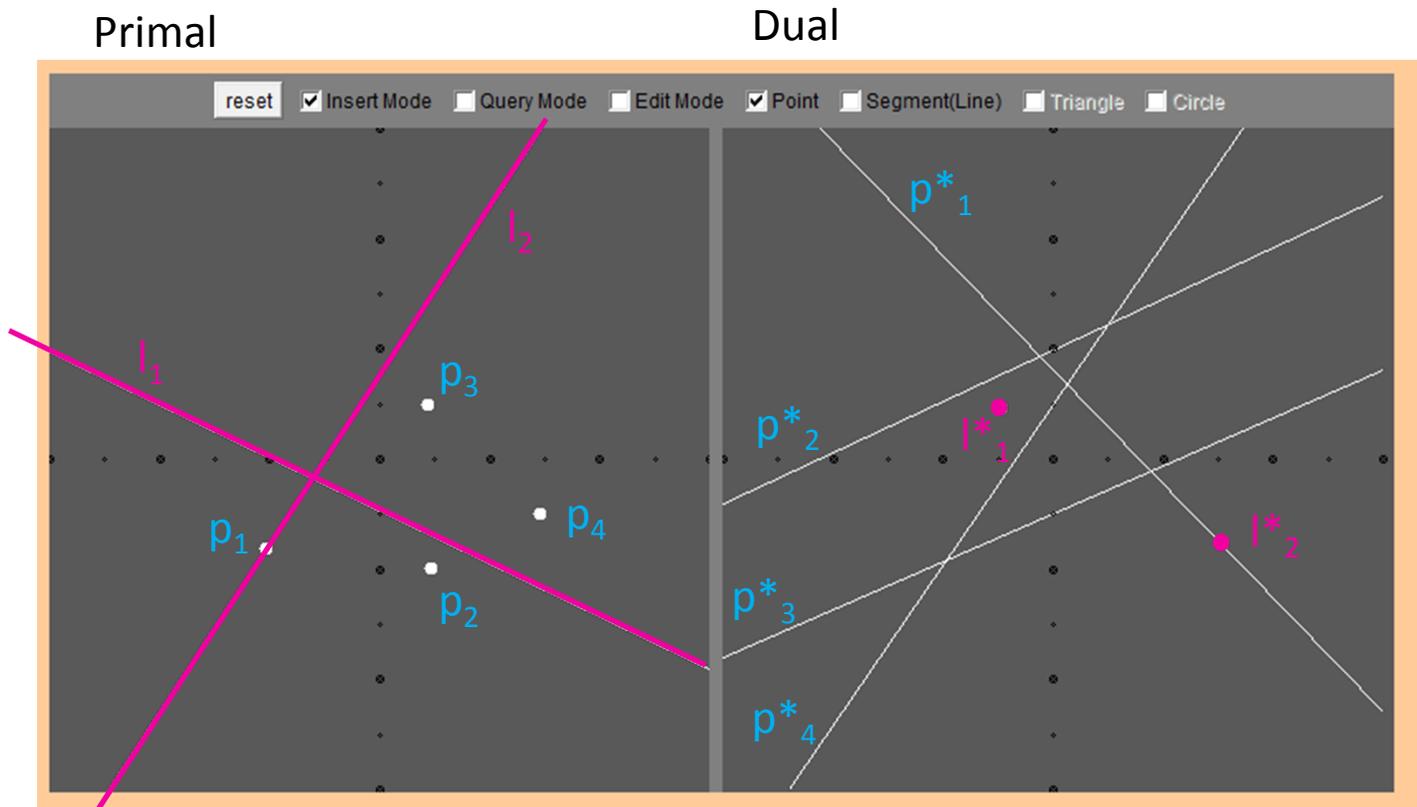


Point-Line Duality

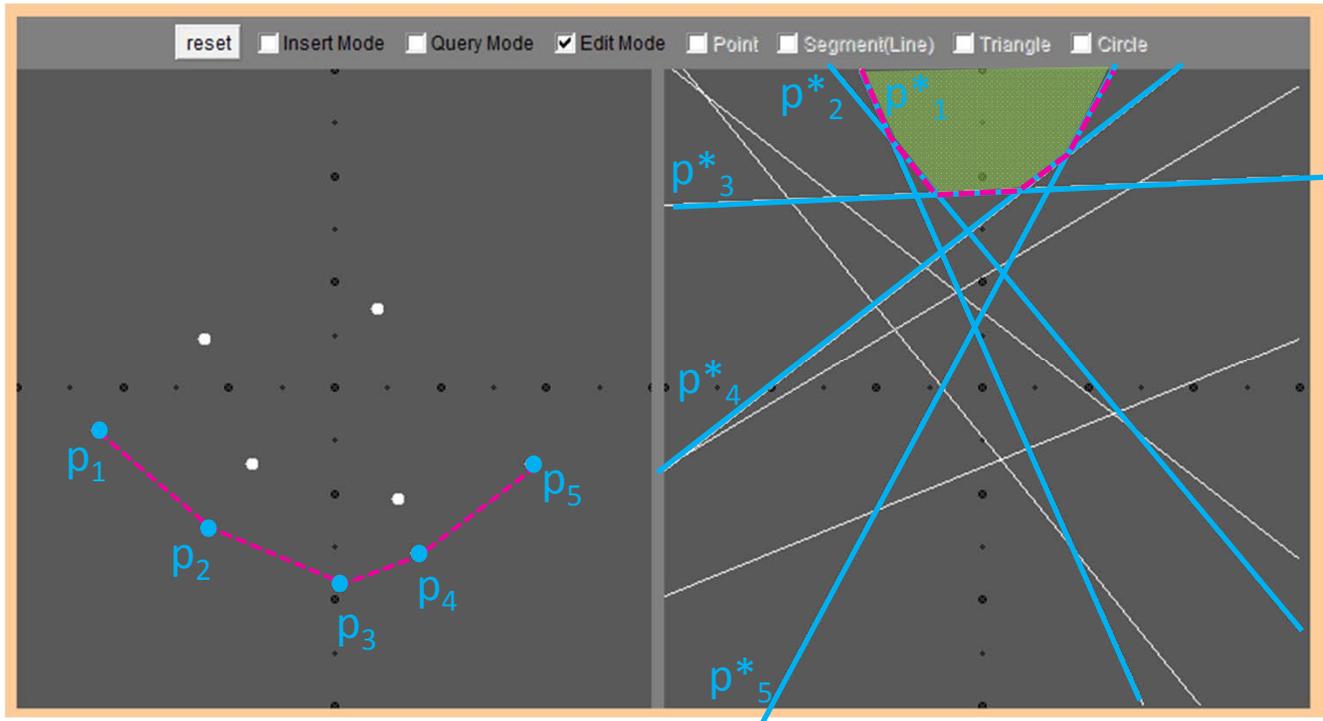


- $p_1 \in l_2 \Leftrightarrow l^*_2 \in p^*_1$
- p_3 is above $l_1 \Leftrightarrow l^*_1$ is above p^*_3

LCH \cong UE

Primal

Dual



LCH lower convex hull

UE upper envelope (= pointwise maximum)
halfplane intersection (of upper halfplanes)

- LCH = p_1, p_2, p_3, p_4, p_5
- UE = $p^*_1, p^*_2, p^*_3, p^*_4, p^*_5$