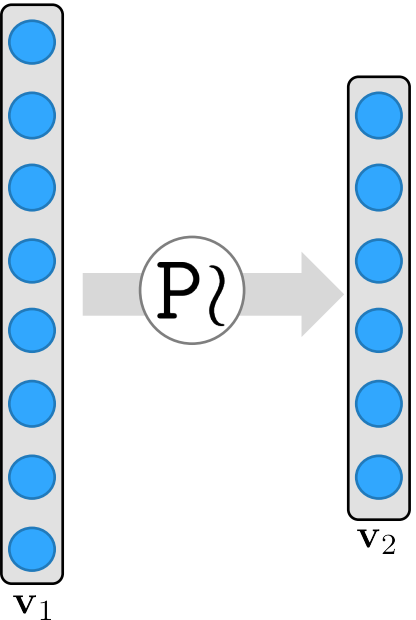
New notation



Algebraically

$$\mathbf{v}_2 = \sigma\left(\mathtt{P}\mathbf{v}_1\right)$$

Generic non-linearity

$$\mathtt{P} = \begin{bmatrix} - & \mathbf{h}_1 & - \\ - & \mathbf{h}_2 & - \\ - & \mathbf{h}_3 & - \\ - & \mathbf{h}_4 & - \\ - & \mathbf{h}_5 & - \\ - & \mathbf{h}_6 & - \end{bmatrix}$$

The bias is incorporated within the Homogeneous notation for simplicity