Funcons-beta: Generic *

The PLanCompS Project

`Generic.cbs` | PLAIN | PRETTY

Generic abstractions

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

Meta-variables T <: values
$T^?$ <: 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(_ : $T^? \Rightarrow T$) : $\Rightarrow$ 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) $\vdash$ closure(X) $\longrightarrow$ 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)) $\rightsquigarrow$ X

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