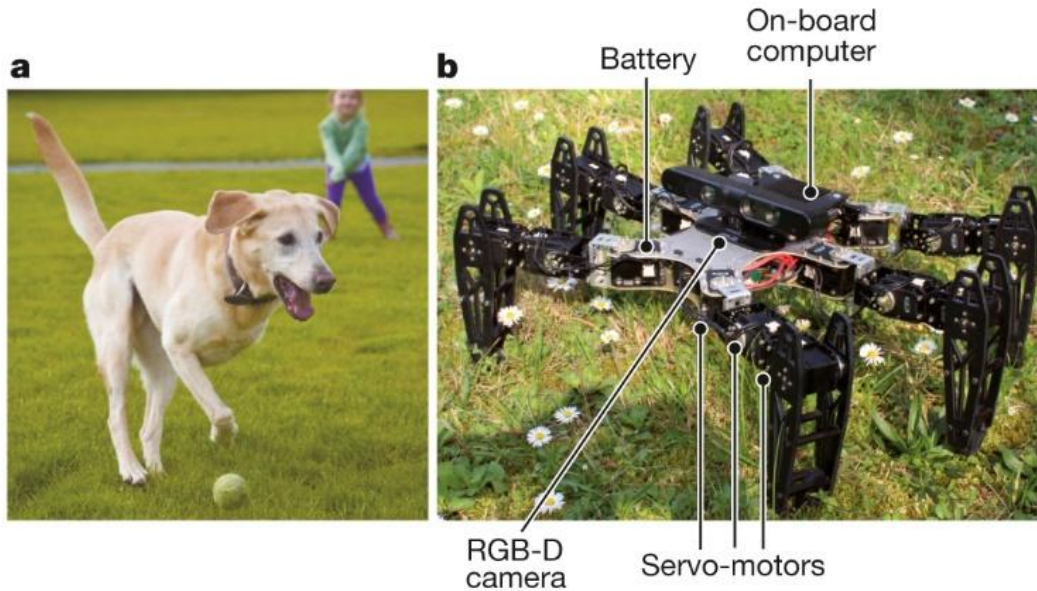


Using the Intelligent Trial and Error (IT&E) algorithm, robots, like animals, can quickly adapt to recover from damage.

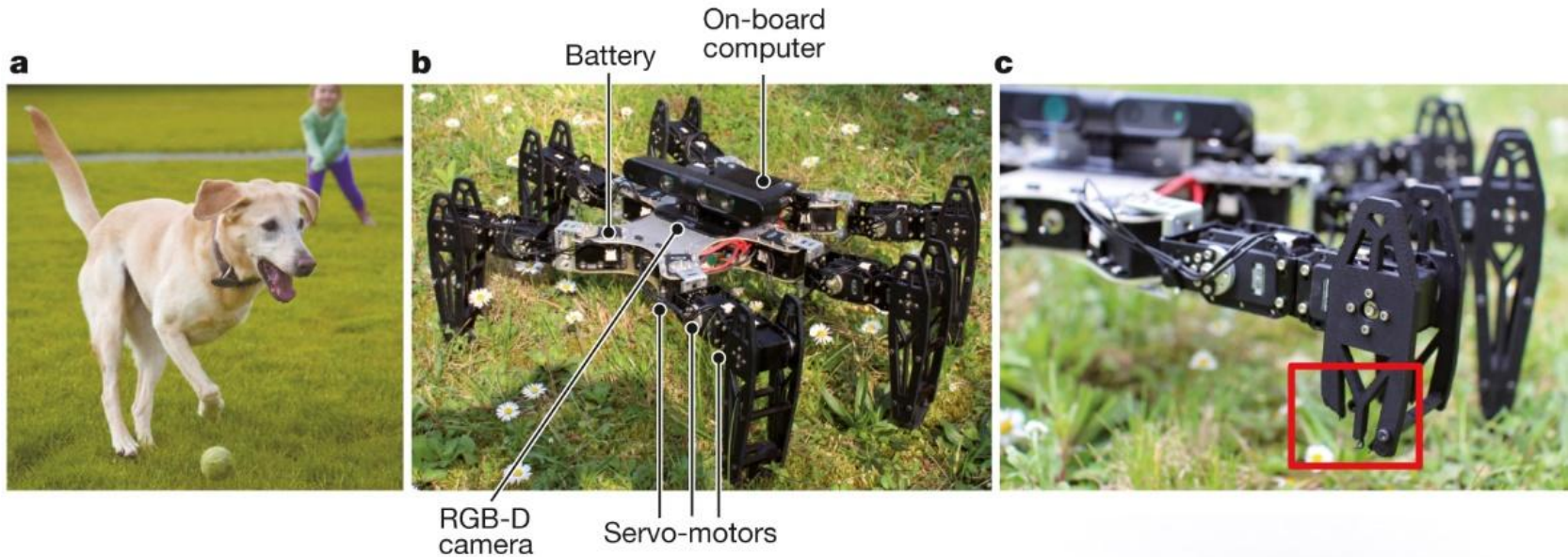
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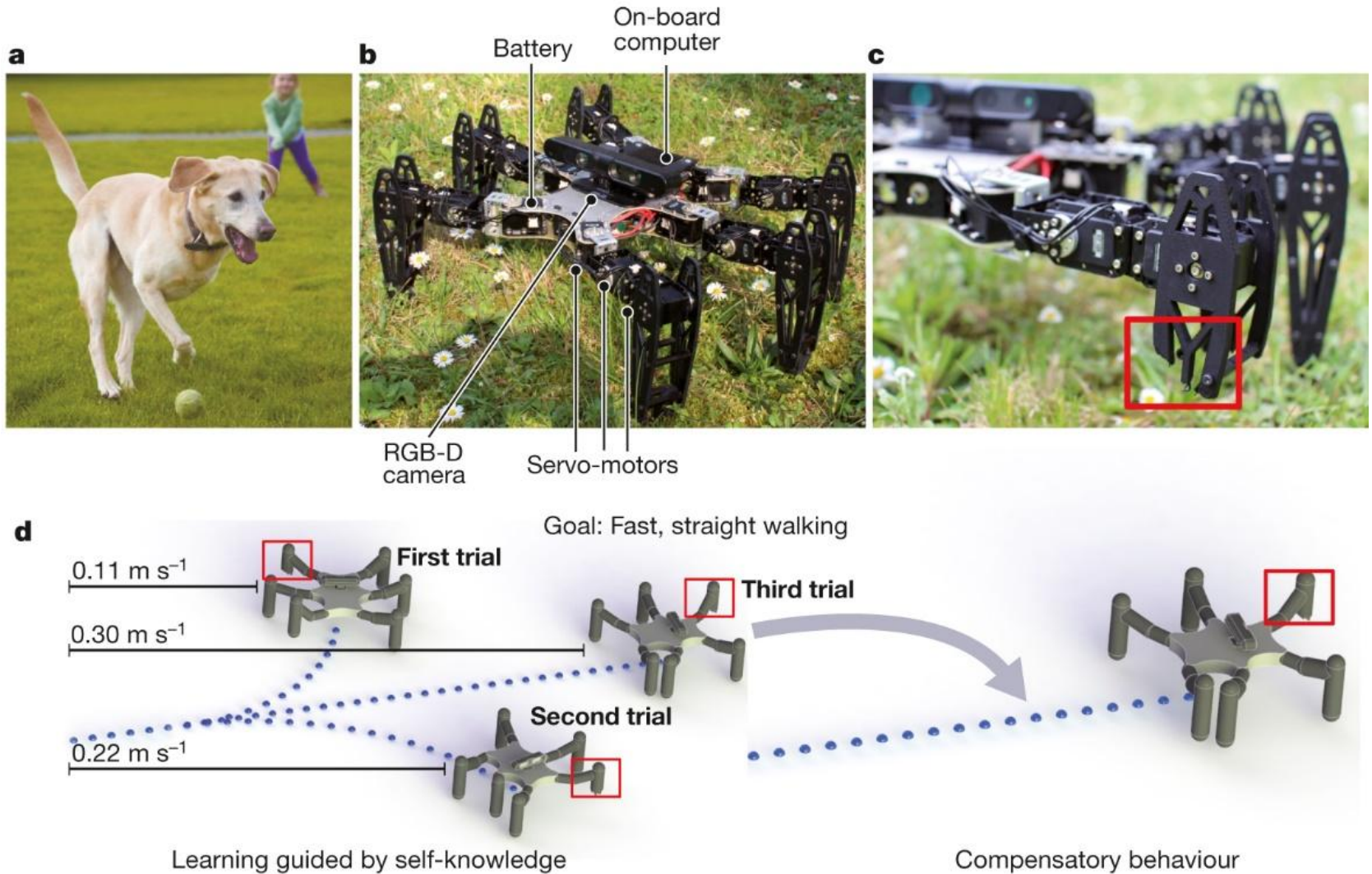
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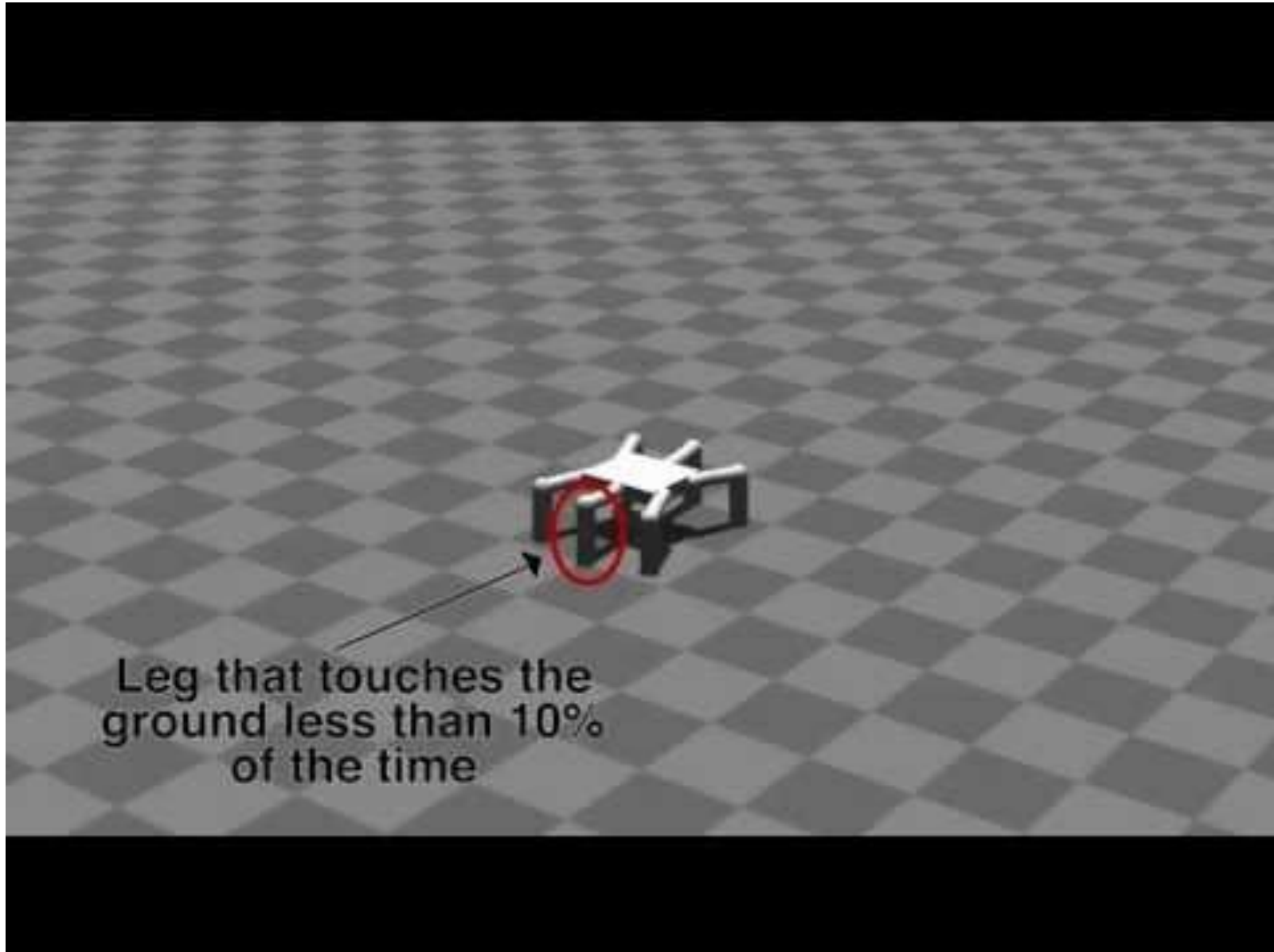
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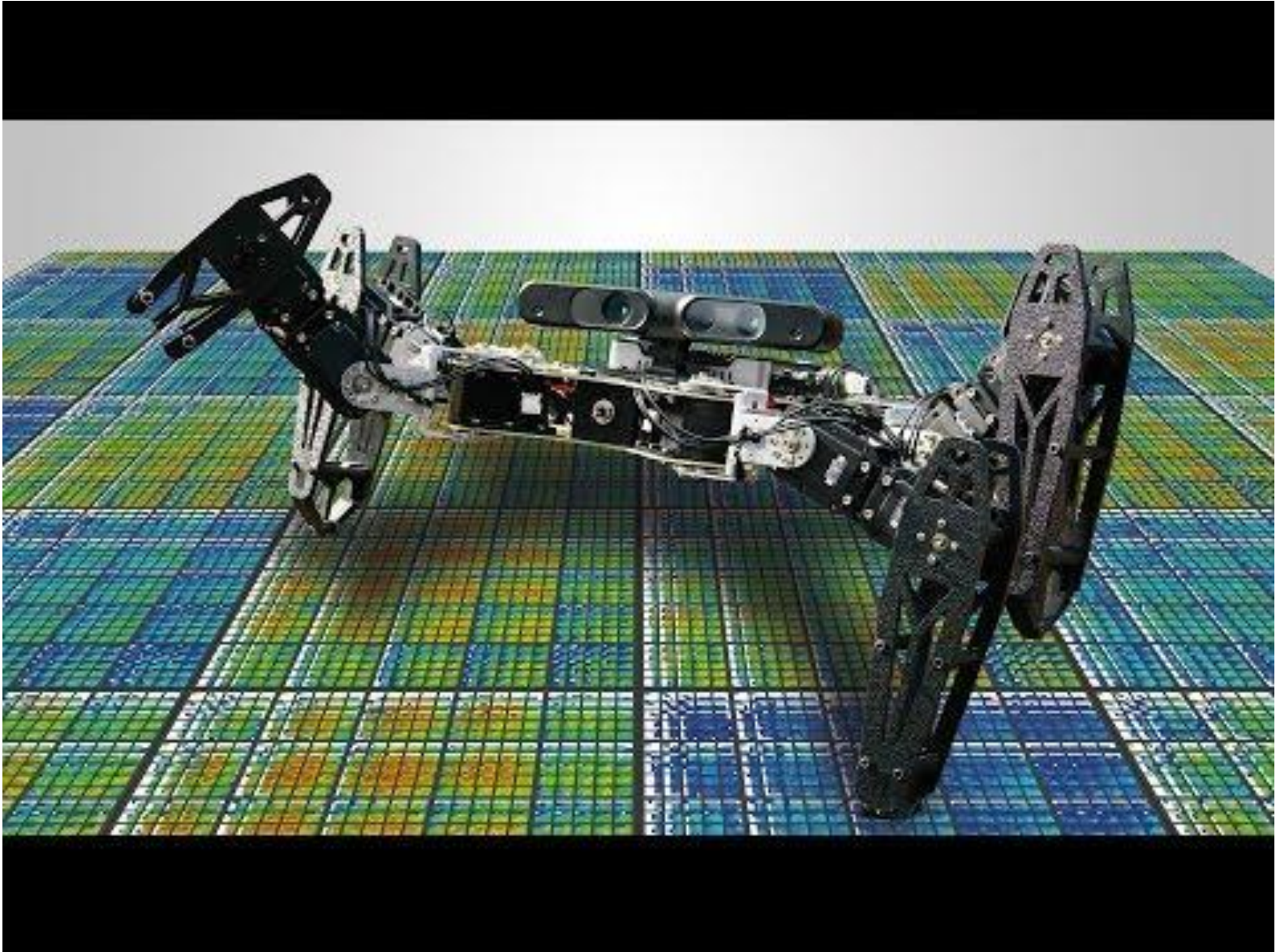
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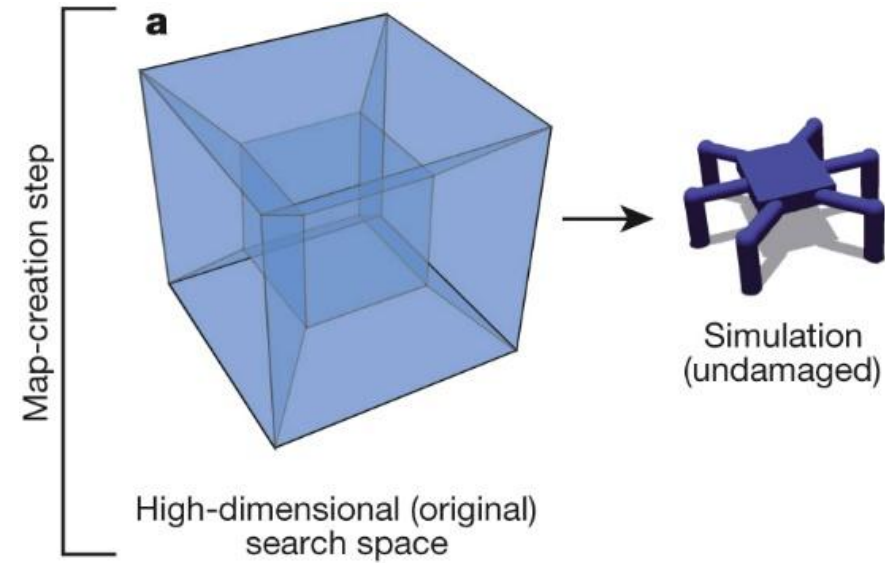


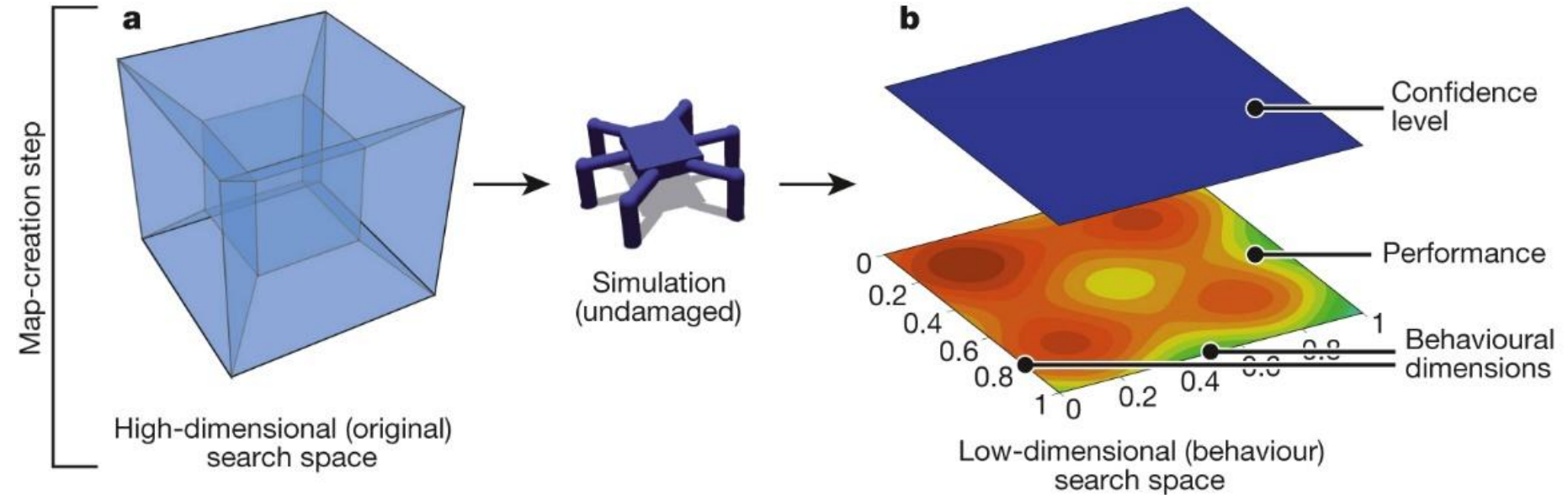
Robots that can adapt like animals.



Robots that can adapt like animals.







Position of the controller defined by the genotype

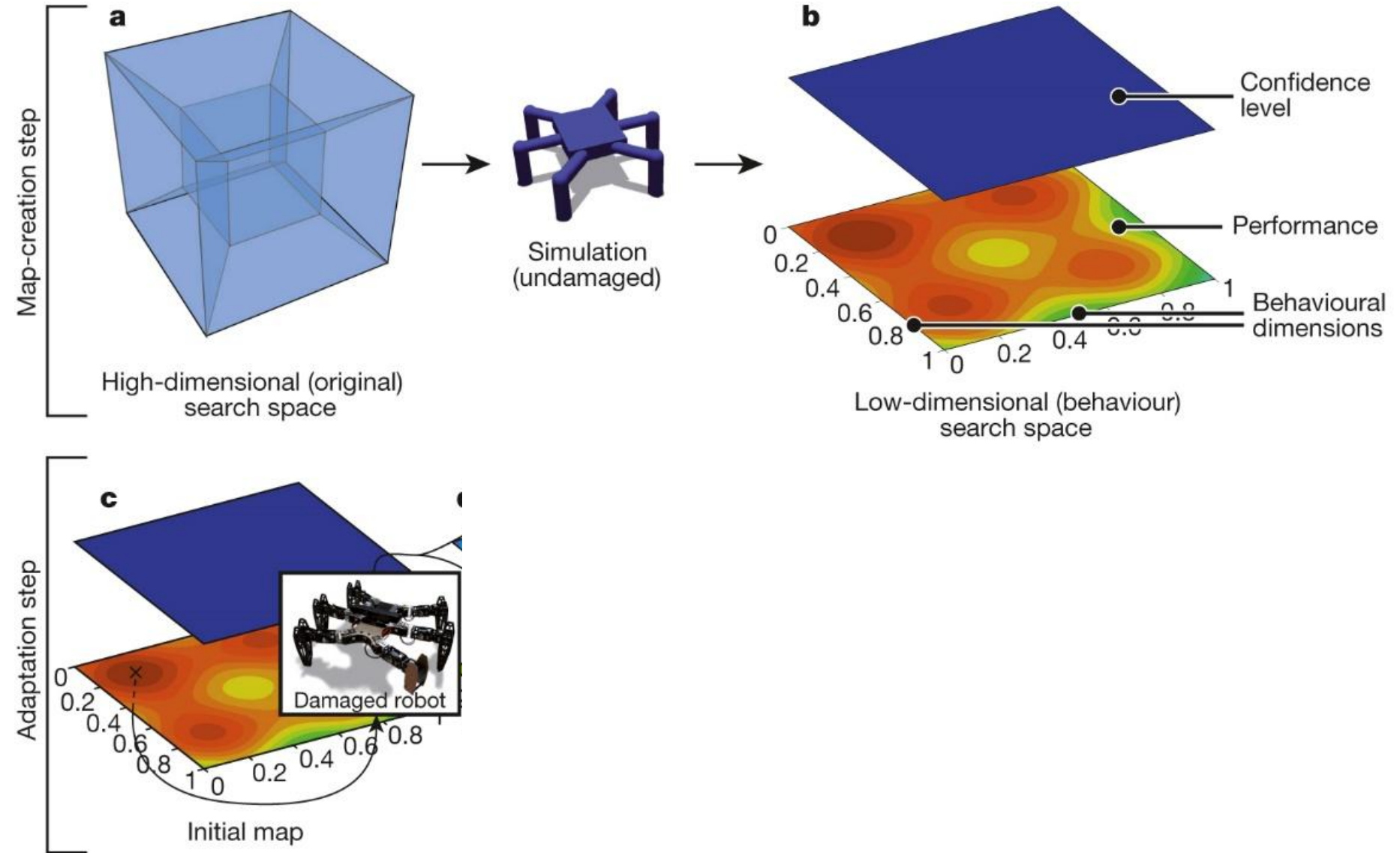
The controller search space is remapped into a low-dimensional search space described by behaviour.

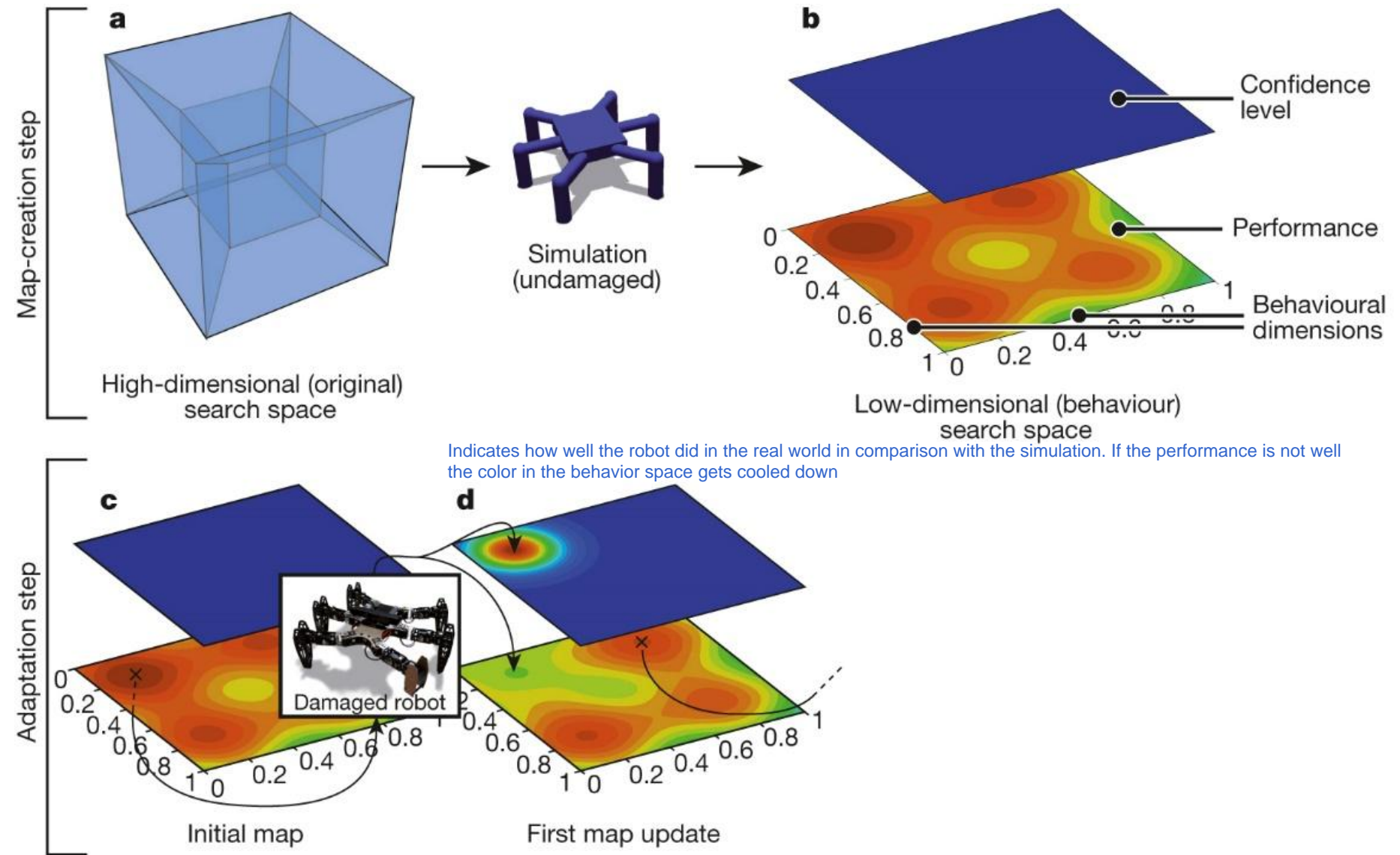
Position of the controller is defined by the phenotype.

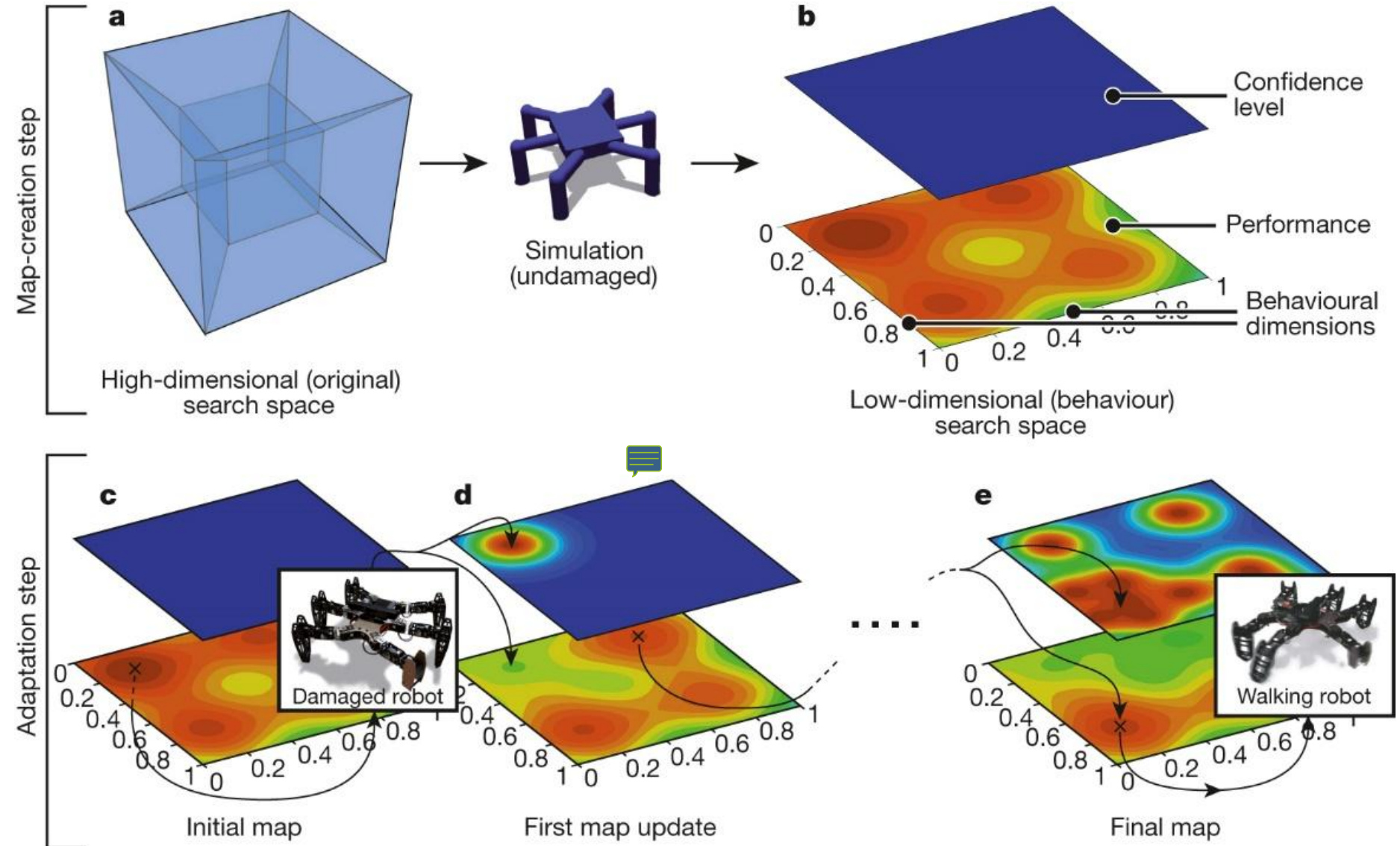
The coordinates of the controller in the new search space can be percentage of time each leg was positioned in the ground

The color represent the performance. Hot color represent high fitness.

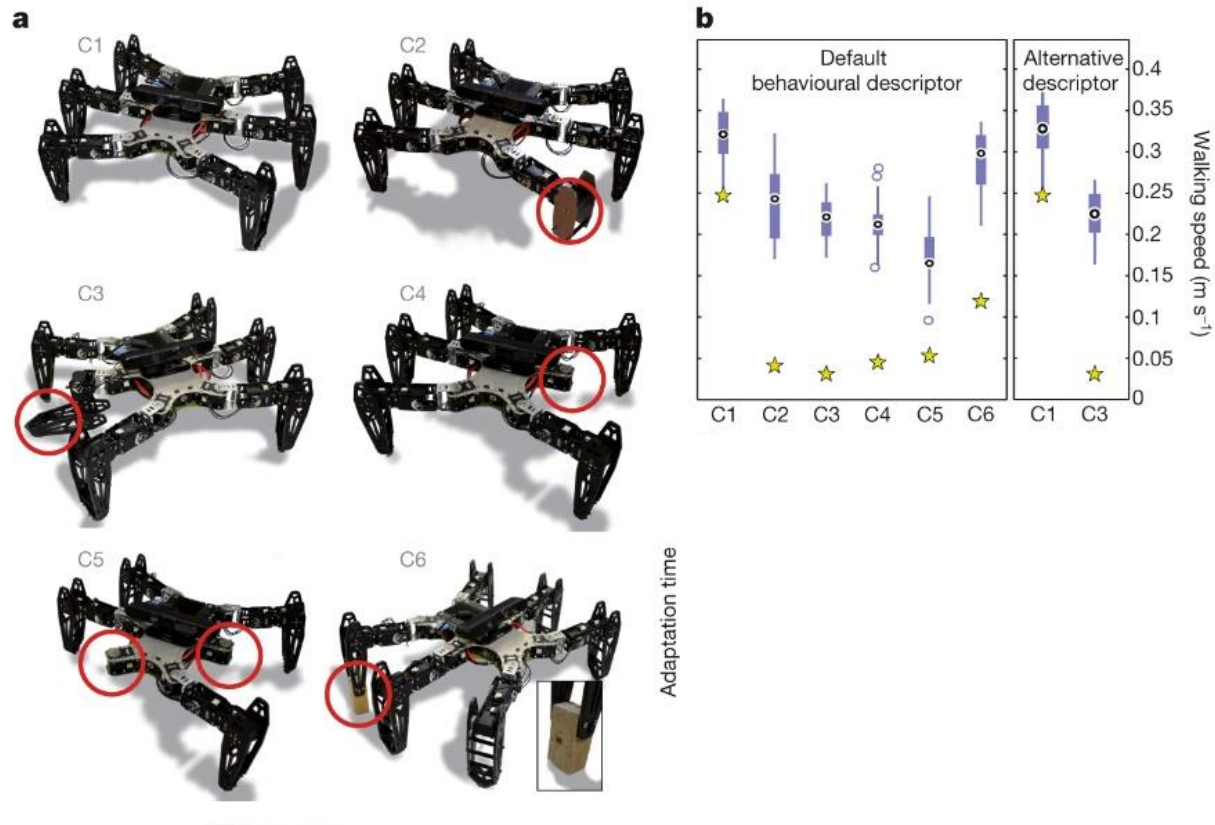
Every point in the behavior space, as a point in the confidence space, which express the controller crossing the reality gap.

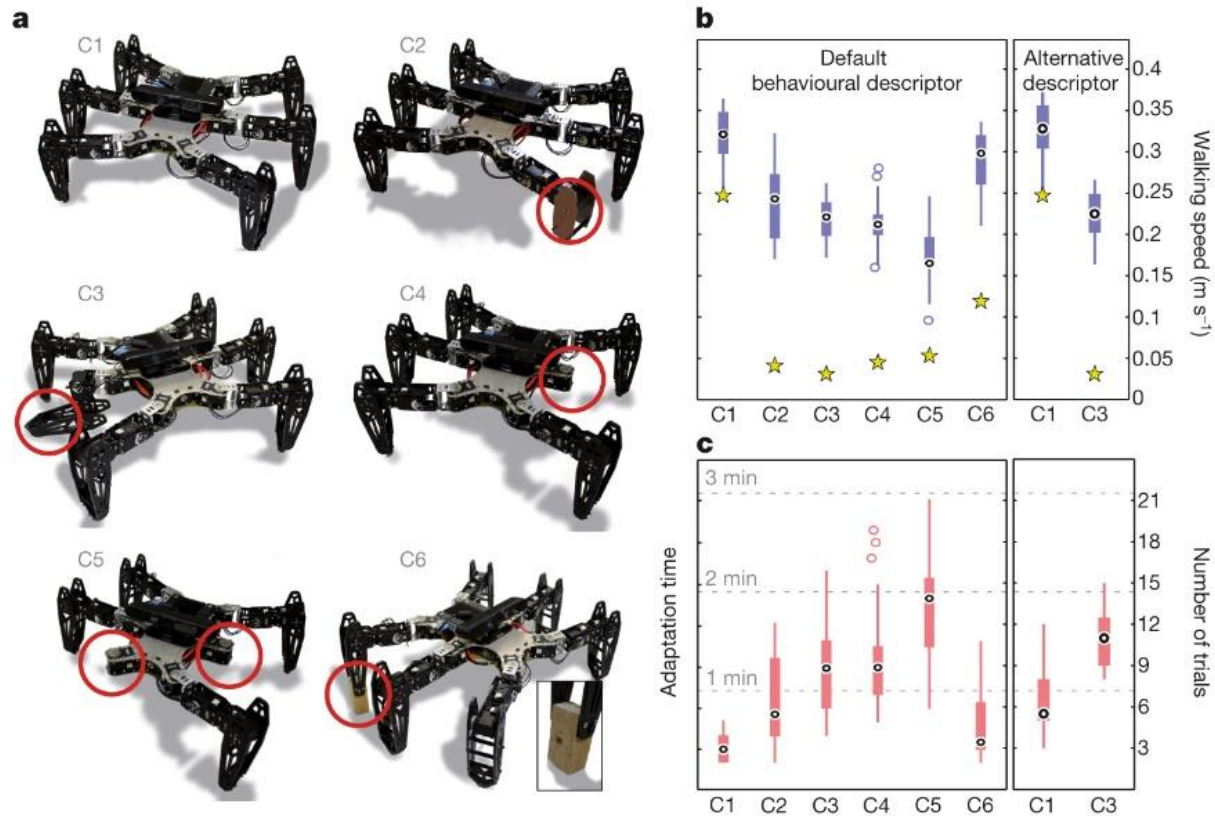


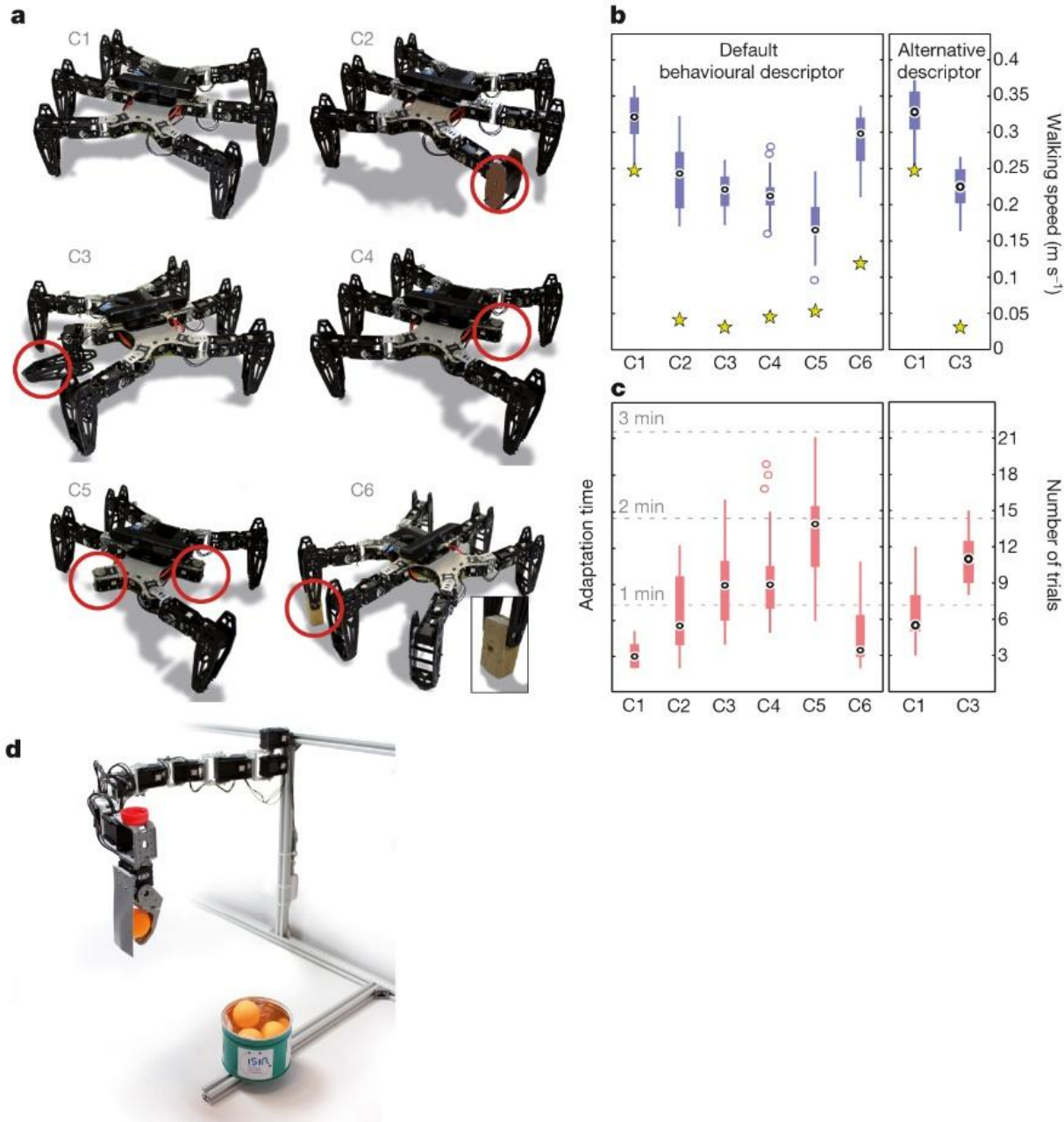


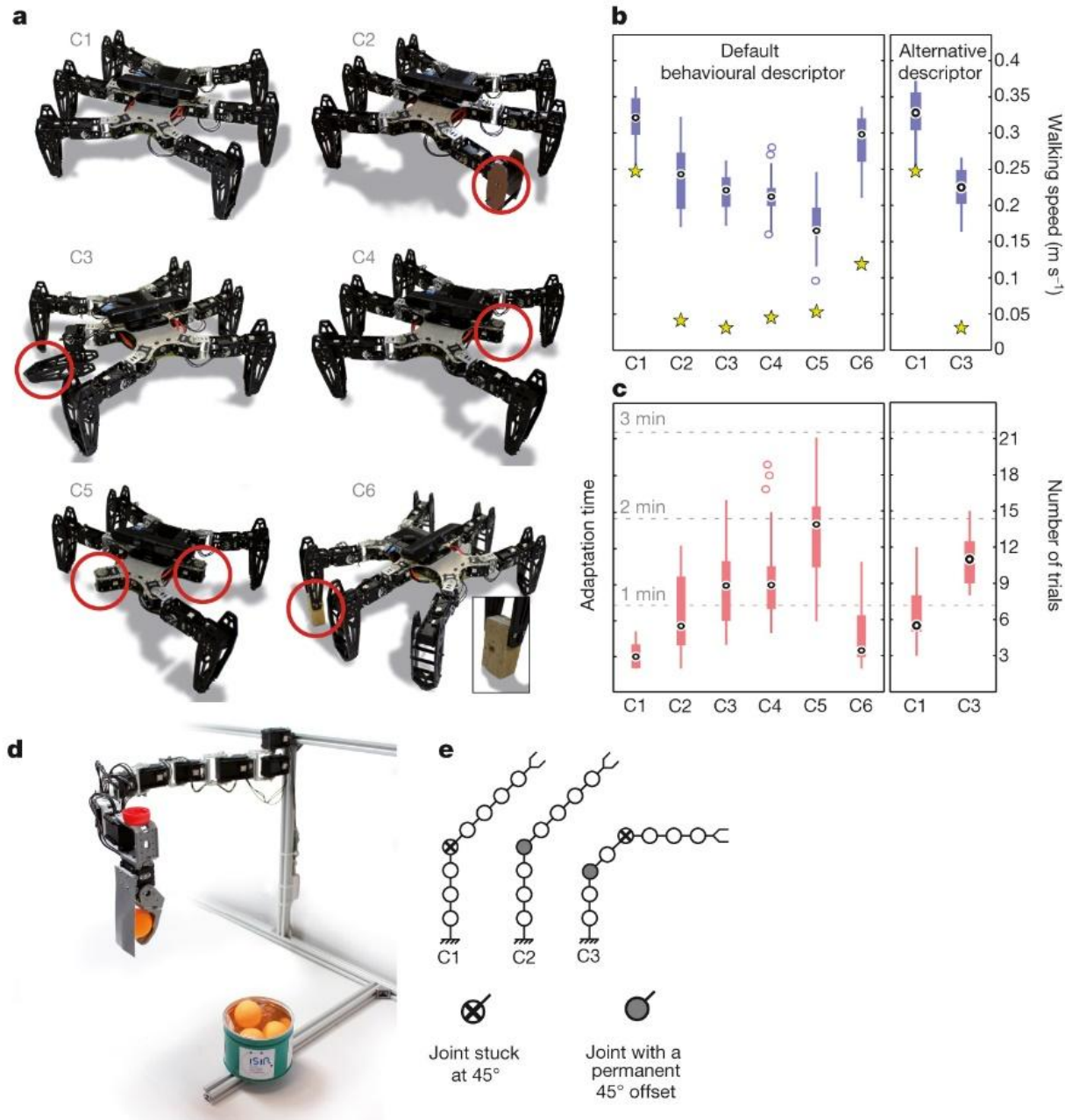


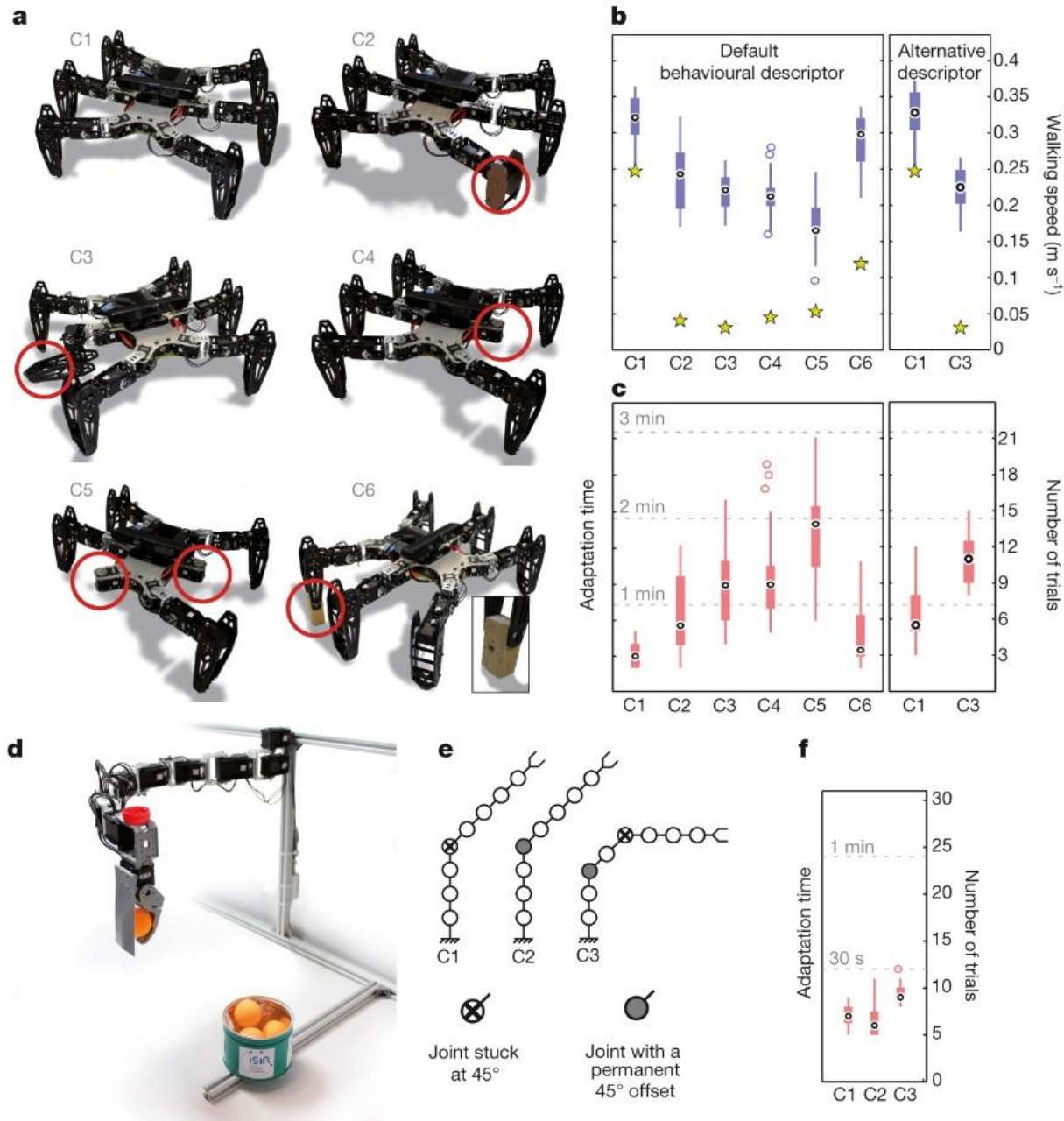


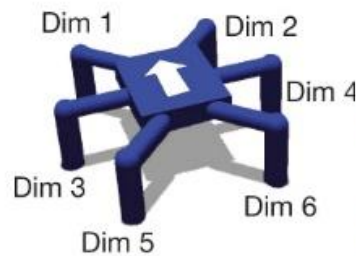
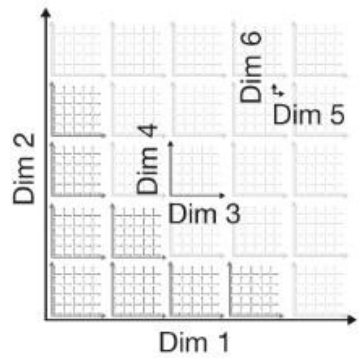












MAP-Elites has the property of keeping around lots of solutions that has very different behaviors.
 It is tricky to find the location of the controller that provides a solution to the problem that the robot is facing.
 The robot does not know which leg is missing.

