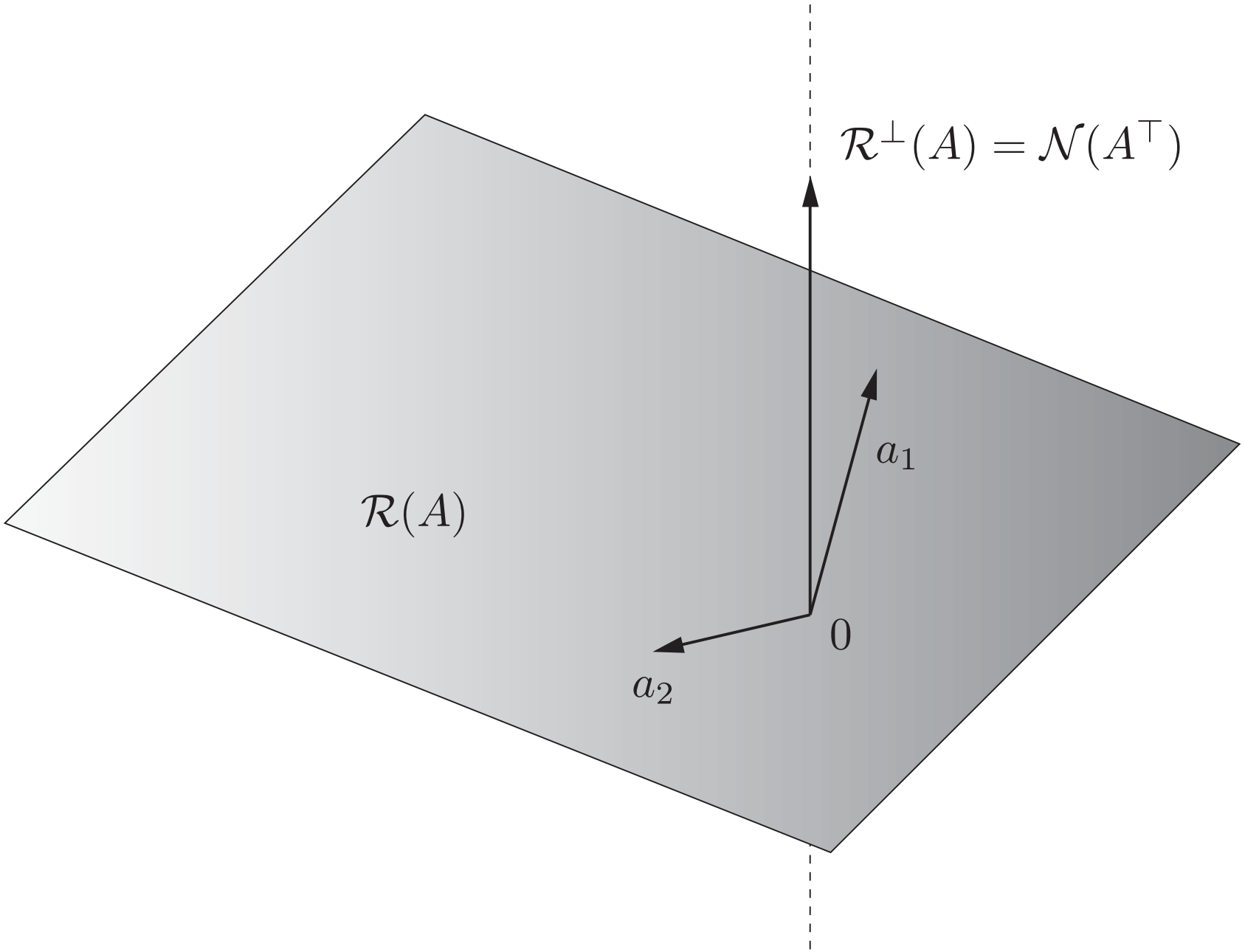
$\mathcal{R}^{\perp}(A) = \mathcal{N}(A^{\top})$
a_1
$\mathcal{R}(A)$
0
a_2