$$X \xrightarrow{v_x} V_X \xrightarrow{u_x} U_X \qquad \text{(in} \qquad \mathscr{A})$$

$$\downarrow_Q \qquad \qquad \downarrow_Q \qquad \qquad \downarrow_Q$$

$$X \xrightarrow{[1]} \qquad \text{(in} \qquad \text{Ho}\mathscr{A})$$