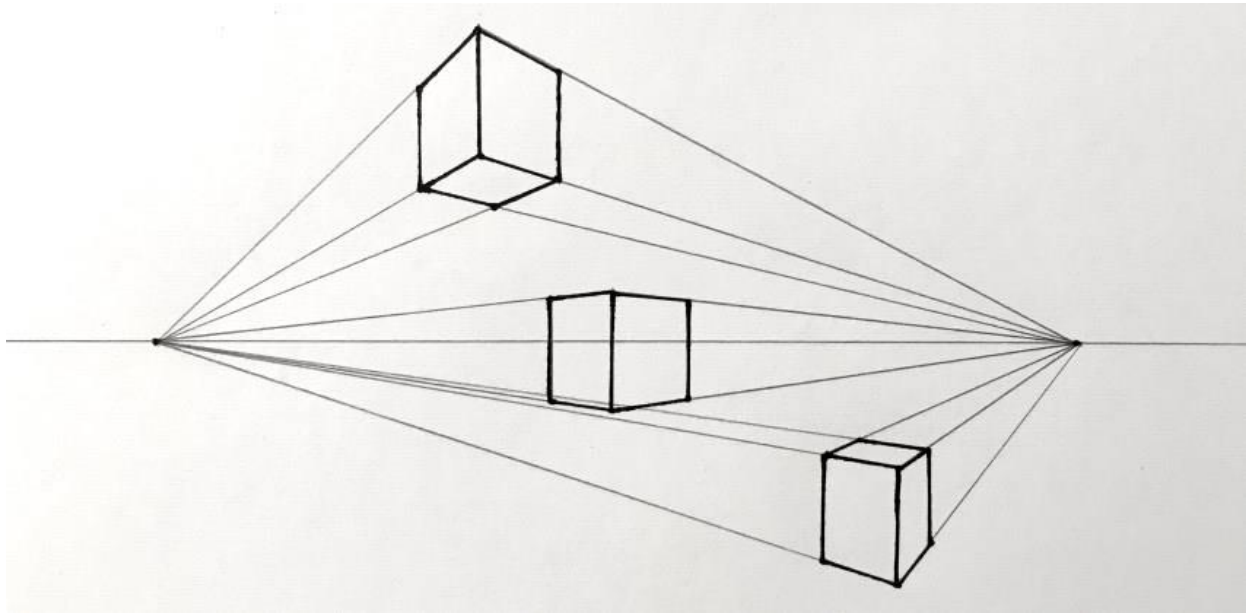


Two-point perspective



Boxes in 2-point perspective



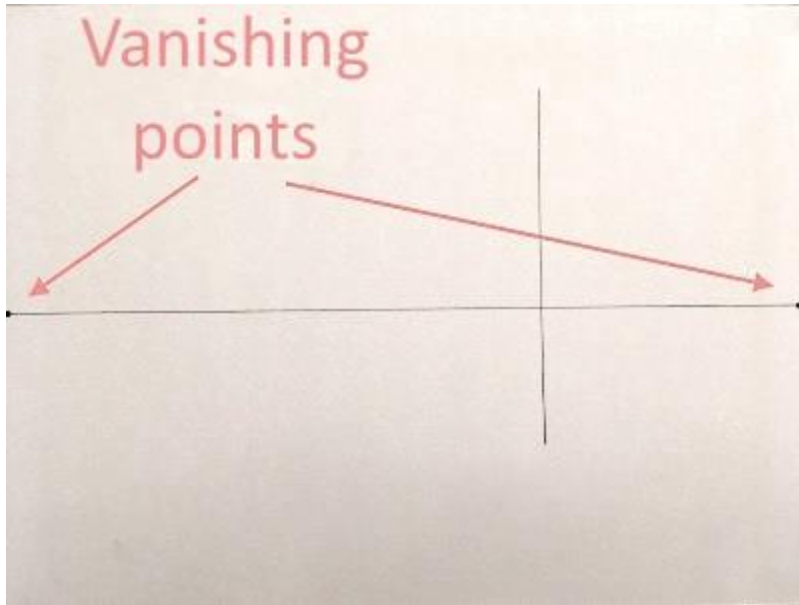
In **two-point perspective**, only lines that represent **height** will be parallel. They will be perpendicular to the horizon.

All other lines, meaning lines representing **width** and **depth**, come out of the vanishing points.

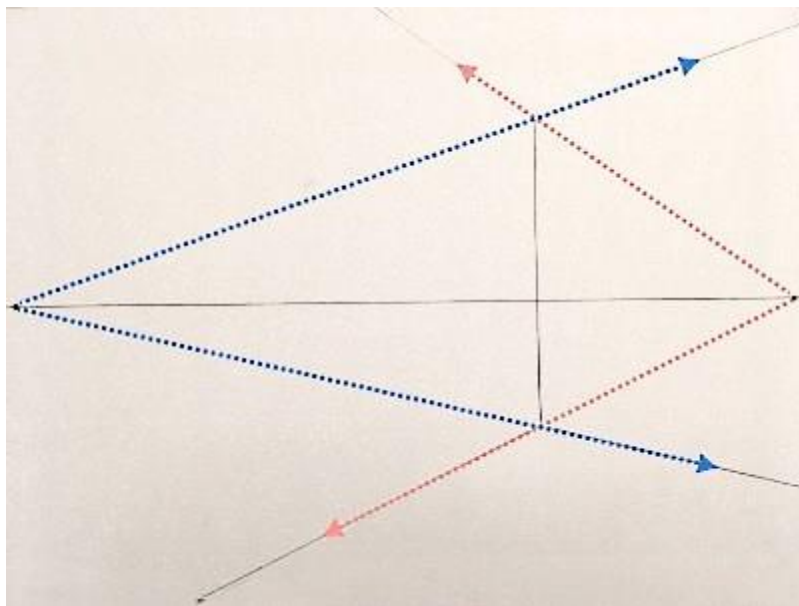
In two-point perspective, there will be **two vanishing points**.

How to Draw a Room in Two-point perspective

Drawing walls from two vanishing points:



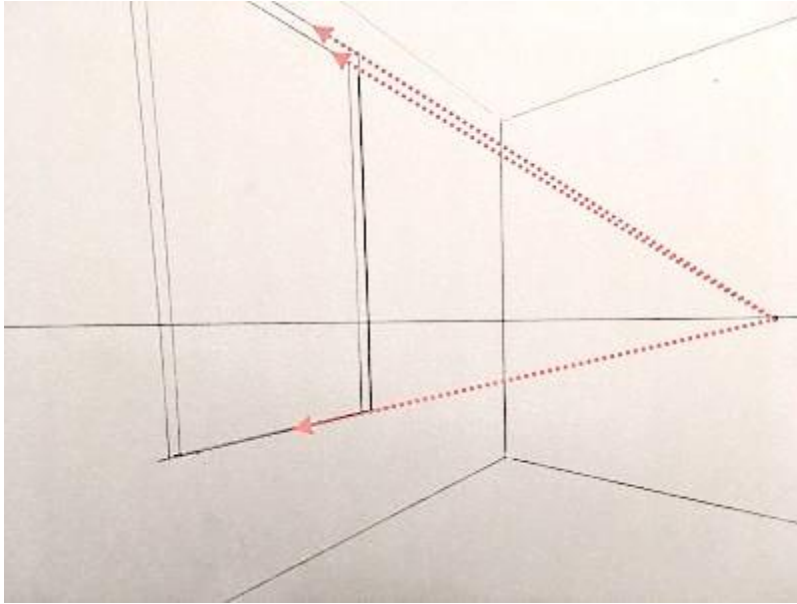
Two vanishing points



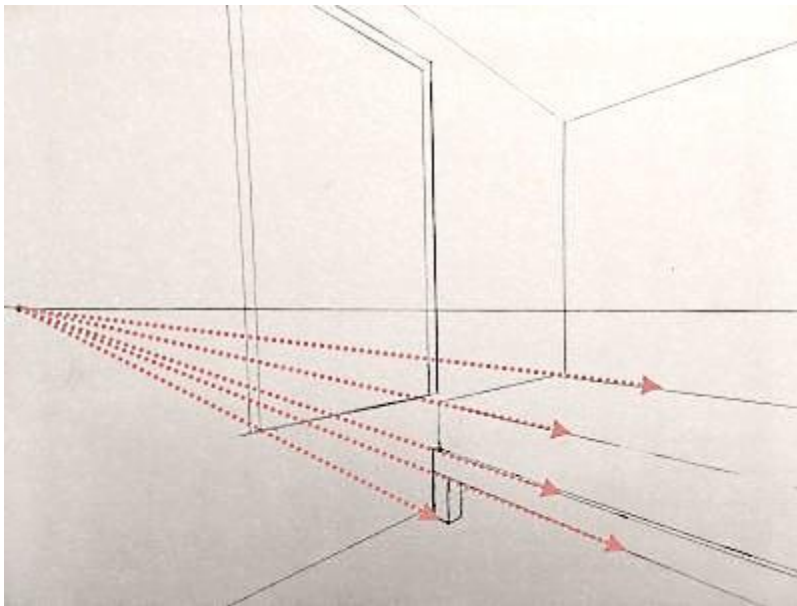
Lines representing walls

All lines that are parallel in reality but in perspective drawing, meet on the right side of the painting will come out from the right vanishing point.

All lines that are parallel in reality but in perspective drawing, meet on the left side of the painting will come out from the left vanishing point.



Right vanishing point



Left vanishing point

Result:

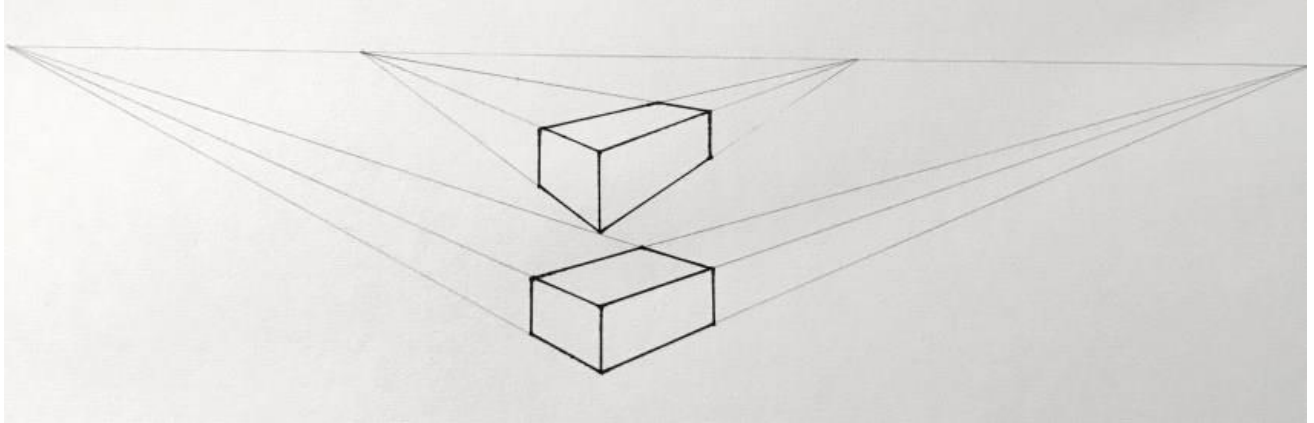


Room in two-point perspective

Where to Place Vanishing Points?

While drawing in perspective helps to create scenes in a realistic way, it can sometimes produce odd or unnatural-looking results.

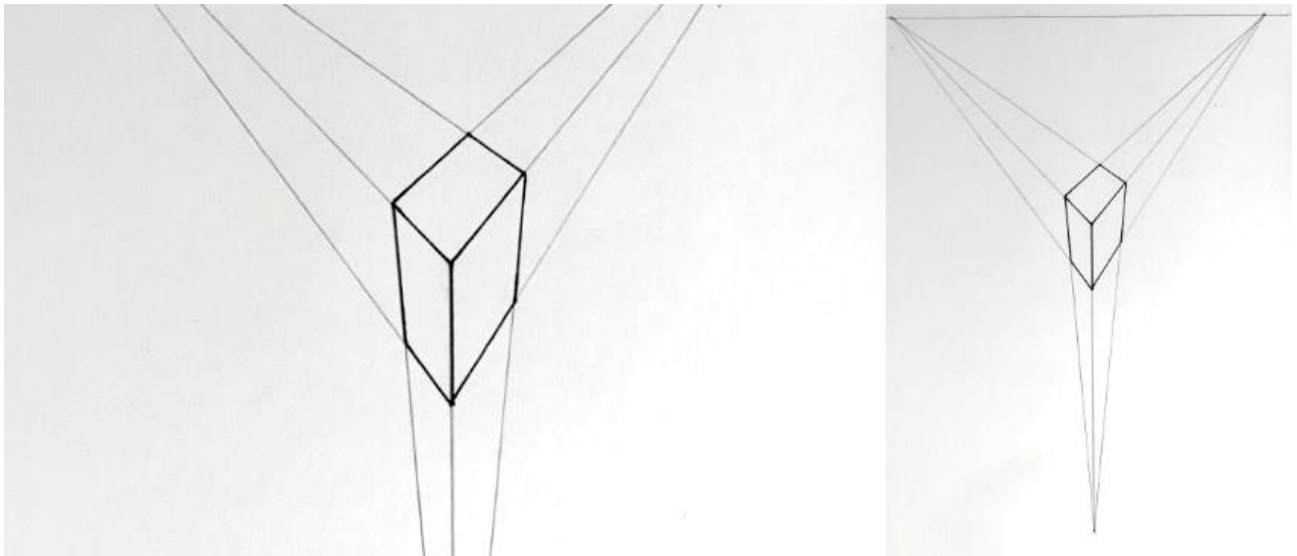
Depending on an object's size, different positioning of vanishing points on the horizon line will produce different perspectives.



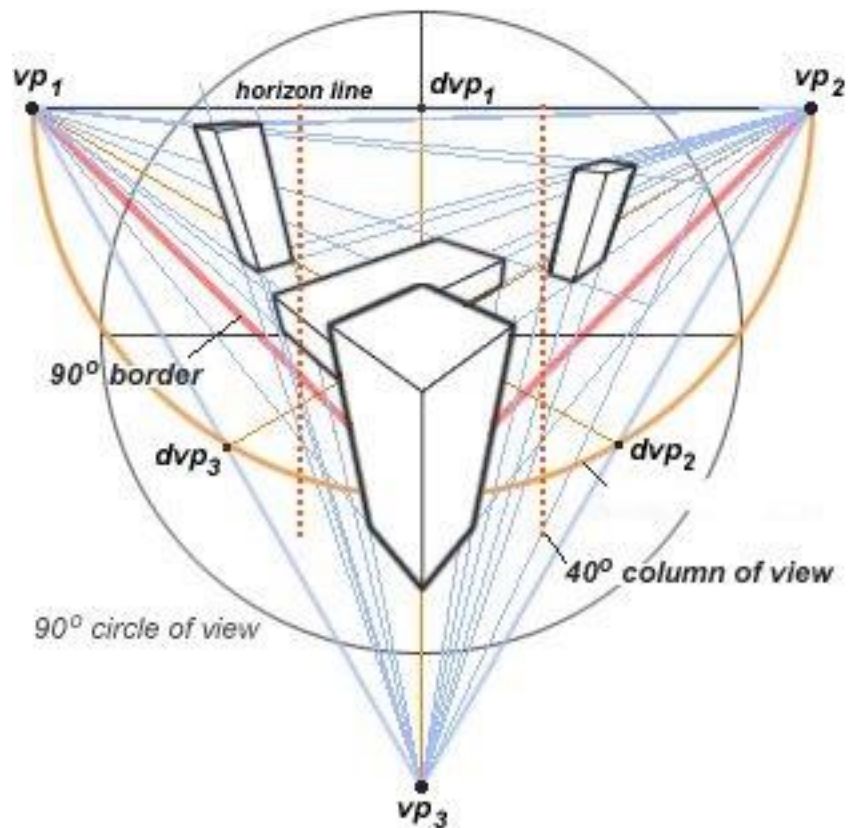
Vanishing points placement

The solution to this problem is to use simple shapes at the planning stage and to test different positioning of vanishing points.

Three-point perspective



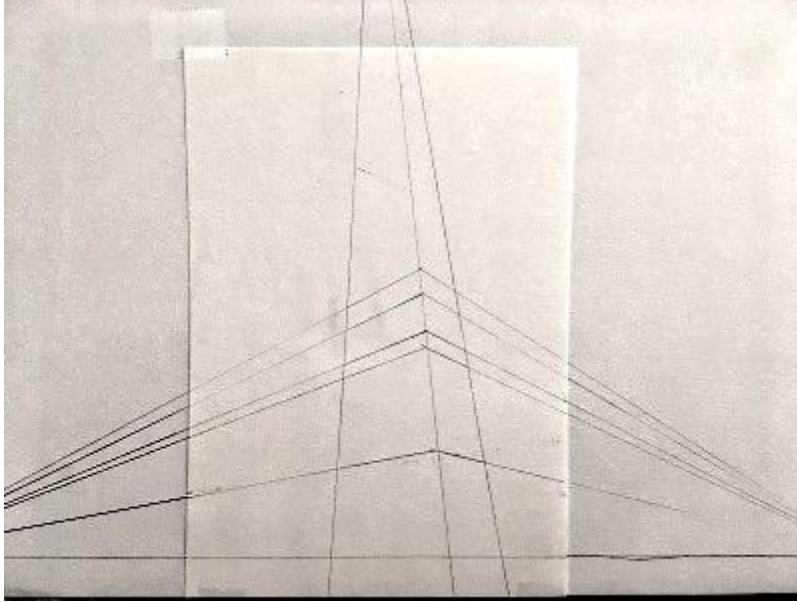
Box in 3-point perspective



Three-point perspective is suitable for situations such as looking from above or below. For example, a bird's-eye view or a caterpillar view.

In three-point perspective drawing, **ALL** the lines that are parallel in reality will meet at a vanishing point.

Like one- or two-point perspective, for three-point perspective there is extensive use when drawing [comic books](#).



Three vanishing points



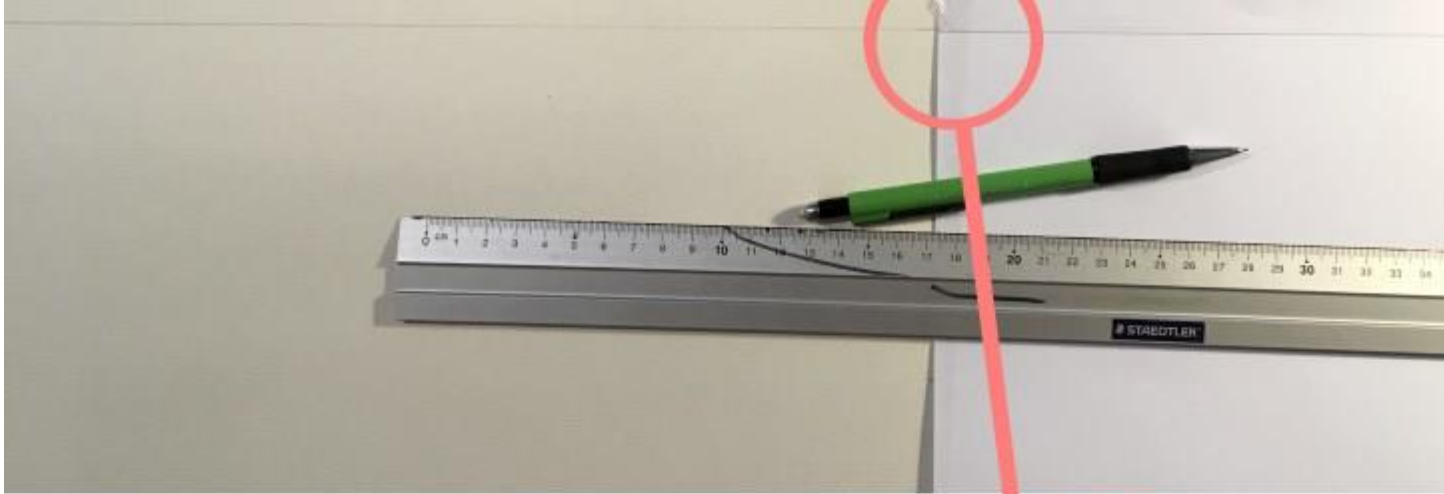
A view from below

Tip:

Sometimes, vanishing points may be outside the painting surface.

To solve this problem, a larger paper sheet can be used below the drawing paper, and lines can be drawn from it.

Another solution is to attach two paper sheets and tape them together.



Attaching paper sheets

Perspective Drawing Characteristics

There are two important rules to pay attention to when drawing in perspective.

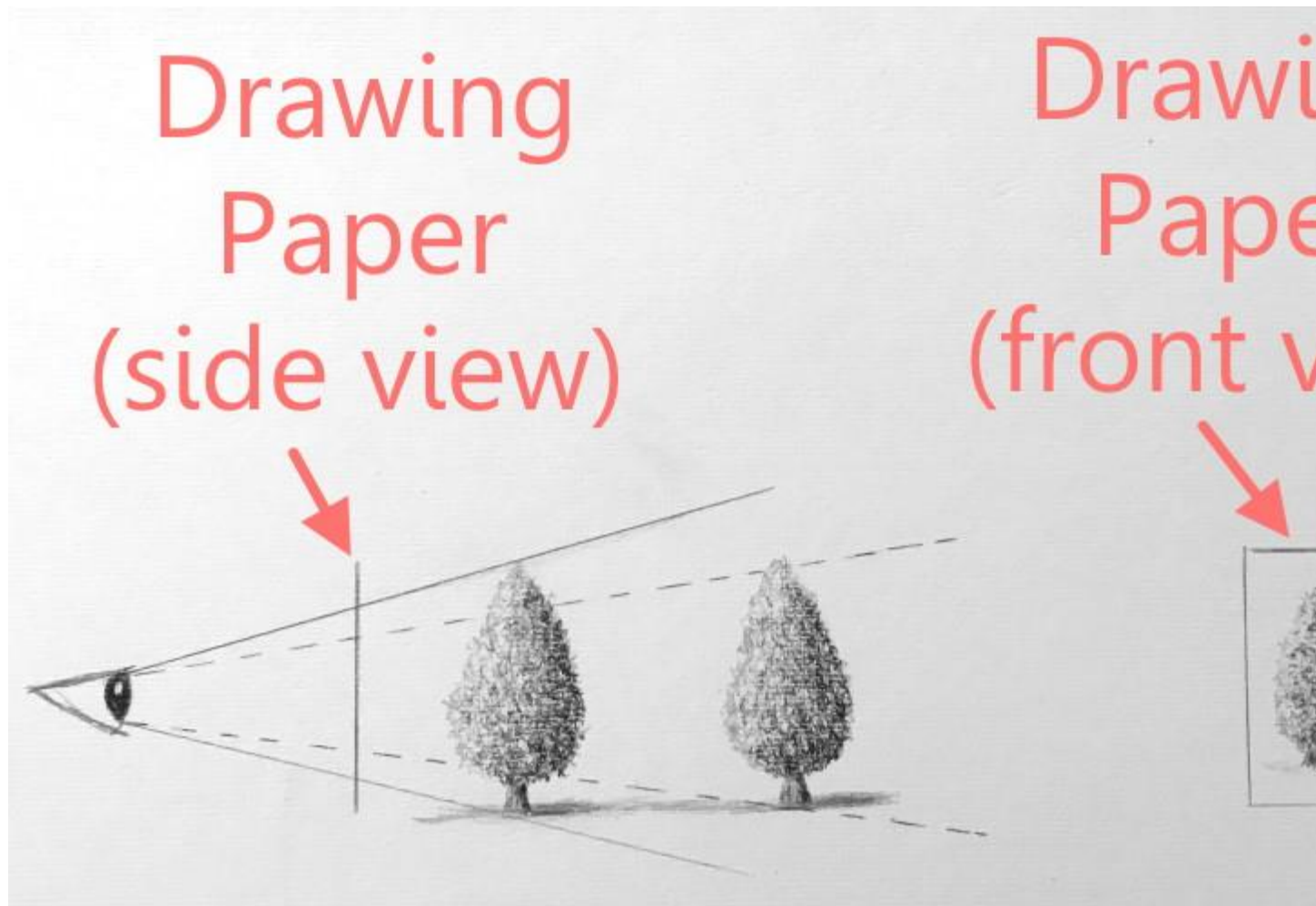
1. Objects Look Smaller with Distance

The farther an object is from the observer, the smaller it will look!

In other words:

Objects in front of the observer will get smaller with distance, but they will keep the ratio between height and width, meaning there will be no distortion.

Visualization:



Explanation:

The size of object across the line of sight changes with distance. In the illustration above we can see how two identical (in size) objects look different (when drawing) due to distance.

We can see both how small the far object will be and its placement on the drawing paper. Meaning, for this view, it's (the far object) top will be lower on the drawing paper and its bottom will be higher.

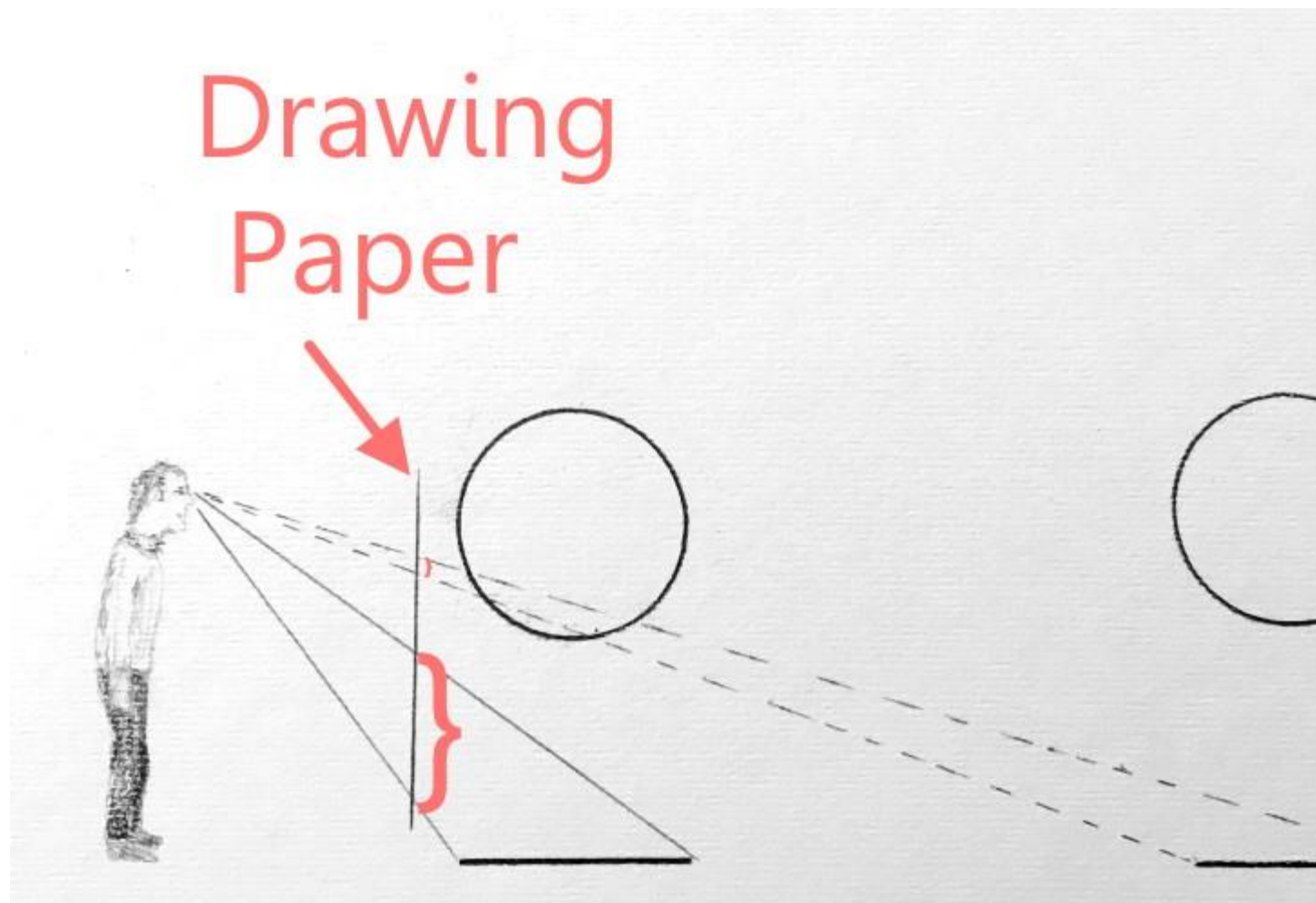
2. Foreshortening

All objects are subject to foreshortening! This means (when drawing) that the height of objects in the direction of vision will be shorter than their width.

In other words:

Objects that are in the direction of vision (along the line of sight), for example on the ground, like a lake, will look shorter in height than in width as they are farther away, therefore they will be distorted. The reason is the change in the angle of sight of the viewer.

Visualization:



Explanation:

In the illustration above, we can see two flat circles (they can represent a lake or a biscuit).

When they are flat on the ground, their width will get smaller with distance like in the first rule but their depth is getting much smaller (depth is represented as height when drawing since the drawing paper is flat).

So, if we draw a table, its width and height will get smaller with distance but will keep their ratio. On the other hand, the top part of the table (depth) is along the line of sight and therefore will be foreshortened. Meaning much smaller with distance.