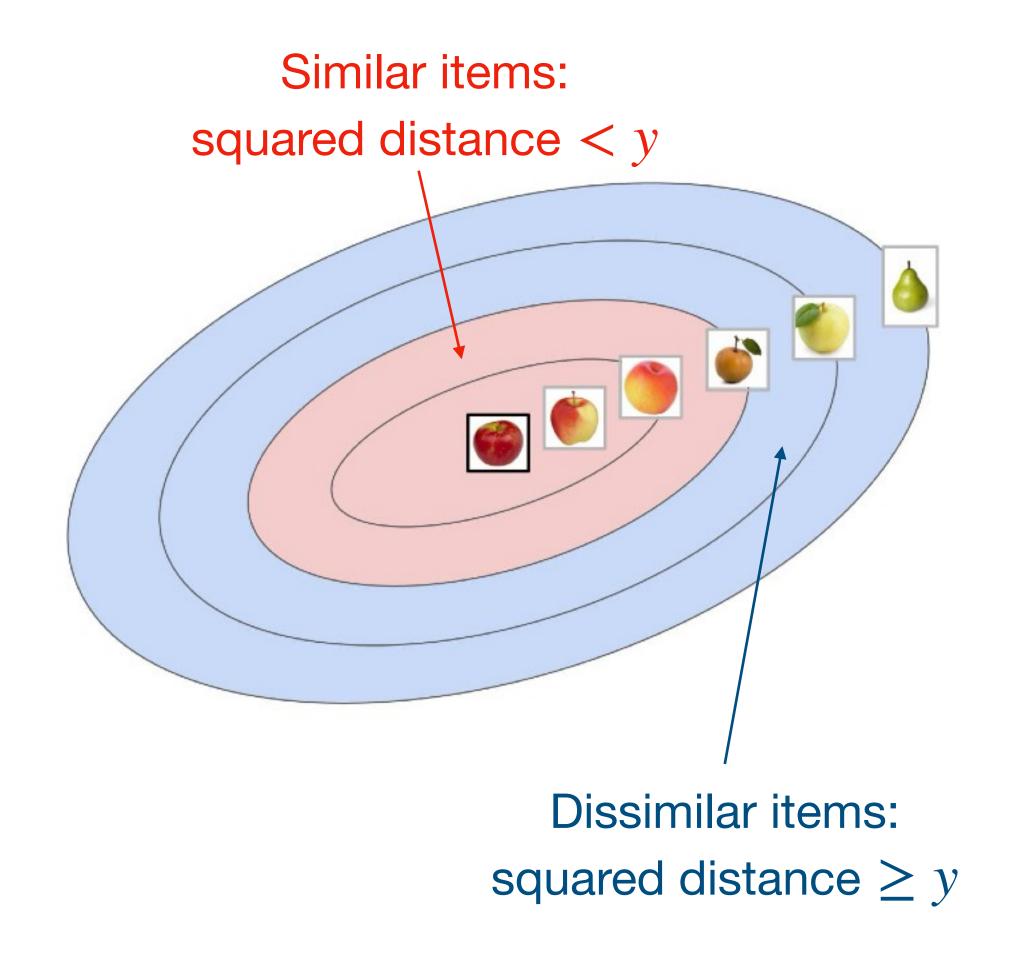
## Distance-based perception model

- High-dimensional feature space  $\mathbb{R}^D$ , where each point corresponds to an item
  - Perception governed by a low-rank Mahalanobis metric  $\mathbf{M} \in \mathbb{R}^{D \times D}$ , rank $(\mathbf{M}) = r, r \ll D$
  - If two items are squared distance < y apart under  $\mathbf{M}$ , they are considered "similar"
- Goal: Estimate M from PAQ responses



## PAQs for metric learning

