Minimalist Reduction

How were the shapes created? It seems as if chunks were subtracted from an 'original'.
The top face shows us the orientation of the 'original', in the texture [tilted 30 degrees].
So we see that the 'original' form is first tilted and then subtracted from.
The primary subtraction seems to occur underneath, making the volumes appear 'raised'.
This image also shows us that the raised volumes can be filled underneath, with glass.
The glass is strongly gridded with strong horizontal cells; it is a grid of glass.
Then there are also smaller subtractions that make channel-grooves in the ceiling.

How does one reduce a visual form so that its 'real' complexity is reduced, but its richness is maintained? This is the art of minimalism, quite different from mere simplification. In minimalist moves, the designer knows that visual forms are made up of elements, but also of connections. The trick is to replace the elements with simpler versions, while maintaining the connections (which tend to be mathematical, but can also be textural, or conceptual, amongst others).

As an example of a minimalist approach, let us take an existing architectural form (architectural works being amongst the most complex visual forms in our culture, by virtue of the multiple meanings embedded in them). Here it is useful to find imagery that represents the various aspects of an architectural work (just one lonely picture will not do; for this exercise, about 5 pictures is fine). Then, it is the designer's job to distinguish essentials from secondary attributes:

This is a nice detail, showing the contrast between solid and glazing.
There is a strong channel-groove underneath.
Below, we also see that doorways are cut into the volumes.

Here we see that corners can be sharp, or cut off.
There also seem to be 2 predominant surface materials:
    a clean white stucco, and corrugated metal.
It also seems that all volumes are subtracted at the corners.
One corner seems to act as the 'entrance' for each building.

Although their forms are slightly different, all buildings follow the same logic of connections/shaping.
Also, we see here that all are oriented towards a flat, central thoroughfare.
And notice that the roof lines of adjacent buildings seem continuous (as well as other edge-lines).
We also see a new material here: concrete.

First, we look at a particular aspect that we feel is essential. For example, in the image below (as we have already seen), the 'eaten-away corner' is important. The next step is to represent this aspect, in a gridded square icon:
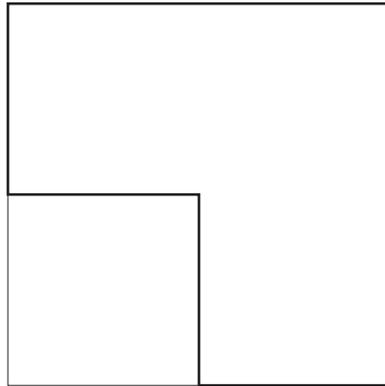
In the first version of the icon, the important thing is that it be a perfect square, and that we draw the most basic and essential version of the architectural detail being evaluated. The drawing will consist of architecture lines, grid lines, and box edge. Grid lines and box edge can be drawn in pencil to assist you in making architecture lines, but in the end only architecture lines, inked, should remain.
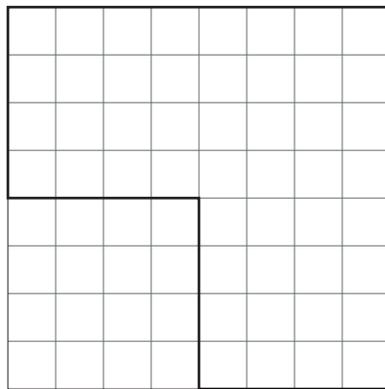
Logically, the size of the grid is determined by the smallest space needed by the drawing. For example, if your icon shows a 10-foot wall with rectangular windows, 10 feet would be the height of the entire box, probably. Then you figure out the size of the windows. If they can only be as small as 2 feet, then that is your smallest space needed, and your grid would be a 5-unit grid (five 2-foot units equal 10 feet). Proper sizes have a lot to do with your ability to 'read' the architecture that you are analyzing. Notice, as in the example on this page, that sometimes the smallest unit is hidden in the 'potential shapes' (in this exercise, for every icon that you develop, you will create 9 other 'variations', or 'potential shapes').
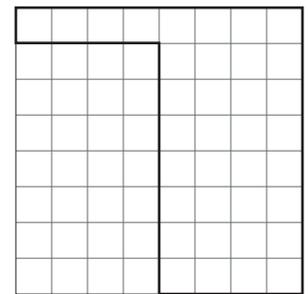

Here the grid is a 8-unit grid, because the designer feels that the size of the 'eaten-away corner' could be increased or decreased nicely using this particular unit size.
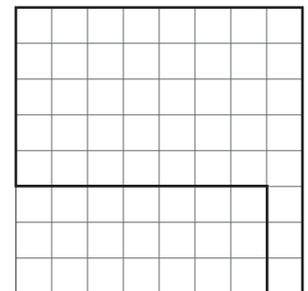

'eaten-away corner'
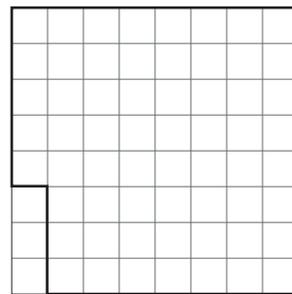
 01

 02

 03

In these 3 variations, we explore modifications that would still be 'in keeping' with the original architecture, and explore 'maximum change'. These particular variations are based on the fact that the subtracted corner is a doorway, so it can't be much shorter than the 8-10-foot height it started out with. Personal taste also comes into play. If the selected architectural element does not offer enough 'richness' for 9 variations, include a second (and maybe 3rd) architectural element.

Be aware of exactly what it is that you are transforming, in each variation. In this example, we are changing the width and the height of the 'eaten-away corner'. Since the transformation is very specific, here we probably will not be able to make some 5-6 variations. We've already created 3 variations; let's see how many more variations can be created by changing just the height and width of the corner opening:
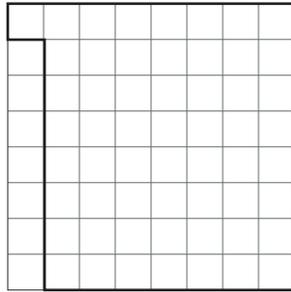
04
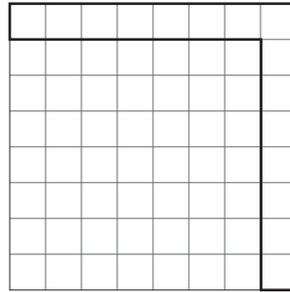
05

That's about it. Sure, we could make hundreds of variations based on height and width of the opening (instead of just 5), but they wouldn't be very different from each other (one of the goals of this exercise is to create the greatest difference possible). Also, it is important to be selective, as designers, and keep only the variations that we really like. So we'll need to find something else to transform (maybe the angle of one of the edges of the opening). Or we could add another element to the master icon (something else that can be transformed, such as the edges of the metal corrugation on the surface of the wall). Let's first work with angles. Starting again from the master, we could create the following new variations:
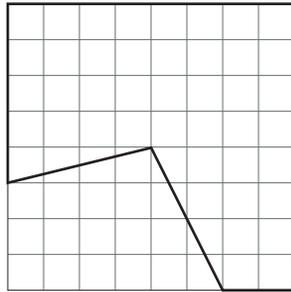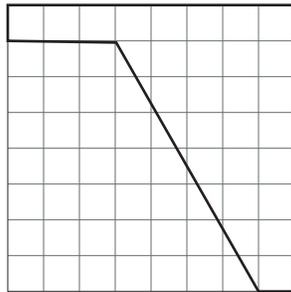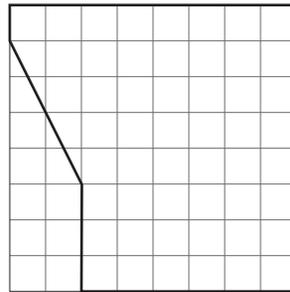
06
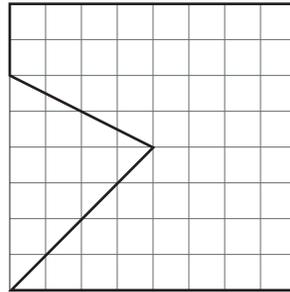
07
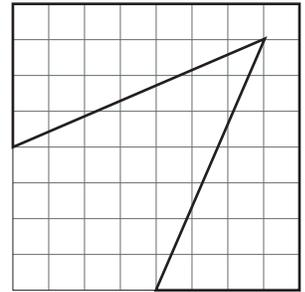
08

09

10

From the strongest variations based on angle changes, these last 5 are the ones the designer liked best. These should still be compared to the first 5 variations, to make sure that the new variations are unique enough. And finally, since we only need 9 variations, we'll have to eliminate any extras (the weakest ones, such as #10, in this case, which is not very 'defined', or #08, which seems 'too defined').