

Definition (Boolean profunctors). Given two posets \mathbf{P} and \mathbf{Q} , a *boolean profunctor* from \mathbf{P} to \mathbf{Q} is a monotone function of the form

$$F : \mathbf{P}^{\text{op}} \times \mathbf{Q} \rightarrow_{\mathbf{Pos}} \mathbf{Bool}.$$

This is also written as

$$F : \mathbf{P} \multimap \mathbf{Q}.$$