World origin

Sensor plane

(0,0)

Normalized image plane

Optical center

World to camera transformation: \( P_{\text{camera}} = RP_{\text{world}} + t \)

Projection to normalized image plane: \( p_{\text{normalized}} \equiv P_{\text{camera}} \)

Homography to sensor plane: \( p_{\text{sensor}} \equiv KP_{\text{normalized}} \)