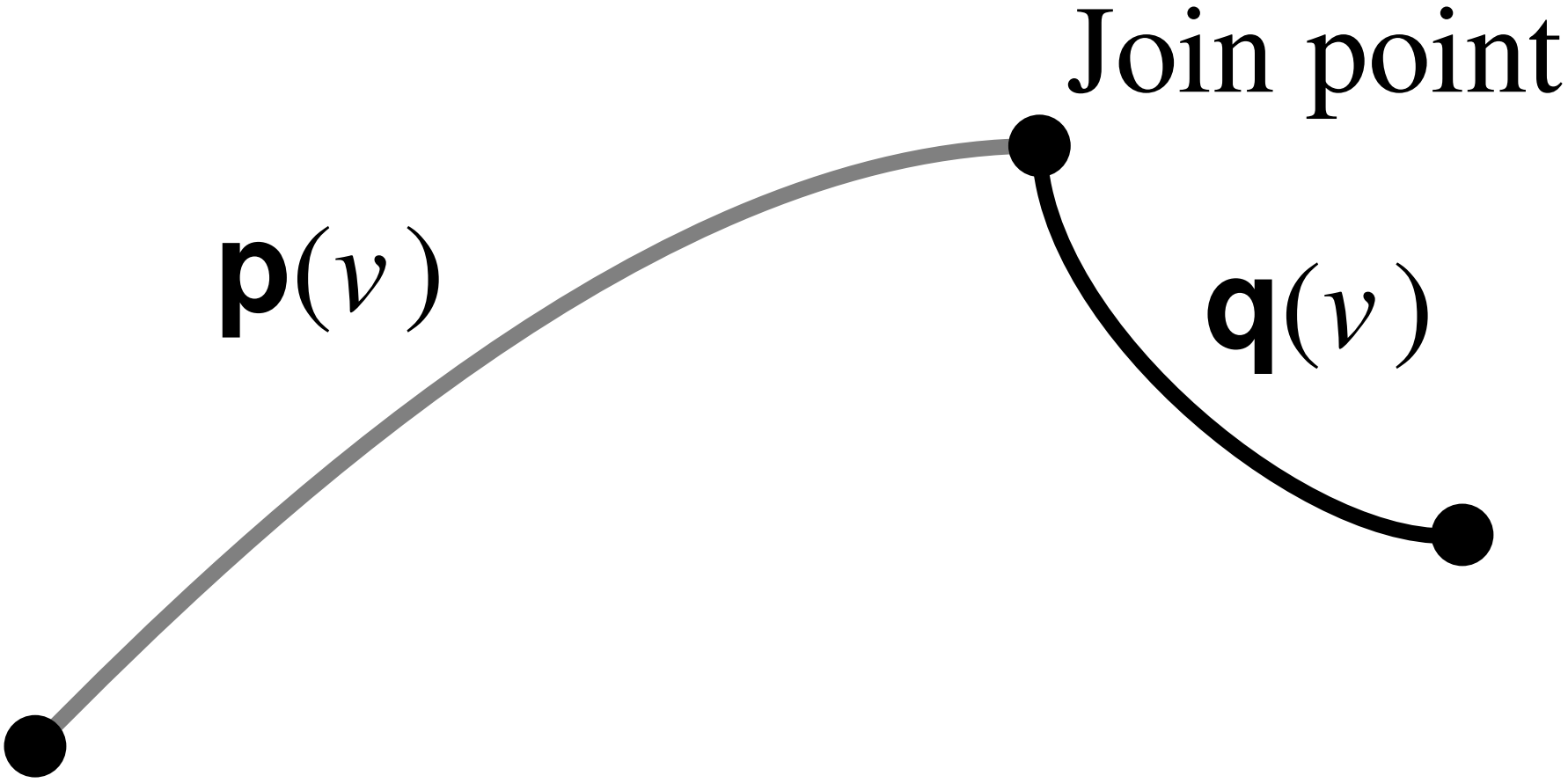
Join point
$\mathbf{p}(v)$
$\mathbf{q}(v)$