

$$\begin{array}{ccc}
 \coprod_{g \in \ker n} |\partial \Delta^n| & \xrightarrow{\coprod_{g \in \ker n} |i^n|} & \coprod_{g \in \ker n} |\Delta^n| \\
 (a_g)_{g \in \ker n} \downarrow & \text{PO} & \downarrow \\
 K_{n-1} & \xrightarrow{\quad} & K'_n \\
 \searrow f_n & & \swarrow f'_{n+1} \text{ (dashed)} \\
 & & X
 \end{array}$$

A commutative diagram illustrating a relationship between spaces and maps. At the top, a map $\coprod_{g \in \ker n} |\partial \Delta^n| \xrightarrow{\coprod_{g \in \ker n} |i^n|} \coprod_{g \in \ker n} |\Delta^n|$ is shown. Below this, a map $(a_g)_{g \in \ker n} \downarrow$ maps $\coprod_{g \in \ker n} |\partial \Delta^n|$ to K_{n-1} . Another map \downarrow maps $\coprod_{g \in \ker n} |\Delta^n|$ to K'_n . A horizontal map $K_{n-1} \xrightarrow{\quad} K'_n$ is labeled "PO". A curved arrow f_n maps K_{n-1} to X . A dashed curved arrow f'_{n+1} maps K'_n to X . A solid curved arrow also maps $\coprod_{g \in \ker n} |\Delta^n|$ to X .