Lemma. There is a functor FixFunMinResBack : $\mathbf{Pos}_{\mathcal{U}} \to \mathbf{DP}$ which maps:

1. An object (poset) in $\mathbf{Pos}_{\mathcal{U}}$ to the same object (poset) in **DP**.
2. A morphism $g \in \mathrm{Hom}_{\mathbf{Pos}_{\mathcal{U}}}(\mathbf{F}; \mathbf{R})$ to the morphism $\mathbf{f}_g \in \mathrm{Hom}_{\mathbf{DP}}(\mathbf{F}; \mathbf{R})$, where:

$$\mathbf{f}_g : \mathbf{F}^{\mathrm{op}} \times \mathbf{R} \to_{\mathbf{Pos}} \mathbf{Bool}$$

$$\langle f^*, r \rangle \mapsto r \in g^\star(f).$$