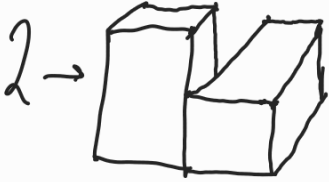
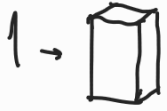
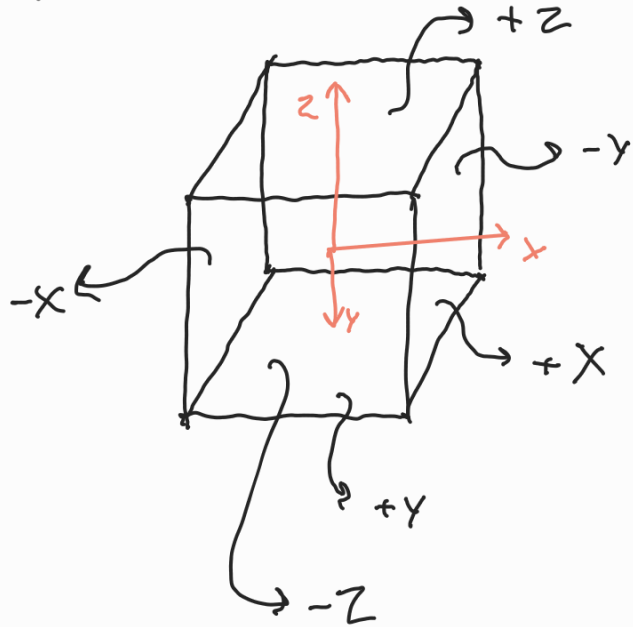


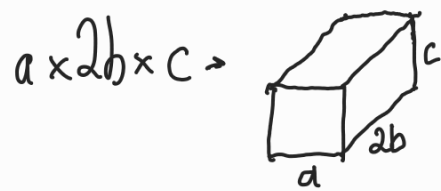
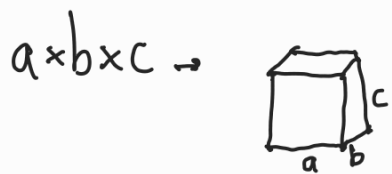
1) A random number of links is decided:



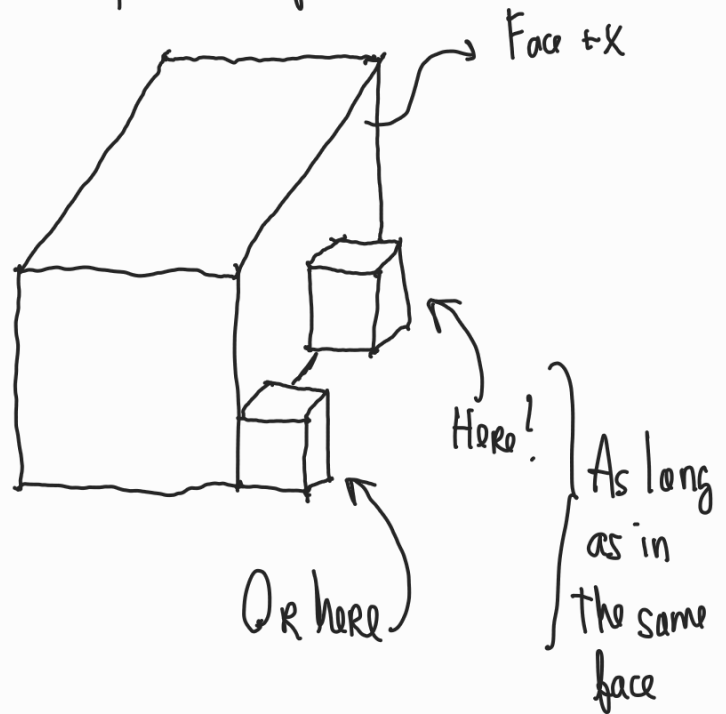
2) A random face is decided on any pre-existent structure:



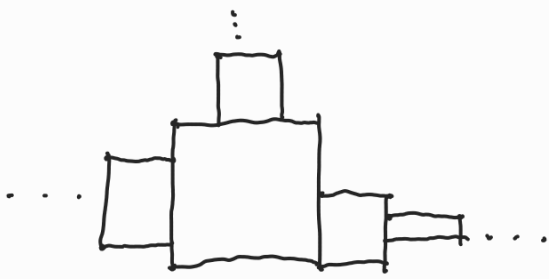
3) A randomly shaped link is generated...



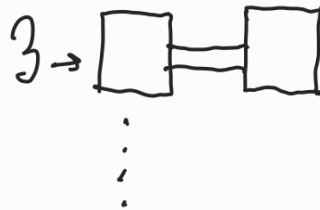
4) In a randomly decided position in the previously decided face:



5) And so on and on!

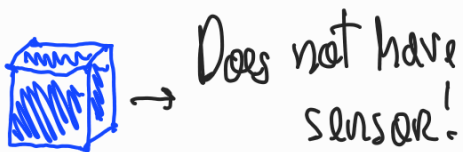
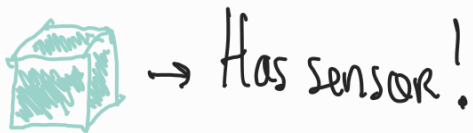


6) That process is done simultaneously $10 \times$ Times!

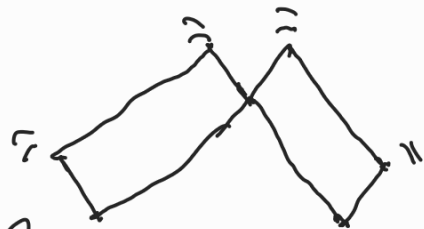


7) Then a neural network comes into play!

• Links can be sensorized or not:



• Joints can be motorized or not:

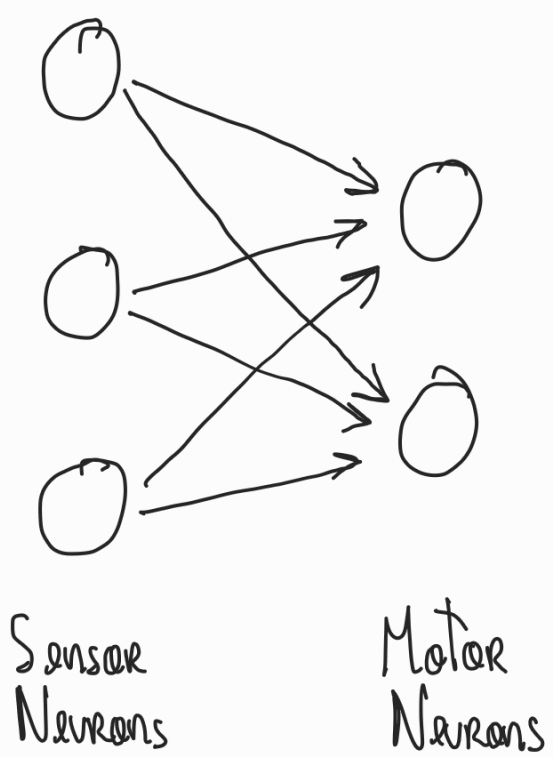


↳ Moving around, motorized!

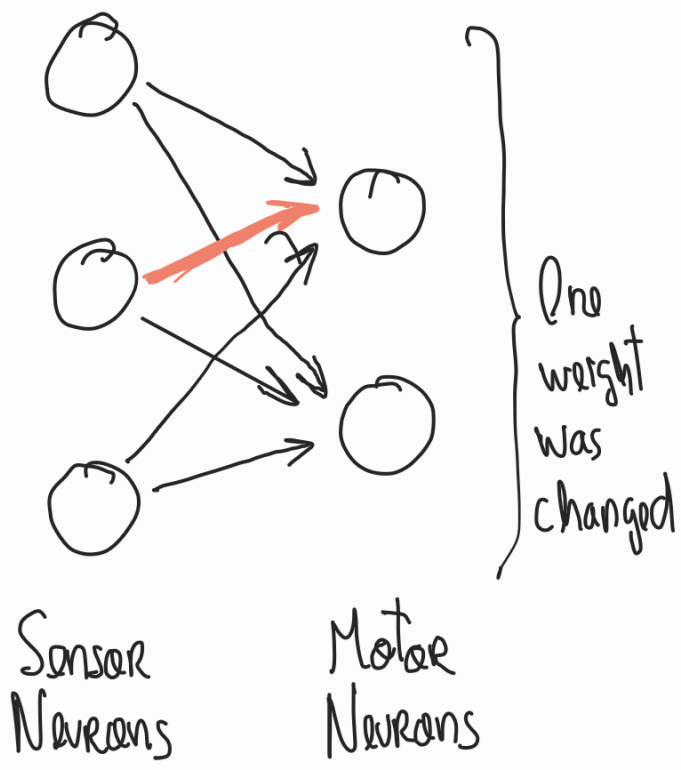


↳ Dead, no motors!

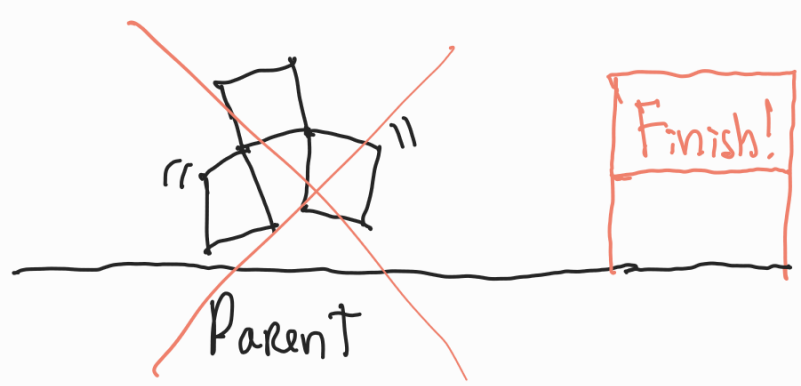
8) Initial random weights are sent:



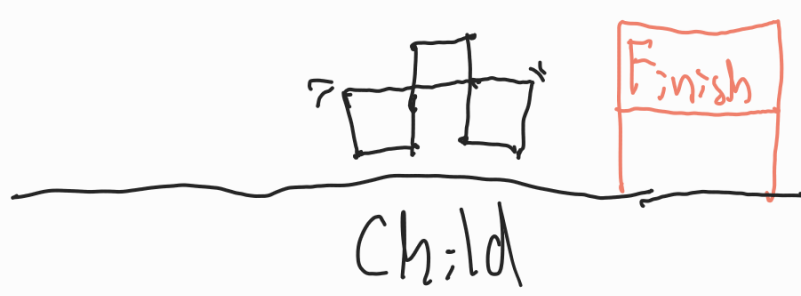
9) Every loop, one weight is randomly mutated:



10) The mutated child is compared to the parent, and the one that walked the furthest is selected.



Child wins!

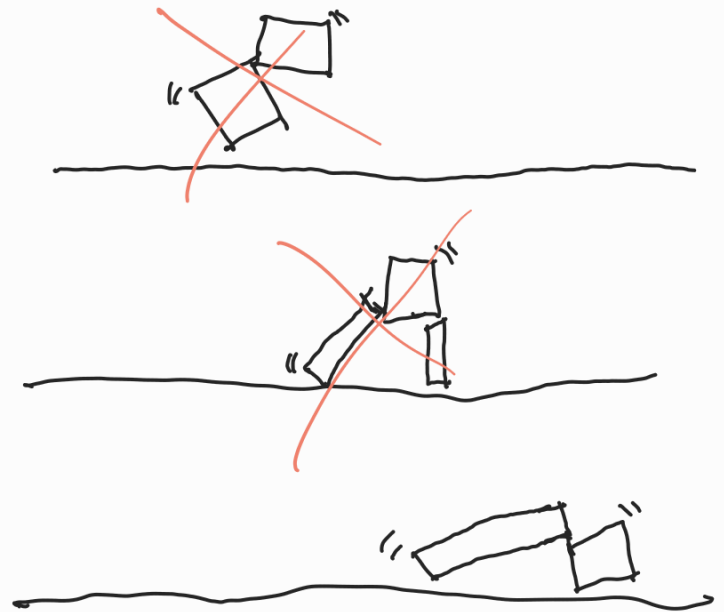


11) The process continues!

Child → Parent

Grandchild → Child

12) At the end of the loop, the robot
with best shape and distance is
selected:



13) Thus, we have our evolution based winner!

