

① Define structure groups  $G \rightarrow \Sigma$   
 $G$ -operands  
 $G$ -collections  
 Operands = monoids in  $G$ -Coll  
 Endomorphism of operands  
 Algebras

First  
 (N)

② Do this in Cat

(A)

$G$ -operand  $P \leadsto \Sigma$ -monad

Compute things:  $\text{alg}(G\text{-ops})$ ,  $\text{maps}(G\text{-ops} + \text{law})$ , 2-cells

$P$ -alg  $\hookrightarrow$   $P$ -maps  $P \rightarrow \Sigma_X$ ; need  $P$ -maps of operands

Q: should we show  $O_P \cong O\text{-Alg}$  for some multiset  $O$

③ Basic properties

Finitary

Cartesian iff  $G$ -free

Coherence

④  $P$ -comon

Definitions

Prop 6.1 (correct version)

Cor 6.3

Braided / ribbon braided cases

Q: symmetric?