

Function of Change

This is the the generalized version of the function of change.

It encodes all the possible msgs that the system could receive or accept, independent of the structure of the system, ie the number of actors present. It also defines the change that happens after the msg has arrived or has been sent.

```
open import PredP
open Pred
```

```
module FCP (A :  $\mathcal{U}$  )  $\mathcal{V}$  (C : Pred (Pred A  $\mathcal{V}$ ) ( $\mathcal{U} \sqcup \mathcal{V}$ )) (B :  $\mathcal{W}$  ) where
```

```
open  $\Sigma$ Pred
```

$$FC = (\Sigma Mp : \Sigma C , (\forall x \rightarrow \langle Mp \rangle x \rightarrow B)) \times (\Sigma Ap : \Sigma C , (\forall x \rightarrow \langle Ap \rangle x \rightarrow B))$$

```
module FC (fc : FC) where
```

```
Mp : _
Mp = fc .pr1 .pr1
```

```
fm :  $\forall x \rightarrow \langle Mp \rangle x \rightarrow B$ 
fm = fc .pr1 .pr2
```

```
Ap : _
Ap = fc .pr2 .pr1
```

```
fa :  $\forall x \rightarrow \langle Ap \rangle x \rightarrow B$ 
fa = fc .pr2 .pr2
```