

AT THE GIANT'S TABLE

A PERSPECTIVE FOLLOWUP
BY MARK SIMMONS



IT TURNS OUT THAT IMPROMPTU DEMOS OF COMPLEX SHADOW-PLOTTING TRICKS DON'T ALWAYS GO SMOOTHLY! LET'S TRY THIS AGAIN WITH AN EXAMPLE OF HOW WE CAN DESIGN A NICE SHAPE WITH NATURAL LIGHT, USING THE SHADOW TRACE POINT METHOD.

LET'S SAY OUR LIGHT SOURCE IS THE SUN, BEHIND THE VIEWER.

WE CAN START BY PICKING A CORNER.

I'D LIKE THE LIGHT THROUGH THE WINDOW TO MAKE A SHAPE LIKE THIS ON THE TABLE TOP.

THE LIGHT CAN CONTINUE IN ANY DIRECTION WE LIKE.

THE BOTTOM EDGE OF THE LIGHTED AREA MUST BE PARALLEL TO THE WINDOW SILL, SHARING THE SAME V.P.



NOT EVERY SHAPE WILL BE PHYSICALLY PLAUSIBLE, BUT LET'S SEE IF WE CAN WORK BACKWARDS TO MAKE THIS HAPPEN, MAGIC CHICKEN!

WE'VE ALREADY PICKED THE DIRECTION OF LIGHT WE WANTED...

① WHERE DIRECTION LINE CROSSSES THE HORIZON, WE'VE FOUND BASE POINT.

HORIZON

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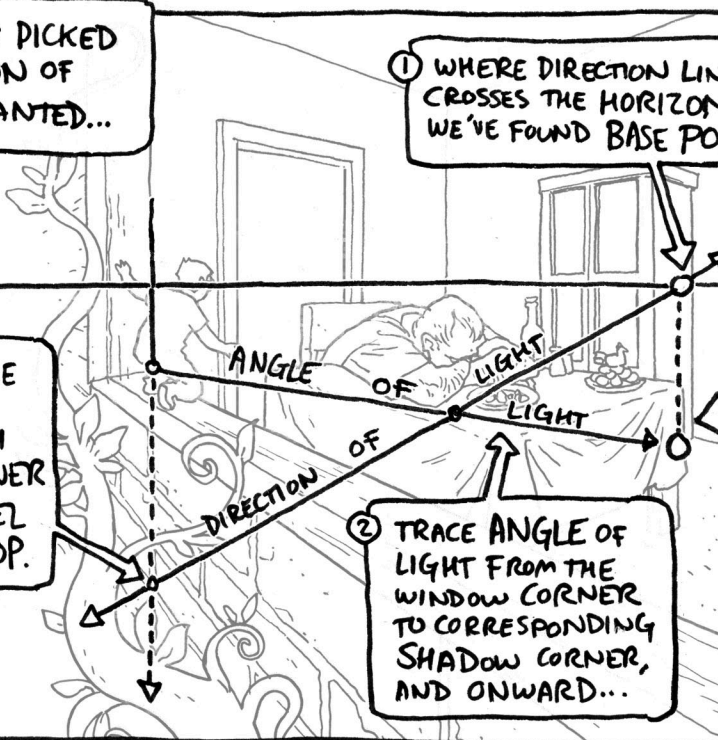
NOTE THAT WHERE DIRECTION LINE PASSES BENEATH WINDOW CORNER IS A POINT LEVEL WITH TABLE TOP.

ANGLE OF LIGHT

DIRECTION OF LIGHT

② TRACE ANGLE OF LIGHT FROM THE WINDOW CORNER TO CORRESPONDING SHADOW CORNER, AND ONWARD...

③ FINALLY! WHERE ANGLE LINE PASSES UNDERNEATH BASE POINT, WE'LL FIND OUR DESIRED SHADOW TRACE POINT.



IT'S WORTH REPEATING THAT I DIDN'T KNOW WHERE MY SHADOW TRACE POINT WOULD END UP, OR HOW HIGH THE WINDOW WAS IN RELATION TO THE TABLE OR FLOOR.

WORKING BACKWARDS TO CREATE THE SHAPE I WANTED, I FOUND OUT THESE TECHNICAL DETAILS. NOW I NEED TO USE THEM TO PLOT ALL THE OTHER, LESS IMPORTANT SHADOWS AND LIGHT SHAPES.



JUST LIKE THIS!



IF THE SUNLIGHT IS IN FRONT OF THE VIEWER, WE CAN LIKEWISE PICK A COOL LIGHT SHAPE AND WORK BACK FROM THERE...

BUT IT'S A LOT EASIER.

NOW LET'S GO, MAGIC CHICKEN!

