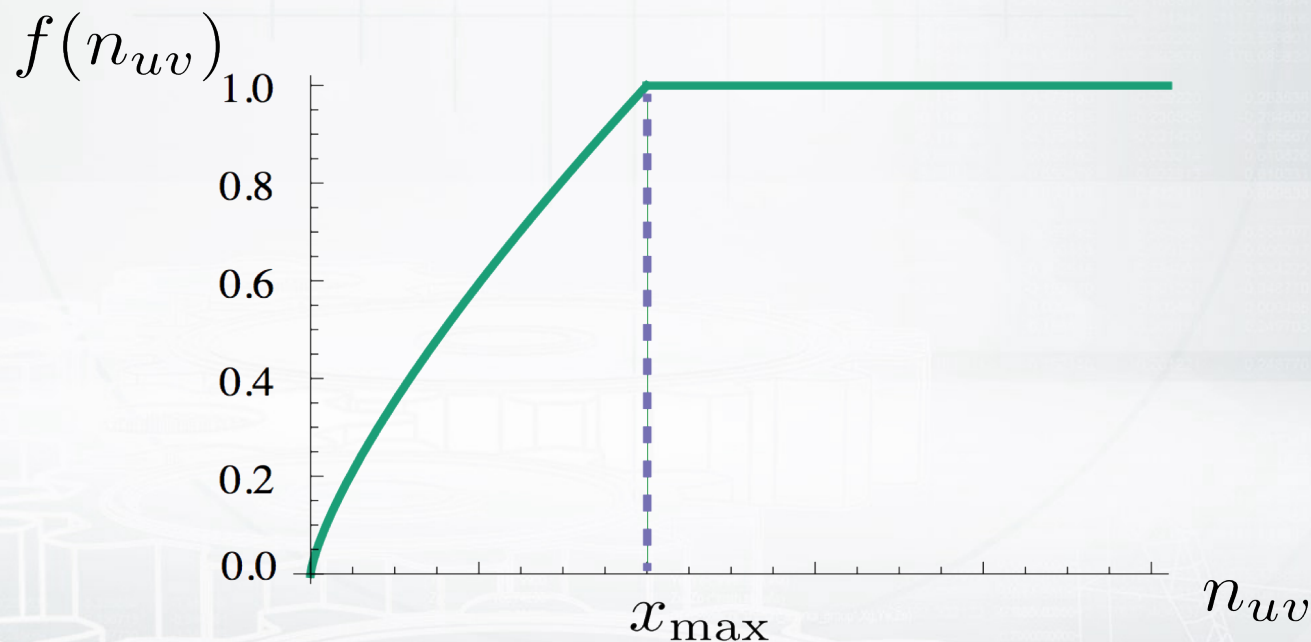# Weighted squared loss: GloVe

Fill X with $\log n_{uv}$ and try another objective:

$$\sum_{u \in W} \sum_{v \in W} f(n_{uv}) \left(\langle \phi_u, \theta_v \rangle + b_u + b'_v - \log n_{uv} \right)^2 \to \min_{\phi_u, \theta_v, b_u, b'_v}$$

Pennington et. al. GloVe: Global Vectors for Word Representation, 2014.