12 Taking Stock and Sketching

Saturday, February 20, 2016 10:51 PM

Today

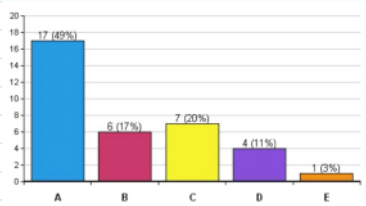
Taking stock: looking back at Upcycle, and ahead at Main Project
Some sketching
UPS on color
Tonight: Between The Folds
Wednesday Blog: Info for team building - what are your skill sets, and what are your personal aspirations (not inspirations)? What do you want to do when you graduate? What do you aspire to be?
Friday: Guest speaker Adam Agee, industrial designer, on role of sketching

Taking stock

Looking Back at Upcycle

Presentations: Very Good! Coherent, illustrated well. One suggestions, works with all talks:
Say Thank You at the end of your talk. Do NOT say 'Any questions' right away; wait until after the applause. Then ask for questions. It's magic. It completes the rhythm of the talk. Allowing applause sets the audience free to ask.
Written report should be very complete, have more details than the presentation. Use comments to find areas that need more details described.
Many wonderful artifacts. Would love to see them all achieve their maximum vision. Most folks attempted fabrication techniques that were brand new to you.
How could class support/structure have helped move everyone to the next level? What changes should be made for Upcycle project, or be made now to maximize success of main project?
Survey: Qualtrics. A bit long, maybe 20 minutes to complete. Expect email today. Please complete by 5 pm Friday 2/24/17
I promise that your survey responses are anonymous to me, but I feel I need to track responses in order to make sure I get a good sample.
Clicker: Do you trust me in this? Exchange clickers for anonymity.

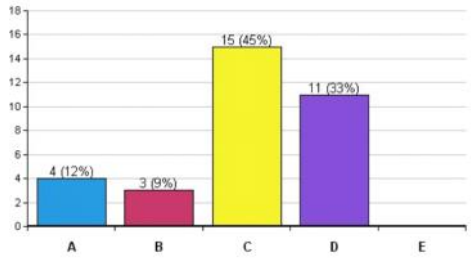
A) absolutely
B) probably, but it's ok, will be honest in responses
C) probably, but responses may not be 100% honest
D) not really



Looking Forward to Main Project

Design Review: 3 weeks to March 13
Aesthetics First! Complete a prototype that demonstrates the aesthetic. Can be non-functional. Can be small scale model. Make it say what you want; don't get caught up in the engineering.

a) Yes, I know what I'm going to make for the main project
b) I have a couple of ideas to choose from
c) I am not ready to choose
d) I am panicked. I have no clue what I'm going to do



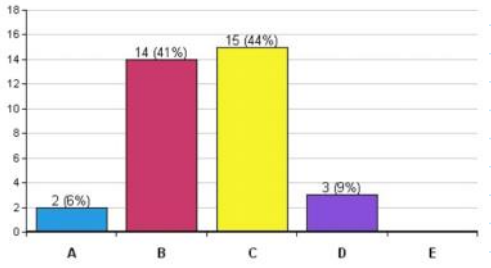
OK. It's good to know what resources you have, so hopefully this week's blog assignment will help with that. Be sure to read your teammates' posts. We may have class time Friday for project discussions and brainstorming. If not, we will do that Monday for sure.

Sketching Session: check your perspective

How is your practice going?

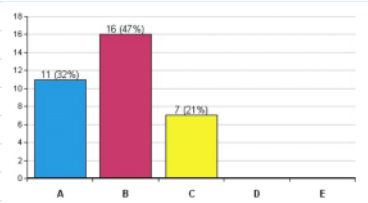
a. I sketch every day

b. I'd like to sketch every day, but only do it a few times per week
c. I only sketch as needed for a specific project. Would like to be better, but not a priority
d. I'm not into sketching
e. Sketching has no value; no point in learning it.

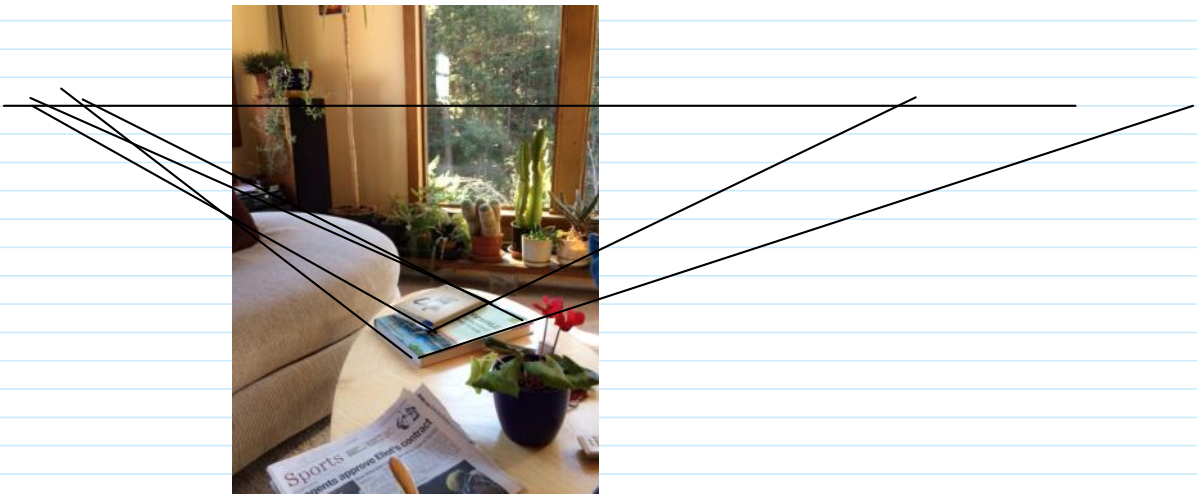


Do you want specific sketching exercises?

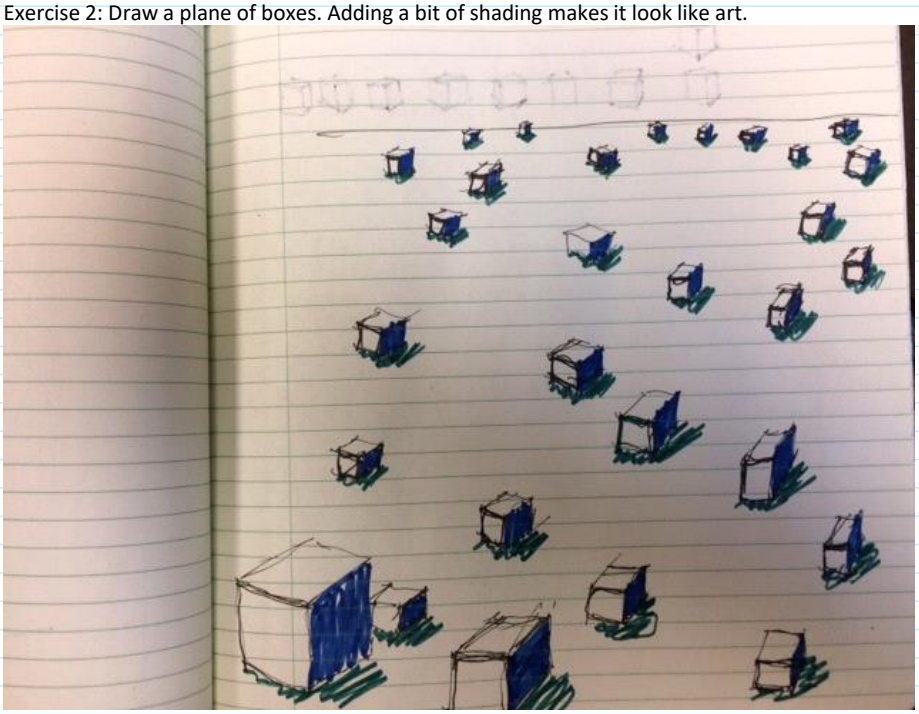
1. Yes please!
2. OK, wouldn't hurt
3. Nah

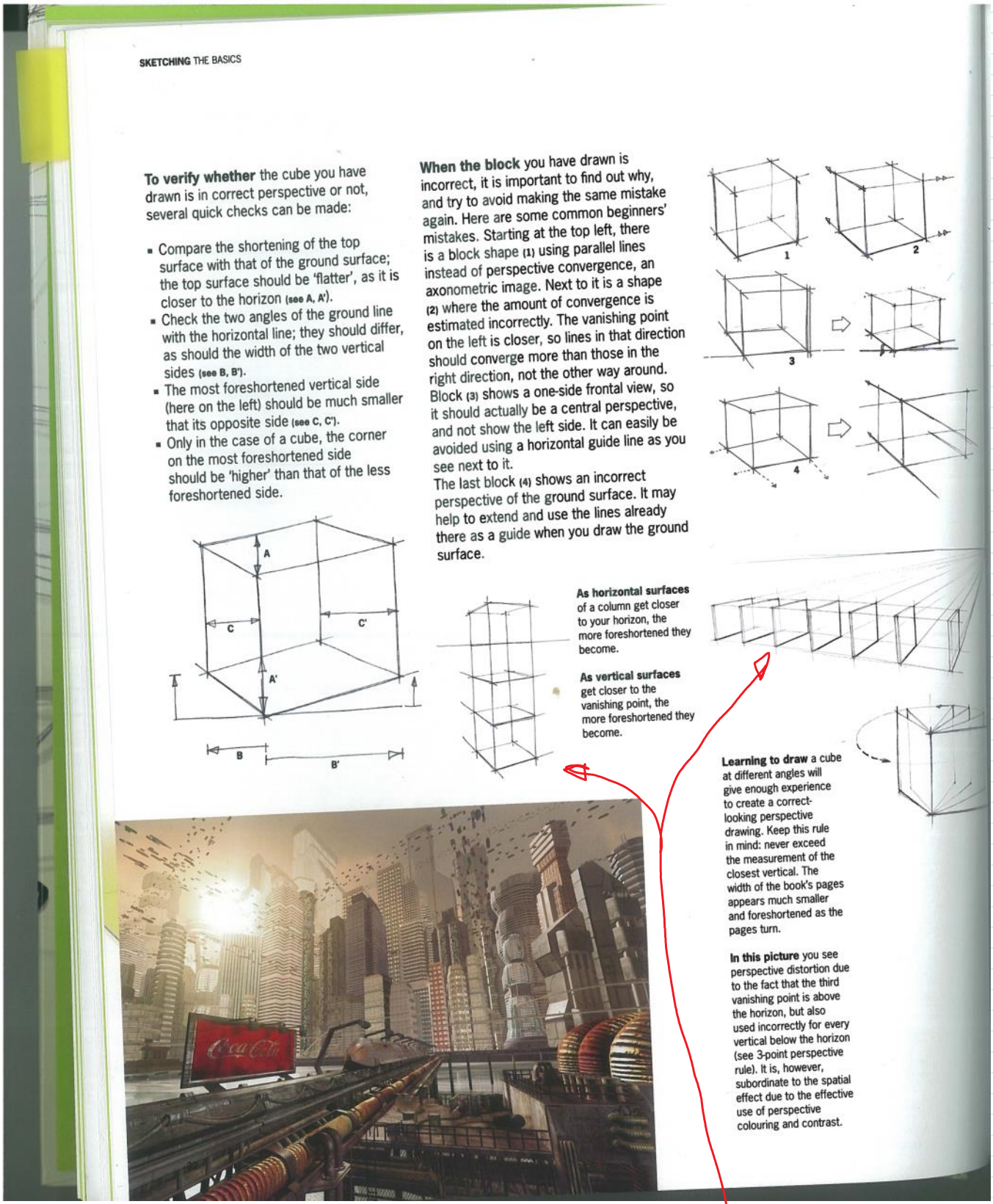


Exercise 1: What is realistic for viewpoints? Take some snapshots of rectangular shapes, draw on them, extending lines to see where vanishing points are.



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





SKETCHING THE BASICS

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.

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.

Last Time: Supernormal Stimuli: instinctual likings/ or dislikes; responses.

Examples from students:
Psychological effects: green, light blue = calming
Red= agression
Shiny things = more attractive
Sharp corners = scary, bad
Rounded is pleasant, not scary
Music: emotionally evocative,
Motion

Last year's suggestions:
Red Blue and Yellow - draw eyes, attractive
Shiny; always looking for water
Orthogonal shapes, sharp angles make humans anxious (more on this later)
Musical notes: Pentatonic scale, equal temperment. Humans like hearing frequencies with rational relationships like perfect 3rds and 5ths.

Today: White Effects.