$$\vec{x} \qquad \vec{f}(\vec{x},\{w\})$$

Input Layer | Hidden Layers | Output Layer

$\nu = 0 \quad \nu = 1 \quad \nu = \nu'-1 \quad \nu' \quad \nu = L$
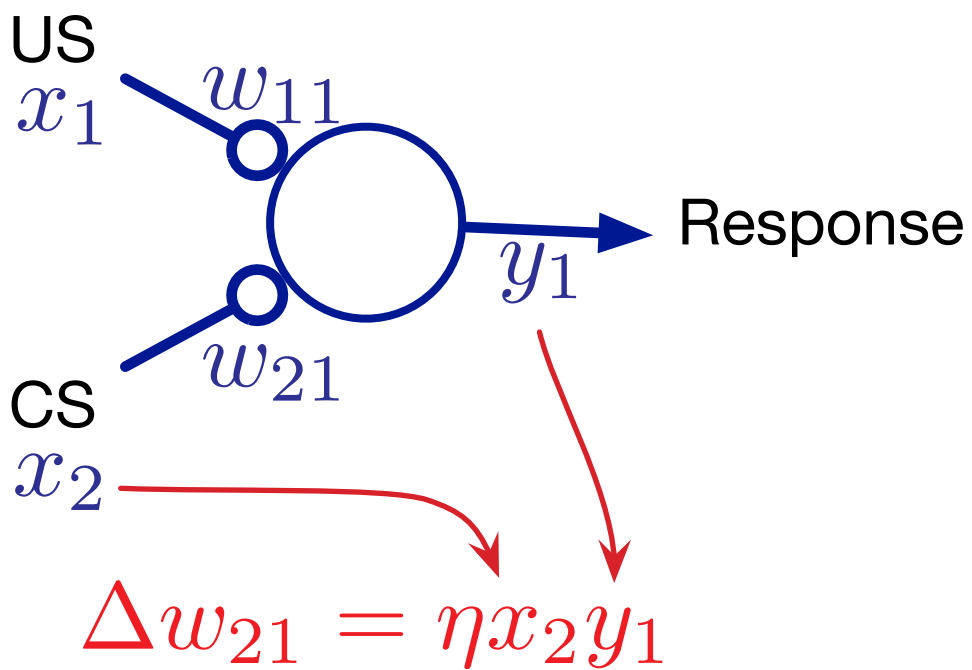
$$\Delta\vec{w} \quad \frac{\partial\sigma}{\partial a}\frac{\partial a}{\partial w_i} \quad \frac{\partial\sigma}{\partial a}\frac{\partial a}{\partial w_i} \quad E$$

Backpropagation

US x_1 w_{11}

y_1 Response

CS x_2

$$\Delta w_{21} = \eta x_2 y_1$$

Hebbian = local