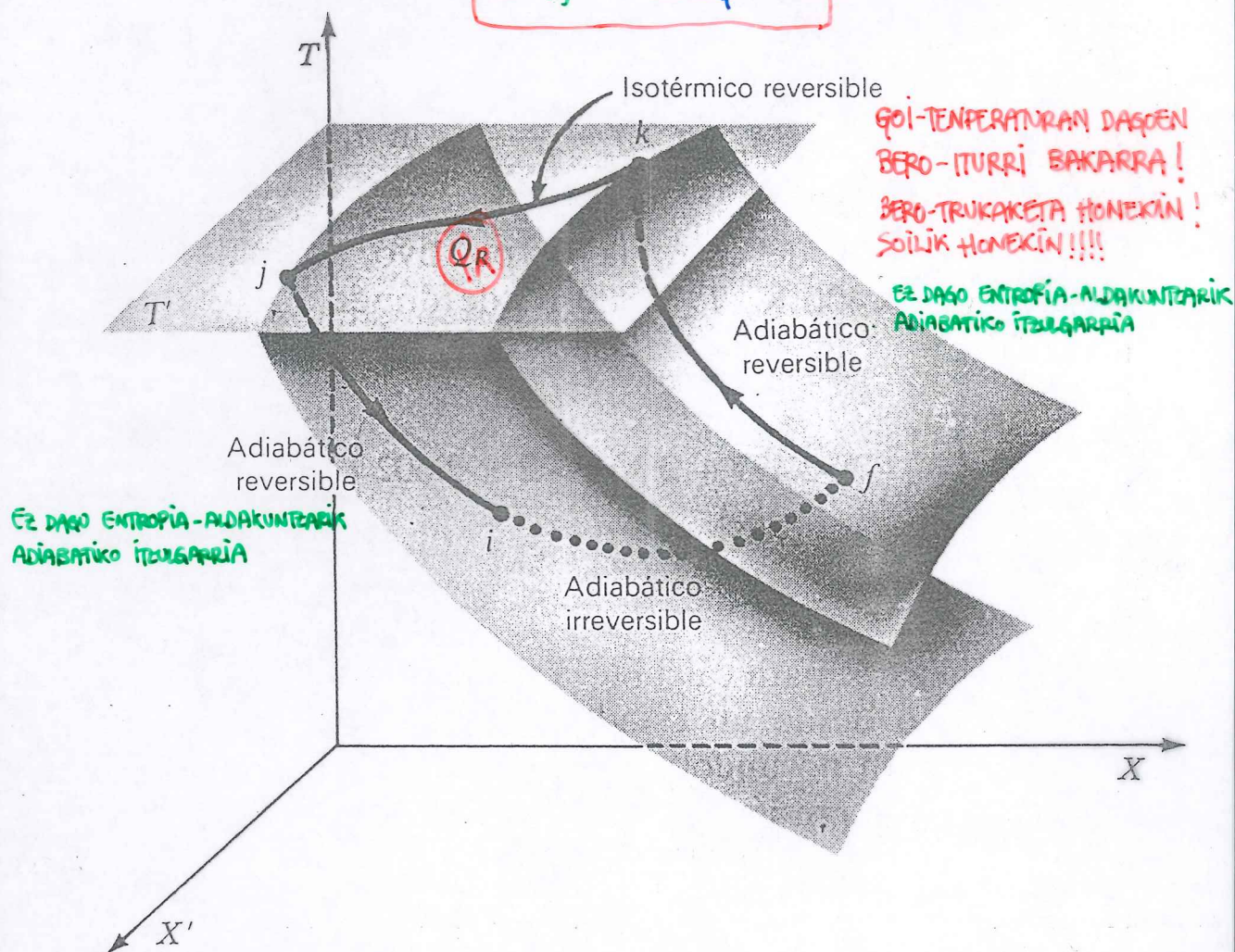


SISTEMA

$$\left[\Delta S_0 = \Delta S_{kj} + \underset{0}{\Delta S_{ji}} + \Delta S_{if} + \underset{0}{\Delta S_{fk}} = 0 \text{ (ZIKLOA)} \right]$$

$$\Delta S_{kj} + \Delta S_{if} = 0$$



$$\left. \begin{array}{l} \Delta S_{kj} \equiv S_j - S_k \\ \Delta S_{if} \equiv S_f - S_i \end{array} \right\} \Delta S_{if} + \Delta S_{kj} = 0 \Rightarrow \Delta S_{if} = -\Delta S_{kj} \Rightarrow \Delta S_{if} = \Delta S_{jk} = S_k - S_j$$

$$Q_R = T' \Delta S_{jk}$$

$$Q_R \leq 0 \text{ (2.P)} \Rightarrow \Delta S_{kj} \leq 0 \Rightarrow \Delta S_{jk} \geq 0$$

$$\Delta S_{if} \geq 0$$