$$\begin{array}{ccc}
\mathbb{V} & \longrightarrow \mathbb{W} \\
\underline{V} & \uparrow & \downarrow & (?)_{\underline{W}} \\
\mathbb{R}^n & \longrightarrow \mathbb{R}^m
\end{array}$$

$$(F)^{\underline{V}}_{\underline{W}}(X)_{\underline{V}} = (F(\underline{V}(X)_{\underline{V}}))\underline{W} = (F(X))_{\underline{W}}$$