

THE DRAWING PATH

Smooth Gradients

A Complete Lesson Plan

BEGINNER

HOBBYIST

PROFESSIONAL

Lesson 5 · Shading & Texture

Teach Yourself to See

thedrawingpath.com

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SKILL LEVEL 1

BEGINNER

Creating smooth, even transitions between values.

1

Smooth Gradients — Beginner

What Makes a Smooth Gradient?

A smooth gradient is a continuous, even transition from one value to another with no visible banding, streaking, or abrupt steps. In drawing, smooth gradients are most commonly needed to describe curved surfaces (where the surface continuously turns away from the light) and atmospheric depth (where distant surfaces become lighter and less distinct). The key skill is building tone gradually and evenly — starting lightly and building up in thin, consistent layers.

The most common approach in pencil: begin with very light pressure at the transition point, and gradually increase pressure as you move toward the darker value. Never start with heavy pressure. Work in multiple passes, not one heavy pass. Use a well-sharpened or round-tipped pencil for consistency.

[VISUAL EXAMPLE]

Three gradient attempts: (1) banded/stepped — shows visible value jumps. (2) streaky — shows directional marks within the gradient. (3) smooth — even, continuous transition. Labels indicate the problems in (1) and (2) and what makes (3) correct.

Blending Tools and Their Effects

Finger blending: fast and warm-toned; works well for large areas. Smears graphite/charcoal into the paper tooth. **Tortillon/blending stump:** more controlled than finger; good for medium-sized areas. Deposits and spreads tone simultaneously. **Brush blending:** lightest touch; works well for soft atmospheric gradients. **Kneaded eraser:** can be used to lift tone gradually — excellent for creating light within a gradient by subtraction rather than addition.

Common Mistakes

Starting too dark

Starting with heavy pressure produces a dark mark that cannot be gradually lightened. Always start lighter than you think you need to.

Too few passes

Trying to achieve the full gradient in one pass produces streaks and bands. Multiple light passes, each building slightly on the last, produce smooth results.

Blending direction parallel to gradient direction

Blending along the same axis as the gradient smears the gradient and creates streaks. Blend perpendicular or in circular motions.

Over-blending producing a flat, textureless surface

Excessive blending removes all trace of the original mark and produces a flat, dead surface. Preserve some texture by limiting blending passes.

Beginner Exercises

10cm Gradient Exercise

15 min

TRAINS: White to dark grey in one pass vs multiple passes

STEPS

1. Draw two rectangles (10cm × 3cm each).
2. Rectangle 1: try to create a smooth gradient in one pass — heavy pressure at the dark end, light at the light end.
3. Rectangle 2: create the same gradient in 5 or more light passes — each pass builds tone slightly.
4. Compare. Which is smoother?
5. Note: most people find multi-pass dramatically smoother than single-pass.

SELF-EVALUATE:

Which approach produced the smoother gradient? How many passes did it take to achieve a smooth result in Rectangle 2?

Sphere Gradient Study

25 min

TRAINS: Smooth gradient on a curved form

STEPS

1. Draw a sphere lit from the upper left.
2. Shade using blending — no hatching. The goal is the smoothest possible gradient from highlight to core shadow to reflected light.
3. Test: at arm's length, can you see any bands, streaks, or uneven patches? If yes, continue blending.
4. The finished sphere should look smooth enough to be a photograph of a white porcelain ball.

SELF-EVALUATE:

At arm's length, is the gradient completely smooth with no visible banding or streaking? If not, what specific blending problem caused the issue?

Atmospheric Gradient

20 min

TRAINS: Horizon-to-sky gradient

STEPS

1. Draw a simple horizon landscape: flat ground plane and sky above.
2. Sky gradient: lightest value directly above the horizon, gradually darkening toward the top.
3. Ground gradient: lightest value at the horizon, gradually darkening toward the foreground.
4. Both gradients should be smooth with no visible banding.
5. This gradient pattern (light horizon, darker in both directions) creates basic atmospheric depth.

SELF-EVALUATE:

Are both the sky and ground gradients smooth with no banding? Does the atmospheric gradient create a convincing sense of depth even in this minimal landscape?

Value Gradient Scale

25 min

TRAINS: Building a 10-step smooth gradient

STEPS

1. Create a single 20cm-long gradient that runs smoothly from pure white to as dark as your medium allows.
2. The gradient must be smooth throughout — no visible steps anywhere along its length.
3. If using pencil: use multiple passes with different pencil grades (2H to 8B) to extend the value range.
4. This is the hardest version of the gradient exercise and tests full tonal control.

SELF-EVALUATE:

Is the 10-step gradient smooth with no visible banding anywhere? Does using multiple pencil grades extend the value range beyond a single grade?

Beginner Resources

Ctrl+Paint — Smooth Gradients

ctrlpaint.com

Free. Matt Kohr's treatment of gradient building in digital is equally applicable to traditional media.

Proko — Shading Techniques

youtube.com/user/ProkoTV

Gradient and blending techniques demonstrated. Free.

Virtual Instructor — Blending Techniques

thevirtualinstructor.com

Step-by-step beginner blending and gradient exercises.

SKILL LEVEL 2

HOBBYIST

Gradients describing form, material, and atmosphere.

2

Smooth Gradients — Hobbyist

Gradients on Complex Forms

On compound and complex forms — the human figure, a face, an architectural moulding — smooth gradients must describe not just the broad light-to-shadow transition but the subtle plane changes within the lit and shadow areas. A slight plane shift on the forehead that catches slightly more light than the adjacent area produces a subtle gradient that communicates the facial structure. These micro-gradients within larger gradient zones are the key to describing complex form through shading alone.

Gradients and Material Description

The gradient character describes the material. A very smooth, sharp-transitioning gradient (quick change from light to dark) suggests a hard, reflective surface with a small light source. A very soft, wide gradient (slow change from light to dark over a large area) suggests a soft or matte surface with a large, diffuse light source. A gradient that ends in a highlight spot rather than gradual lightening suggests a polished or wet surface. Learning to use gradient character to describe material type is a core hobbyist skill.

Common Mistakes

Gradient direction that doesn't follow the form

Applying a gradient in a direction that does not describe how the surface curves. The gradient direction should always describe the form's turning direction.

Gradients of identical softness for all materials

All surfaces rendered with the same gradient softness regardless of material type. Vary gradient sharpness to describe material differences.

Gradient that obscures plane changes

A smooth gradient that blends through a plane change that should be slightly visible. Plane changes should create subtle value steps within the gradient.

Hobbyist Exercises

Portrait Gradient Mapping

45 min

TRAINS: Gradient direction following facial structure

STEPS

1. Draw a simple portrait. Before shading, map the gradient directions across the face.
2. Cheek: gradient runs from cheekbone toward the shadow under the cheekbone.
3. Forehead: gradient runs from the highlight plane toward the shadow at the temples.
4. Nose: gradient runs along the nasal bridge from lit top toward shaded sides.
5. Each gradient must follow the surface's turning direction.

SELF-EVALUATE:

Does the gradient direction accurately describe the facial structure? Where does gradient direction most contribute to the sense of volume?

Material Gradient Comparison

50 min

TRAINS: Different gradient characters for 4 materials

STEPS

1. Draw the same cylindrical form 4 times as 4 materials: matte clay, polished chrome, worn wood, wet glass.
2. Each version should use a different gradient character: (1) wide, soft gradient (clay), (2) very sharp transition with strong highlight (chrome), (3) medium gradient with texture interruption (wood), (4) sharp gradient with specular highlight (glass).
3. Use only gradient quality to communicate the material — no other texture marks.

SELF-EVALUATE:

Are the 4 materials distinguishable from gradient quality alone? Which material gradient was hardest to achieve convincingly?

Figure Gradient Study

55 min

TRAINS: Gradients describing body volume

STEPS

1. Draw a simplified figure (gesture or block figure) with full gradient shading.
2. Each major body mass (torso, arm, leg, head) should have its own gradient system.
3. The gradients should collectively communicate: the light direction, the roundness of each form, and the spatial relationship between forms.
4. No outlines — use only gradient values to define the figure's edges.

SELF-EVALUATE:

Does the figure read as three-dimensional from gradient shading alone without outlines? Are the individual form gradients consistent with the overall light direction?

Atmospheric Gradient Environment

50 min

TRAINS: Depth through gradient in a complex scene

STEPS

1. Draw an environment (landscape, cityscape, or interior) using gradients to create all depth cues.
2. Aerial perspective: backgrounds lighter and less contrasted.
3. Shadow gradients: shadow sides slightly lighter at distances.
4. Ground plane gradient: floor darkening toward foreground.
5. No abrupt value changes — everything transitions through gradients.

SELF-EVALUATE:

Does the gradient system create convincing atmospheric depth? Which gradient (aerial, shadow, or ground) most effectively communicates spatial recession?

Hobbyist Resources

James Gurney — Color and Light

gurneyjourney.com

Gradient use for form description and atmospheric perspective. Professional standard.

Ctrl+Paint — Gradients and Form

ctrlpaint.com

Free comprehensive gradient coverage in the context of form description.

Watts Atelier — Portrait Drawing

wattsatelier.com

Paid. Professional gradient application in portrait and figure drawing.

SKILL LEVEL 3

PROFESSIONAL

Gradient as design element and production tool.

3

Smooth Gradients — Professional

Gradient as Design Element

In production illustration, gradients are deliberate design elements, not just the optical consequence of curved surfaces. A large-scale gradient across a composition can unify a scene, direct the eye, or establish an atmospheric mood. A "vignette" — a gradient darkening toward the edges of a composition — focuses attention on the centre. A diagonal gradient of light to dark creates dynamic compositional tension. At the professional level, gradients are designed at the composition stage as major value elements, not added during rendering.

Gradients in Production

In digital production illustration, gradients are often applied as separate layers, allowing independent control of the gradient's direction, range, and intensity. The underlying rendered form can be kept "clean" while a global gradient layer adds atmospheric or compositional depth. This layered gradient approach enables rapid adjustment of the gradient during revision — a significant production advantage. Traditional artists replicate this by planning the global gradient at the thumbnail stage and applying it as the first layer of tone before any detail rendering.

Common Mistakes

Gradients applied at the rendering stage rather than designed at the composition stage

Adding a compositional gradient during detailed rendering makes it difficult to adjust without overworking the surface.

Global and local gradients conflicting

A local surface gradient (a sphere turning from light to dark) that conflicts in direction with a global compositional gradient (light at top-left, dark at bottom-right).

Gradient too obvious as a separate design element

A compositional gradient so strong that it reads as a separate element rather than an integrated part of the scene.

Professional Exercises

Compositional Gradient Design

150 min

TRAINS: Gradient as primary design element

STEPS

1. Design 5 thumbnail compositions where a single large gradient is the dominant compositional element.
2. Gradient options: (1) light centre / dark edges (vignette), (2) light top / dark bottom (overcast/ground light), (3) diagonal light to dark, (4) left light / right dark, (5) design your own.
3. For each: develop a full illustration from the thumbnail, maintaining the gradient as the dominant structure.
4. The gradient should be visible as an intentional compositional choice.

SELF-EVALUATE:

Is the gradient clearly the dominant compositional element in each illustration? Does each gradient choice produce a different compositional dynamic?

Gradient Layer Study

75 min

TRAINS: Global gradient over detailed rendering

STEPS

1. Create a detailed, flat-value rendered figure or environment.
2. Add a global gradient layer: light upper-left, dark lower-right.
3. The gradient should unify the scene without obscuring the underlying detail.
4. Adjust gradient intensity: too strong (obscures detail), too weak (no unifying effect), correct (enhances but doesn't dominate).
5. Document the correct intensity.

SELF-EVALUATE:

What gradient intensity produces the best balance between unification and detail preservation? How does the global gradient change the scene's atmospheric quality?

Material Gradient Vocabulary

60 min

TRAINS: Building a personal gradient library

STEPS

1. Create a reference sheet of 12 gradient types, each describing a specific material and light condition.
2. For each: specify the gradient character (speed of transition, highlight presence, edge quality) and the material/light combination it describes.
3. This becomes a personal gradient reference to use in production illustration.
4. Test: apply 3 of the 12 gradients to a complex scene and verify they communicate the correct material.

SELF-EVALUATE:

Does your gradient vocabulary accurately describe its intended materials when applied? Which gradient types have the widest range of application?

Production Environment — Gradient-First Approach

120 min

TRAINS: Applying global gradient before local detail

STEPS

1. Create a full production environment illustration using a gradient-first approach.
2. Stage 1: apply the global compositional gradient — this sets the overall atmospheric lighting.
3. Stage 2: add local gradients at the object level, always consistent with the global gradient direction.
4. Stage 3: add detail rendering on top of the gradient foundation.
5. The gradient and rendering layers should integrate seamlessly.

SELF-EVALUATE:

Does the gradient-first approach produce a more atmospherically unified result than detail-first? Where did the global and local gradients conflict, and how did you resolve it?

Professional Resources

James Gurney — Color and Light

gurneyjourney.com

Gradients as compositional and atmospheric design tools at the professional level.

Ctrl+Paint — Gradients in Production

ctrlpaint.com

Free. Gradient layer workflow for production illustration.

Master Exercise Index

All exercises consolidated for quick reference.

Beginner

#	Exercise Name	What It Trains	Duration
B1	10cm Gradient Exercise	Single vs multi-pass	15 min
B2	Sphere Gradient Study	Smooth curved surface	25 min
B3	Atmospheric Gradient	Horizon-to-sky gradient	20 min
B4	Value Gradient Scale	Full tonal range gradient	25 min

Hobbyist

#	Exercise Name	What It Trains	Duration
H1	Portrait Gradient Mapping	Gradient following structure	45 min
H2	Material Gradient Comparison	4 materials 4 characters	50 min
H3	Figure Gradient Study	Volume without outlines	55 min
H4	Atmospheric Gradient Environment	Depth through gradient	50 min

Professional

#	Exercise Name	What It Trains	Duration
P1	Compositional Gradient Design	Gradient as primary element	150 min
P2	Gradient Layer Study	Global over rendered detail	75 min
P3	Material Gradient Vocabulary	Personal gradient library	60 min

Resource Directory

All recommended resources, consolidated.

Beginner

Resource	URL	Notes
Ctrl+Paint Smooth Gradients	ctrlpaint.com	Free gradient building
Proko Shading Techniques	youtube.com/user/ProkoTV	Demonstrated blending
Virtual Instructor Blending	thevirtualinstructor.com	Beginner exercises

Hobbyist

Resource	URL	Notes
James Gurney Color Light	gurneyjourney.com	Atmospheric gradient depth
Ctrl+Paint Gradients Form	ctrlpaint.com	Free form description
Watts Atelier Portrait	wattsatelier.com	Paid portrait gradients

Professional

Resource	URL	Notes
James Gurney Color Light	gurneyjourney.com	Compositional gradient design
Ctrl+Paint Production	ctrlpaint.com	Free gradient workflow
CGMA Environment Art	cgmasteracademy.com	Paid concept art gradients