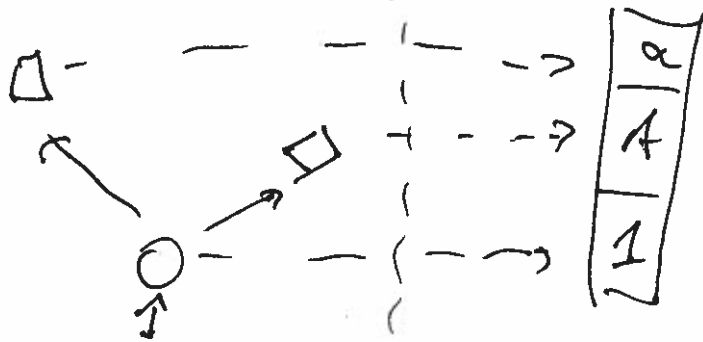


tree

memory

theo = algebraic
cont = co-alg.



① \oplus on labels $\Rightarrow \oplus$ on memory? no order?

② concrete story of N memory \oplus is concat, etc

$$\Rightarrow \underline{A \oplus B} \approx \underline{B \oplus A}$$

...

$$a^{L_1 + L_2} = a^{L_1} \cdot a^{L_2}$$

$$a^{L_1 \times L_2} = (a^{L_1})^{L_2}$$

$$a^{L_1^{L_2}} = ??$$

data $A = A$

data $B = B$

$C \times D$

$D \times C$

are on "visible label" side of world.

\rightarrow Set occurs in C.S. too.

Label : Type.

don't assume Dec \equiv

a : Type

data

can extract.

[?]
memory = Label \rightarrow a.

split story

class for
memory lookup
virtual "

? ?

1. visible labels

2. invisible labels

label invariance

Label' : Set

Label' \hookrightarrow Label

\hookrightarrow pre compose.

justify: injection.

label \sim abstract ptr
 \sim Java ref.

memory

grounding?
realization
concretization

Label \rightarrow ~~pointer~~

Label \rightarrow a

\Downarrow

Ptr \rightarrow a

\Downarrow ?

~~At \rightarrow a (as mem?)~~

design: not
ordered



α

A

a

1