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 $\operatorname{closure}(X)$ forms abstractions with static bindings.

```
Funcon closure(\_: T^? \Rightarrow T): \Rightarrow abstractions(T^? \Rightarrow T)
```

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

```
Rule environment(\rho) \vdash closure(X) \longrightarrow abstraction(closed(scope(\rho, 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.