

Figure 2.15 Pin-hole camera interpretation of perspective function. The dark horizontal line represents the plane $x_3 = 0$ in \mathbb{R}^3 , which is opaque, except for a pin-hole at the origin. Objects or light sources above the plane appear on the image plane $x_3 = -1$, which is shown as the lighter horizontal line. The mapping of the position of a source to the position of its image is

related to the perspective function.