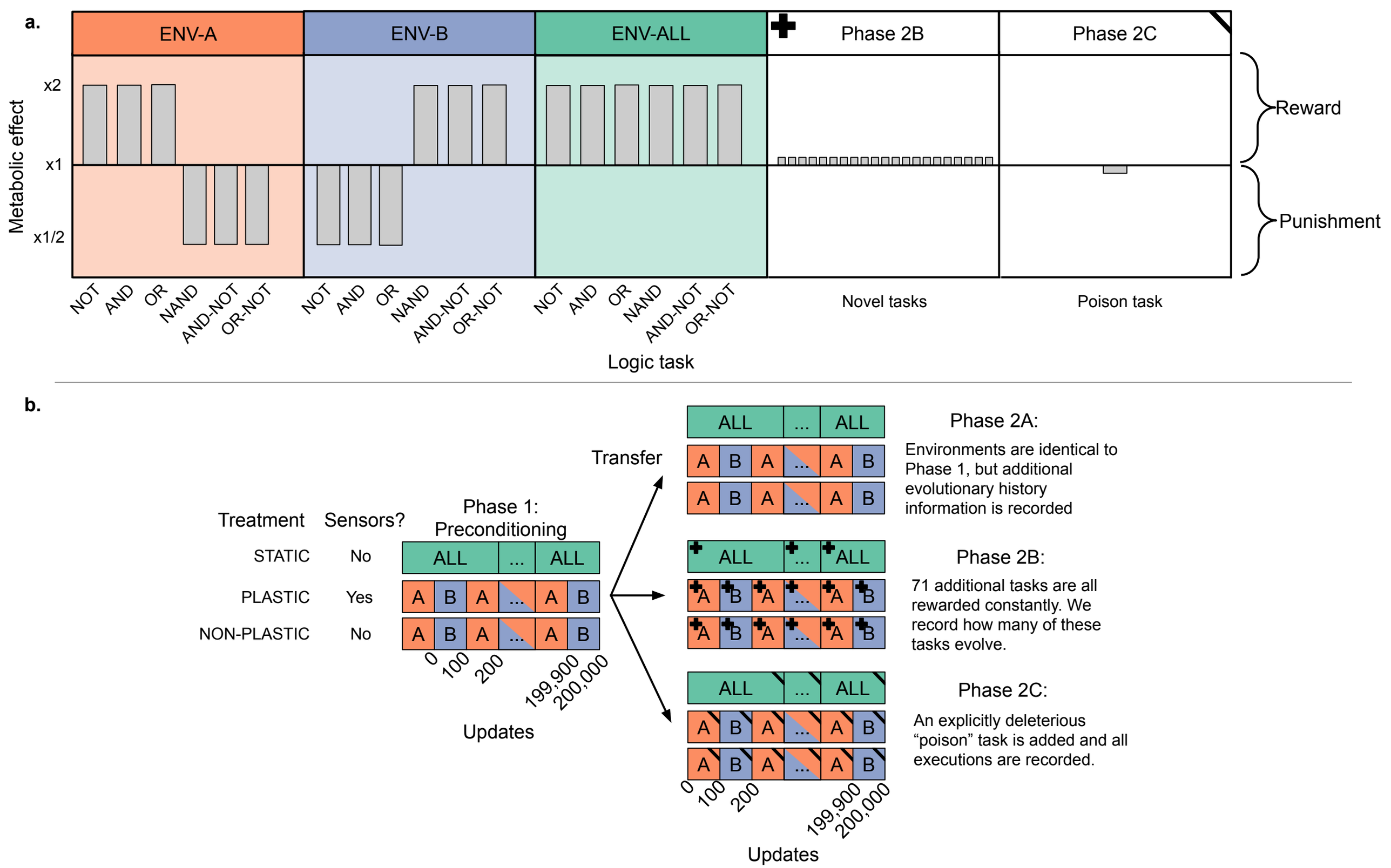
a.
ENV-A
ENV-B
ENV-ALL
Phase 2B
Phase 2C
Metabolic effect
x2
x1
x1/2
Reward
Punishment
NOT
AND
OR
NAND
AND-NOT
OR-NOT
Novel tasks
Poison task
Logic task
b.
Treatment
Sensors?
STATIC
No
PLASTIC
Yes
NON-PLASTIC
No
Phase 1:
Preconditioning
ALL
...
A
B
0
100
200
199,900
200,000
Updates
Transfer
Phase 2A:
Environments are identical to Phase 1, but additional evolutionary history information is recorded
Phase 2B:
71 additional tasks are all rewarded constantly. We record how many of these tasks evolve.
Phase 2C:
An explicitly deleterious "poison" task is added and all executions are recorded.