

- A **normal** distortion measure is one which allows a source X to be reproduced with zero distortion.
- The square-error distortion measure and the Hamming distortion measure are normal distortion measures.
- The **normalization** of a distortion measure d is the distortion measure \tilde{d} defined by

$$\tilde{d}(x, \hat{x}) = d(x, \hat{x}) - c_x$$

for all $(x, \hat{x}) \in \mathcal{X} \times \hat{\mathcal{X}}$.

- It suffices to consider normal distortion measures as we will see.