

```
[
  .name = x ;
  .age → now() - y ;
  .ageIn year → year - y ;
  .likes red → .true ;
  .likes - → .false ;
]
```

⇒

```
[
  .name = x ;
  .age = now() - y ;
  .ageIn → [ year → year - y ] ;
  .likes → [ .red → .true ;
              - → .false ; ] ;
]
```

[] — bind self.

[] — do not bind self

Trait operations : + / @ - ↑

- + sum — merge objects with no pattern overlap permitted
- / override — merge, with conflicts resolved to the left object
- @ rename — transforms a message on its way through.
(does it transform on the way back?)
- remove — math or delegate to DNU handler; otherwise as for override
- ↑ inherit — as for override, but exposes the RHS to supercalls

variable
+ binding
rator rand

(left associative)

[]

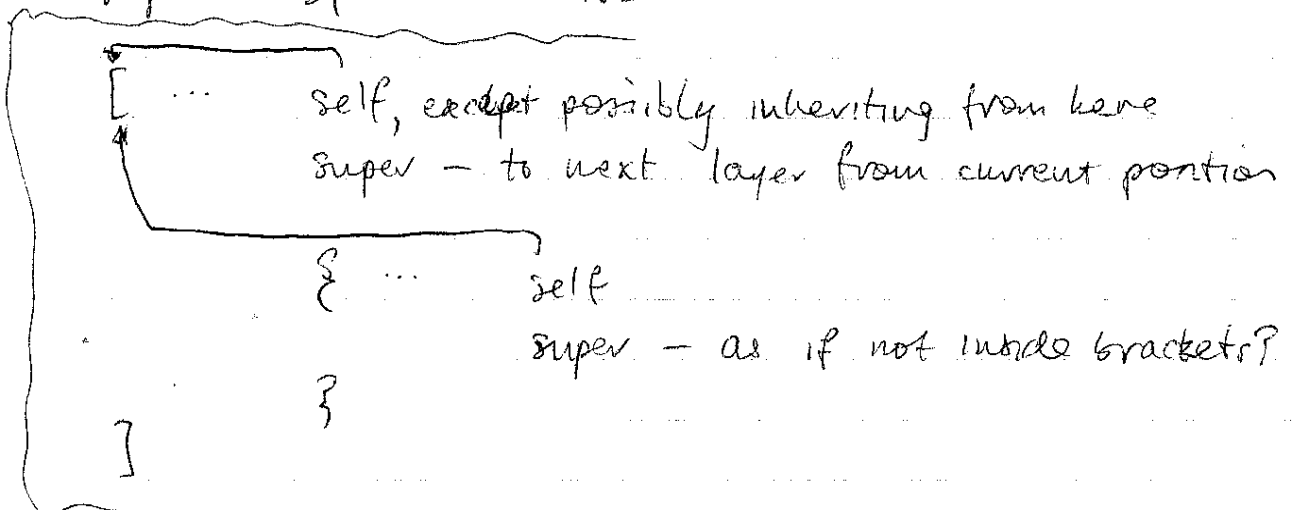
object - binds self.

{ }

closure - does not bind self.

self - actual value

super - special receiver



Closures can't be trait-opped??

$$\{\} + x \rightarrow [+v \rightarrow \{\} v] + x$$

$$\{\} \uparrow x \rightarrow [+v \rightarrow \{\} v] \uparrow x$$

or, more properly,

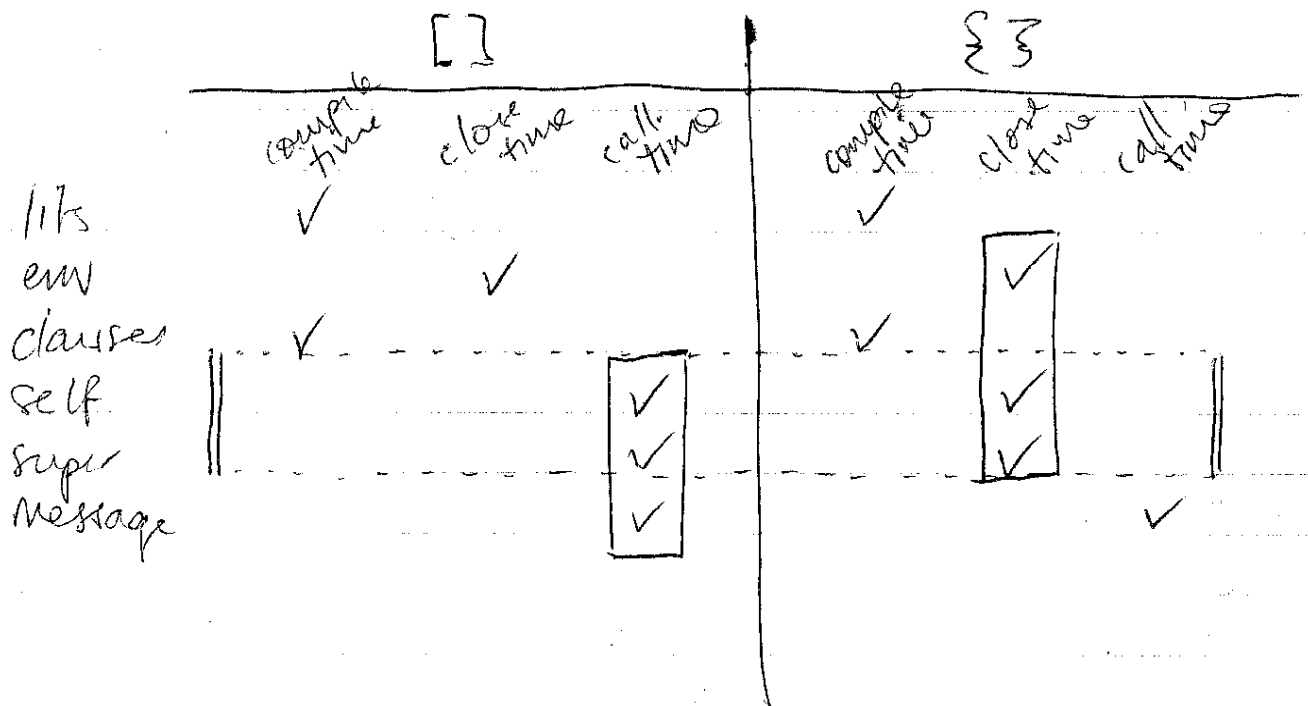
$$(+c = \{\} ; [+v \rightarrow c v] \uparrow x)$$

[] \rightarrow more late-bound, with open recursion and dynamic
self + super

{ } \rightarrow less late-bound, with no open recursion and
static self + super.

[] : object static literals
 environment closed over
 clauses
 dynamic self
 super
 message

{ } : closure static literals
 environment closed over
 clauses
 self
 dynamic super
 message



The other problem is coming up with a convenient syntactic shorthand for *every* closures (blocks).

{ (...) }

$[p \rightarrow v; \dots]$

$\{p \rightarrow v; \dots\}$

$\{v\}$

$\{\{v\}\}$

↑
ok because closures
can't appear in postfix?

$\{[p \rightarrow v; \dots]\}$

$([p \rightarrow v; \dots])$

$[[p \rightarrow v; \dots]]$