
The Three Principles of Great Three-Dimensional Drawings

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For beginners it is even much harder, they have to practice hard to move up a steep learning curve. It is well-known that good drawing skills are to over 50% the result of hard practicing. But knowing the three most important principles of three-dimensional drawing can make your life easier. It can be a shortcut to better drawing skills and help even experienced artists to pinpoint parts that need reworking.

So what makes a scene appear three-dimensional? There are three principles that contribute to the realistic appearance of your drawings. Each of them must be mastered and together they guarantee near to perfect results:

- 1. Composition
- 2. Perspective
- 3. Lighting and Shadows Composition

Does composition really contribute to the three-dimensional appearance of an image? Of course! The three-dimensional appearance of an image has much to do with the relationships between the different objects within the drawing. You can create an image with objects that all follow the laws of perspective and have perfect lighting and shadows and lighting are perfect, too. But if the composition is bad, most of the three-dimensional effect will be lost.

There is one important composition rule: let your objects overlap! Often I see people avoiding overlapping elements in their work, because they are afraid to mess it up. If your drawing has many overlapping elements it gets more complicated. There are more shadows and the perspective and the proportions of the objects must be much more exact.

That's challenging. Closely arranged elements in your picture may reveal all weaknesses. On the other hand if you manage to get the perspective, lighting and shadow right, a closer composition will strengthen their three-dimensional effect.

So have courage to put your picture's elements closer together. Let them overlap and show how good you can draw them according to the principles of three-dimensional drawings. Perspective

Drawing a correct perspective is where a little bit math comes into play. Don't worry – no complicated formulas, simply drawing some extra lines.

By realizing a drawing with the rules of perspective in mind you make sure that:

- 1. your objects have the correct proportions and sizes
- 2. your objects have the correct distortion because of their distance
- 3. your objects are correlating correctly to each other

All this is achieved by one simple rule:

“Objects and parts of objects grow smaller the farther they are away.”

This rule cannot be emphasized too much. If it is not applied or applied incorrectly, drawings will look a warped and awkwardly. Drawing some extra lines and employing some tricks will help you to apply this rule correctly. A specialised tutorial with illustrations and step-by-step explanations on this topic will be ready soon. Light and Shadow

The correct lighting and shadowing is the third important principle for realistic looking three-dimensional scenes. It is because of the lights in your drawings that shadows appear. And shadows are necessary for a realistic looking drawings - except you draw “gray rainy day” scenes only.

To create realistic shadows there are some facts you have to consider:

- 1. you must know where the lights come from

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- 2. so you can find the right size of the shadow
 - 3. the right angle and direction for the shadow
 - 4. and the correct shape of the shadow

Unfortunately realistic shadows are not that easy to realize. But there are some helpful tricks, too. Just in this moment I am working on a tutorial explaining these tricks step-by-step.

This is just a first draft of my conceptions on this topic. I hope it is already helpful enough for improving your drawing skills. Nonetheless I am working on some step-by-step tutorials to explain some techniques and tricks more in detail.

Please let me know whether this article helped you. What question did it leave open? What techniques and tricks do you know? Just use the comment function to share your thoughts.