$$\coprod_{\lambda \in \Lambda_n} |\partial \Delta^n| \xrightarrow{\coprod_{\lambda \in \Lambda_n} i^n} \coprod_{\lambda \in \Lambda_n} |\Delta^n|$$

$$\downarrow^{(a_n^{\lambda})} \qquad \qquad \downarrow^{\text{PO}} \qquad \downarrow^{\text{K}_{n-1}}$$