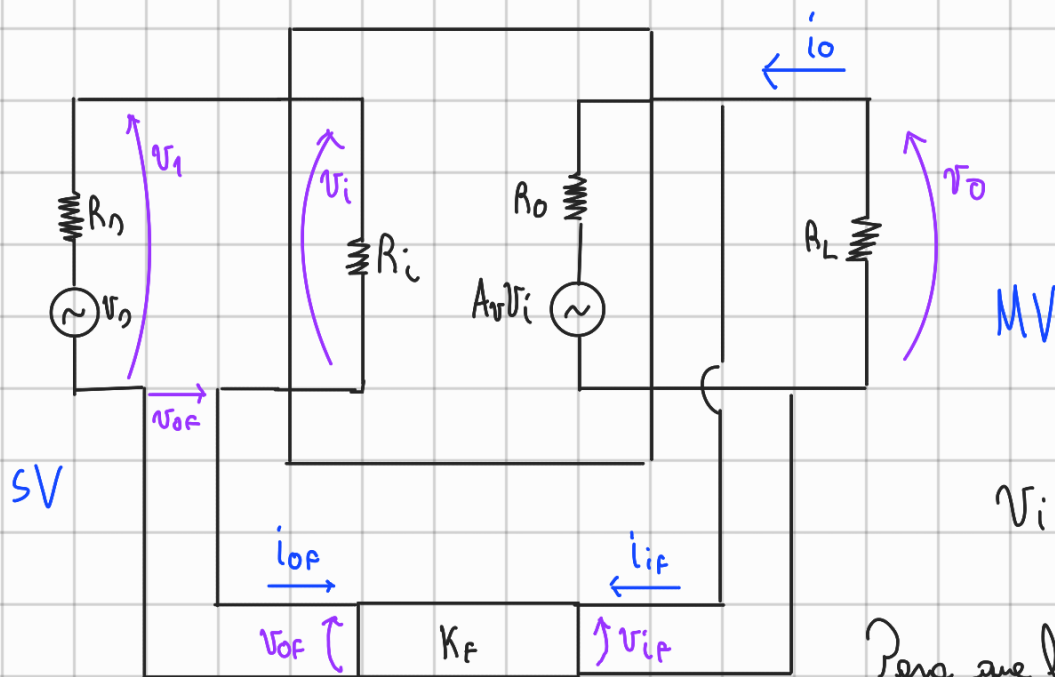


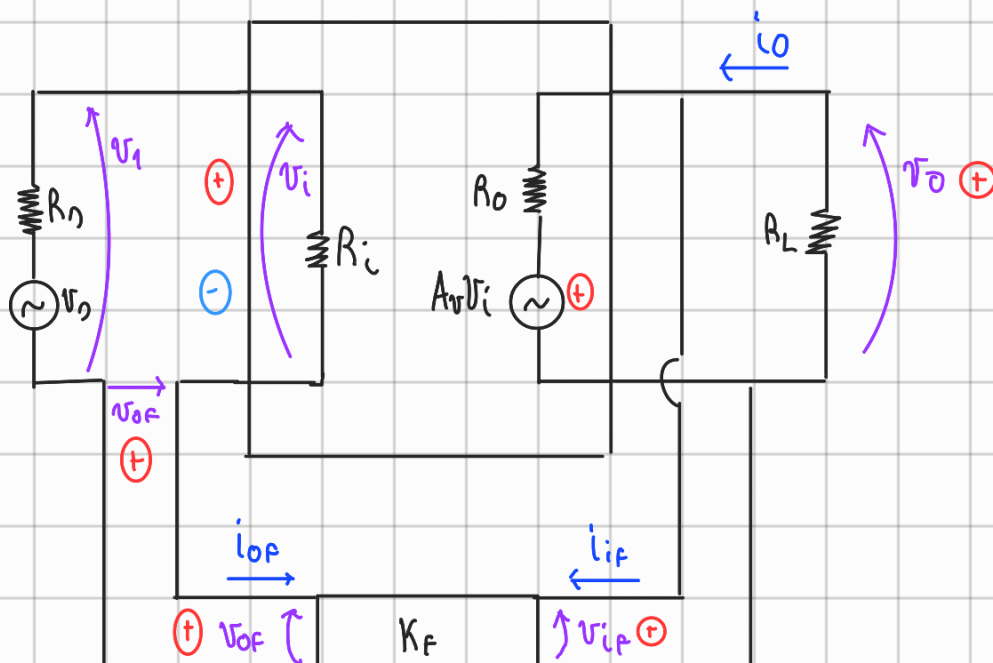
SV-MV



$$v_i = v_1 - v_{of}$$

Para que haya realimentación negativa ante un incremento de v_i se debe compensar ese incremento

Signos de K

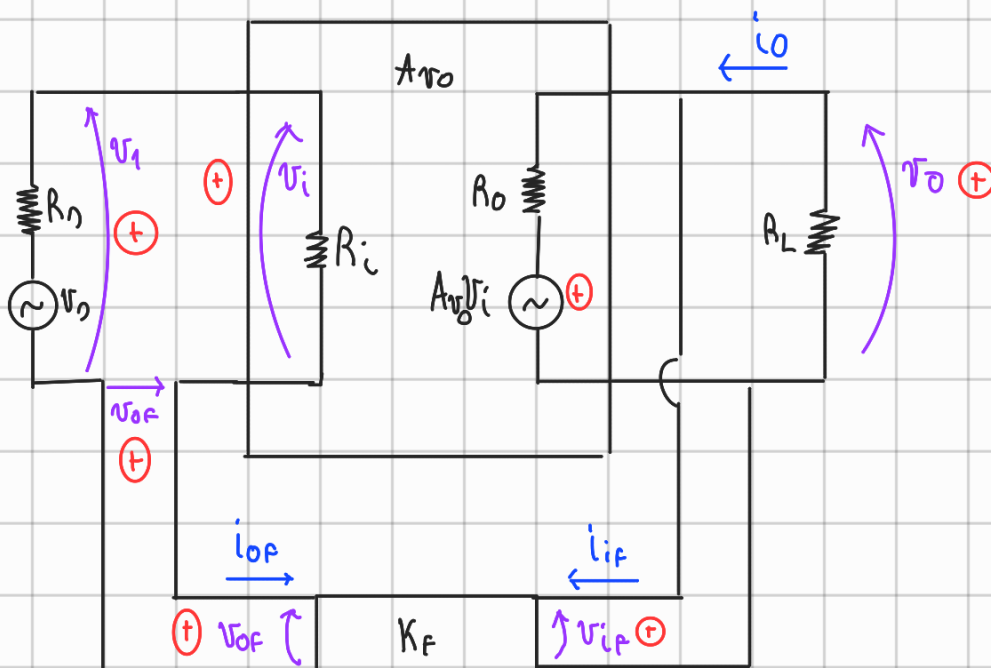


Para que sea realimentación negativa $K_F = \frac{v_{of}}{v_{if}} > 0$

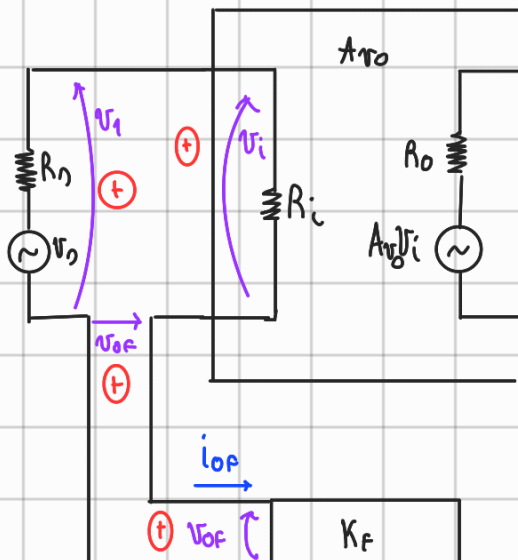
A_v

$$A_{v_o} = \frac{v_o}{v_i}$$

$$A_v = \frac{v_o}{v_1} = \frac{v_o}{v_i + v_{of}} < \frac{v_o}{v_i} = A_{v_o}$$



R_{if}



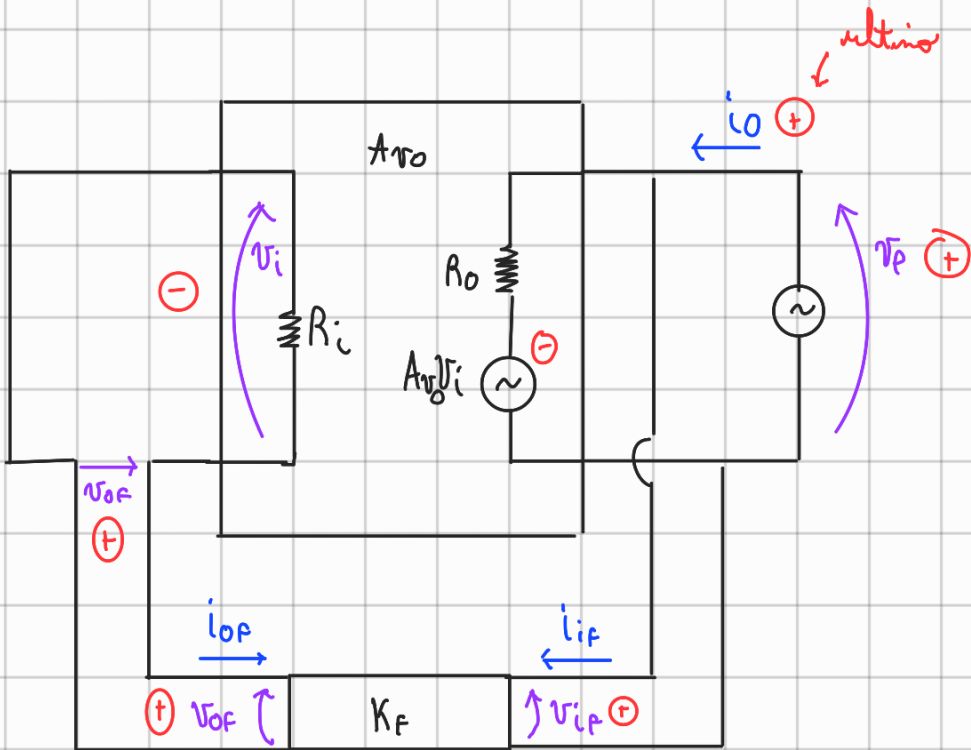
$$R_i = \frac{V_i}{i_i}$$

$$R_{ir} = \frac{V_i + V_{of}}{i_i}$$

 \Rightarrow

$$R_{ir} > R_i$$

R_{or}



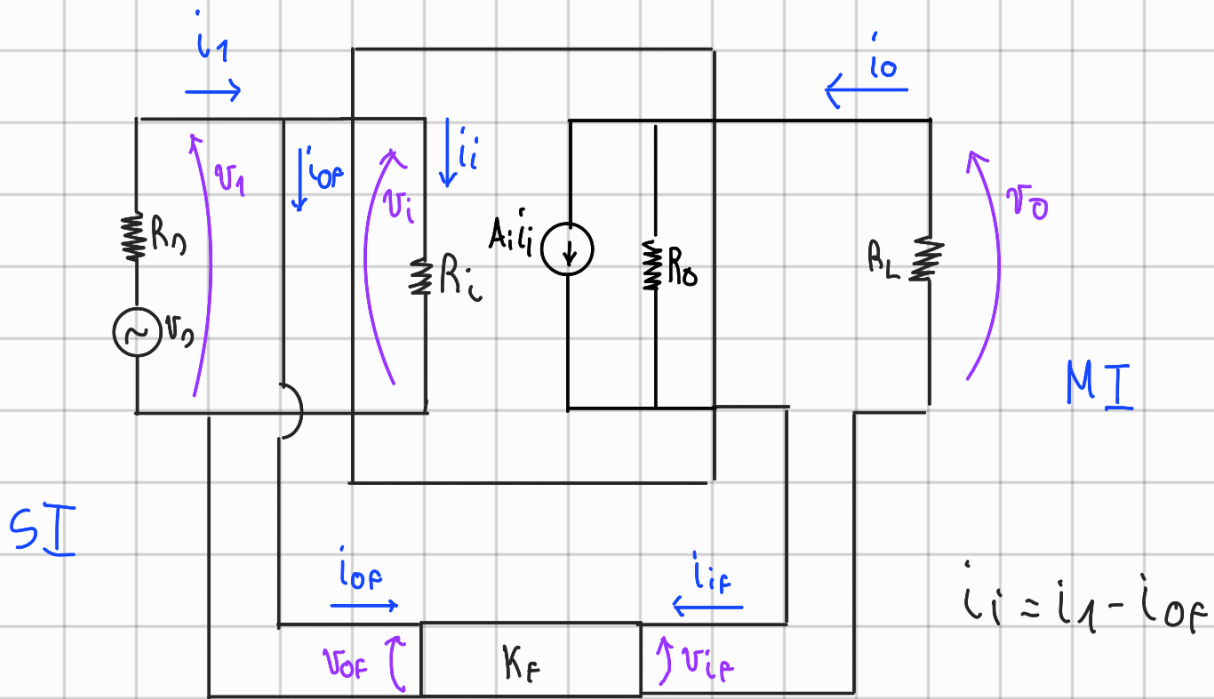
$$R_o = \frac{V_p}{i_o}$$

$$R_{or} = \frac{V_p}{i_{or}}$$

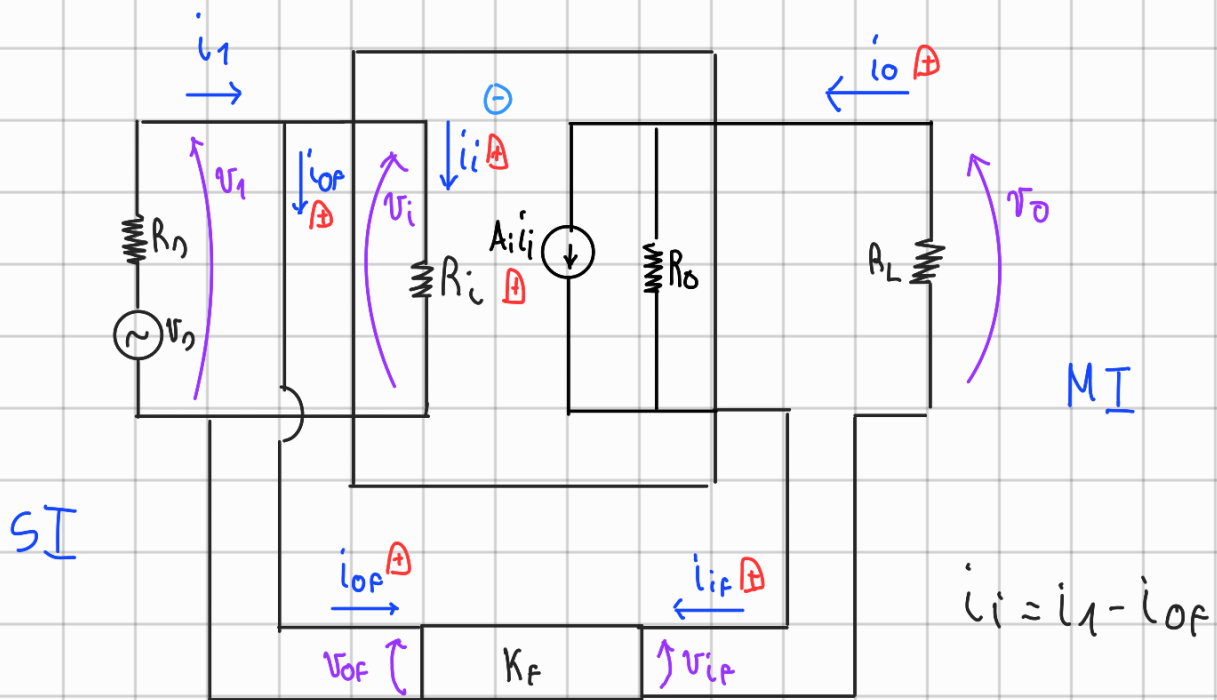
$$i_{or} > i_o \rightarrow$$

$$R_{or} < R_o$$

SI - MI



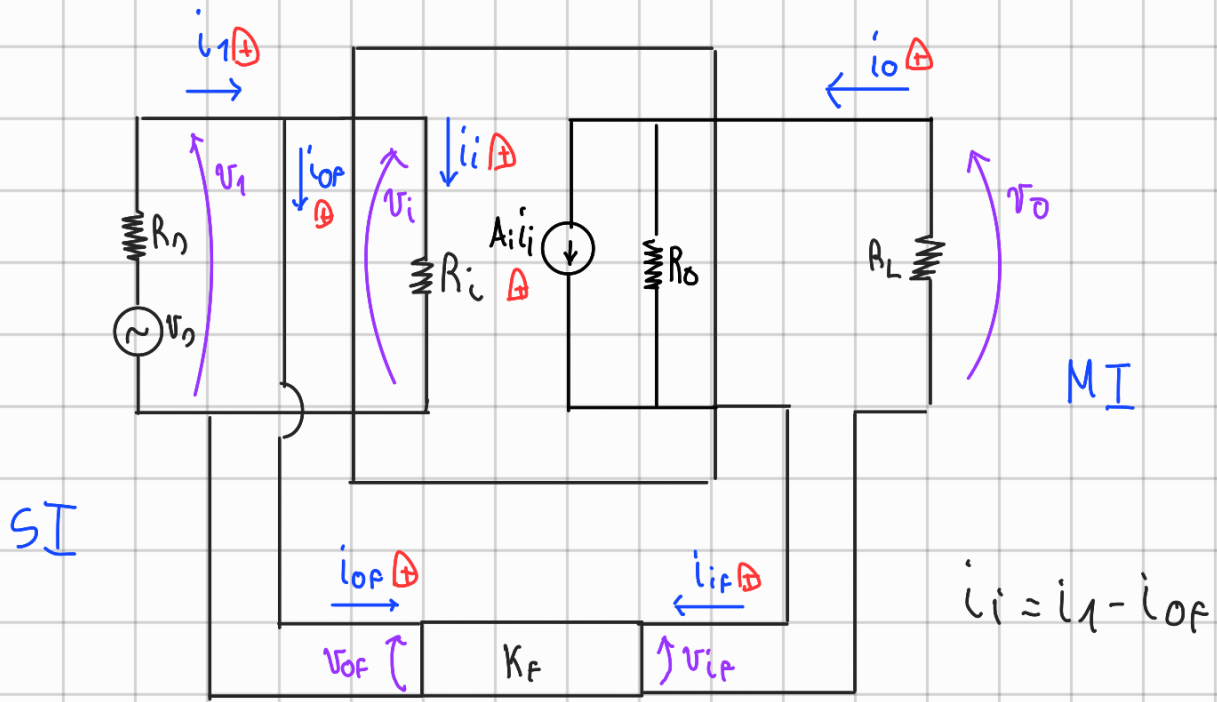
Signo de K



$$i_i = i_1 - i_{of}$$

$$K_F = \frac{i_{of}}{i_{if}} > 0$$

A_i



$$A_{i_o} = \frac{i_o}{i_i}$$

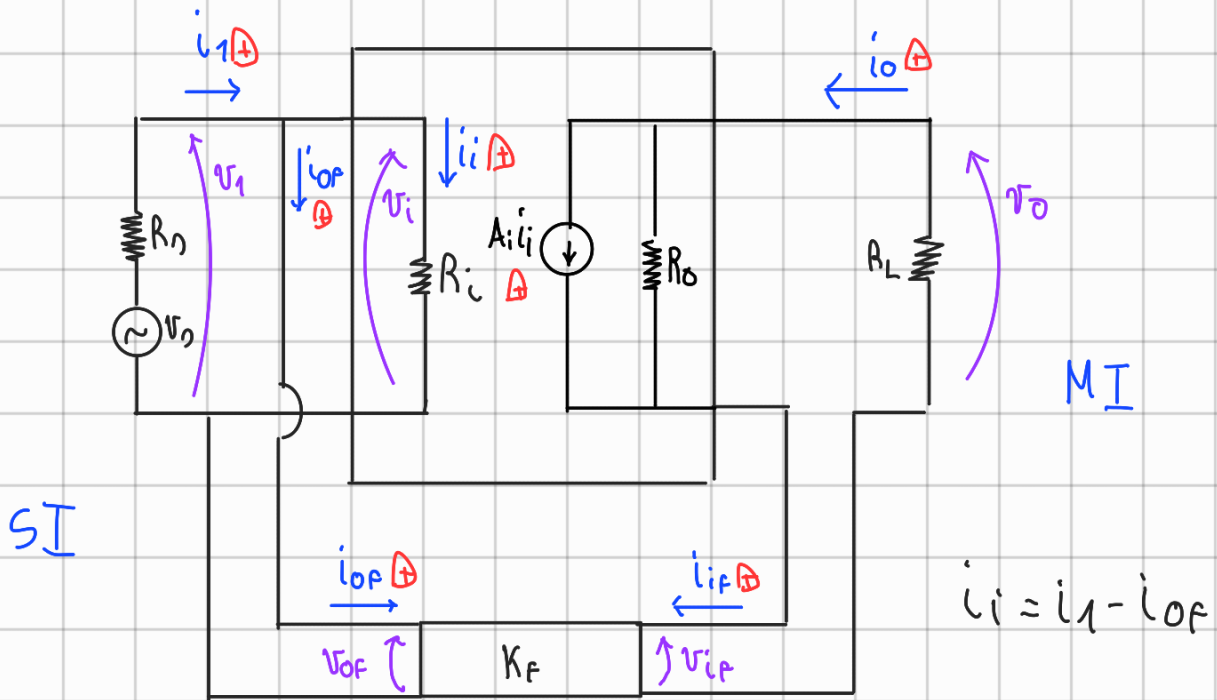
$$A_i = \frac{i_o}{i_1}$$

$$A_{i_o} = \frac{i_o}{i_i} > \frac{i_o}{i_i + i_{of}} = A_i$$

\Rightarrow

$$A_{i_o} > A_i$$

R_{ir}



$$R_i = \frac{v_p}{i_i}$$

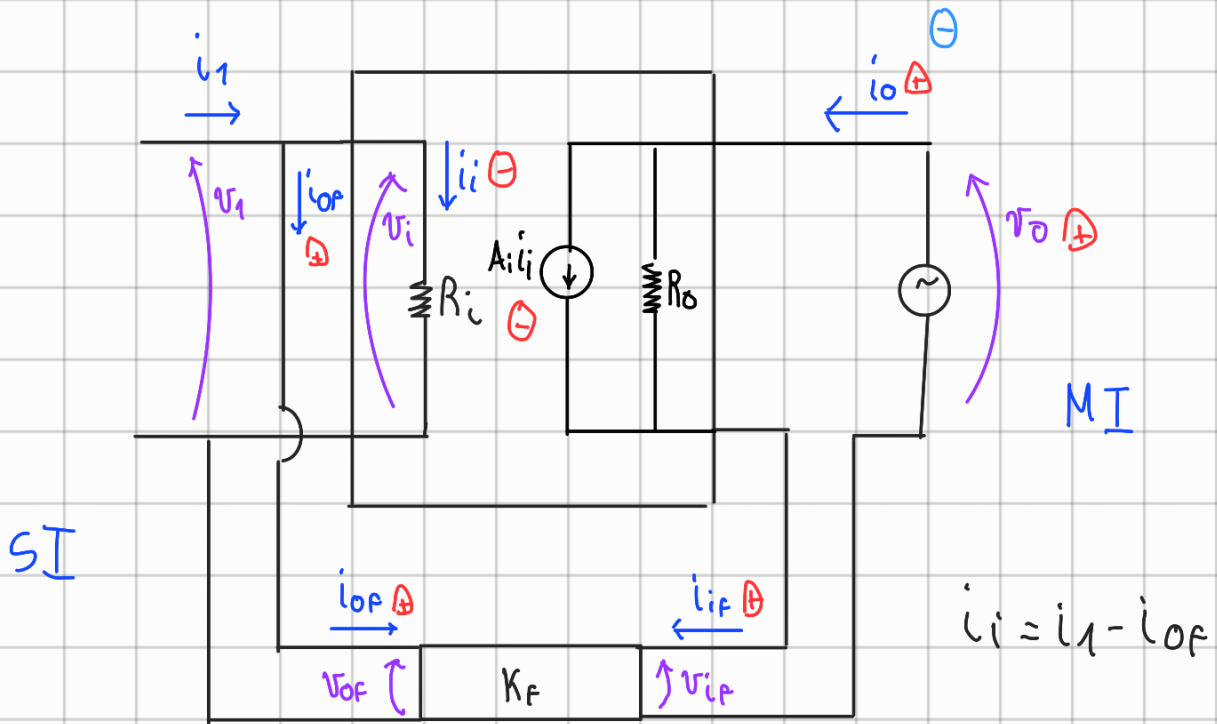
$$R'_{ir} = \frac{v_p}{i_1}$$

$$R_i = \frac{v_p}{i_i} > \frac{v_p}{i_i + i_{of}} = R'_{ir}$$

\Rightarrow

$$R'_{ir} < R_i$$

R_{or}



$$R_o = \frac{v_p}{i_o}$$

$$R_{or} = \frac{v_p}{\underbrace{i_{or}}_{< i_o}} > \frac{v_p}{i_o} = R_o$$

$$\Rightarrow R_{or} > R_o$$