

$$\begin{array}{ccccccc}
 & & & & & & 0 \\
 & & & & & \nearrow & \\
 & 0 & & & H_n(X^{n+1}) \cong H_n(X) & & \\
 & \searrow & & & \nearrow & & \\
 & & H_n(X^n) & & & & \\
 & & \downarrow j_n & & & & \\
 \partial_{n+1} \nearrow & & & & & & \\
 \dots \longrightarrow H_{n+1}(X^{n+1}, X^n) & \xrightarrow{d_{n+1}} & H_n(X^n, X^{n-1}) & \xrightarrow{d_n} & H_{n-1}(X^{n-1}, X^{n-2}) & \longrightarrow & \dots \\
 & & \downarrow \partial_n & & \nearrow j_{n-1} & & \\
 & & H_{n-1}(X^{n-1}) & & & & \\
 & & \nearrow & & & & \\
 & 0 & & & & &
 \end{array}$$