

$$\begin{array}{ccc}
\mathrm{Hom}(X, Y_1) & \longleftrightarrow & \mathrm{Hom}(A(Y_1), \mathcal{O}_X) \\
\downarrow & & \downarrow \\
\mathrm{Hom}(X, Y_2) & \longleftrightarrow & \mathrm{Hom}(A(Y_2), \mathcal{O}_X)
\end{array}$$