

08 Upcycle specs, Perspective sketching

Friday, January 31, 2020 1:03 PM

Today

Upcycle specs

Sketching: Intro to perspective, boxes

- **Upcycle Artifact must be completed by 11 am Feb 12.**
 - You are encouraged to revise and improve it later, but this is the version you must document for critique. If you revise it, submit an additional post about it later too.
- **Upcycle Report Title Due as AesDes.org post midnight Feb 11. Filled out into complete report midnight Feb 12**
- **Video of your Upcycle Presentation due in your Blog Report midnight of your presentation date.**
- **2 Critiques of Upcycle reports due Midnight Sunday Feb 16**

Upcycle Report/Blog post

Length: As long as it needs to be to include the following.

- Title/blog spaceholder due midnight Tuesday Feb 11, so your pod can comment on it during your presentation. Complete report due as blog post, midnight Weds Feb 12.
- Set a Featured Image.
- OK to cut and paste from Inspiration, and Progress posts.
- Describe and **cite** your inspirations and any existing designs that you adapted. *You must cite ALL content on your blogs for this course! Any photo that you did not take, any text that you did not write MUST have a citation, a source link. If you can't remember where you got something DON'T USE IT. Go back and search for something similar that you can cite. Please go back and correct your first three posts ASAP.*
- Describe your vision for your project, the specifications that you developed for its function *and its form, your artistic vision and aesthetic*. What were you trying for?
- Describe your actual design process vs ideal and/or a previous design process. Include your design process graphic, and compare to it. Can you create a new graphic that would be more descriptive? For example, are there stubs, dead ends? Did it seem more linear than iterative, loopy?
- Add a detailed description of your fabrication process. Document with lots of sketches, photos or video. Minimum 5 photos, or 1 minute video.
- An illustrated description of the final artifact.
- Compare what you achieved to your FUNCTIONAL goals.
- Compare what you achieved to your ARTISTIC goals. This your aesthetic, your metric.
- What is next? Will you refine this artifact? Keep it, recycle it, try again someday?
- Include a link to the video you made of your live presentation, or another video that provides and equivalent full description and demo. If you want this to appear with a play button instead of a Featured Image, insert the link to your video (upload to YouTube or Vimeo) as the first text in your post, and set your post type to Video. You won't get credit in the end for this major post without a video.

Two In-Depth Written Critiques

Choose two Upcycle Final Reports to read carefully. We are working on having a rubric to help you evaluate all aspects of the report.

Upcycle Presentations

In class starting Weds Feb 12 (see Schedule), we will have presentations in pods. These will be the pods for the rest of the semester too, so remember your pod assignment. Your pod will have an assigned facilitator/timekeeper/session chair to keep things moving along (5228 grad section is expected to volunteer, please email me). Locations for the presentations will be in conference rooms and classrooms in the EC with projectors or screens; see post.

Each student will give a presentation on their Upcycle project, with the content of the presentation to mirror the written report, detailed below. You can choose to bring your physical artifact to your presentation or not, although I recommend you bring it; everyone will want to admire it. Plan to talk for 7 minutes, then take 5 minutes for Q&A, then one minute for the next speaker to get set up while others are commenting. This way 4 students can speak each period. The order of speakers will be set by who volunteers to go next, but if desired your pod can decide to set an order.

It's up to you to make sure your computer works with the projector. If it doesn't work, be prepared to have a backup on a thumbdrive to show on somebody else's laptop or speak without it. DO NOT depend on downloading or showing your presentation in a browser; everybody will be online so there won't be enough bandwidth.

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.

Plan to have a teammate video your talk on your phone or camera, to add to your posted report. Yes, **this is required**. If your video turns out awful for some reason, you may re-record your talk afterwards and post that. I recommend you test your setup in advance. Title it, then upload to Youtube or Vimeo.

Everyone is expected to bring a laptop or other online device to comment on your podmates' presentations, live in class. **Even on the days you are not presenting, you must attend and comment.** This is another opportunity to hone your critique skills.

Critiques

Our critique method is adapted from

Lerman, Liz. *Critical Response Process: A Method for Getting Useful Feedback on Anything You Make, from Dance to Dessert*. EBook., 2002. https://www.amazon.com/Liz-Lermans-Critical-Response-Process-ebook/dp/B00CF8MYD6/ref=sr_1_1?crid=33FL1ANVGYPF&keywords=liz+lerman%27s+critical+response+process&qid=1565033305&s=gateway&sprefix=liz+lerman%2Caps%2C576&sr=8-1.

Step 1: Statements of Meaning

These are often, but not always positive statements, calling out a strength of the work.

What does this work say about design? About the intended aesthetic?

If making a positive comment, **BE HONEST and SPECIFIC**. What did you like and why? **DO NOT JUST SAY 'good job'**

Step 2: Artist as Questioner

The student presenting can ask for specific feedback to guide further development of the work:

"What do you think of the way top is supposed to open? What about the saturation of the color, is it too hot? Did you notice how the fasteners are hidden?" etc. Don't ask just 'what do you think', that's too vague. You'll get more useful answers if your question is focused.

Responders should answer with honesty even if your opinion is negative. However, offer suggestions only in response to the artist's question.

Step 3: Neutral questions from Responders (audience).

This is tough, to ask a question without embedding an opinion. It will take practice. For example, instead of "It's kind of rough" or "why does it look unfinished" ask "How does the finish interact with your aesthetic" Be sure to ask about the aesthetics. **DO NOT OFFER SUGGESTIONS HERE.**

Instead, ask about why certain choices were made.

Step 4: Permissioned Opinions

Responders name the topic of their opinion, then ask the artist for permission to state it. For example, "I have an opinion about the overall size of your artifact. Do you want to hear it?" The artist can answer yes or no. If you already know that the artifact is too small and what to do about it, you can say "No thanks." If you are open to suggestions, then say "yes". If you have a suggestion about how to make the artifact differently that hasn't been discussed yet, here you can say "I have an opinion about how to fabricate your device. Do you want to hear it?"

Students in the 5228 section are expected to volunteer as Pod Coordinators for one of the three major

In-Class Critiques:

1. Log in to [AesDes.org](https://aesdes.org)
2. Find the post with the presenter's Upcycle Report
3. **For each work, try to type or verbalize at least one substantive comment:**
 - a) **A statement of meaning** or
 - b) **A response to a question from the artist** or
 - c) **A neutral question** or
 - d) **Ask to offer an opinion.** If you only type the offer, be sure to follow up later when artist will respond; if yes, then add your opinion.
4. If you verbalize a comment, type it too.

Suggestions on what to do at each stage if you are the ARTIST

Preparing for the Process

... invested in continuing to work on the piece you are showing and open to the possibility that you might change it.

... thinking about what you want to learn related to where you are in the process of developing the work you are showing.

... in an open frame of mind about what you will hear.

... learning as much as you can about the physics before you present

Step One: Statements of Meaning

... suspending the need to hear "this is the greatest thing I've ever seen."

... suspending the need to question the sincerity of positive comments.

... attending to your own internal reactions to the comments in terms of how they inform the steps to come:

Are they answering the questions I have about the work?

- Are they suggesting that I need to probe deeper on any subject?
- Are they raising my sense of curiosity about something new?
- Are they reflecting a consensus reaction or a diverse response?

Step Two: Artist Asks Questions

... building on the information you have heard in step one.

... refraining from long explanatory preambles.

... considering possibilities for two-part questions or general questions.

... ready to narrow questions down when they spill out in groups.

... ready to hear opinions, including negative ones, when they are in direct response to the question you have posed.

Step Three: Responders Ask Neutral Questions

... attentive to possibilities and issues that may not be prominent in your current thinking.

... using the dialogue as an opportunity to advance your thinking about the work rather than to repeat what you already know.

... not working too hard to divine the opinion behind the question

Step Four: Permissioned Opinions

... listening to the content of permission requests as well as opinions.

... exercising the options of saying "yes" or "no" to a proposed opinion.

... considering how content of this and previous steps is informing your thinking about how you want to continue with the piece you are working on

Wrap-up

... consolidating the most useful information you've heard.

RESPONDER

Preparing for the Process

... invested in the potential for the artist to do his/her best work.

... thinking ahead to how you will participate in the steps of the Process as you observe the presentation of the artist's work.

Step One: Statements of Meaning

... making comments that add new perspectives to what has already been stated.

... limiting your response to one or two points when many responders are participating.

... if you have a strong opinion that you would eventually like to make, addressing a related aspect of the work in your step one statement.

... noting the meanings that others have found in the artwork, observing how those comments are expanding your own perception of the work.

... observing your own preferences and points of reference.

Step Two: Artist Asks Questions

... keeping your answers honest and specific to the artist's question.

... expressing opinions, even negative ones, IF they are in response to the artist's question.

... listening carefully to the areas of interest and concern that are directed by the artist.

... staying interested in the conversation, even when it is about an aspect of the work about which you may not have a strong opinion.

Step Three: Responders Ask Neutral Questions

... framing a neutral question about the area of your opinion.

... considering options from general to specific and the possible merits of posing a more general question before a specific one.

... listening to the artist's response for indications that the opinion you have in mind may be either very valuable or irrelevant to the artist's concerns.

... curious about aspects of the work that aren't related to strong opinions (i.e., open to asking questions that are not opinion driven)

Step Four: Permissioned Opinions

... always prefacing opinions by saying "I have an opinion about ____ would you like to hear it?" and waiting until artist consents.

... indicating, in your request to the artist, if your opinion contains a suggestion or fixit.

... not loading the content of your opinion into the permission request.

... engaging the artist directly rather than dialoguing with other responders.

Wrap-up

...observing the quality of the contribution you and your fellow responders have made.

One, Two and Three Point Perspective

2.1 INTRODUCTION

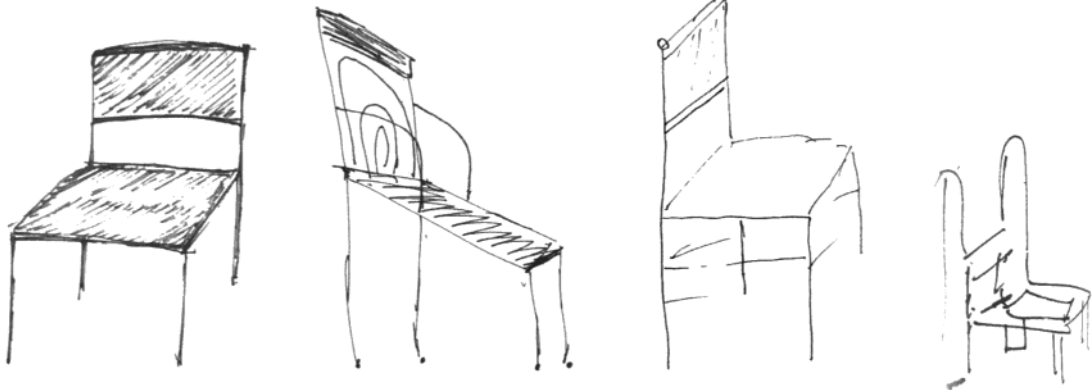
We asked several non-designers to simply 'draw a chair' in perspective, with no specific purpose for the drawing. You will of course recognise a chair in all the drawings, but it is obvious that these drawings were made by people untrained in drawing, who are not designers. What is the striking difference 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'.

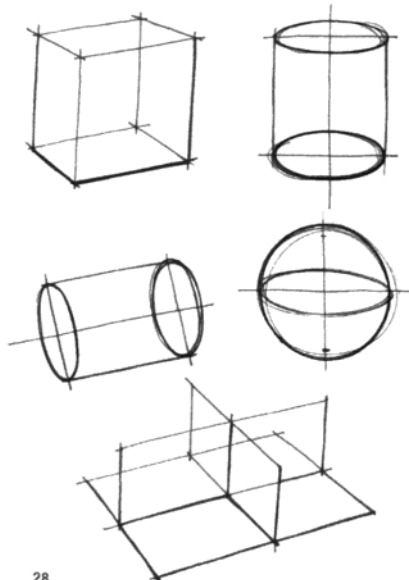
The designer is able to analyse, and can make a distinction between the overall shape and details, and will make a deliberate choice on where to put the emphasis in his drawings. In the concept phase, just after ideation, for example, the overall shape will probably need to be communicated in a clear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

Drawing of chairs by non-designers of various age and gender



Basic p

Cent



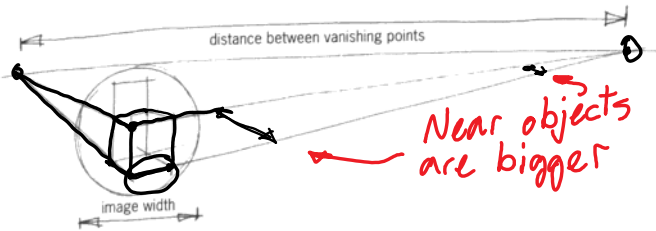
In the following chapters we will show a drawing method that will lead to informative, shape explaining drawings. In this chapter a quite bold division between shapes (products) is made by means of how they are drawn:

- 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.

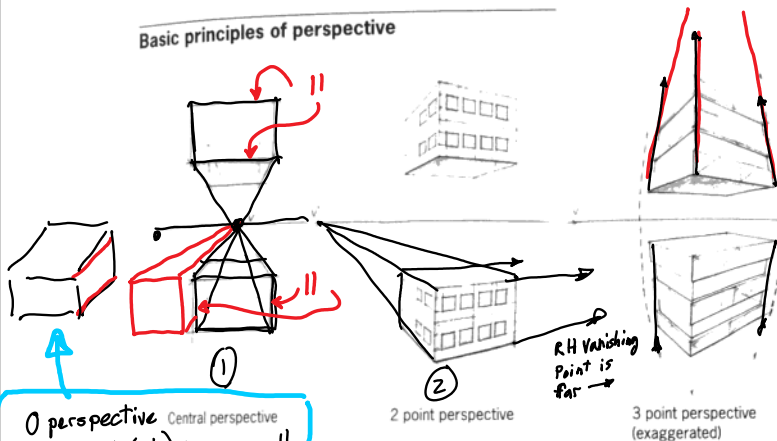
We have chosen this division for specific reasons. Of course, not every situation can be described in such a bold way; a mixture of approaches will eventually be more realistic. But it is a simple way to start with learning how to analyse and draw shapes. Learning how to draw spatially and implementing it in design work are surely two different things at the beginning of studies.

3D cue, one of many: Vanishing point



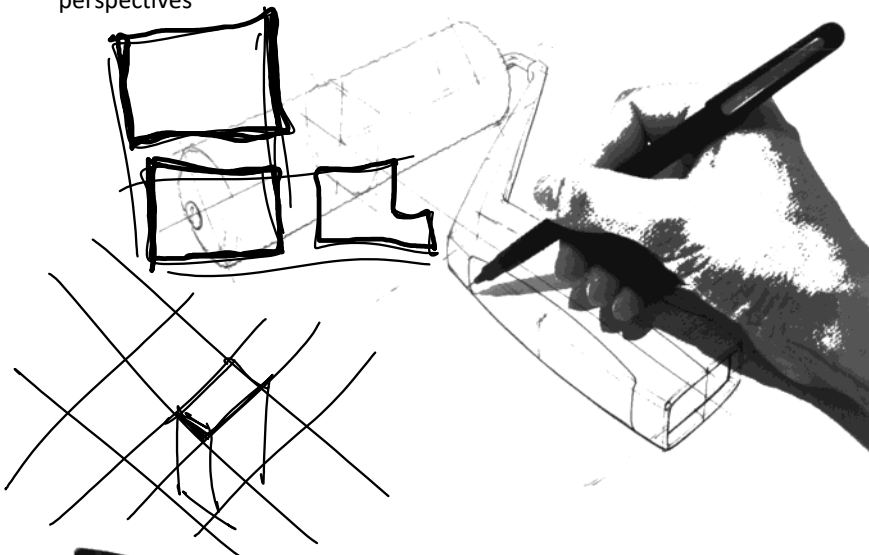
This drawing method requires no horizon and vanishing points on the paper. The reason for this is that in order to appear 'realistic' (without distortion), the vanishing points of a shape need to have a distance between them that is approximately 5 times the image width. In the case of a chair, for example,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

Basic principles of perspective



0 perspective Central perspective
All parallel (||) lines are ||
isometric

Traditional Engineering Graphics =
Orthographic views, or 45 degree
perspectives

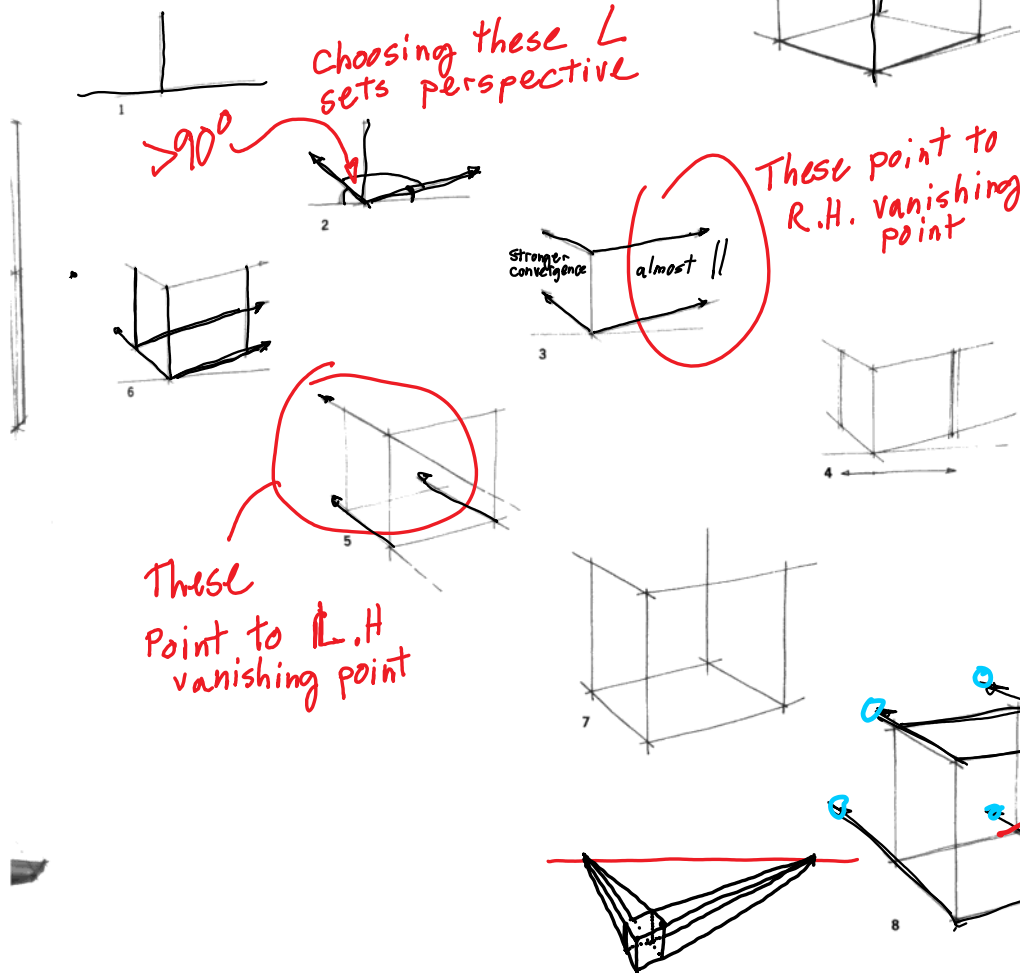


Among the several 'kinds' of perspective, such as central perspective, 2-point perspective with 2 vanishing points, and 3-point perspective, we will mainly draw in 2-point perspective. This means that the vertical lines will have no vanishing point, no convergence, and therefore no foreshortening. This 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.

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.

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.