

A Variation on Alberti's Method

Lecture notes for MATH 121

By Richard Hammack

Recall that Alberti's Method is a procedure making a perspective drawing of a square room with a tiled floor viewed as indicated in the following diagram.

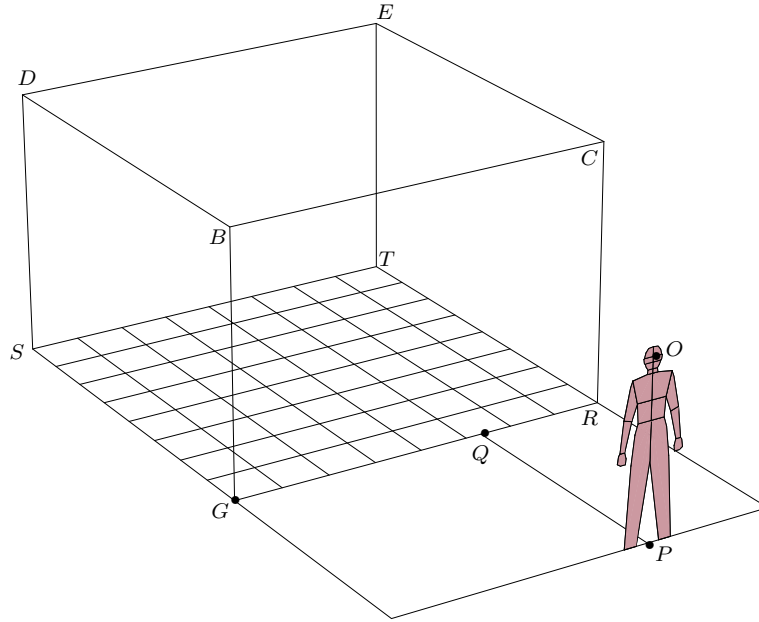
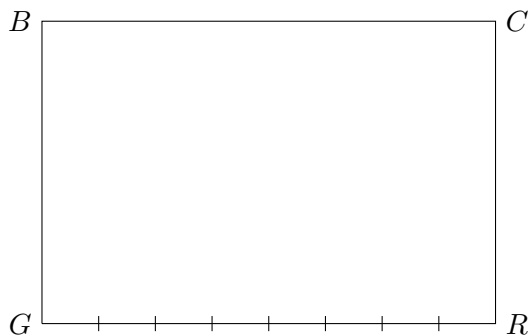


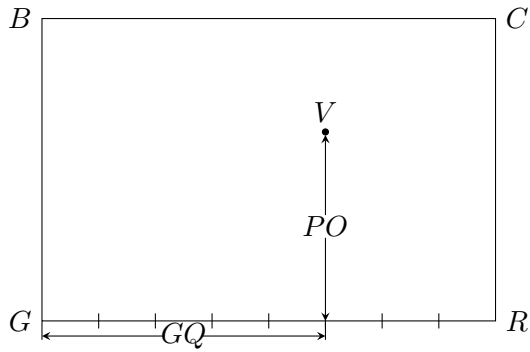
Figure 1: A viewer looking into a room

Here is a somewhat simpler variation on Alberti's method that does not take into account the distance QP , but still produces an accurate perspective drawing. It uses the idea of the diagonal check, discussed in class. The first few steps are exactly the same as in Alberti's standard method.

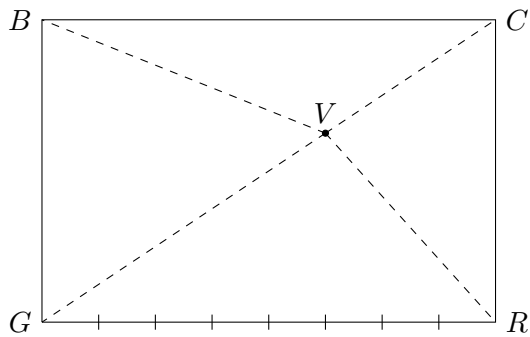
Step 1. Draw the picture plane. Draw a rectangle of the same proportions as the rectangle $GRCB$ in Figure 1. This rectangle may have any length you want, but it must have the same proportions as $GRCB$ in Figure 1. (For example, if rectangle $GRCB$ in Figure 1 is 12 by 8 feet, you could draw a 12 by 8 inch rectangle, or a 6 by 4 inch rectangle, etc.) Divide the line segment GR into equal parts, as determined by where the edges of the tiles in Figure 1 meet it. (For example, if there are eight tiles between points G and R in Figure 1, then divide the segment GR into eight equal parts.)



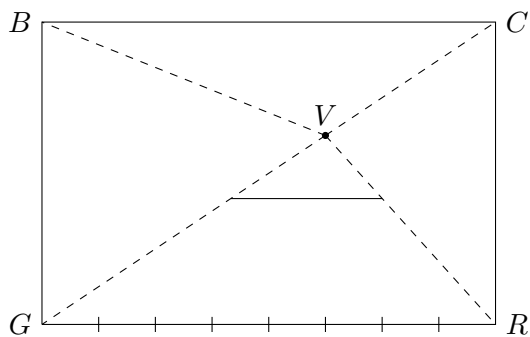
Step 2. Locate the vanishing point. Mark off a distance of GQ units to the right of Point G , and from there mark off a distance of PO up, to reach a point V . (Or just put V wherever you think it will have the best effect.)



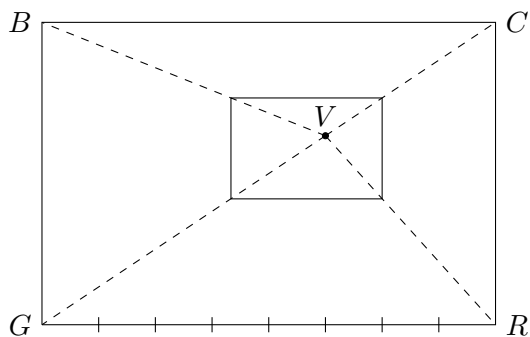
Step 3. Lightly draw lines from V to points G, B, C and R .



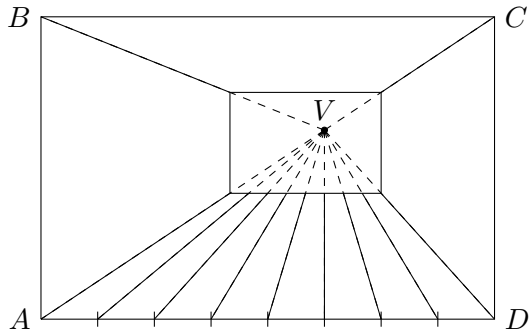
Step 4. Draw a horizontal line where you want the bottom back edge of the room to be.



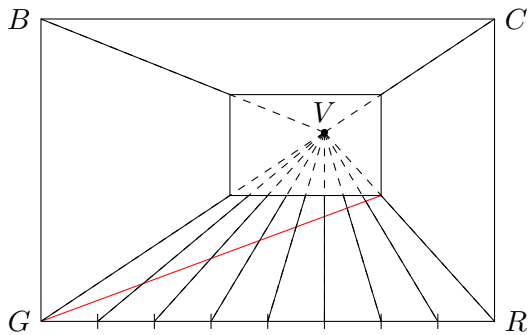
Step 5. Complete the rectangle for the back wall, as illustrated.



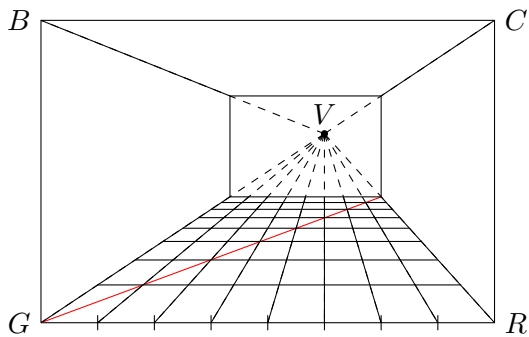
Step 6. Make bold the lines joining the inner and outer rectangle, as illustrated. Also draw lines from V to the tick marks on GR , as illustrated.



Step 7. Draw a diagonal across the floor, as illustrated.



Step 8. Draw a horizontal line at each point where the diagonal intersects a line between the inner and outer rectangles, as illustrated.



Step 9. Now erase (or ignore) the diagonal and all lightly drawn (dashed) lines. What remains is a drawing of the room exactly as the viewer sees it.

