$\operatorname{br}_{X,Y}^{\star}: X \times Y \to_{\operatorname{Pos}} \mathcal{U}(Y \times X)$ 

 $\langle x, y \rangle \mapsto \uparrow \{y\} \times \uparrow \{x\},$ 

defined for all  $X, Y \in Ob_{\mathbf{Pos}_{9}}$ , forms a symmetric monoidal category.

**Lemma.**  $\langle \mathbf{Pos}_{9/2}, \otimes, \mathbf{1} \rangle$  from ?? equipped with the braiding isomorphism  $\mathbf{br}_{X|Y} : X \times \mathbf{1}$ 

 $Y \xrightarrow{\cong} Y \times X$ , given by