

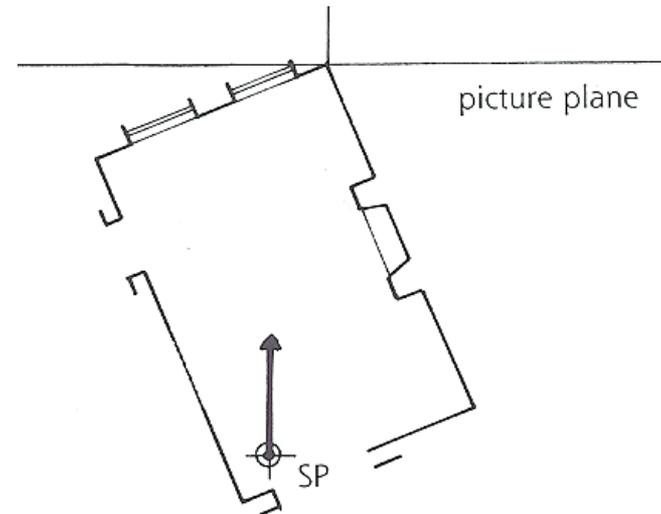
Develop an Interior perspective from  
a floor plan using 2 points

using orthographic projection techniques

# Stage one

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- ▶ Obtain a floor of the space to be drawn
  - ▶ Digital or hand drawn plan
  - ▶ Plan must be to scale
  - ▶ Often used  $\frac{1}{4}$ " scale
  - ▶  $\frac{1}{2}$ " scale preferable for a very small space
  - ▶  $\frac{1}{8}$ " scale for a large area
- ▶ Mark your station point in plan
  - ▶ Where the imagined viewer will stand in the space



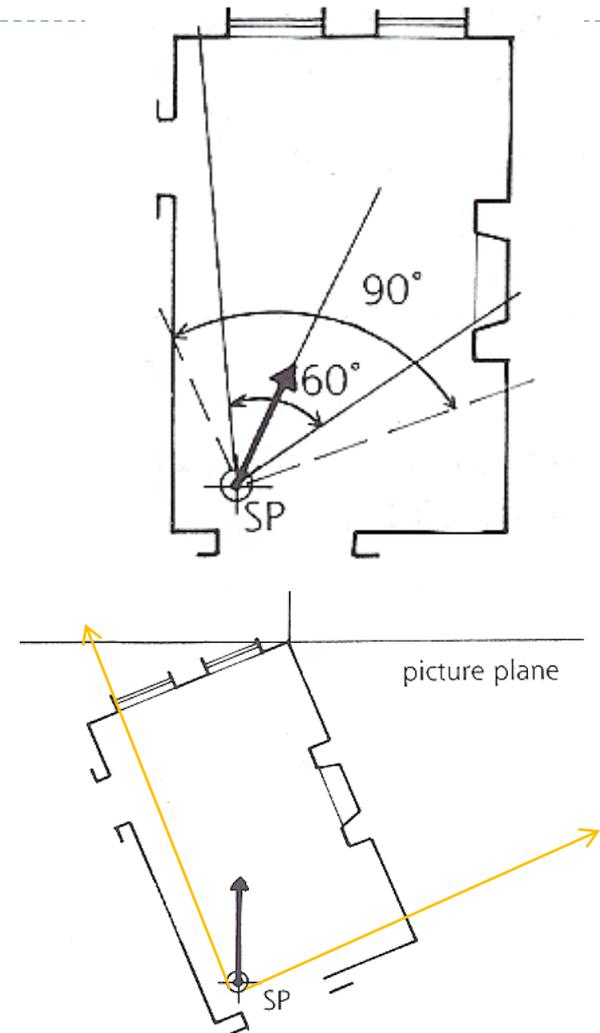
$\frac{1}{4}$ " scale given floor plan

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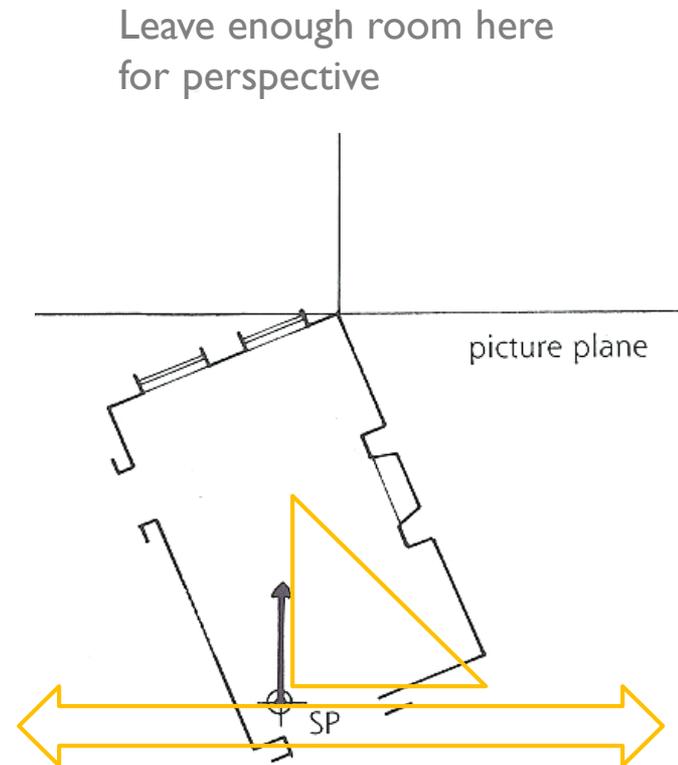
## Stage two

- ▶ Decide on the direction in which the imaginary viewer will look and mark this direction with an arrow
  - ▶ 30 degrees angle on either side of this arrow – gives the widest view without distortion
    - ▶ 60 degrees is a normal cone of vision
  - ▶ 45 degrees on either side – gives a bit of distortion
    - ▶ 90 degrees
  - ▶ Best to have cone of vision within 60 to 90 degrees



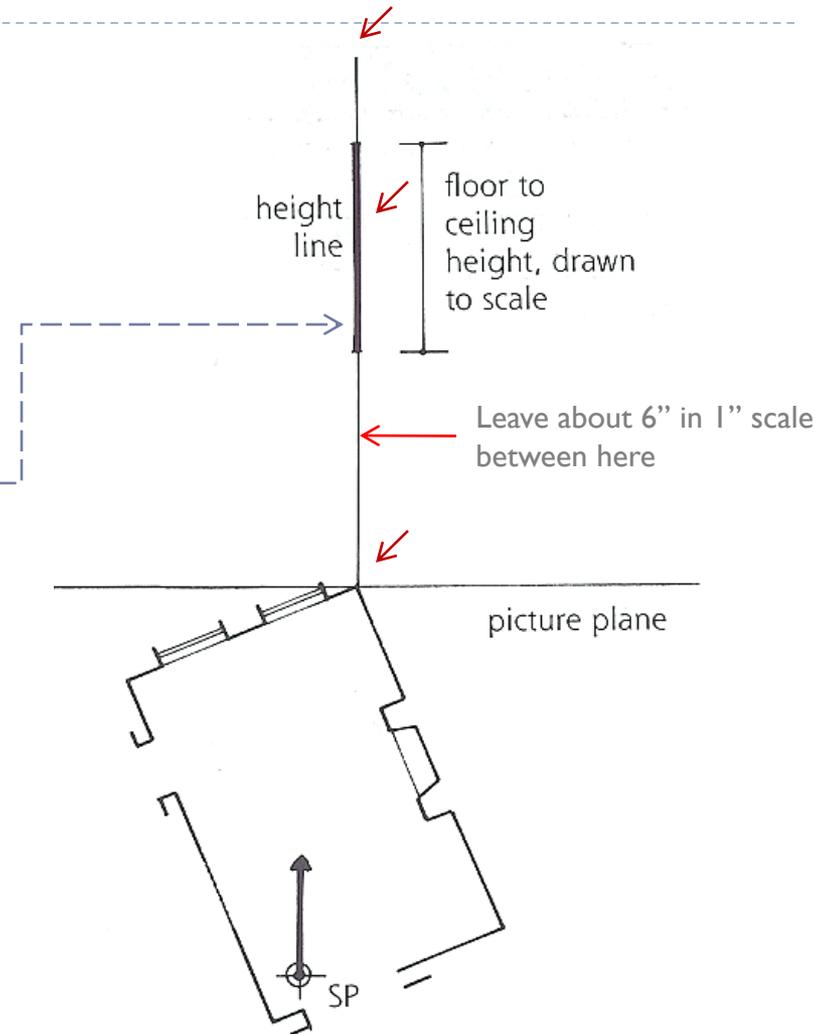
# Stage three

- ▶ Rotate the arrow direction (SP) vertically with marked angle until it points straight up to the drafting board using T-square and triangle
  - ▶ SP arrow parallel to triangle
- ▶ Tape plan down
  - ▶ Toward your body and left most
- ▶ Make sure to leave enough room above the plan for the perspective



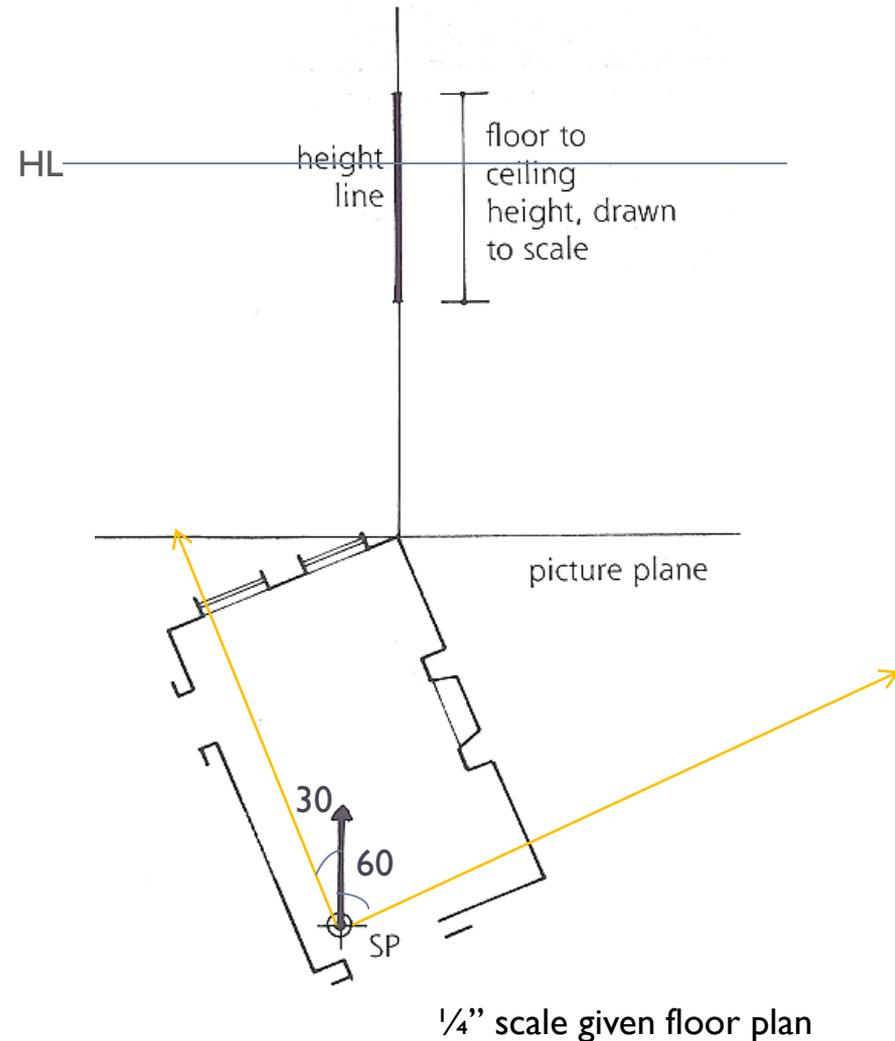
# Stage four

- ▶ Draw a horizontal line across the sheet that touches the topmost corner of the rotated plan
  - ▶ Line is called *picture plane*
- ▶ Draw a vertical line upward from the corner into the drawing
- ▶ Draw the True height line (actual floor to ceiling) where all the heights will be measured
  - ▶ Make it 8' (1/4" scale)



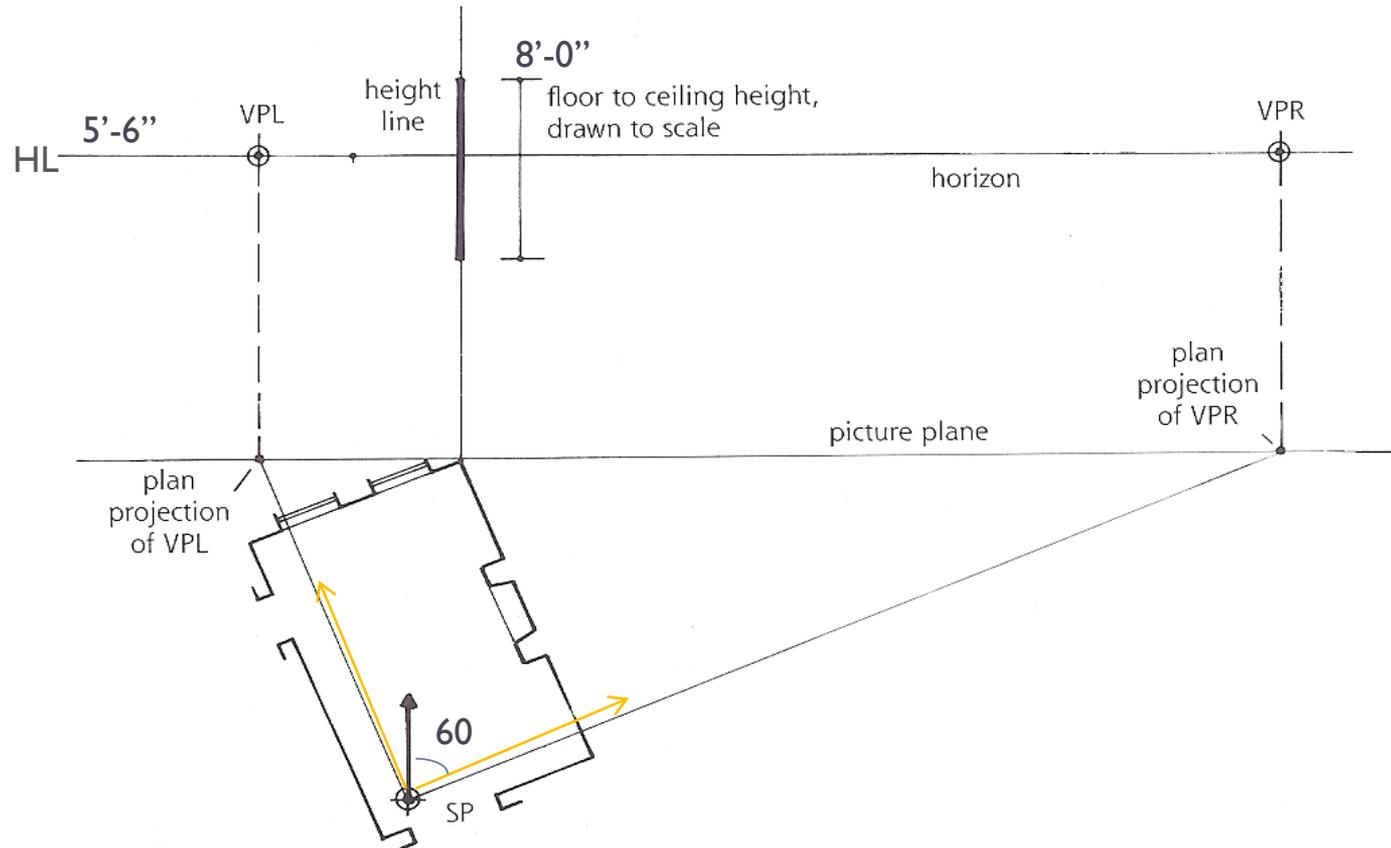
# Stage three

- ▶ Then draw the horizon line at 5'-6" on the THL
- ▶ To find best of cone of vision is within 60 to 90 degrees
- ▶ Select and draw cone of vision (30/60)
- ▶ Draw a light line from left SP arrow parallel to left wall (at 30 degree) and from right SP arrow parallel to right wall (60 degree ) mark to the picture plan



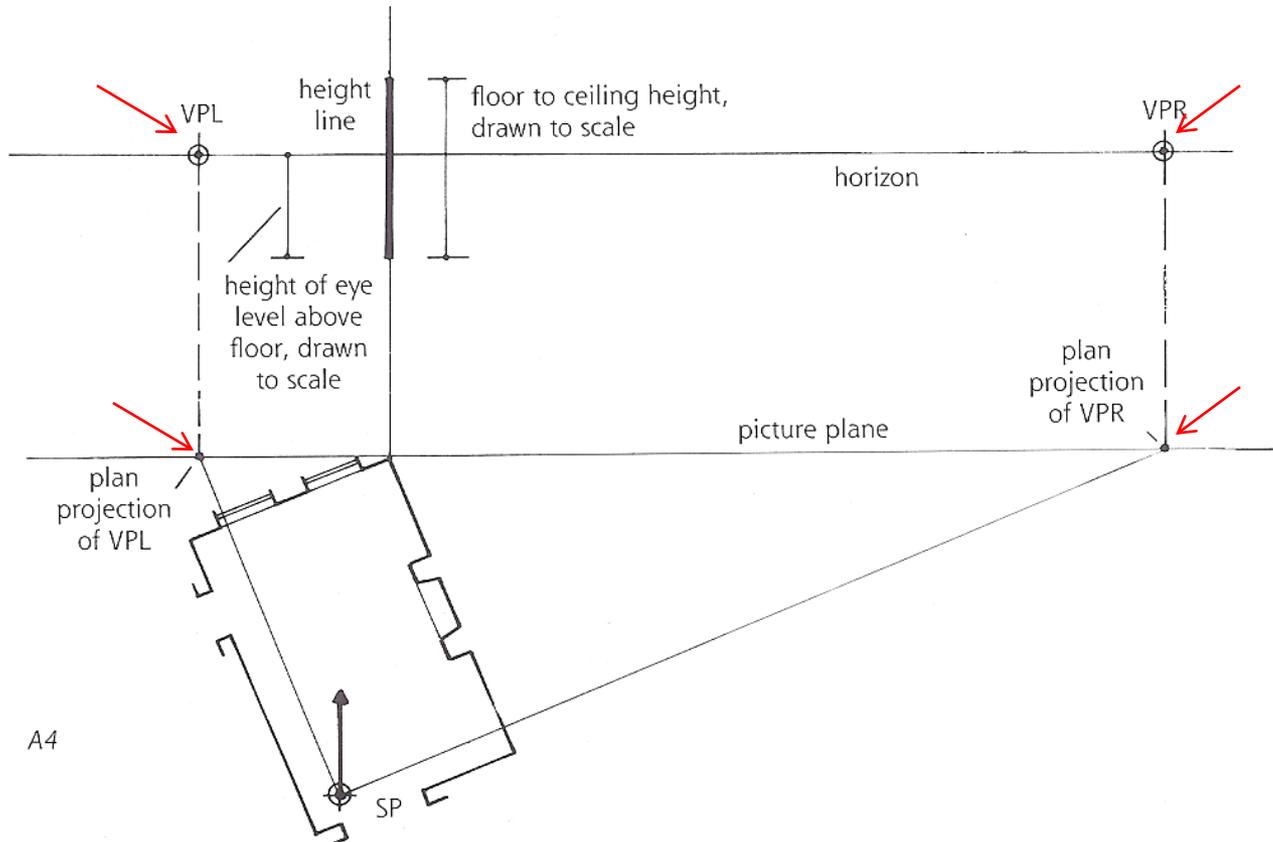
# Stage five – find RVPR and LVPR

- ▶ Find HL at 5'-6" at THL
- ▶ To find VPs - Continue the 90 degree cone of vision lines to the PP



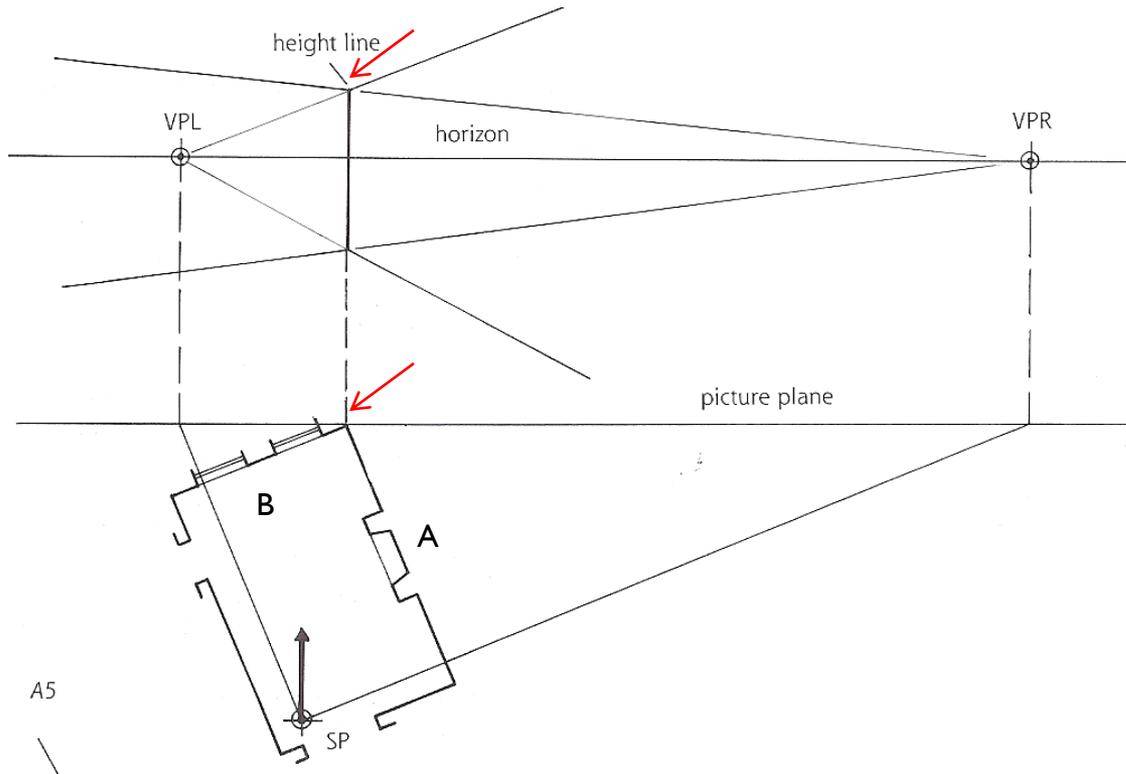
# Stage five

- ▶ From the PP intersection points draw a straight dashed lines upward to the HL on both sides to find VPR and VPL



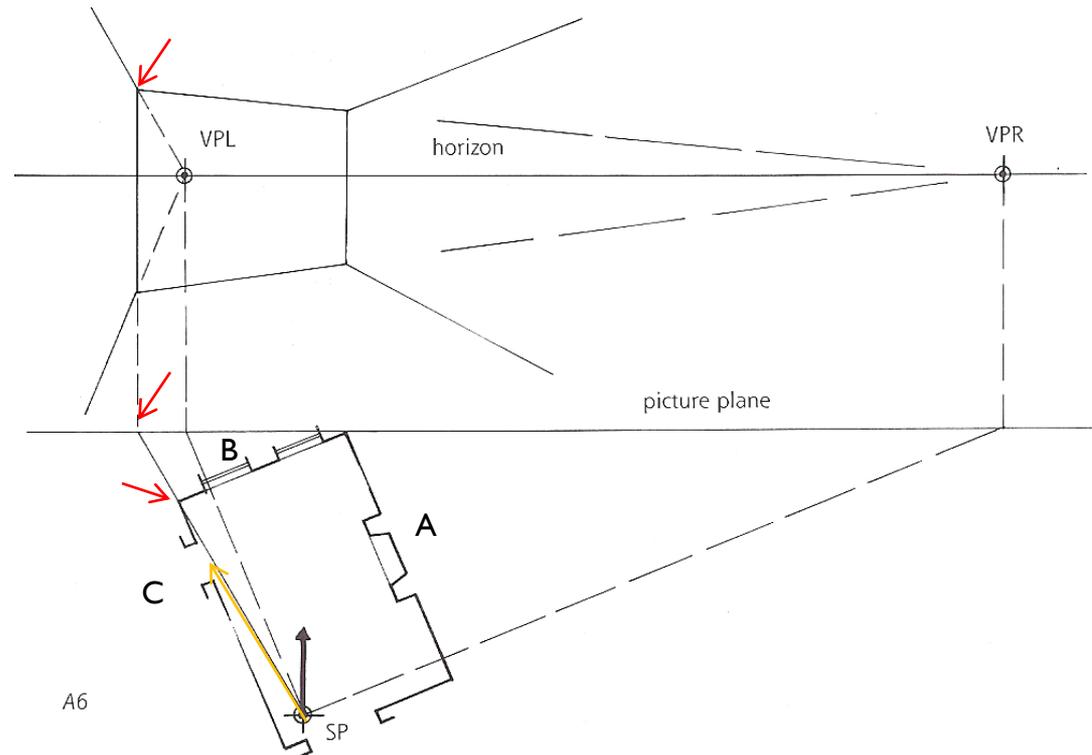
# Stage six

- ▶ Connect both VPL and VPR to the top and bottom of the THL to create the back (B) and right (A) walls with the floor and ceiling lines
- ▶ The THL only form one of the corner



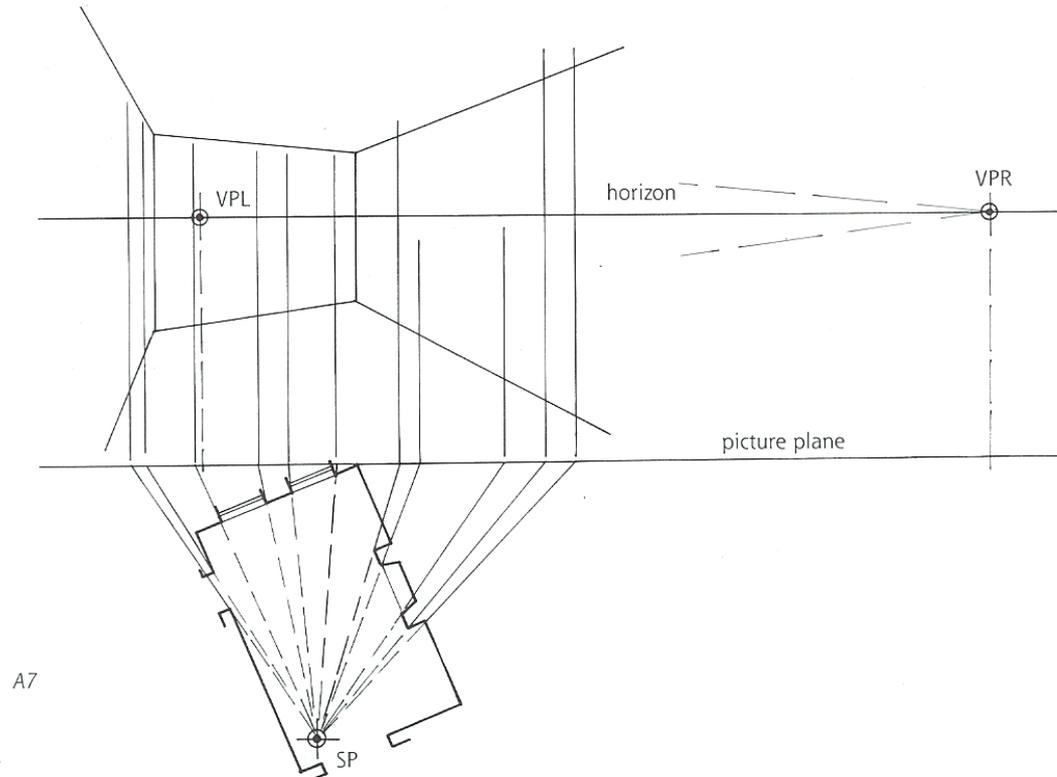
# Stage seven

- ▶ To find another left corner of the back room wall , extend a construction/faint line from the SP in plan to the left corner back room on the floor plan to the PP and draw a straight dashed line up where it meets B wall's ceiling and floor lines to create the left wall



# Stage eight

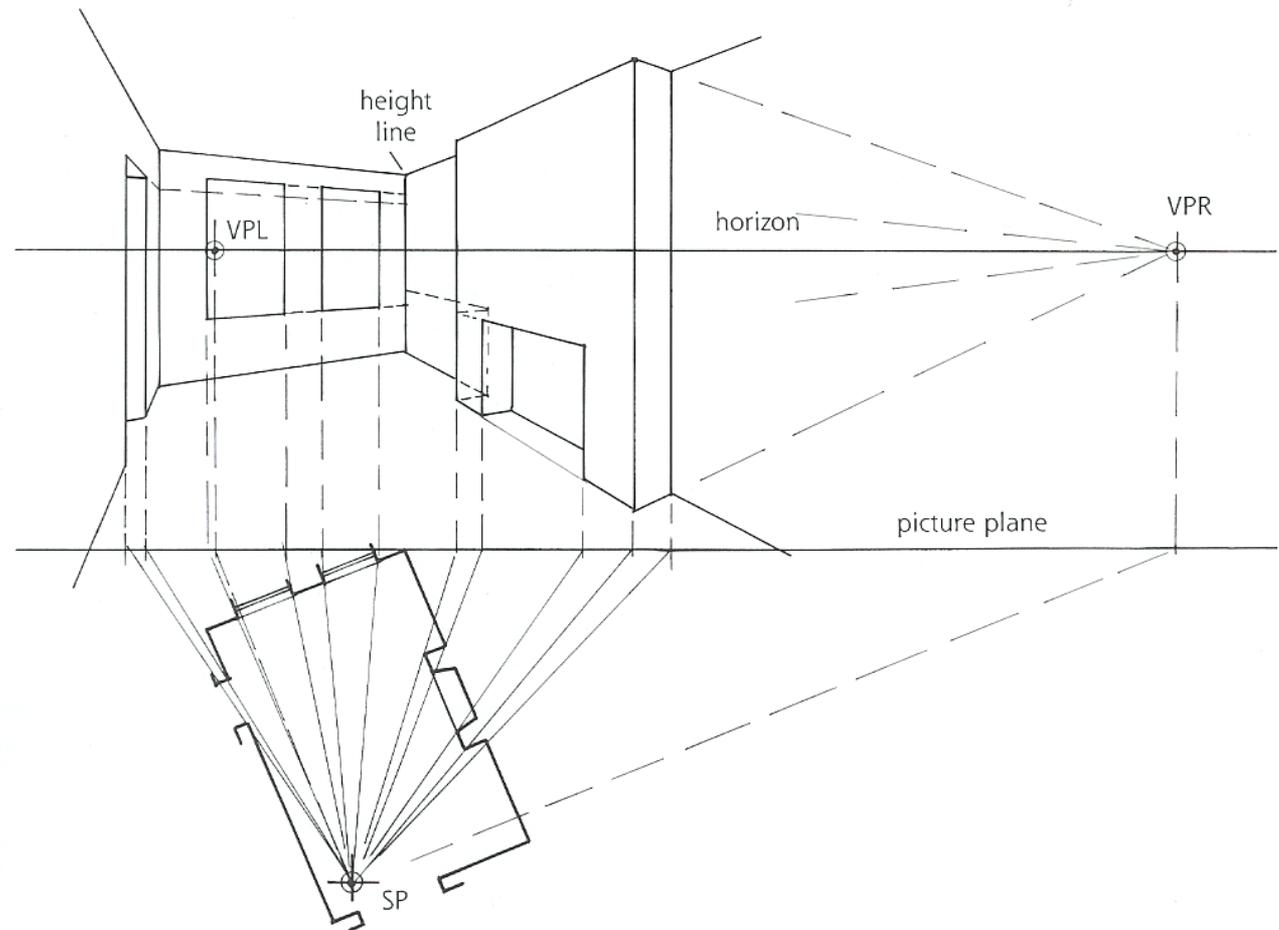
- ▶ Find all the elements in or against the walls of the space such as windows, doors, or fireplace
- ▶ Begin from the SP in plan and run from each of the edges of the elements to the PP just as the corner was found then straight up to the HL where it meets the respective walls





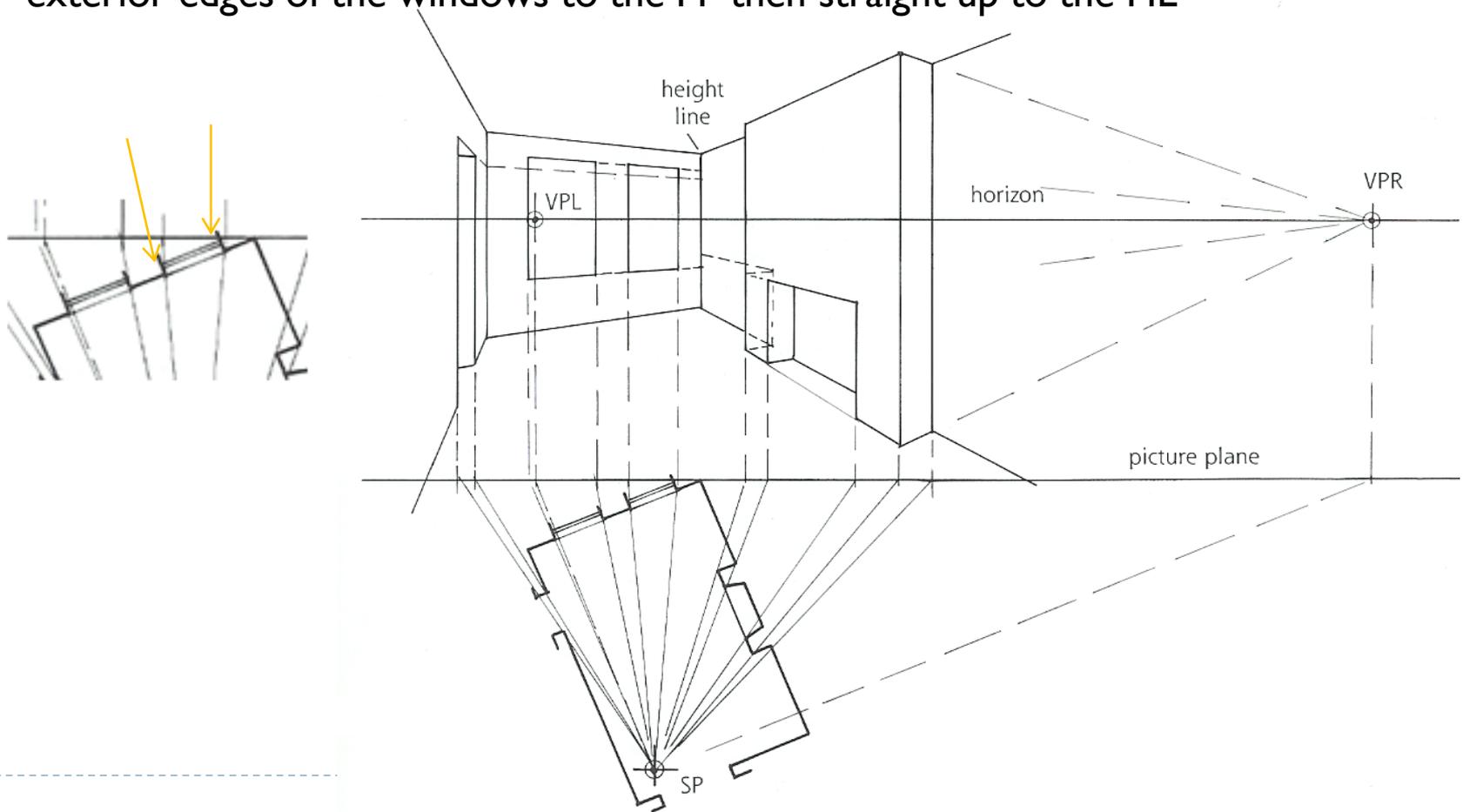
# Stage ten

- ▶ Start to locate the windows at the back room and then the left door opening
- ▶ Begin from the SP in plan and run from each of the edges of the windows to the PP then straight up to the HL



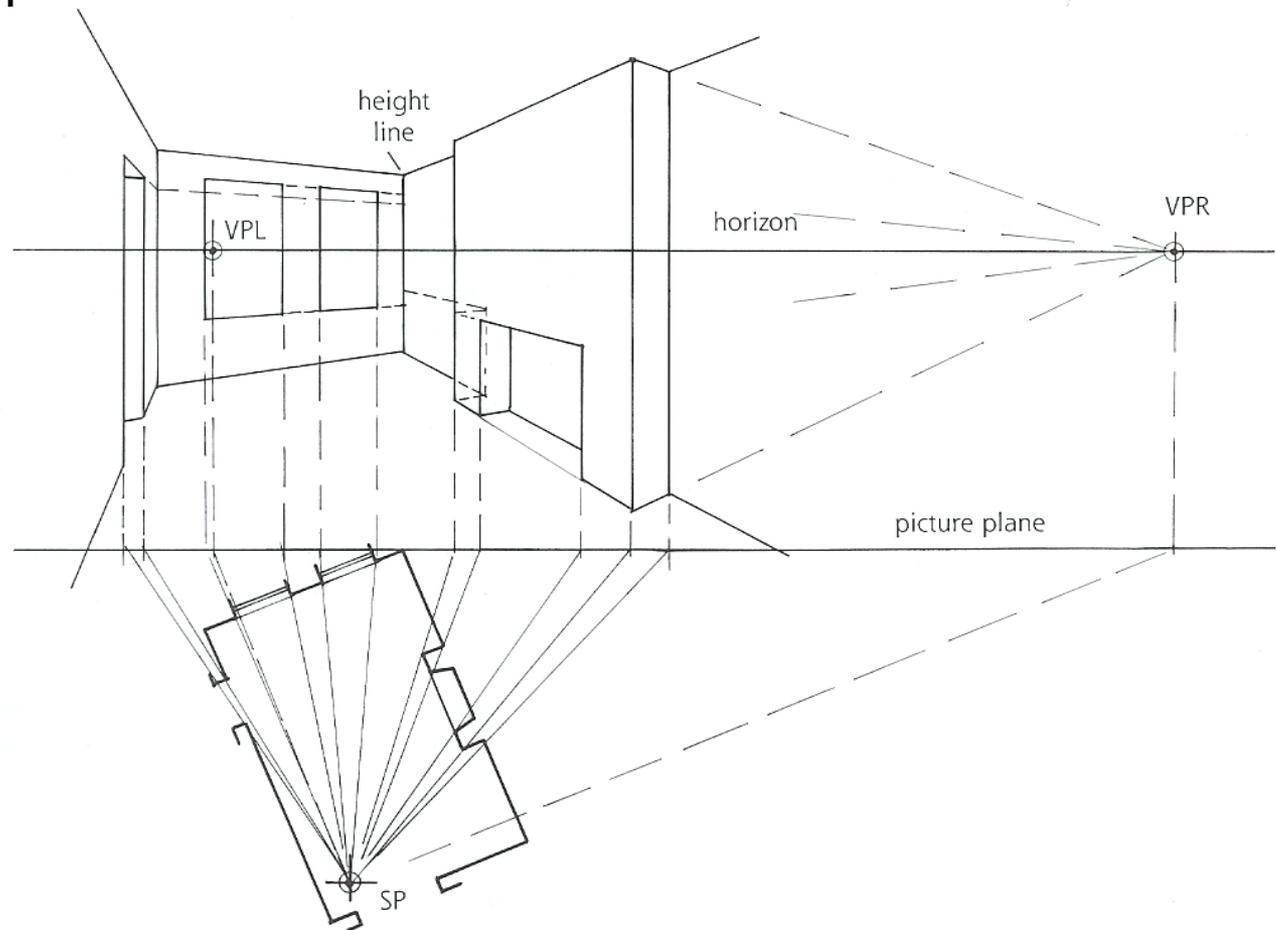
# Stage eleven

- ▶ Find the height of the windows (window sill 30" a.f.f.) by measuring from the THL
- ▶ Now find the depth of the windows by running from the SP in plan to each of the exterior edges of the windows to the PP then straight up to the HL



# Stage twelve

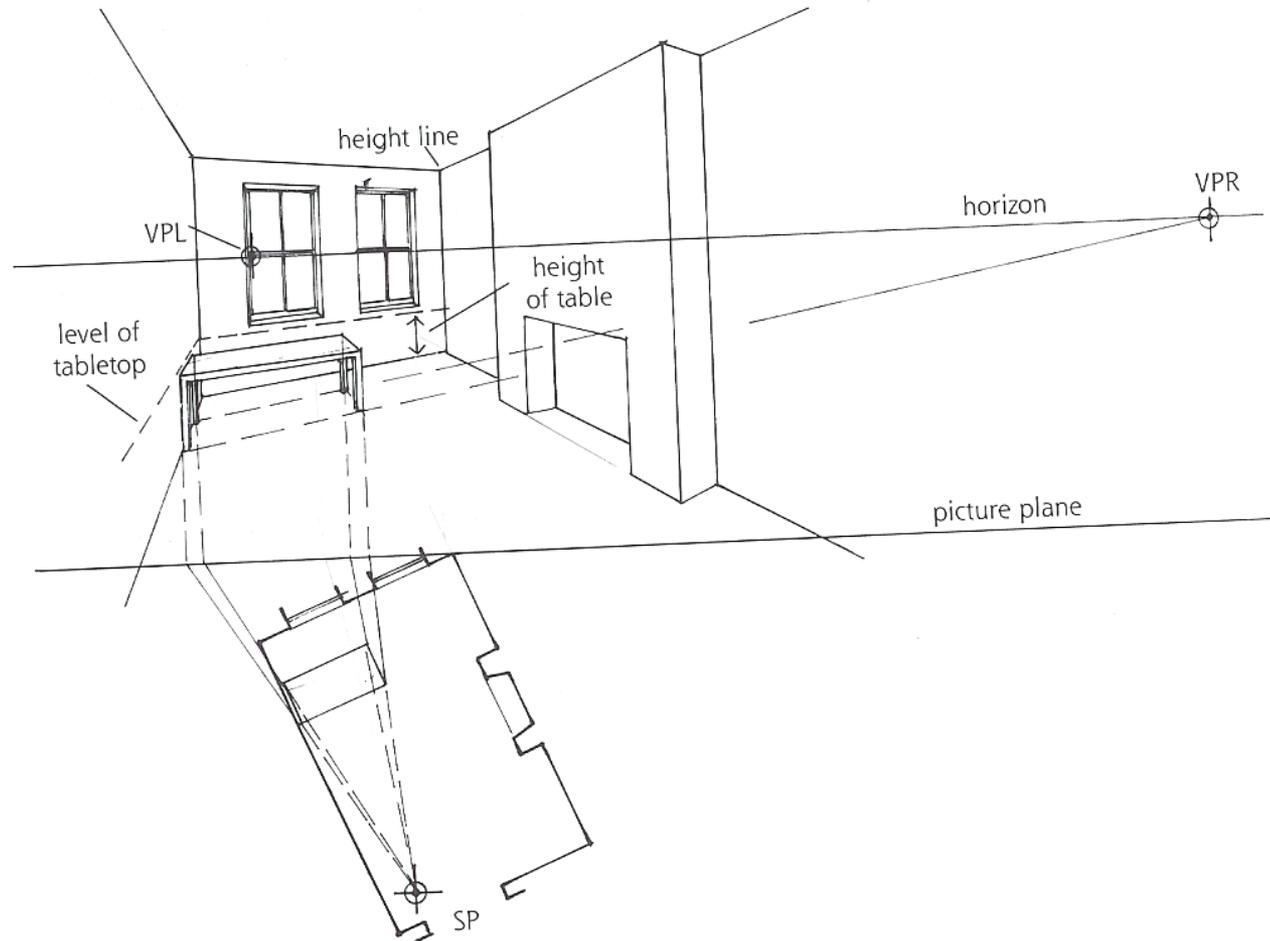
- ▶ Locate the left door opening
- ▶ Repeat the same process





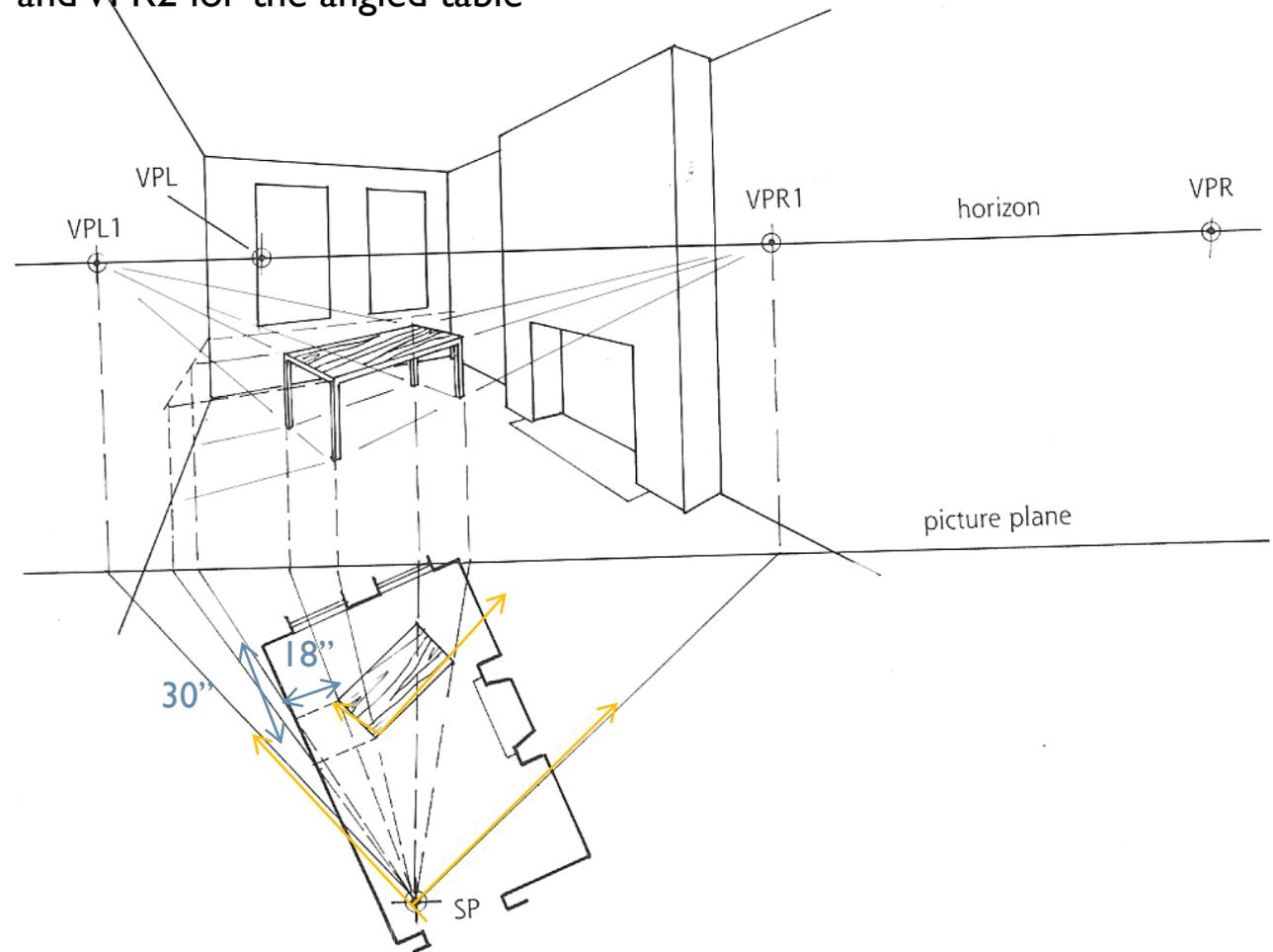
# Homework 1 – locate the table in perspective

- ▶ Draw a table 36" w x 18" l x 30" h against the left wall and 7' from the back wall onto the previous perspective
- ▶ Provide window/table details and show line weights



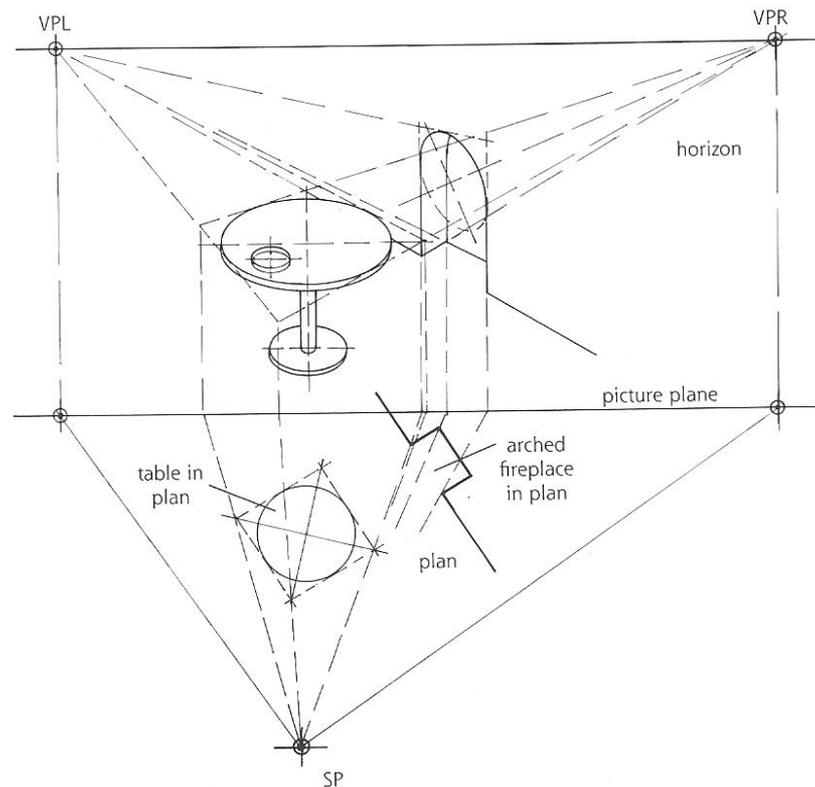
# Exercise – locate the angled table in perspective

- ▶ Do not draw on top of the previous perspective
- ▶ New tracing paper - Create a new vanishing points - table is not parallel to the existing one
- ▶ Draw a new set of VPL1 and VPR2 for the angled table



# Exercise – add a round table in the previous perspective

- ▶ 4' diameter round table 30''h with a 1' d base and a 3'' tubular pole support
- ▶ Next, draw an arched fireplace and show line weights



# Homework 2 – one point perspective

- ▶ Back wall in plan is lined up with the PP
- ▶ Heights can be measured anywhere on the back wall, which is actually an elevation
- ▶ Include all the details (a recessed above and a round mirror above the fireplace) and show line weights

