

## Shannon's lower bound

- ▶ Assume  $p_T$  is “well behaved”. For example, IID.
- ▶ Let  $T \rightarrow \infty$
- ▶  $H(p) \doteq \lim_{T \rightarrow \infty} \frac{H(p_T)}{T}$  exists and is called the per character entropy of the source  $p$