

Funcons-beta: Linking

The PPlanCompS Project

Funcons-beta/Computations/Normal/Linking/Linking.cbs*

Linking

```
[ Datatype links
  Funcon initialise-linking
  Funcon link
  Funcon fresh-link
  Funcon fresh-initialised-link
  Alias fresh-init-link
  Funcon set-link
  Funcon follow-if-link ]
```

Meta-variables $T <: \text{values}$

Datatype links ::= link($_ : \text{variables}$)

Funcon initialise-linking($X : \Rightarrow T$) : $\Rightarrow T$
 \rightsquigarrow initialise-storing(X)

initialise-linking(X) ensures that the entities used by the funcons for linking are properly initialised.

Funcon fresh-link(T) : $\Rightarrow \text{links}$
 \rightsquigarrow link(allocate-variable(T))

*Suggestions for improvement: plancomps@gmail.com.
Issues: <https://github.com/plancomps/CBS-beta/issues>.

Funcon **fresh-initialised-link**($T, V : T$) : \Rightarrow **links**
 \rightsquigarrow **link**(**allocate-initialised-variable**(T ,
 V))

Alias **fresh-init-link** = **fresh-initialised-link**

Funcon **set-link**($_ : \text{links}, _ : T$) : \Rightarrow **null-type**

The value of a link can be set only once.

Rule **set-link**(**link**($Var : \text{variables}$), $V : T$) \rightsquigarrow **initialise-variable**(Var, V)

Funcon **follow-link**($_ : \text{links}$) : \Rightarrow **values**

Rule **follow-link**(**link**($Var : \text{variables}$)) \rightsquigarrow **assigned**(Var)

Funcon **follow-if-link**($_ : \text{values}$) : \Rightarrow **values**

If V is a link, **follow-if-link**(V) computes the set value, and otherwise it evaluates to V .

Rule **follow-if-link**(**link**($Var : \text{variables}$)) \rightsquigarrow **assigned**(Var)

Rule **follow-if-link**($V : \sim \text{links}$) \rightsquigarrow V