13 Supernormal Stimuli

Monday, February 1, 2016 5:49 AM

Today:

Universal Principles of Design: Supernormal Stimuli
Cube sketching conclusion

Admin

Guest speaker: next Weds, Adam Agee on drawing
Friday Andres G, Intro to Rhino?

Takeaways from Upcycle

Many great projects, but a lot of rough aesthetics, crude workmanship.

Many could have used resources like tools, space, workshops and expertise of ITLL and Idea Forge, and teammates' help. Why not use? Minute paper please.

Many aesthetics were determined by constraints; materials, SKILLS (solidworks not rhino), time and functionality, not the other way around. Many aesthetics just not thought out (this was missing from many reports). For main project, let aesthetics guide you. Wood is not an aesthetic. Don't choose minimalism by default; it's cheap and somewhat dated

SCHEDULE: AesDes.org. Blogs due EVERY WEDNESDAY. 2 Critiques due EVERY SUNDAY. Topics are suggestions.

Don't forget office hours Monday at 3. Also available by appointment. Happy to discuss your projects!

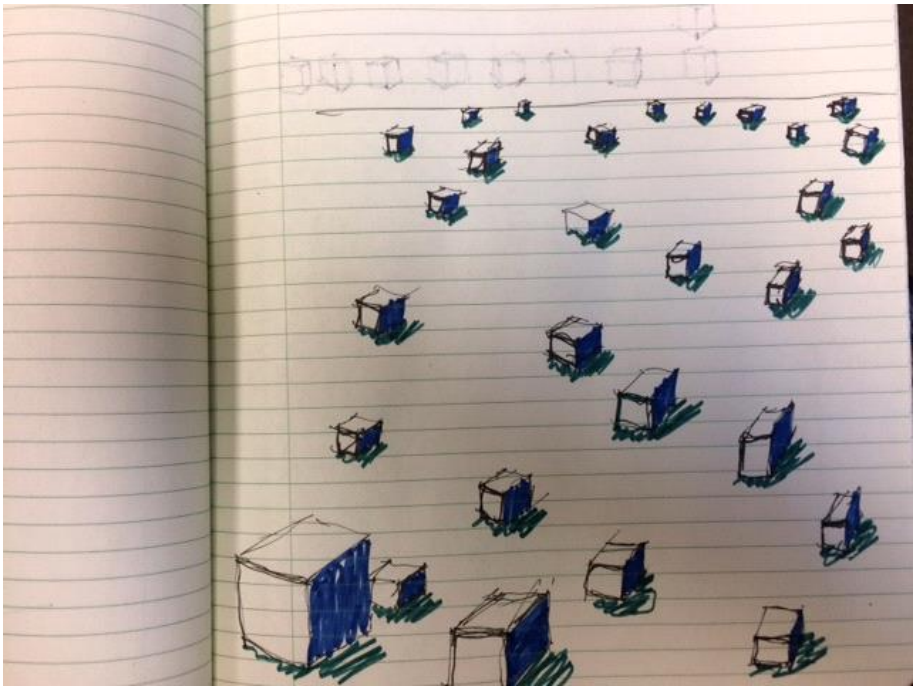
Universal Principles of Design (UPDes)

Book and video series, available on Lynda.com (http://www.colorado.edu/lynda)
Many good functional design rules, based on ergonomics, psychology, market research; what do people do when they interact with designs? Text has references that video omits.
And some good aesthetics rules, based on research on human likes/dislikes.

Today, start video topics

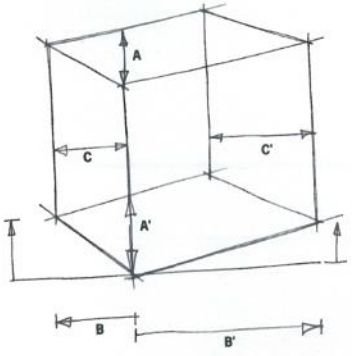
Supernormal Stimuli: instinctual likings/ or dislikes; responses to essential triggers that exceed responses to natural triggers.

Exercise 2: Draw a plane of boxes. Adding a bit of shading makes it look like art.

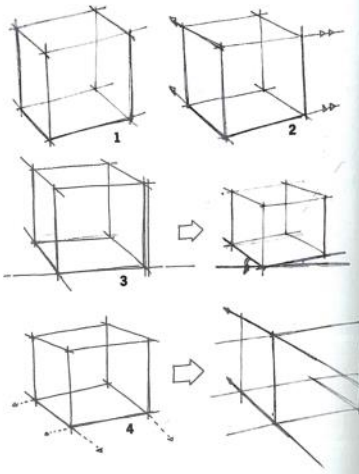


To verify whether the cube you have drawn is in correct perspective or not, several quick checks can be made:

- Compare the shortening of the top surface with that of the ground surface; the top surface should be 'flatter', as it is closer to the horizon (see A, A').
- Check the two angles of the ground line with the horizontal line; they should differ, as should the width of the two vertical sides (see B, B').
- The most foreshortened vertical side (here on the left) should be much smaller that its opposite side (see C, C').
- Only in the case of a cube, the corner on the most foreshortened side should be 'higher' than that of the less foreshortened side.

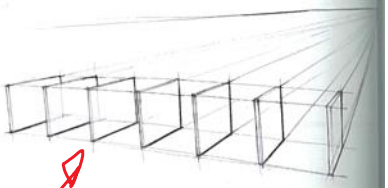


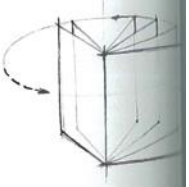
When the block you have drawn is incorrect, it is important to find out why, and try to avoid making the same mistake again. Here are some common beginners' mistakes. Starting at the top left, there is a block shape (1) using parallel lines instead of perspective convergence, an axonometric image. Next to it is a shape (2) where the amount of convergence is estimated incorrectly. The vanishing point on the left is closer, so lines in that direction should converge more than those in the right direction, not the other way around. Block (3) shows a one-side frontal view, so it should actually be a central perspective, and not show the left side. It can easily be avoided using a horizontal guide line as you see next to it.
The last block (4) shows an incorrect perspective of the ground surface. It may help to extend and use the lines already there as a guide when you draw the ground surface.



As horizontal surfaces of a column get closer to your horizon, the more foreshortened they become.

As vertical surfaces get closer to the vanishing point, the more foreshortened they become.





Learning to draw a cube at different angles will give enough experience to create a correct-looking perspective drawing. Keep this rule in mind: never exceed the measurement of the closest vertical. The width of the book's pages appears much smaller and foreshortened as the pages turn.

In this picture you see perspective distortion due to the fact that the third vanishing point is above the horizon, but also used incorrectly for every vertical below the horizon (see 3-point perspective rule). It is, however, subordinate to the spatial effect due to the effective use of perspective colouring and contrast.

Exercise 3: Draw a stack of horizontal and vertical surfaces. Note the foreshortening, how a surface narrows as the surface normal moves away from the central perspective.

Exercise 4: Draw a rotating cube in flip book format, maybe at the corner of your sketchbook. Have something come out of the cube at the end for fun.