

## Definition (Series operator $\odot$ )

For two maps  $h_1 : \mathbf{F}_1 \rightarrow \mathcal{AR}_1$  and  $h_2 : \mathbf{F}_2 \rightarrow \mathcal{AR}_2$ , if  $\mathbf{R}_1 = \mathbf{F}_2$ , define

$$h_1 \odot h_2 : \mathbf{F}_1 \rightarrow \mathcal{AR}_2,$$

$$h_1 \mapsto \text{Min}_{\leq \mathbf{R}_2} \bigcup_{r_1 \in h_1(f)} h_2(r_1).$$