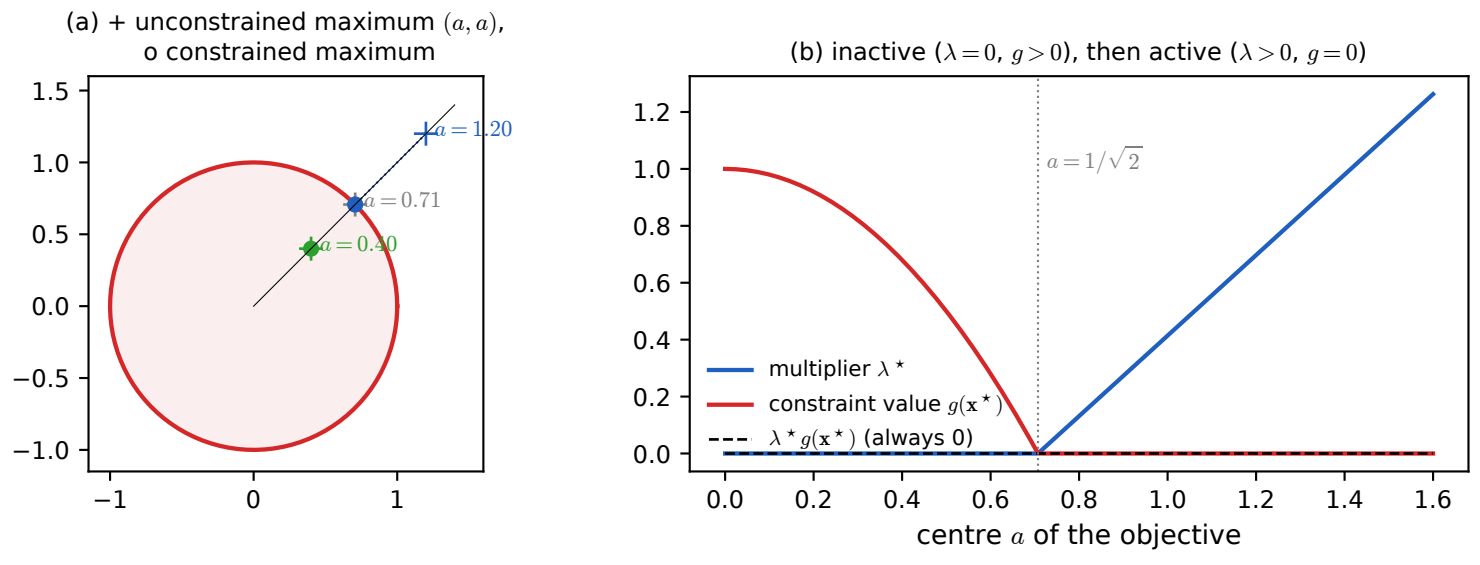

(a) + unconstrained maximum (a, a),
o constrained maximum
$a = 1.20$
$a = 0.71$
$a = 0.40$
(b) inactive ($\lambda = 0$, $g > 0$), then active ($\lambda > 0$, $g = 0$)
$a = 1/\sqrt{2}$
multiplier $\lambda^\star$
constraint value $g(\mathbf{x}^\star)$
$\lambda^\star g(\mathbf{x}^\star)$ (always 0)
centre a of the objective