Lemma. Let $\langle \mathbf{C}, \otimes, \mathbf{1}_{\mathbf{C}}, \mathrm{br}, \mathrm{Tr} \rangle$ be a traced monoidal category. Then a more general version of the superposing law holds: for any morphisms $f : X \otimes Z \to Y \otimes Z$ and $g : U \to V$,

$$\mathrm{Tr}^{Z}_{U \otimes X, V \otimes Y}(g \otimes f) = g \otimes \mathrm{Tr}^{Z}_{X,Y}(f).$$