

# 26 Chairs: Sketching glass, Aaltos to Eames chairs

Monday, April 12, 2021 6:36 PM

## Today

Sketching  
Eames Lounge  
Monobloc

## Admin:

Anonymous check-in

- A) I'm doing OK
- B) I'm not really OK, very stressed
- C) I'm not OK, pretty depressed
- D) I'm burnt out
- E) Senioritis



Final assignment specs have been posted:

### Due dates:

- Your product (artifact, plans or whatever you have created) must be completed by 11 am Friday April 23
- You are encouraged to revise and improve them later, but this is the version you must document for critique. If you revise your creation, submit an additional post about it later too.
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- Option 1:
  - 2 part final report.
  - Part 1 due on AesDes.org midnight Weds April 21.
  - 2 In-Depth Critiques (i.e. for two people) of Part 1 due as comments due midnight Sunday April 25.
  - Part 2, plus video of your Final Report presentation in the post due midnight Weds April 28.
- Option 2:
  - 1 part report
  - 2x size, including content specified for Part 1 and 2, plus presentation video due midnight Weds April 28.
- Sign up for AesDes Expo by midnight Weds April 28.
- Ungrading Statement midnight Tuesday May 4, 1:30 pm
- Exit Survey Tuesday May 4, 1:30 pm
- Virtual AesDes Expo Tuesday May 4, 1:30 pm
- Any final revisions or late work: Weds May 5, noon. Submissions after this time will require a grade change.

Last Sketching advice:

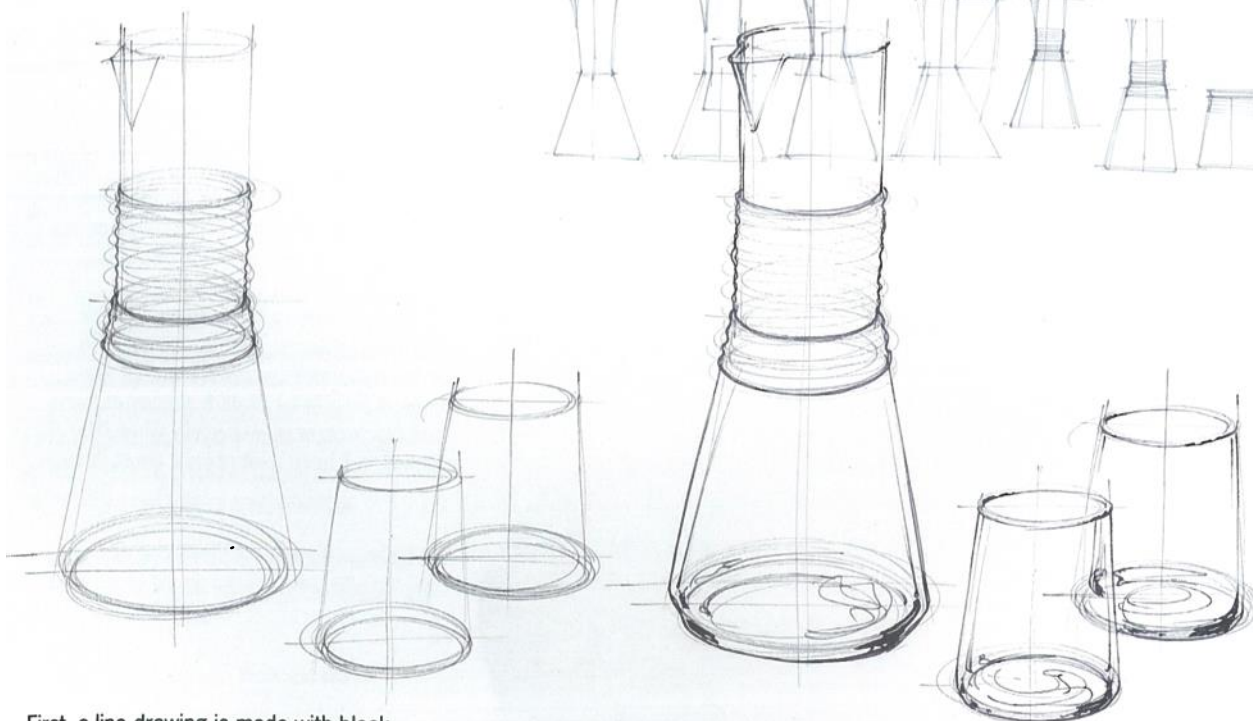
### 5.5.2 Transparency

Glass has several handy and distinguishing characteristics one can use to express in a drawing. First of all, it is obviously transparent. In a drawing, this simply means that it is handy to draw something 'behind' it to show this transparency. In the step-by-step example, cast shadow is chosen for this reason. A rounded object such as a glass will also distort what is seen through it. This is called refraction.

*curved*

Another characteristic of glass is the compressed reflection seen in the material. You will find these reflections mostly where the material is thick. They appear mainly as black and whites.

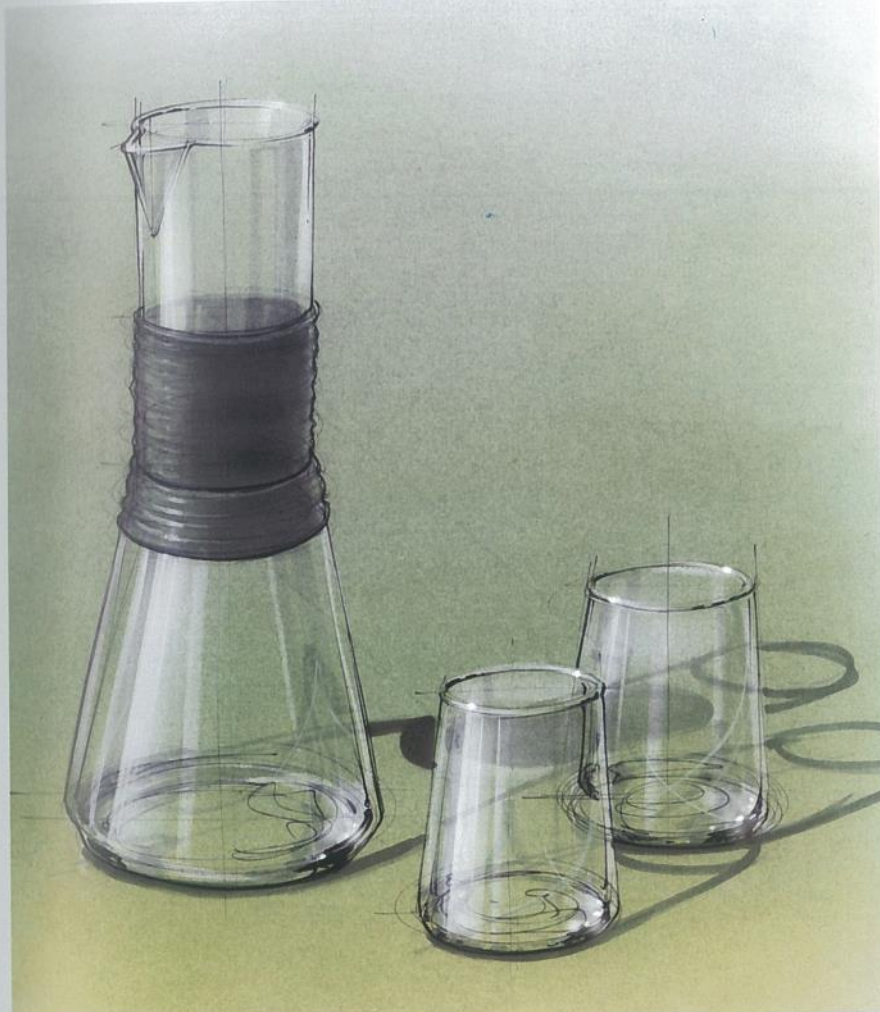
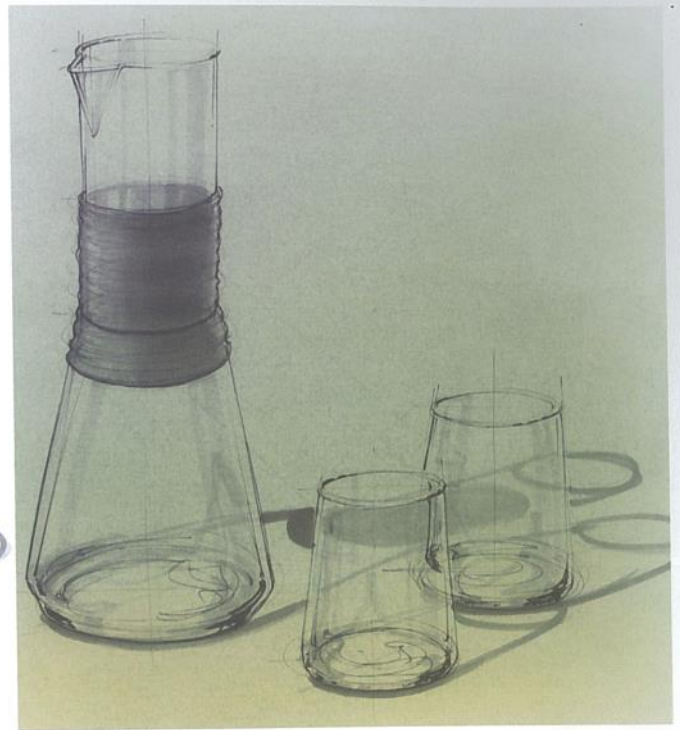
Glass is also very shiny, which means using bright highlights in the drawing. These highlights can hardly be seen on a white background, as in the pictures. In a drawing it is effective to choose a darker background. Here it is done using pastel chalk.



First, a line drawing is made with black fineliner. It is possible to sketch very loosely, especially in positioning the base ellipses. Notice the number of lines used and their visibility in the end result.

130

The same fineliner is used to darken some contour lines, to express material thickness and to draw the black reflections in thicker glass areas.



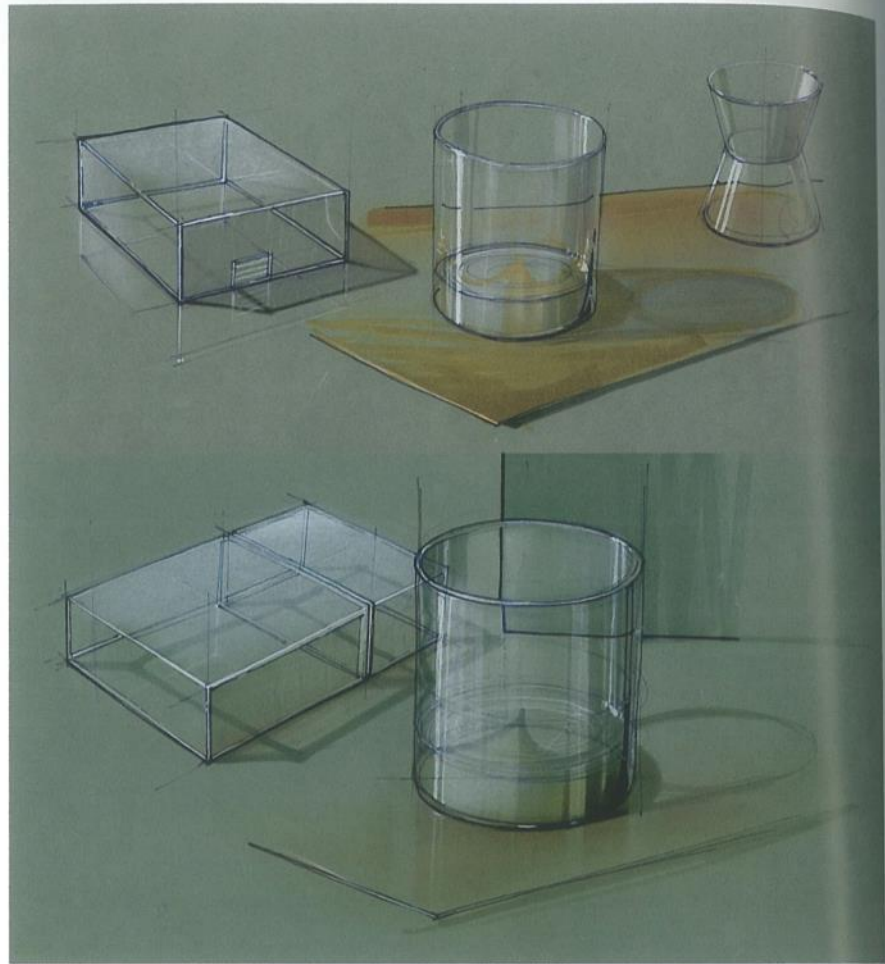
Glass casts a shadow from the thicker glass parts. This effect is somewhat exaggerated. A single layer of grey is used where the cast shadows are seen through glass. Multiple layers of grey are used to draw the shadows next to the glass. On the glass itself this single layer of grey is also used for shading and a 'pointy' reflection. Notice that these glasses are not transparent at all near the contour.

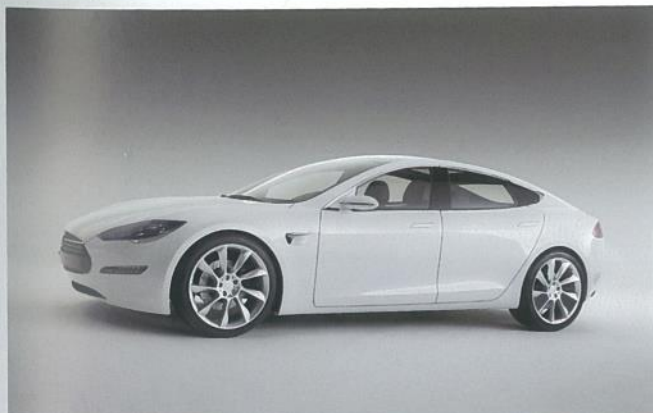
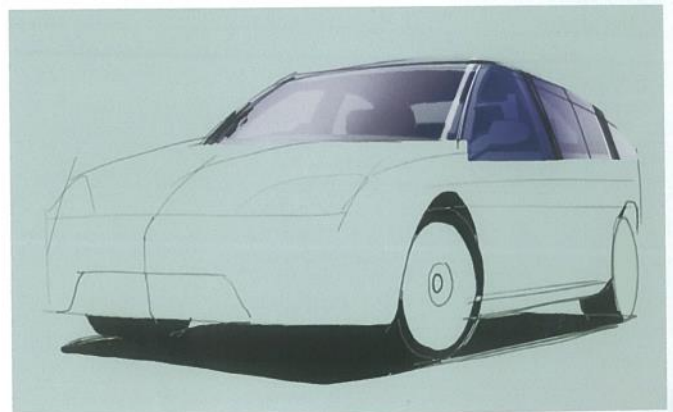
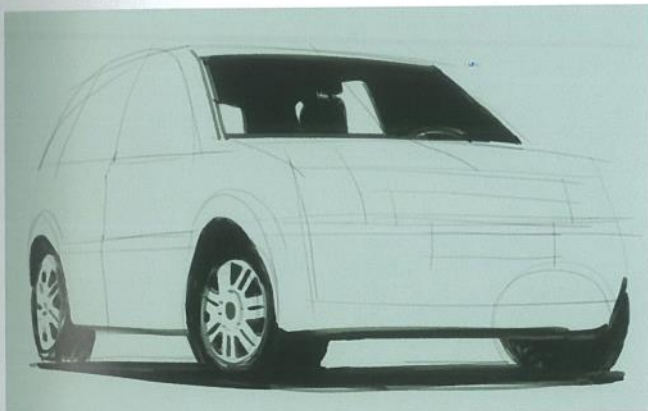
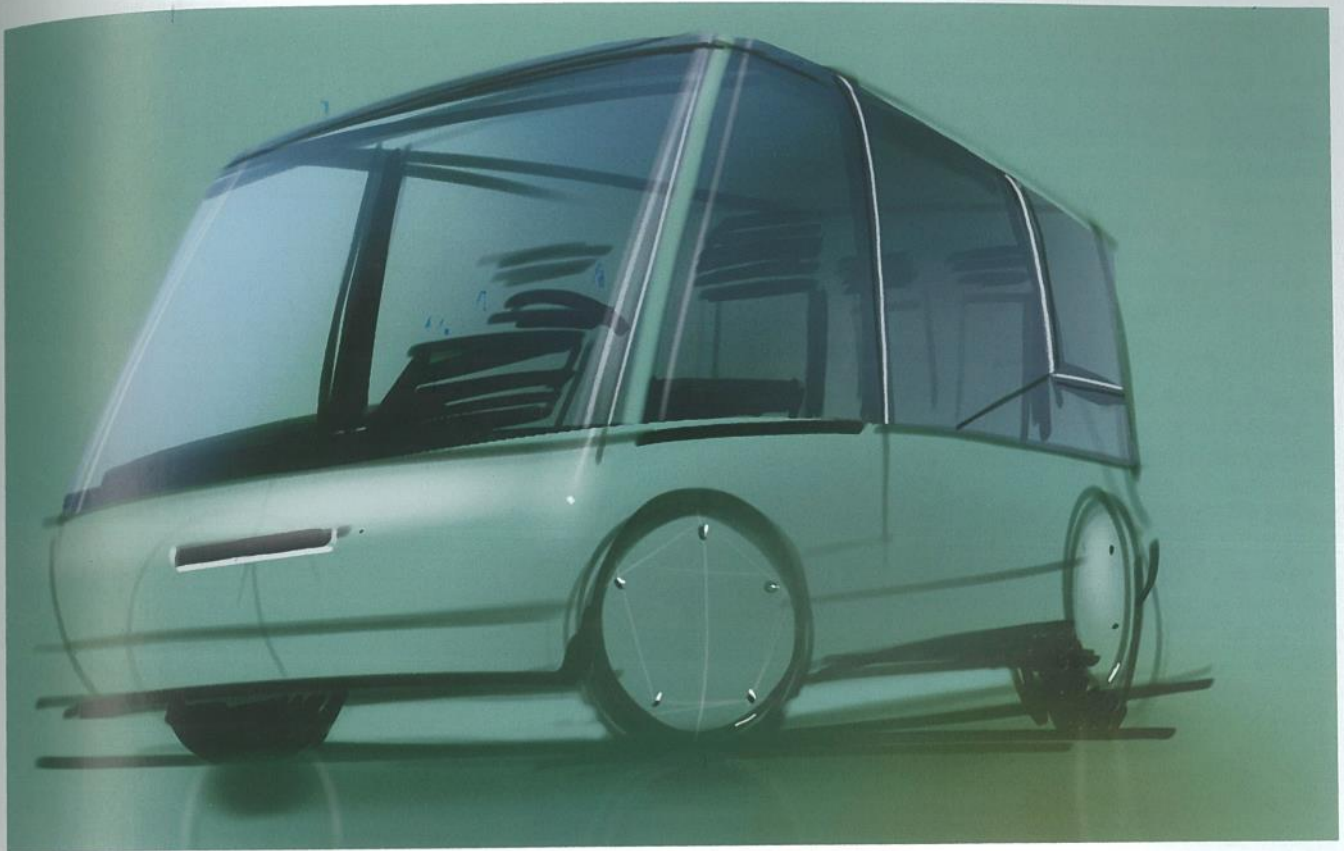
Pastel chalk is applied, so reflections and highlights can be drawn. In this abstract environment a warmer colour is used nearby, and a cooler one at the back, thus adding to the suggestion of depth.

Highlights and reflections are mainly 'drawn' by erasing the pastel chalk. Only some white pencil and some white gel-pen drops are added to finish the drawing.

**When highlights are important**, it is again obvious that drawing on coloured paper can be very efficient. Here, the use of white pastel chalk in the glass will make it stand out against its background.

Previously, transparency of glass was expressed by placing something behind it. In some cases, an object or something else is already at hand, such as in the example of the coffee grinder or the car windows. Sometimes, the transparency of the glass is overruled by bright reflections and highlights, especially on the more angled surface of the side windows. They prevent the material's transparency. In the cylindrical shapes, you most likely see this more to the side where there is more curvature.





**In largely 'flat' surfaces like the car glass,** transparency will be optimal when looking at it perpendicularly, and reflection/highlights will mostly be seen when looking at the glass from an angle.

First the car's interior is drawn in black only. After that, a large and brighter airbrush is used to partially cover this interior again. Some colour is given to the glass as well. Bright reflections are seen on the rounding in front, but also to the far left and right, further away from the viewer, as you are less perpendicular to these spots.

Exercise: Get a simple transparent object - a drinking glass, a glass jar. Place on a uniform surface, maybe a sheet of paper, colored if possible. Sketch, paying close attention to the location of highlights, reflections and lensing effects where the glass is thick and curved.



## Modern Chairs

Le Corbusier liked bentwood better. Designed some chairs, inspired others. Alvar and Aino Aalto, Finnish architects, husband and wife. Paimio lounge chair



Designed for a tuberculosis sanatorium, 1929. This one is actually comfortable.

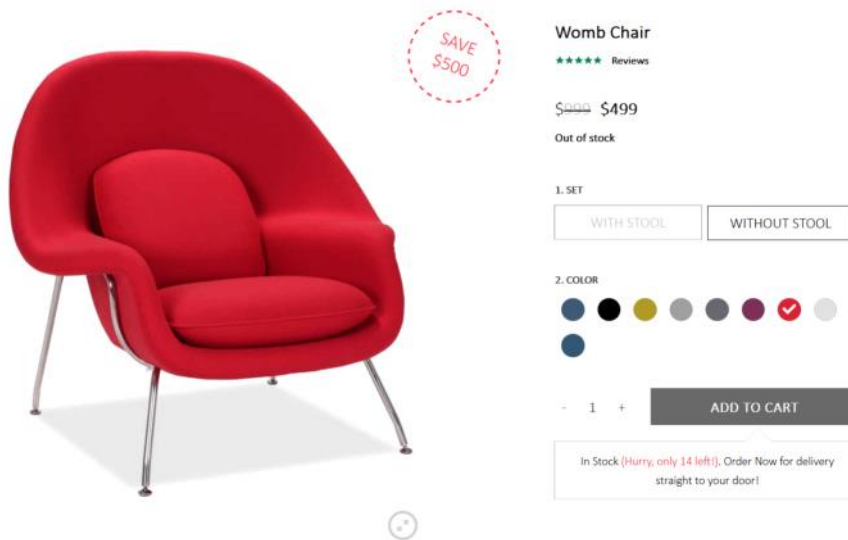
The Aaltos then influenced Eero Saarinen, who partnered with Charles Eames to make the Reading Chair:



The Organic Chair – a small and comfortable reading chair – was developed in several versions for the 1940 'Organic Design in Home Furnishings' competition organised by the Museum of Modern Art in New York. With its sculptural shapes, the design was ahead of the times. But due to the absence of suitable manufacturing techniques, the armchair never went into production. Not until 1950 did it become possible to manufacture and market organically shaped seat shells in large quantities, as exemplified by Charles and Ray Eames's famous Plastic Armchair or Saarinen's Tulip Chair.

This one wasn't manufactured until 2004, for \$2000

Eames then moved away. Saarinen went on to design the Womb chair. My mother loved this chair. I spent my childhood curled up in it watching TV.



Charles and Ray Eames, husband and wife, members of Mid Century Modern/Organic design movement. Pioneered fiberglass and molded plywood seating. Many designs for huge furniture manufacturer Hermann Miller (Grand Rapids, MI). Eames Intro: <http://www.eamesoffice.com/eames-office/charles-and-ray/>  
They made a number of educational films as well. My favorite is Powers of Ten: <https://www.youtube.com/watch?v=0fKBhvDjuy0> watch!

Eames were big in the Organic movement: Incorporated user experience philosophy (the good host, providing comfort) with pioneering manufacturing process; formed plywood shells + upholstery