

$$\begin{array}{ccc}
\coprod_{\lambda \in \Lambda_n} |\partial \Delta^n| & \xrightarrow{\coprod_{\lambda \in \Lambda_n} i^n} & \coprod_{\lambda \in \Lambda_n} |\Delta^n| \\
(a_n^\lambda) \downarrow & \text{PO} & \downarrow \\
K_{n-1} & \longrightarrow & K_n
\end{array}$$