

$$\begin{array}{ccccccc}
\bullet & \xrightarrow{(\mathrm{id}_Z)^*} & \bullet & & & & \\
\downarrow (w')^* & \searrow \text{反} & \downarrow \mathfrak{s}(1_{X[1]}) & & & & \\
\bullet & \xrightarrow{\mathfrak{s}(w)} & X & \xrightarrow{u} & Y & \xrightarrow{v} & Z \\
& & \downarrow & & \downarrow v & & \parallel \\
& & 0 & \longrightarrow & Z & \xlongequal{\quad} & Z \\
& & \downarrow & & \downarrow w' & & \\
& & X[1] & \xlongequal{\quad} & X[1] & &
\end{array}$$