

Potentialities

```
open import PredP
open Pred

module PotP (Msg :  $\mathcal{U}^+$ )  $\mathcal{V}$  (Cm : Pred (Pred Msg  $\mathcal{V}$ ) ( $\mathcal{U} \sqcup \mathcal{V}$ ))  $\mathcal{W}$  (Cp : Pred ( $\Sigma$  Cm)  $\mathcal{W}$ )
where

  open import FCP { $\mathcal{W} = \mathcal{U} \sqcup \mathcal{V}^+ \sqcup \mathcal{W}^+$ } Msg  $\mathcal{V}$  Cm

  open  $\Sigma$ Pred

  BSet =  $\Sigma$  Cm
  &PSet =  $\Sigma$  Cp

  open import FunctorP
  open import Final-CoAlgebraP

  Fpot : Functor ( $\mathcal{U} \sqcup \mathcal{V}^+ \sqcup \mathcal{W}^+$ )
  Fpot =
     $(\lambda X \rightarrow X \times \&PSet \times FC X)$ 
    ,  $(\lambda f (x, \&ps, ((mp, fm), (ap, fa))) \rightarrow f x, \&ps, (mp, \lambda x c \rightarrow f (fm x c)), (ap, \lambda x c \rightarrow f (fa x c)))$ 
    ,  $(\lambda f g x \rightarrow refl)$ 
    ,  $\lambda x \rightarrow refl$ 

  Pot = Final-CoAlgebra Fseq
```