

THE DRAWING PATH

Foreshortening

A Complete Lesson Plan

BEGINNER

HOBBYIST

PROFESSIONAL

Lesson 2 · Perspective & Volume

Teach Yourself to See

thedrawingpath.com

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PROFESSIONAL

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SKILL LEVEL 1

BEGINNER

Objects angled toward the viewer appear compressed.



Foreshortening — Beginner

What Is Foreshortening?

Foreshortening is the visual compression that occurs when an object or part of an object is angled directly toward or away from the viewer. Hold a pencil at arm's length, parallel to the floor — you see its full length. Now tilt its far end toward you: it appears shorter. Tilt it directly at your eye: it looks like a small circle with a dot in the centre. The length hasn't changed, but your viewing angle causes it to appear dramatically compressed.

Foreshortening is used in figure drawing to create dynamic poses — a fist punching toward the viewer, a running figure, a character leaping overhead. It creates the illusion of depth and movement that a flat side-view cannot. Most beginners avoid it instinctively because it feels "wrong" — the arm looks too short, the leg appears stubby. But the foreshortened version is objectively more accurate to the viewing angle.

[VISUAL EXAMPLE]

A cylinder shown in three orientations: parallel to picture plane (full length visible), 45° angle (shortened), pointing directly at viewer (appears as a circle). Labels show the same physical length in each orientation.

The Foreshortened Cylinder

The cylinder is the best object for learning foreshortening because its geometry is predictable. When a cylinder is angled toward the viewer: (1) its apparent length shortens, (2) the near ellipse (the mouth closest to the viewer) appears at a higher degree (rounder), (3) the far ellipse appears at a lower degree. The degree difference between the two ends tells the viewer how steeply the cylinder is angled. This principle applies directly to arms, legs, fingers, and any limb-like organic form.

Common Mistakes

Making the foreshortened limb too long

Instinctively drawing an arm at its "correct" length rather than its foreshortened compressed length. Trust the foreshortening — shorten aggressively.

Wrong ellipse degrees at near and far ends

The near end of a foreshortened cylinder should have a rounder ellipse than the far end. Getting this backwards makes the cylinder appear to recede the wrong way.

Avoiding foreshortening by adjusting the pose

Rotating the figure until no foreshortening is needed. This produces safe but static poses. Embrace the challenge.

Drawing foreshortening without overlap

Foreshortened limbs must clearly overlap the body behind them. Without overlap, the foreshortened length just looks like a drawing error.

Beginner Exercises

Cylinder Angle Series

25 min

TRAINS: Foreshortening through ellipse degree

STEPS

1. Draw a series of 7 cylinders, all the same physical length, at different angles to the viewer: 0° (side on), 15°, 30°, 45°, 60°, 75°, 90° (pointing directly at you).
2. For each angle: shorten the apparent length appropriately and use correct ellipse degrees at each end.
3. The 90° version should appear as a circle (single ellipse) with no visible length.
4. Label each with its angle.

SELF-EVALUATE:

Does the degree of apparent shortening increase consistently with the angle? Does the 90° cylinder read as pointing at you?

Arm Pointing Toward Viewer

25 min

TRAINS: Figure foreshortening introduction

STEPS

1. Draw an arm pointing directly at the viewer (fist forward, shoulder behind).
2. The hand (near end) is large and detailed. The upper arm (far end) is short and mostly hidden.
3. Use the foreshortened cylinder model: near ellipse rounder, far ellipse narrower.
4. Add a second drawing of the same arm from the side to show the true proportion relationship.

SELF-EVALUATE:

Does the foreshortened arm feel like it's coming toward you? How does the overlap of the hand in front of the arm reinforce the depth?

Book at an Angle

20 min

TRAINS: Simple geometric foreshortening from observation

STEPS

1. Hold a hardcover book at varying angles toward you.
2. Draw the book at 5 different angles using 2PP.
3. For each angle, pay attention to how the long dimension of the book appears shorter as it tilts toward you.
4. Compare: at which angle does the foreshortening become most visually dramatic?

SELF-EVALUATE:

Does the apparent length of the book decrease as the angle increases? At which angle is the foreshortening most convincing?

Character — Basic Foreshortened Kick

25 min

TRAINS: Simple action pose with foreshortening

STEPS

1. Draw a stick figure performing a kick — the kicking leg extends toward the viewer.
2. Replace the stick with cylindrical volumes for each limb.
3. The kicking leg should use clear foreshortening: large near-end, small far-end, shortened apparent length.
4. Add a simple ground plane to anchor the figure in space.

SELF-EVALUATE:

Does the kick feel dynamic and directed toward the viewer? Does the foreshortened leg clearly point forward in space?

Beginner Resources

Proko — Foreshortening the Figure

youtube.com/user/ProkoTV

Proko's dedicated foreshortening video applied to the human figure. Excellent clear explanation.

Loomis — Dynamic Figure Drawing

archive.org/search?query=loomis

Andrew Loomis's classic on action poses includes strong foreshortening methodology. Free on Archive.org.

Drawabox — Boxes in Perspective

drawabox.com

The 250 box challenge trains the ability to construct foreshortened geometric forms from imagination.

SKILL LEVEL 2

HOBBYIST

Dynamic poses and complex foreshortening.

2

Foreshortening — Hobbyist

Figure Foreshortening

Figure foreshortening requires understanding the skeletal structure well enough to know what is hidden behind the near forms. When an arm points toward you, the shoulder and upper arm are mostly hidden by the forearm and hand. You must know enough anatomy to understand what is occluded. This is why foreshortening is traditionally taught only after basic figure proportions are established — without knowing the true lengths, you can't accurately compress them.

[VISUAL EXAMPLE]

A foreshortened seated figure from a low angle: the thighs appear very short (compressed toward viewer), the torso angles back. Reference photo beside the drawing shows the same pose from the side.

Dynamic Poses and Action Foreshortening

The most dramatic foreshortening appears in action poses: a figure leaping overhead, a fist punching toward the viewer, a character falling. These poses are almost always drawn from imagination (there are no live models performing them) and require: (1) a strong understanding of figure construction, (2) confident foreshortening of the most compressed limb or section, (3) clear overlap that establishes which parts are in front, and (4) a strong silhouette that reads as a single dynamic shape.

Common Mistakes

Foreshortening that is too subtle

Compressing the limb by 10% when it should be compressed by 70%. Beginners under-foreshorten consistently. Exaggerate by 25% more than your instinct suggests.

Losing the figure's silhouette

Heavy foreshortening can make the silhouette ambiguous. The overall shape of the foreshortened figure must still read as a clear single form.

Correct foreshortening but wrong weight distribution

A foreshortened leg that points toward the viewer but the figure's weight doesn't shift to account for it. Body mass follows the foreshortened limb.

Hobbyist Exercises

Foreshortened Pose from Reference

50 min

TRAINS: Working from extreme angle photography

STEPS

1. Find 4 photographs of figures in strongly foreshortened poses (arms or legs toward camera, jumping, falling, or running toward the viewer).
2. For each photograph, identify: which body part is most foreshortened? What is its true length vs apparent length?
3. Draw each pose focusing on capturing the compression accurately rather than "correcting" it.
4. Annotate each drawing with the foreshortened limb and its compressed appearance.

SELF-EVALUATE:

Does each drawing capture the foreshortening accurately? How extreme is the compression in your most foreshortened example?

Punching Fist — Complete Figure

45 min

TRAINS: Action foreshortening from imagination

STEPS

1. Design a figure throwing a punch toward the viewer — drawn entirely from imagination.
2. The punching arm must be fully foreshortened: fist large and in front, upper arm short and mostly hidden.
3. The body twists to support the punch. The back foot pushes off the ground.
4. All parts of the figure must consistently support the pose — weight, balance, and overlap.

SELF-EVALUATE:

Does the punch feel directed at the viewer with physical force? Is the foreshortening of the arm consistent with the body's pose?

Vehicle Foreshortening

55 min

TRAINS: Dramatic angle for mechanical subjects

STEPS

1. Draw a vehicle (car, train, aircraft) from a dramatically foreshortened angle — front or rear facing almost directly at the viewer.
2. The near face of the vehicle is large and detailed. The body recedes quickly behind it.
3. Use 2PP or 3PP as the perspective system. The vehicle's long axis points almost at the viewer.
4. Apply atmospheric perspective to reinforce depth.

SELF-EVALUATE:

Does the vehicle feel like it's rushing toward (or away from) the viewer? Is the scale relationship between front and back convincing?

Timed Foreshortened Gestures

15 min

TRAINS: Speed and confidence with compressed forms

STEPS

1. Set a timer for 2 minutes per pose.
2. Use reference from a pose website (e.g., Line of Action) — specifically foreshortened positions.
3. Draw 6 poses in 12 minutes total. Focus only on capturing the compression — not detail.
4. After all 6: identify the one most successfully foreshortened and the one least successful. What made the difference?

SELF-EVALUATE:

Do the timed drawings capture foreshortening more or less accurately than slow study drawings? What does speed force you to prioritise?

Hobbyist Resources

Proko — Dynamic Figure Foreshortening

youtube.com/user/ProkoTV

Proko's foreshortening series covers figure-specific foreshortening with clear construction breakdowns.

Burne Hogarth — Dynamic Figure Drawing

[amazon.com/search?q=burne+hogarth+dynamic](https://www.amazon.com/search?q=burne+hogarth+dynamic)

Dramatic action foreshortening reference. Hogarth's figures are extreme but teach aggressive foreshortening discipline.

Line of Action — Foreshortening Poses

[line-of-action.com](https://www.line-of-action.com)

Free pose reference website. Set the timer and practice mode for foreshortening-heavy poses specifically.

SKILL LEVEL 3

PROFESSIONAL

Complex foreshortening, action, and drama.

3

Foreshortening — Professional

Complex Figure Foreshortening

Complex figure foreshortening occurs when multiple body parts are foreshortened simultaneously — a figure diving overhead where both arms, the torso, and both legs are all angled at varying degrees toward the viewer. The construction method: (1) identify the most foreshortened single element and establish it first, (2) work outward from that anchor, relating each other element to it, (3) use cross-contour lines and ellipses to verify the spatial relationships between body parts. The figure must have a consistent internal logic — the foreshortening of each part must be reconcilable with all others.

Foreshortening and Implied Movement

The most powerful foreshortened figures communicate not just the current position but the implied movement that led to it and will follow from it. A fist punching toward the viewer should feel like it's in the middle of a committed swing. The extreme compression of the foreshortened arm carries kinetic energy that a side-view would not. This is why comic artists, animation concept artists, and action illustrators invest heavily in foreshortening competency — it is the primary tool for conveying dynamic movement in a static image.

Common Mistakes

Parts that don't relate to each other

In complex foreshortening, each body part's spatial position must be consistent with all others. A foreshortened torso and a non-foreshortened arm attached to it creates a spatial impossibility.

Foreshortening without silhouette design

A technically correct foreshortened figure that reads as an ambiguous blob from a distance. The silhouette must be designed to communicate the action even at thumbnail scale.

Dynamic pose without physical logic

A figure in a foreshortened dynamic pose that defies physics — wrong weight distribution, impossible joint angles, or a centre of gravity that doesn't support the pose.

Professional Exercises

Overhead Figure — Full Foreshortening

120 min

TRAINS: Multiple simultaneous foreshortened elements

STEPS

1. Draw a figure leaping or diving overhead — viewed from almost directly below.
2. Both arms, torso, and both legs are foreshortened simultaneously.
3. Start with the most foreshortened single element (typically the torso angled directly overhead). Build all other parts from this anchor.
4. Add cross-contour lines to verify spatial relationships.
5. Render to a finished illustration standard.

SELF-EVALUATE:

Does the figure feel like it occupies space above the viewer? Are all foreshortened elements consistent with each other spatially?

Sequential Action Foreshortening

120 min

TRAINS: Comic page with foreshortening-driven dynamics

STEPS

1. Design a 4-panel comic page where foreshortening is the primary tool for communicating action.
2. Each panel must contain a different foreshortening challenge: toward viewer, away from viewer, overhead, falling.
3. The panels must read as a sequential action — the figure or figures are in continuous movement across all four.
4. Finish to an inked panel standard.

SELF-EVALUATE:

Does the foreshortening drive the sense of action? Does the page read as a kinetic sequence?

Master Copy — Extreme Foreshortening

90 min

TRAINS: Learning from practitioners of dynamic foreshortening

STEPS

1. Select a Michelangelo, Jack Kirby, or Frank Frazetta figure in extreme foreshortening.
2. Reproduce the drawing exactly — match every foreshortening decision.
3. After completing, analyse: what construction choices made the extreme foreshortening work? Were any areas cheated?
4. Apply one finding to an original foreshortened pose.

SELF-EVALUATE:

What did copying reveal about the original artist's foreshortening approach? Can you identify any places the master "cheated" for compositional reasons?

Vehicle + Figure — Dynamic Scene

120 min

TRAINS: Combined foreshortening in environment

STEPS

1. Design an action scene: a figure interacting with a moving vehicle (jumping on, dodging, riding).
2. Both the figure and the vehicle must be foreshortened from the same dramatic angle.
3. The spatial relationship between figure and vehicle must be unambiguous — their relative positions in depth must be clear.
4. Render with a strong value structure that supports the action read.

SELF-EVALUATE:

Are both the figure and vehicle foreshortened consistently from the same viewpoint? Is the spatial relationship between them clear?

Professional Resources

Frank Frazetta — Art Collections

amazon.com/search?q=frank+frazetta+art

Frazetta's work is the apex of expressive action foreshortening. Study his figure drawings for aggressive foreshortening discipline.

Jack Kirby — The King of Comics

amazon.com/search?q=jack+kirby+king+comics

Kirby's figure work demonstrates extreme foreshortening used for narrative energy. Essential study for comic and action artists.

Watts Atelier — Figure Foreshortening

wattsatelier.com

Professional online figure drawing program with strong foreshortening curriculum and live model video library.

Master Exercise Index

All exercises consolidated for quick reference.

Beginner

#	Exercise Name	What It Trains	Duration
B1	Cylinder Angle Series	Foreshortening through ellipses	25 min
B2	Arm Toward Viewer	Figure foreshortening intro	25 min
B3	Book at an Angle	Geometric foreshortening	20 min
B4	Foreshortened Kick	Simple action pose	25 min

Hobbyist

#	Exercise Name	What It Trains	Duration
H1	Foreshortened Poses	Working from extreme photos	50 min
H2	Punching Fist Figure	Action from imagination	45 min
H3	Vehicle Foreshortening	Mechanical subjects	55 min
H4	Timed Foreshortened Gestures	Speed and compression	15 min

Professional

#	Exercise Name	What It Trains	Duration
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P1	Overhead Figure	Multiple simultaneous	120 min
P2	Sequential Action Page	Comic foreshortening	120 min
P3	Master Copy Extreme	Learning from masters	90 min
P4	Vehicle + Figure Scene	Combined foreshortening	120 min

Resource Directory

All recommended resources, consolidated.

Beginner

Resource	URL	Notes
Proko Foreshortening	youtube.com/user/ProkoTV	Dedicated foreshortening video
Loomis Dynamic Figure	archive.org	Free classic text
Drawabox 250 Boxes	drawabox.com	Geometric foreshortening training

Hobbyist

Resource	URL	Notes
Proko Dynamic Figure	youtube.com/user/ProkoTV	Figure foreshortening series
Burne Hogarth Dynamic	amazon.com	Aggressive foreshortening reference
Line of Action	line-of-action.com	Free foreshortened pose reference

Professional

Resource	URL	Notes
Frank Frazetta Art	amazon.com	Apex action foreshortening
Jack Kirby Comics	amazon.com	Narrative foreshortening study
Watts Atelier Figure	wattsatelier.com	Professional figure program