

Definition (Order on **DP**). Suppose that **A** and **B** are posets, and that **f**, **g** : **A** \multimap **B** are design problems. We define the order as follows.

$$\frac{\mathbf{f} \leq_{\mathbf{DP}} \mathbf{g}}{\mathbf{f}(a^*, b) \leq_{\mathbf{Bool}} \mathbf{g}(a^*, b), \quad \text{for all } a \in \mathbf{A}, b \in \mathbf{B}}$$