



Visualization Chapter 12

Details and Shapes

Details and Shapes

Have you ever thought about how you orient yourself in the world, whether you are reading, writing, sketching, walking, or even arranging your books and papers and any other items you need to complete your homework? Do you work from left to right? Or right to left? What is right-side-up? What is upside-down? This may seem obvious when considering items in our everyday life, but what about things such as atoms or molecules, which are so small that we cannot see them with the naked eye? What about other items, regardless of size, with which we are not familiar? What is their normal or natural position in space? How do we make that decision? What kind of assumptions do we make about orientation? Could culture influence how we orient ourselves and our work spaces?

Since we are used to looking at the world in a particular way, especially with everyday items, we have pictures in our minds of how things should look that may cause us to ignore details.

Exercise 1 Using simple block capital letters, write your name backwards. When you are done, if you have a mirror or other reflective surface, hold it up to your name. How accurate were you?

Still using simple block capital letters, write your name upside down and backwards. Do not rotate the paper you are writing on until you are finished. How hard was it to visualize the letters? When you rotated the paper, did your name look correct?



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Exercise 2 Visualize a standard wooden chair with a straight back and four legs. Do you have the picture in your mind? Now instead of making a 3D sketch of how that chair looks in its normal orientation, sketch it upside down. Do not rotate the paper to check the orientation or proportions of your sketch until you are done. How did you do? What was the most difficult part?
