

Space, Depth, and Proportion

AP Drawing

Measuring and Sighting

Sighting 目测 means measuring the subject with your pencil at arm's length — the survival skill of observational drawing.

- Hold the pencil at full arm's length with a locked elbow and one eye closed: now it is a ruler and a protractor.
- Pick one unit (often the head, or a cup's height) and measure everything in that unit — **comparative measurement** 比较测量.
- Check angles by rotating the pencil to match an edge, then carrying that angle to the paper.
- A **plumb line** 铅垂线 (an imagined vertical) shows which landmarks sit exactly above or below each other.
- Draw the **envelope** 外包形 first: the big simple shape that contains the whole subject, then divide it.

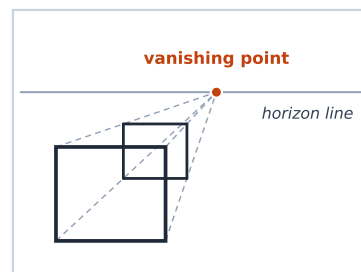
One-Point Perspective

Linear perspective 线性透视 treats the picture as a window. In one-point perspective, all lines going into the depth meet at a single point.

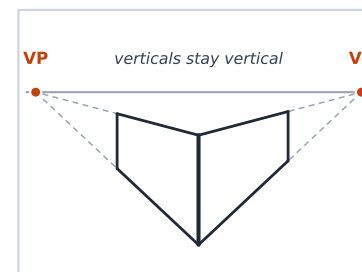


A straight desert road: its two edges appear to meet at a single vanishing point on the horizon, exactly the one-point perspective a drawing recreates to show depth

One-point perspective



Two-point perspective



one-point: receding parallels meet at a VP · verticals stay vertical

Left: one-point — depth lines meet at one vanishing point. Right: two-point — each set of edges meets its own point

- The **horizon line** 视平线 is the viewer's eye level. We look down on everything below it and up at everything above it.
- Lines parallel to the picture surface stay true; lines going *into* the scene converge to the **vanishing point** 灭点.
- Equal spaces look smaller as they recede. Use diagonals to divide receding space evenly.
- **One-point perspective** 一点透视 suits rooms, streets, and corridors seen straight-on.
- Perspective plus **overlap** 遮挡 is depth doubled: near edges cover far edges.

Two-Point and Three-Point Perspective

Turn the subject at an angle and you need **two-point perspective** 两点透视; look steeply up or down and you need a third point.

- In two-point, verticals stay vertical; the two sets of horizontal edges converge to a left and a right vanishing point on the horizon.
- Keep the two points far apart — often off the paper. Points placed too close create a fisheye distortion.
- **Three-point perspective** 三点透视 adds a vertical vanishing point: a skyscraper from below, or a street from a rooftop.
- Boxes drawn in perspective become scaffolding for everything: buildings, books, vehicles, even heads.
- Cast shadows and reflections obey the same perspective system as the objects that make them.

Foreshortening

Foreshortening 透视缩短 is perspective applied to a single form pointing toward you — lengths compress dramatically.

- A pointing arm may appear one-third of its true length. Draw the *apparent* shape, not the length you know.
- Overlap is the key signal: the hand overlaps the forearm, the forearm overlaps the upper arm.
- Think in **cross-sections** 横截面: imagine rings around the form, like a wireframe, to feel how it turns toward you.
- Measure foreshortened lengths by sighting — memory lies, observation tells the truth.
- The classic practice piece: a figure lying down, drawn feet-first, like Mantegna's *Dead Christ*.

Atmospheric Perspective

Atmospheric perspective 空气透视 creates depth without any lines: distant things become lighter, cooler, softer, and less detailed.

- Air scatters light, so contrast fades with distance. The far mountain is a pale, flat shape.
- Foreground: darkest darks, sharpest edges, most texture. Background: a narrow value range and soft edges.
- Save full black and full white for the foreground; the distance lives in the middle greys.
- Detail density is a depth cue by itself: render the near leaf, suggest the far tree.
- Combine linear and atmospheric perspective for maximum depth in landscape drawing.



Layered mountain ridges fade with distance: atmospheric perspective cools and lightens far forms

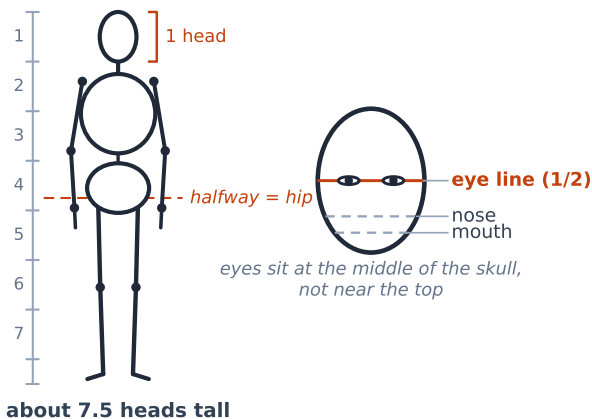
Composition and the Picture Plane

Composition 构图 — the arrangement of everything inside the picture's edges — is a named AP drawing skill and the first thing a scorer sees.

- The **picture plane** 画面 has edges: what you crop out is as expressive as what you keep in.
- The **rule of thirds** 三分法 places focal points on the third-lines — stronger than dead centre.
- Design the **negative space** 负空间: the empty shapes around the subject are shapes you drew, not leftovers.
- The **figure-ground relationship** 图底关系 must stay readable: the eye should always know what is subject and what is background.
- Lead the eye with paths — lines, value contrast, and detail act as arrows toward the focal point.
- Test crops with a **viewfinder** 取景框 (or a phone camera) before committing to the page. Change the **viewpoint** 视点: eye level is neutral; low or high angles make ordinary subjects fresh.

Drawing the Figure and Portrait

The human figure combines every drawing skill at once: **proportion** 比例, gesture, form, and likeness under one deadline.



AP Drawing • Space, Depth, and Proportion • figure (7.5 heads) and head proportions

The classic adult figure is about 7.5 heads tall; in the head, the eyes sit at the halfway line

- The classic adult figure stands about **7.5 heads** tall; the halfway point of the body is near the hip, not the waist.
- In the head, the eyes sit at the **halfway line** 中线 of the skull — beginners always place them too high.
- Start with gesture and the big masses (ribcage, pelvis, skull); features and fingers come last.
- Check likeness with landmark distances, not memorised rules alone — every face bends the average.
- Draw hands and feet as simple geometric mittens and wedges first, then divide them into parts.

Exam tips

- **Perspective errors are the easiest mistakes for a scorer to spot** — check every depth line actually aims at its vanishing point before you render.
- **Include one strong observational space** (an interior, a stairwell, a street) in the portfolio: it demonstrates the *space* skill the rubric names, unmistakably.

- **Foreshortening is high-value evidence.** One convincing foreshortened limb or object tells scorers you draw what you see, not what you remember.
- **Crop like a designer.** Before starting, test three viewfinder crops and pick the one with the strongest negative space — composition is judged at first glance.
- **Use atmospheric perspective in graphite too**, not just paint: softening far edges with a kneaded eraser is quick and reads as skill.