**Definition.** A monotone design problem (DP) is a tuple  $\langle \mathbf{F}, \mathbf{R}, \mathbf{h} \rangle$  such that  $\mathbf{F}$ and **R** are CPOs, and  $h: f \to \mathcal{A}\mathbf{R}$  is a monotone and Scott-continuous function ([gierz03continuous] or [censi16codesign sep16]).