Using perspective grid for two-point perspective

Some notes

Simple perspective grid for one simple building

The perspective grid system may help us to build up a two-point perspective scheme, when both melting points are outside of our picture, far away from a sketchbook page. It is the way to find the direction of the orthogonals for our building without melting points. When we draw a simple shaped building, we use the perspective grid coinciding with the building itself.

There are main elements of the perspective grid, which are necessary: line of the horizon, corner line, two orthogonal lines, and sidelines. In case of simple form, all these elements will be placed inside the building.



When all the main elements of the perspective grid are found, we divide the corner line and sidelines into a number of equal segments each. It may be any number, but the same for all the lines. I prefer to divide into halves, quarters, eighths because it's easy. Then we join the marks and get our orthogonals.

We divide segments of sidelines between orthogonals and horizon line. We do not include part of building lower than the horizon line. Why? Because we don't have information to find out orthogonals for the lower part. We have to calculate them using the upper part of the perspective grid. Segments of the corner line and sidelines, which are below the horizon line, have to be of the same proportions, have to be coherent with all the rest of our construction.



When joining points of division, we've got orthogonals, we can count, how much down we have to step from the horizon line to find baselines of the building. One-quarter? One-eighth? And we count proportions for each of our vertical lines separately.



In the same manner, we count every orthogonal line if it doesn't coincide with already existing orthogonals of the perspective grid.

Perspective grid for a group of buildings or one complex building

There are main elements of the perspective grid, which are necessary: the line of the horizon, corner line, sidelines, and two orthogonal lines. In case of simple form, all these elements will be placed inside the building. But, in case of the complex form, we build up the perspective grid for all the space of our sketch.



As a corner line, we use the corner line of the central building and the first two orthogonal lines we take from rooflines of this building. But as the sidelines, we'll be using vertical lines somewhere close to the borders of the page. They are not parts of the building. They are parts of the perspective grid.



When main orthogonals are ready we divide segments of sidelines between crossing with orthogonal and horizon line. For example, into four equal parts each as well as corner line. Joining the marks we get our perspective grid.

Perspective grid in a case of internal angle

In previous material we considered a perspective grid in the case of an external angle. It is mostly used option. But sometimes we want to draw a building or a group of buildings organized in form of internal angle.



What will be the difference in the perspective grid for an internal angle? Only one: orthogonal lines go up from the corner line to the sidelines.



All the sequence of building up the perspective grid is the same: we find out the line of the horizon, corner line, two orthogonal lines, and sidelines. When all the main elements of the perspective grid are found, we divide the corner line and sidelines into a number of equal segments each. Then we join the marks and get our orthogonals.