Lemma. Consider $\mathbf{d}, \mathbf{e} \in \operatorname{Hom}_{\mathbf{DP}}(\mathbf{R} \times \mathbf{P}; \mathbf{R} \times \mathbf{Q})$. One has

 $\operatorname{Tr}_{\mathbf{P},\mathbf{O}}^{\mathbf{R}}(\mathbf{d} \vee \mathbf{e}) = \operatorname{Tr}_{\mathbf{P},\mathbf{O}}^{\mathbf{R}}(\mathbf{d}) \vee \operatorname{Tr}_{\mathbf{P},\mathbf{O}}^{\mathbf{R}}(\mathbf{e})$