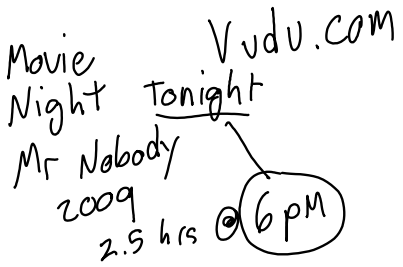
06 Upcycle specs, Perspective sketching, 20th C Timeline

Friday, January 29, 2021 1:03 PM

Today

Blog and Upcycle specs
Sketching: Intro to perspective, boxes
20 Century Timeline intro



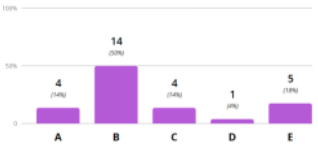
Admin

Blog critiques due Sunday night
Respond to critiques Tuesday night
https://www.aesdes.org/2021/01/13/blog-and-comments-policies/

https://www.aesdes.org/wp-content/uploads/2021/01/Upcycle-Specs-and-Critique.pdf

A) Yes, please, I need to hear all the details
B) Yes, please, the basics
C) If you must

D) No thanks, I'll read it if I think I need to
E) I promise to read it! Let's go on to content.



One, Two and Three Point Perspective

Drawing content from
Steur, Roselien, and Koos Eissen. *Sketching: The Basics*. Amsterdam: BIS Publishers, 2011.

2.1 INTRODUCTION

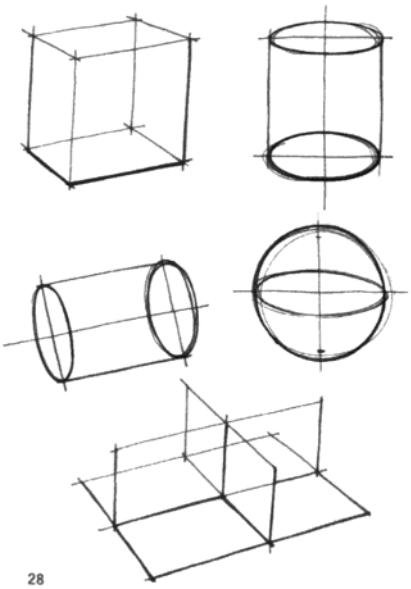
designer +

We asked several non-designers to simply 'draw a chair' in perspective, with no specific purpose for the drawing. You will of course recognise a chair in all the drawings, but it is obvious that these drawings were made by people untrained in drawing, who are not designers. What is the striking difference between drawings by designers and non-designers? Non-designers in general will focus on a 'story', an archetype perhaps, or a history: this is a chair that I have, remember, know, etc.

A designer's drawing, however, will always have a specific purpose, and will in a lot of cases be about communicating an idea. Like a language, different rules apply to drawings that 'communicate'.

The designer is able to analyse, and can make a distinction between the overall shape and details, and will make a deliberate choice on where to put the emphasis in his drawings. In the concept phase, just after ideation, for example, the overall shape will probably need to be communicated in a clear way. To do so, a so-called 'informative' viewpoint is chosen, and aspects such as guidelines and shading are used.

Drawing of chairs by none-designers of various age and gender



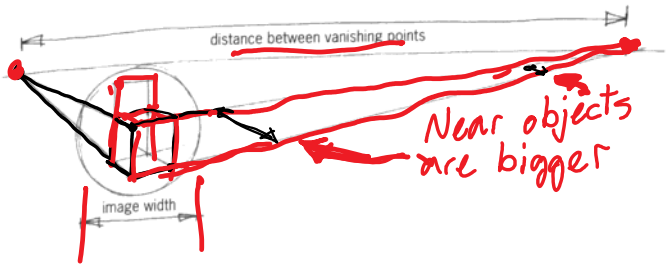
In the following chapters we will show a drawing method that will lead to informative, shape explaining drawings. In this chapter a quite bold division between shapes (products) is made by means of how they are drawn:

- starting with a block shape
- starting with a cylinder or cone
- starting with a sphere
- starting with a plane

In each of the above, the necessary aspects of lines, shading, colour and drawing materials will be explained.

We have ch[illegible] this division for specific reasons. O[illegible]se, not every situation can be des[illegible]t in such a bold way, a mixture of a[illegible]aches will eventually be more realistic. But it is a simple way to start with learning how to analyse and dr[illegible] shapes. Learning how to draw spatially a[illegible] implementing it in design work are surely two different things at the beginning of s[illegible] studies.

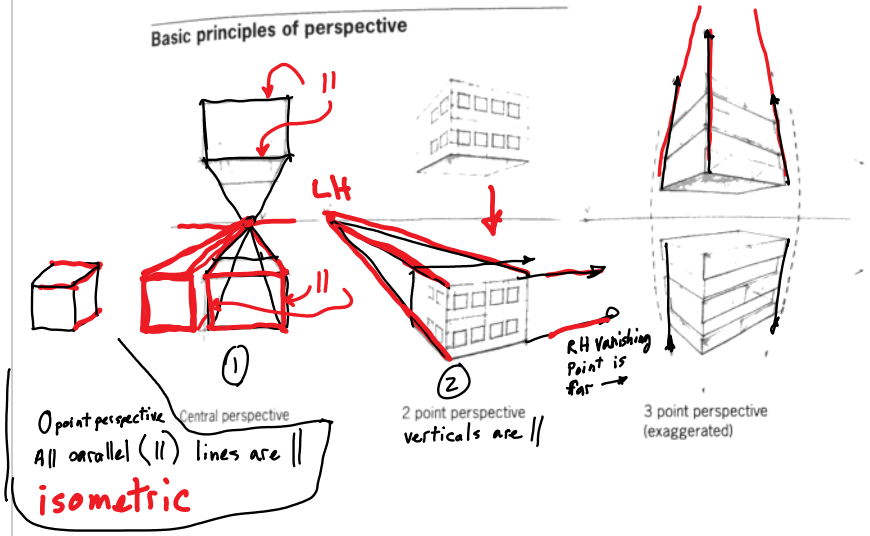
3D cue, one of many: vanishing point



This drawing method requires no horizon and vanishing points on the paper. The reason for this is that in order to appear 'realistic' (without distortion), the vanishing points of a shape need to have a distance between them that is approximately 5 times the image width. In the case of a chair, for example, this means that the drawing will be very small in relation to regular paper size or needs a very large piece of paper.

Among the several 'kinds' of perspective, such as central perspective, 2-point perspective with 2 vanishing points, and 3-point perspective, we will mainly draw in 2 point perspective. This means that the vertical lines will have no vanishing point, no convergence, and therefore no foreshortening. This will ease things dramatically, while still maintaining a realistic appearance. In reality we will more or less perceive or notice objects having 2-point perspective, but if you take a picture of a product, you can immediately see 3-point perspective. Seeing with your mind instead of with your eyes explains this difference in perception.

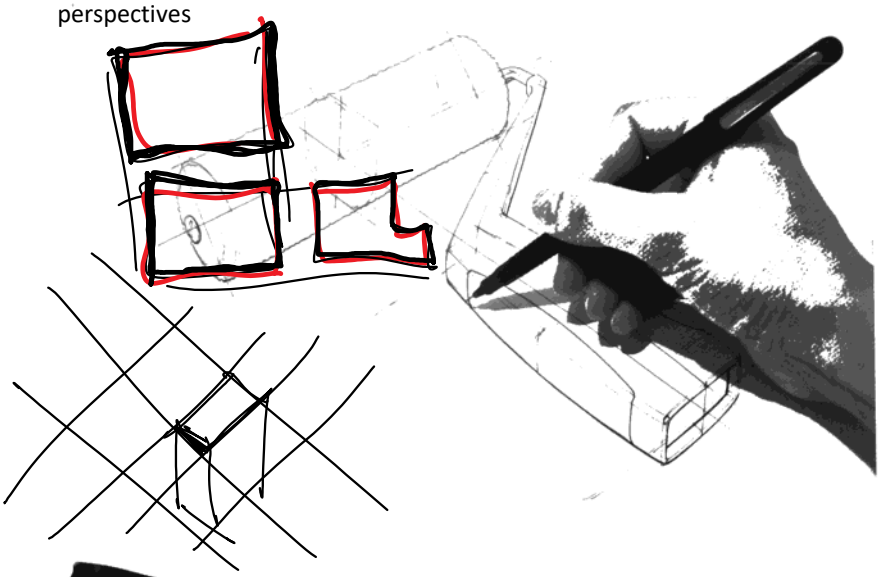
Basic principles of perspective



As for the actual drawing itself, the main guidelines can be described as follows:

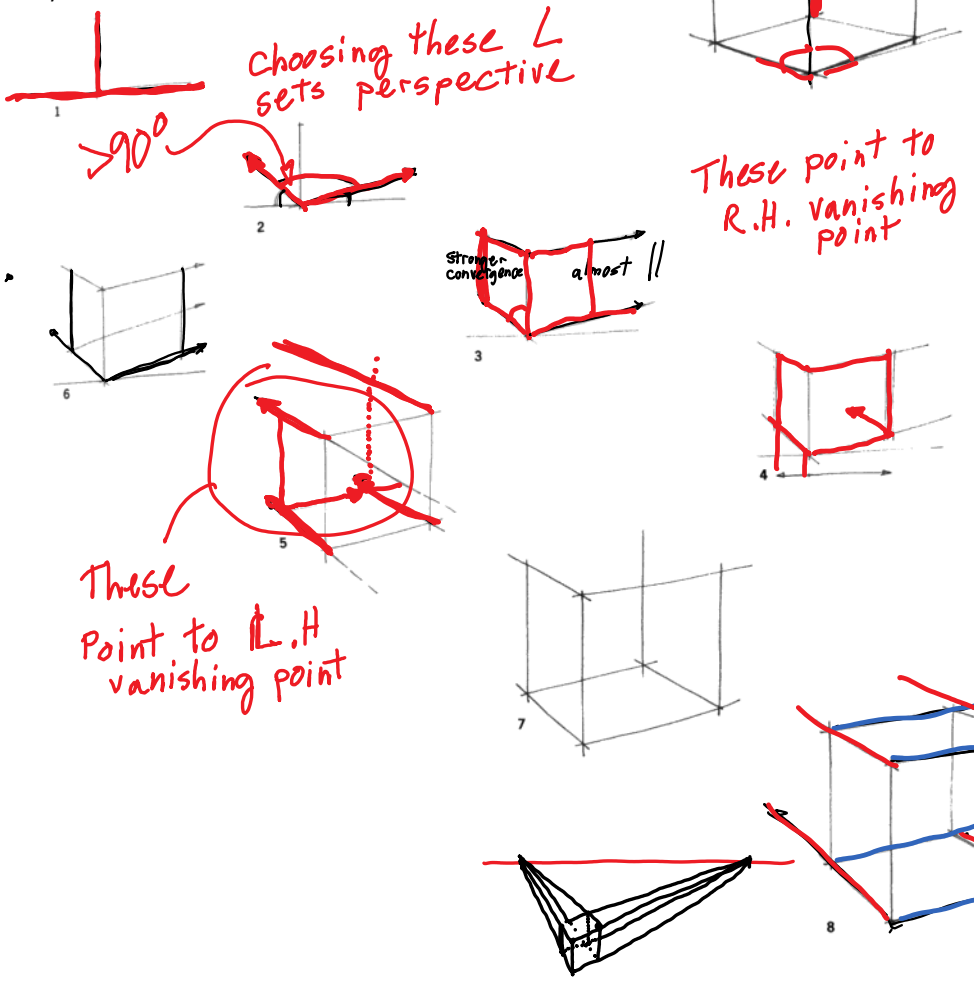
- Use long lines and draw with a definite medium such as a fineliner. A pencil and eraser will tempt you to keep erasing things and will not train you to be resolute in your decisions.
- Draw in a 'transparent' manner; for example, draw the lines of the main shape that you do not see. These lines will guide you regarding control and correction of the perspective and shading.
- Choose an informative viewpoint (See also Chapter 3)
- Start the drawing with a large basic shape, and work your way down to the details; save the details till last.
- Drawings are preferably in a size related to your hand size, preferably bigger and not smaller.
- Use guidelines; they not only enable you to draw easier, but they will also make the drawing more comprehensible (readable) for the viewer.

- Traditional Engineering Graphics = Orthographic views, or 45 degree isometric perspectives



Isometri

Look at a horizontal rectangular object (book, phone) with one eye. Observe how the apparent angle of the corner changes as you rotate the object around a vertical axis. The near corner appears always > 90 degrees. Then observe how the apparent angle of the near corner changes as the object is moved from eye level down to the floor.



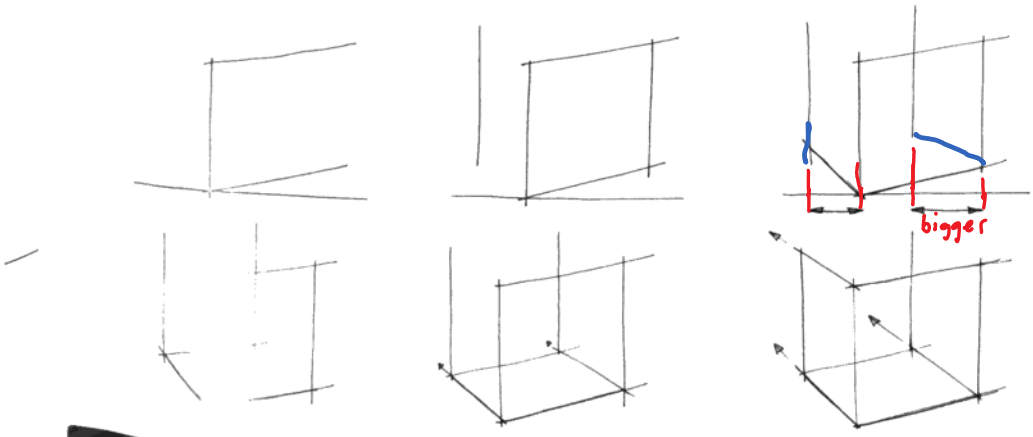
Deliberately unequal angles are chosen to avoid the front and back verticals of the cube from overlapping one another.

The lines to the left converge more than the lines to the right, owing to the shorter distance to their vanishing point.

The cube is drawn, starting with a horizontal guide line, a vertical and two lines that will determine the viewpoint.

In an informative drawing, a realistic amount of perspective convergence is chosen.

After the bottom surface is completed, use the other perspective lines as a guide. A back vertical and the top surface are drawn last.



There are of course more ways to draw a cube; another way is shown here. In this sequence, there is an emphasis on the placement of the verticals. The placement of the back vertical is based upon the principle indicated with the added arrows. These dimensions are of unequal size, as illustrated on the next page.