$$\begin{array}{cccc}
\stackrel{u}{\longrightarrow} Y & \stackrel{v}{\longrightarrow} Z & \stackrel{w}{\longrightarrow} TX \\
\downarrow g & & \downarrow_h & & \downarrow^{T(f)} \\
\stackrel{u'}{\longrightarrow} Y' & \stackrel{v'}{\longrightarrow} Z' & \stackrel{w'}{\longrightarrow} TX'
\end{array}$$