

Perspective Activity and Galileo Reflection

I found myself in need of a ruler or scale during the perspective taking activity. I was repeatedly trying to estimate the relative size of objects in the frame as I moved positions, and found myself using a pen as a rough gauge for size. Some kind of demarcated scale would have allowed me to determine the ratio of relative sizes, increasing the accuracy of my drawing.

On my drawing, I focused primarily on geometric shapes. I was trying to accurately replicate the repeating patterns as accurately and *objectively* as possible. Sticking to geometric shapes allowed for that, and eliminated what I viewed as subjective interpretation. The instruments described by Veltman and illustrated on our handout would have allowed me to replicate the frame from my perspective much more accurately. As mentioned above, I found myself in want of a ruler, and the use of a compass would have allowed for accurate transfer of scale from the framed scene to the media.

I was also struck by Veltman's position that the development of linear perspective taking techniques helped guide the development of scientific thought in Europe. By fixing a perspective, it was assumed that observations could be standardized, and accurate measurements made; thus allowing for generalizations and inductive inferences to be made. I believe this trend toward rigorous control during perspective taking was a critical point of separation between naïve and expert scientific thought, both on an individual and societal level. By controlling perspective through complex tools, these early mathematicians, artists, and engineers were able to begin to control for the biases

and heuristics that hamper many untrained observers. (A confusion of perspective and perception, perhaps?)

This difference is apparent in Drake's biographical sketch of Galileo. Drake posits in the conclusion that it was Galileo's keen powers of observation that ultimately set him apart from his non-scientific peers. I believe this schism exists today. One of my goals for Doctoral study, in fact, is to help find ways to make the public at large more aware of the importance of careful, critical observation in their everyday lives and consumption of scientific media.

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