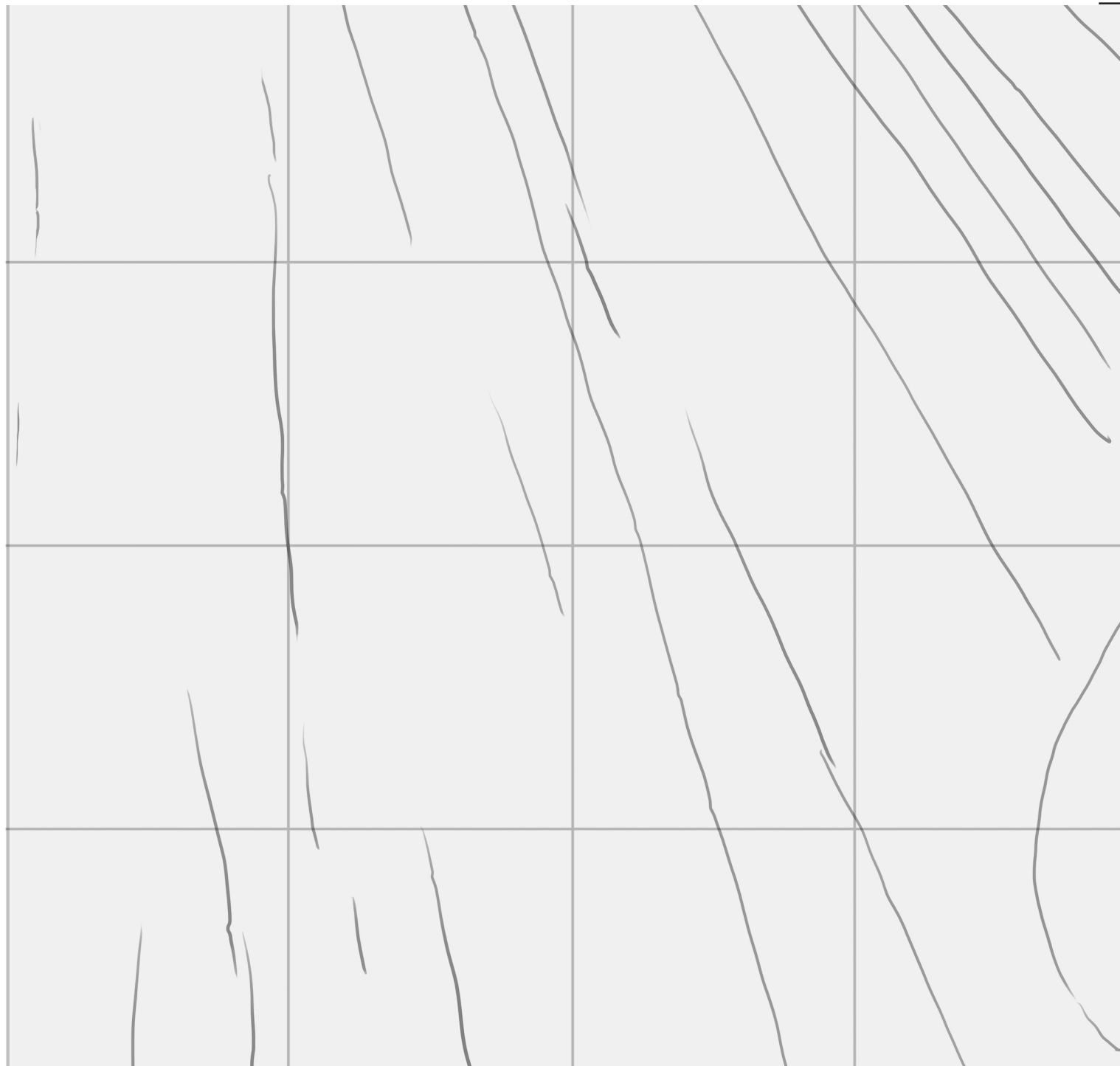


**K**

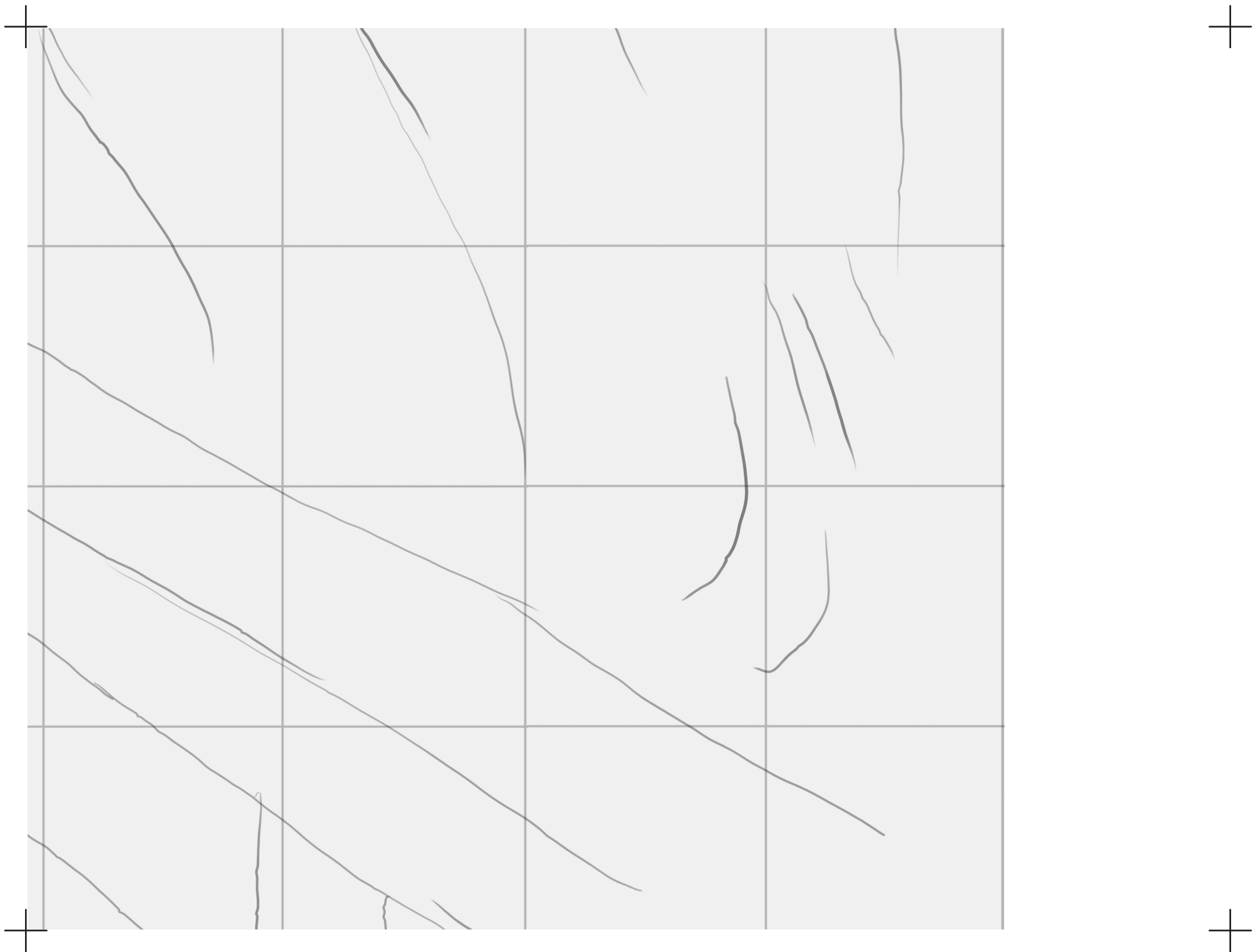
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**M**

**N**



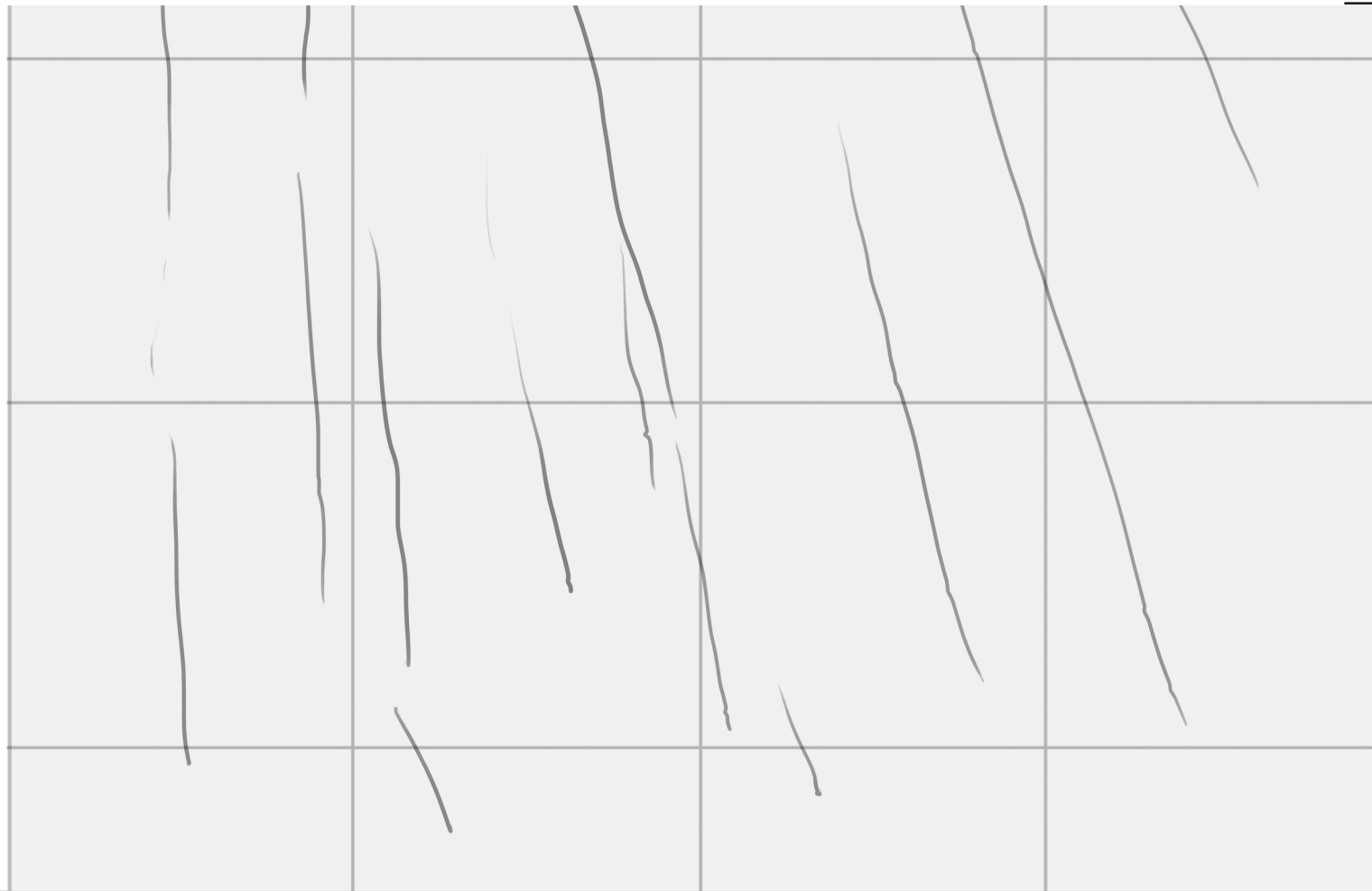


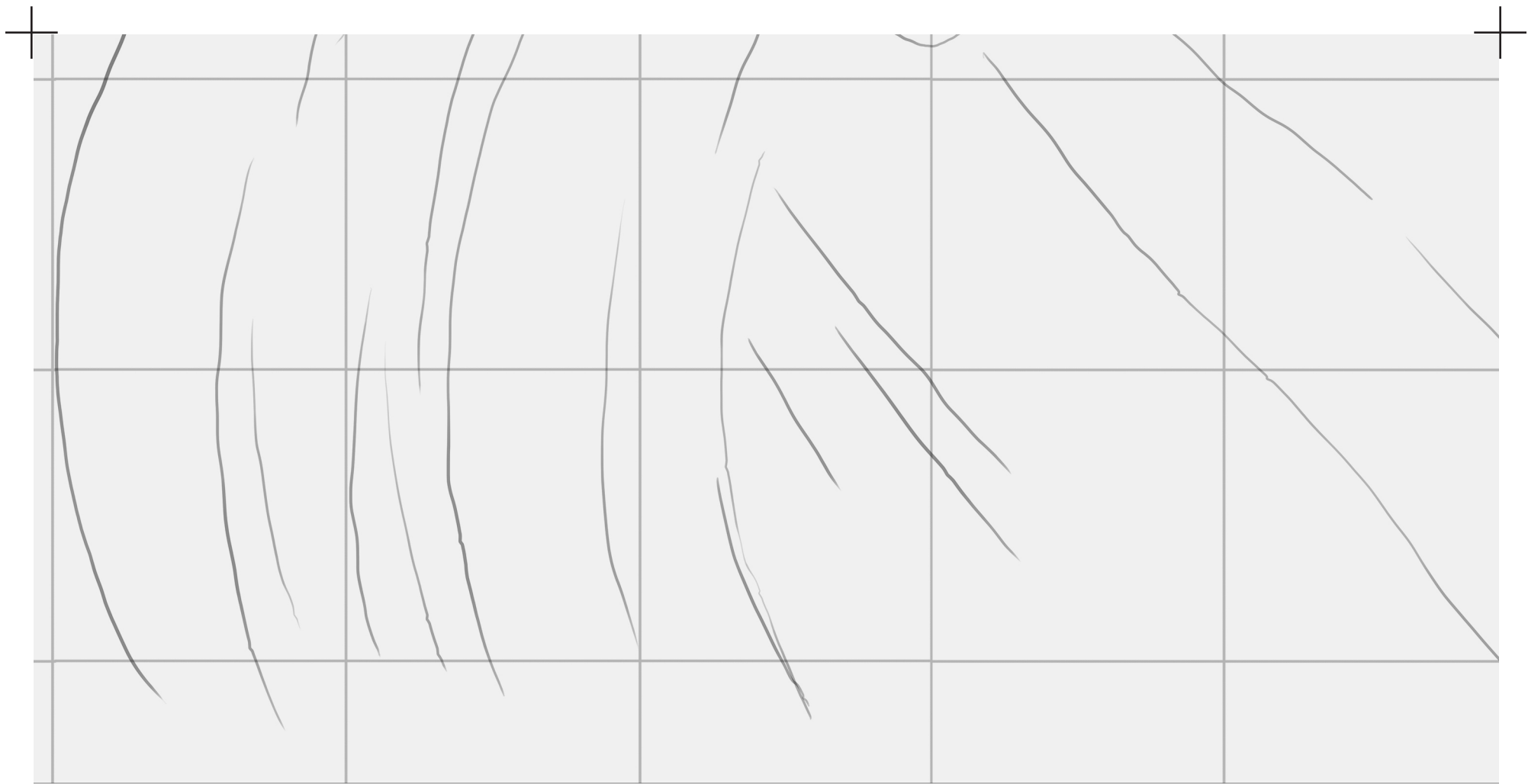


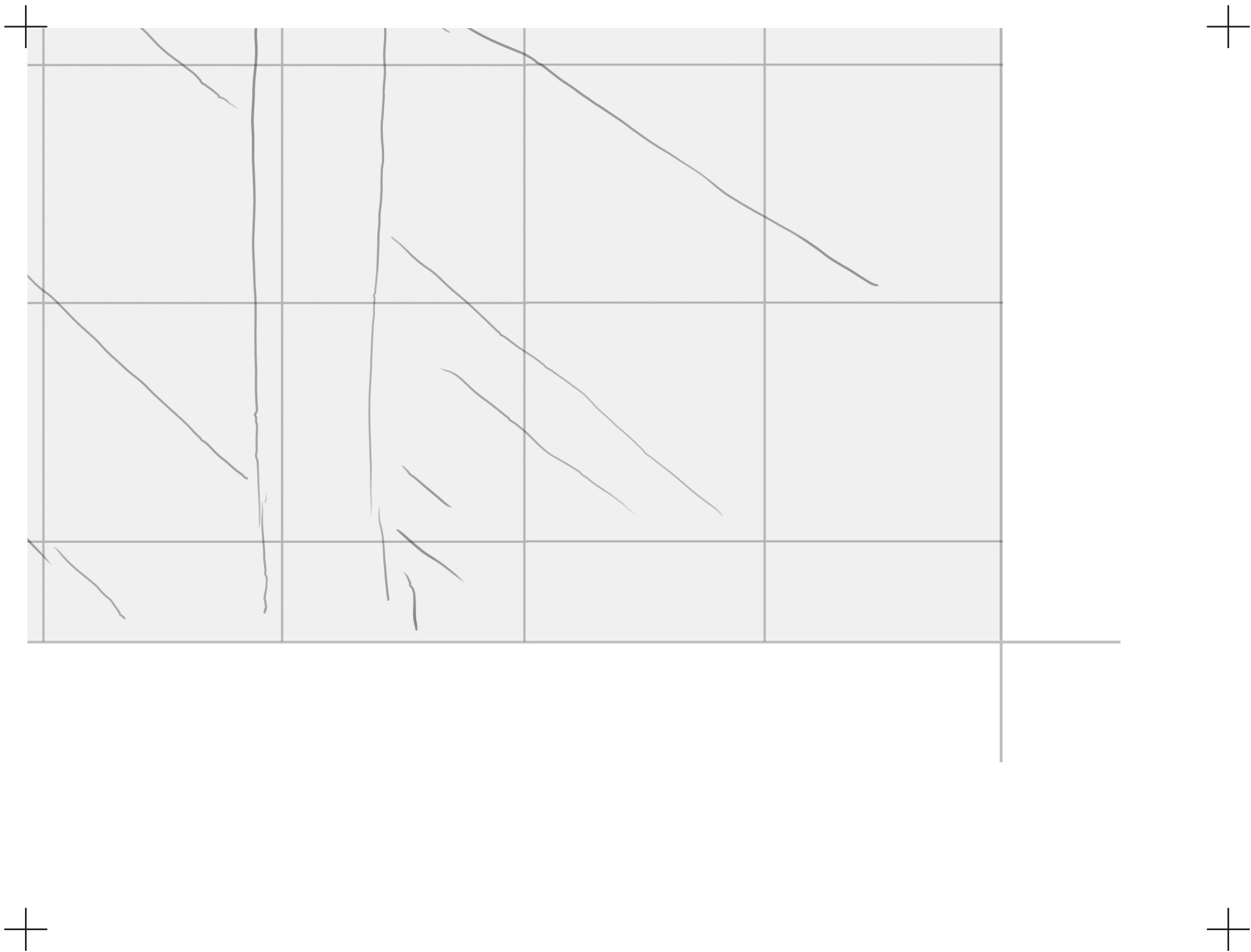


**O**

**P**







1 2 3 4 5 6 7 8 9 10 11 12 13

