

Funcons-beta: Generic *

The PLanCompS Project

Generic.cbs | PLAIN | PRETTY

Generic abstractions

```
[ Type abstractions
  Funcon abstraction
  Funcon closure
  Funcon enact ]
```

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

Type abstractions(_ : computation-types)

Funcon abstraction(_ : $T? \Rightarrow T$) : abstractions($T? \Rightarrow T$)

The funcon `abstraction`(X) forms abstraction values from computations.

References to bindings of identifiers in X are dynamic. The funcon `closure`(X) forms abstractions with static bindings.

Funcon closure(_ : $T? \Rightarrow T$) : ⇒ abstractions($T? \Rightarrow T$)

`closure`(X) computes a closed abstraction from the computation X . In contrast to `abstraction`(X), references to bindings of identifiers in X are static. Moreover, `closure`(X) is not a value constructor, so it cannot be used in pattern terms in rules.

Rule environment(ρ) ⊢ closure(X) → abstraction(closed(scope(ρ, X)))

Funcon enact(_ : abstractions($T? \Rightarrow T$)) : $T? \Rightarrow T$

`enact`(A) executes the computation of the abstraction A , with access to all the current entities.

Rule enact(abstraction(X)) ↠ X

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