

$$\begin{array}{ccccc}
 & & U & & \\
 & \nearrow & & \searrow & \\
 U \cap V & & & & M = U \cup V \\
 & \searrow & & \nearrow & \\
 & & V & & 
 \end{array}
 \quad \rightsquigarrow \quad
 M \longleftarrow U \sqcup V \begin{array}{c} \xleftarrow{\partial_0} \\ \xleftarrow{\partial_1} \end{array} U \cap V$$