

**Definition** (Scott continuity). A map  $f : \mathbf{P} \rightarrow \mathbf{Q}$  between DCPOs is *Scott continuous* iff for each directed subset  $D \subseteq \mathbf{P}$ , the image  $f(D)$  is directed, and  $f(\text{Sup } D) = \text{Sup } f(D)$ .