

$$C_n(X) \xrightarrow{f\#} C_n(Y)$$

$$\begin{array}{ccc} & \downarrow & \\ \partial_n & & \downarrow \\ & \searrow & \\ & & \end{array}$$

$$C_{n-1}(X) \xrightarrow{f\#} C_{n-1}(Y)$$