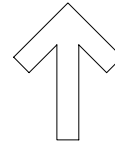


## Functional Analysis of a floor plan and “Bubble Diagrams”

### FLOOR PLAN

1. Find a floor plan of a well-known building in an architectural magazine or book.
2. Draw that one floor plan in AutoCAD as accurately as you can, labeling the major rooms, showing walls, stairs and doors. Do not use TXT font – use **Arial** font for lettering.
3. Poiché the rooms that are the same type with a distinctive gradient color, e.g., offices should all be red, circulation should be blue, storage rooms should be green, etc.
4. Poiché the walls with a solid hatch pattern in black
5. Poiché the major circulation path (hallways) with a cross-hatch pattern in black
6. North is up
7. Show a fat arrow pointing to the main entrance like this:



### “BUBBLE” DIAGRAM

1. Analyze the floor plan you just drew by simplifying the areas of each room into squares – to do this, find the dimensions of the room and multiply length by width, and then take the square root of the resulting product to find the length of a side of the square.
2. Each square that represents the same type of function should receive the same color, same as the floor plan.
3. Show relationships between rooms by heavy lines between them. Do not cross lines. These lines represent doors or passages between distinct functions, not hallways.
4. Stairs should be given their own square.
5. Hallways should be given their own square – poche like the hallways in the floor plan.
6. North is up.
7. Place a fat arrow into one of the squares to show the main entrance location.

## PRESENTATION

1. Plot each drawing in paper space 8" x 8" in AutoCAD on an 8 ½ x 11 sheet of paper in color, same scale – ideally 1/8" = 1'-0" or 1/4" = 1'-0" scale.
2. Glue the plotted sheet to a piece of 3/16" thick white foam board slightly larger than 8" x 8" with Artists spray cement and then carefully cut through the plotted drawing and foam core to the 8" x 8" exact size.
3. Mount each 8" x 8" board side-by-side on a 20" square piece of 3/6" thick black foam core board. Whenever you mount one piece of foam core on another, place a piece of 2" x 2" spacer foam core between to raise one above the other. Glue foam core to foam core with Elmers Glue-all.
4. Label each drawing with the following, using Microsoft Word or Excel Arial font printed on paper white letters on a black background, and mounted on a piece of white foam core:
  - a. The name of the building and its location
  - b. The architect
  - c. Year built
  - d. Your name
  - e. The date of the project
  - f. Critic: Heitzman

**Be sure to carefully read the Quality Assurance guide on the Triton architecture and interior design web site before you do any presentation work at**

**<http://academics.triton.edu/faculty/fheitzman/QA.html>**