

**Lemma.** There is a *covariant functor*  $\Pi_f : \mathbf{DP} \rightarrow \mathbf{UPos}$  which maps:

1. An object (poset) in  $\mathbf{DP}$  to the same object (poset) in  $\mathbf{UPos}$ .
2. A morphism  $dp \in \mathbf{Hom}_{\mathbf{DP}}(\mathbf{F}; \mathbf{R})$  to the morphism  $f \in \mathbf{Hom}_{\mathbf{UPos}}(\mathbf{F}; \mathbf{R})$ ,  
where:

$$f : \mathbf{F} \rightarrow_{\mathbf{Pos}} \mathcal{U}\mathbf{R}$$

$$f \mapsto \{r \in \mathbf{R} \mid dp(f, r) = \top\}.$$