

- **Message Set**  $\mathcal{W} = \{1, 2, \cdots, M\}$
- **Codewords**  $e(1), e(2), \cdots, e(M)$ , where  $e(w) = (x_1(w), x_2(w), \cdots, x_n(w))$
- **Codebook** The set of all codewords.