

1 \rightarrow los elementos estrictamente inferiores

• Por debajo de la diagonal principal

2 \rightarrow

$$\begin{array}{ccc} a_{mn}/a_{ij} & (i < j) & a_{23} \ a_{15} \\ \uparrow & & \\ \text{diagonal principal} & (i = j) & a_{11} \ a_{44} \\ \downarrow & & \\ & (i > j) & a_{21} \ a_{32} \ a_{53} \end{array}$$

3 \rightarrow

a) $i = j$

b) $i < j$

c) $i > j$

4 \rightarrow

$$L_n(\mathbb{K}) := \left\{ \underbrace{A_j \in \mathcal{M}_n(\mathbb{K}) : \forall i, j \in \{1, \dots, n\}, \text{ si } i \geq j \text{ entonces } A_{ij} = 0}_{i \mid \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 1 & 1 \end{pmatrix}} \right\}$$

$$U_n(\mathbb{K}) := \left\{ \underbrace{A_j \in \mathcal{M}_n(\mathbb{K}) : \forall i, j \in \{1, \dots, n\}, \text{ si } i \leq j \text{ entonces } A_{ij} = 0}_{i \mid \begin{pmatrix} 1 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix}} \right\}$$

5 →

$$A \in U_n(\mathbb{K}) \Leftrightarrow A^* \in L_n(\mathbb{K})$$