

**Definition.** A *monotone design problem* (DP) is a tuple  $\langle \mathbf{F}, \mathbf{R}, h \rangle$  such that  $\mathbf{F}$  and  $\mathbf{R}$  are CPOs, and  $h : f \rightarrow \mathcal{A}\mathbf{R}$  is a monotone and Scott-continuous function ([gierz03continuous] or [censi16codesign\_sep16]).