$\operatorname{Id}_{U} \times \operatorname{Tr}_{X,Y}^{Z}(f)(u,x) = \left\langle \uparrow \{u\}, \left\{ y \in Y \mid \bigvee_{z \in Z} \langle y, z \rangle \in f(x,z) \right\} \right\rangle.$