How Biological Modeling Algorithms Impact the Possibility of Consciousness in their Animals

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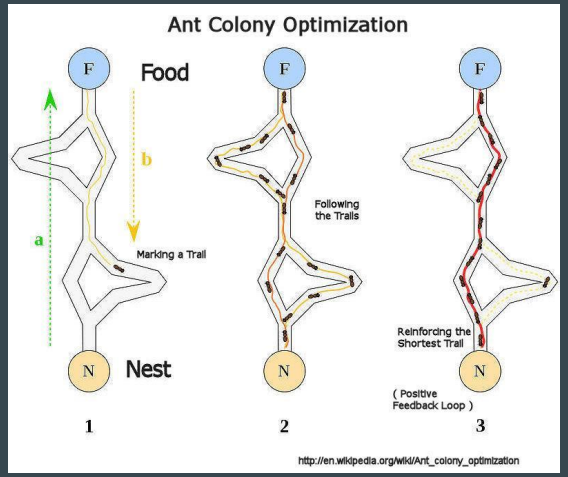
Biologically Inspired Computing?

1. Evolution of Life
2. Simple sets of rules



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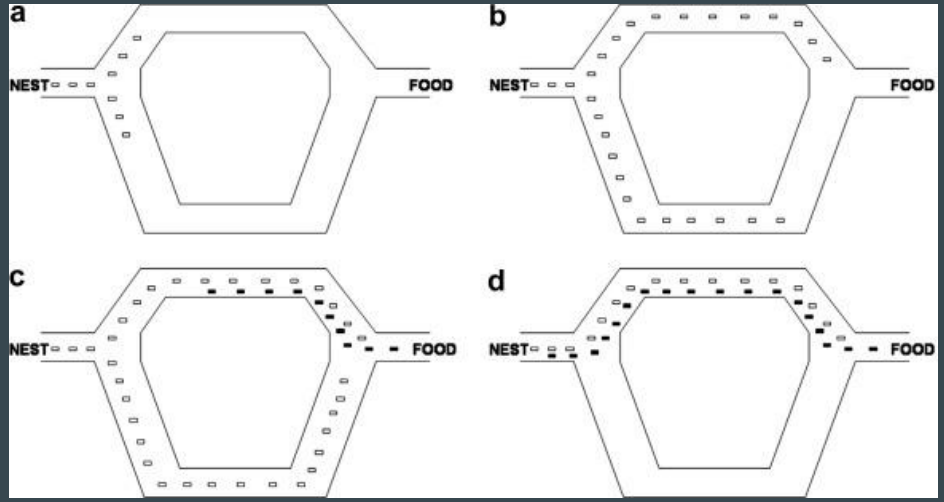

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Consciousness

- Chalmers
- Automaton-Theorists of the 1800's
- Descartes
- Chinese Room

Why is it important?

1. Animal Rights (and the potential lack thereof)
2. Biological Modelling advances -> potential AI implications

I, for one, welcome our new robot overlords

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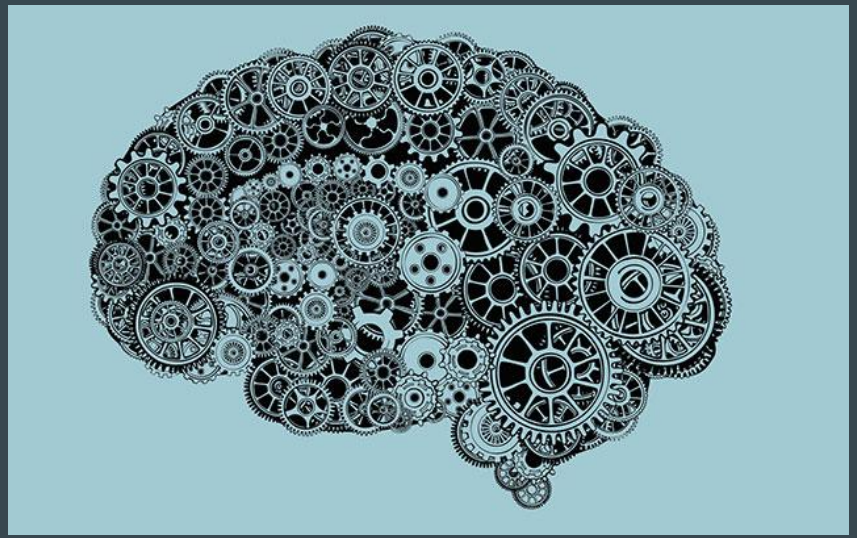
Descartes

1. The Soul
2. Biological Automata

Automaton-Theorists

1. Who they were
2. T.H. Huxley
3. W. James



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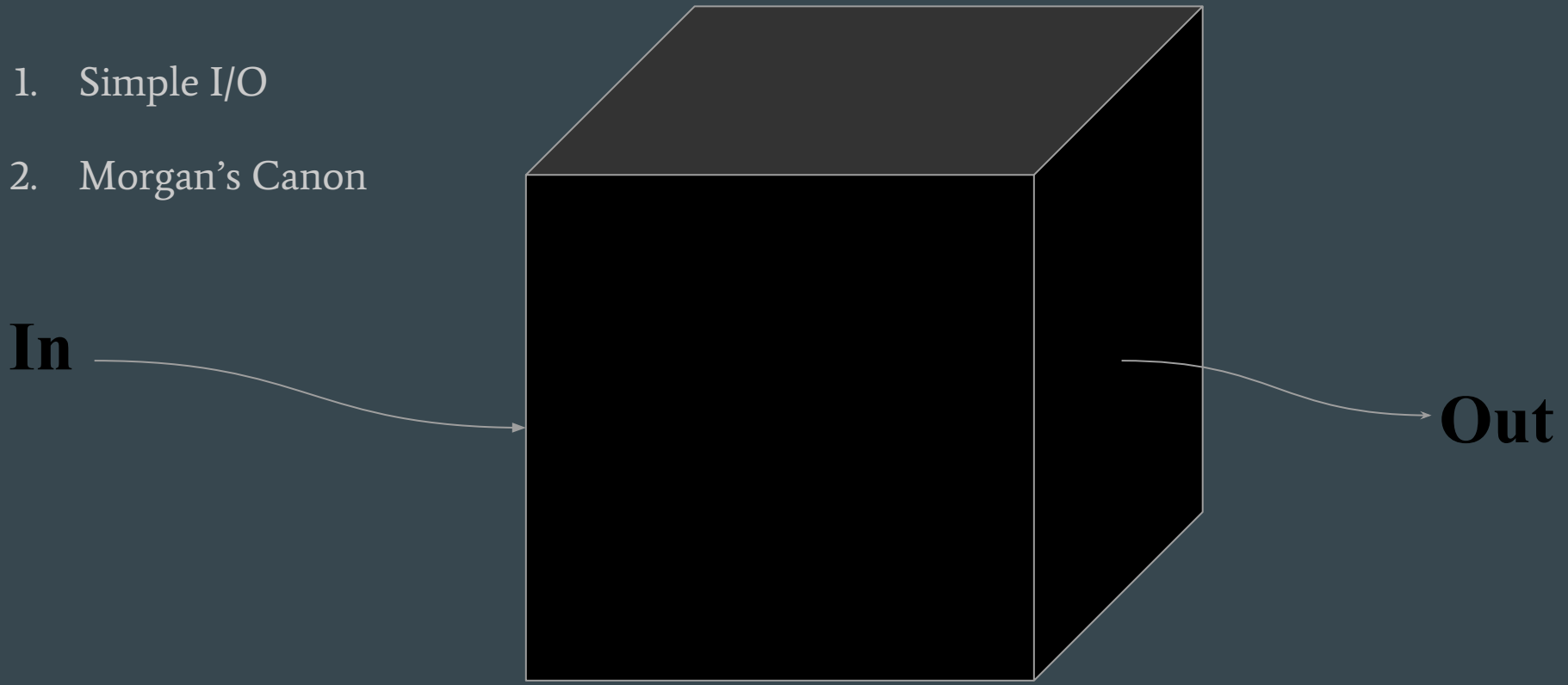
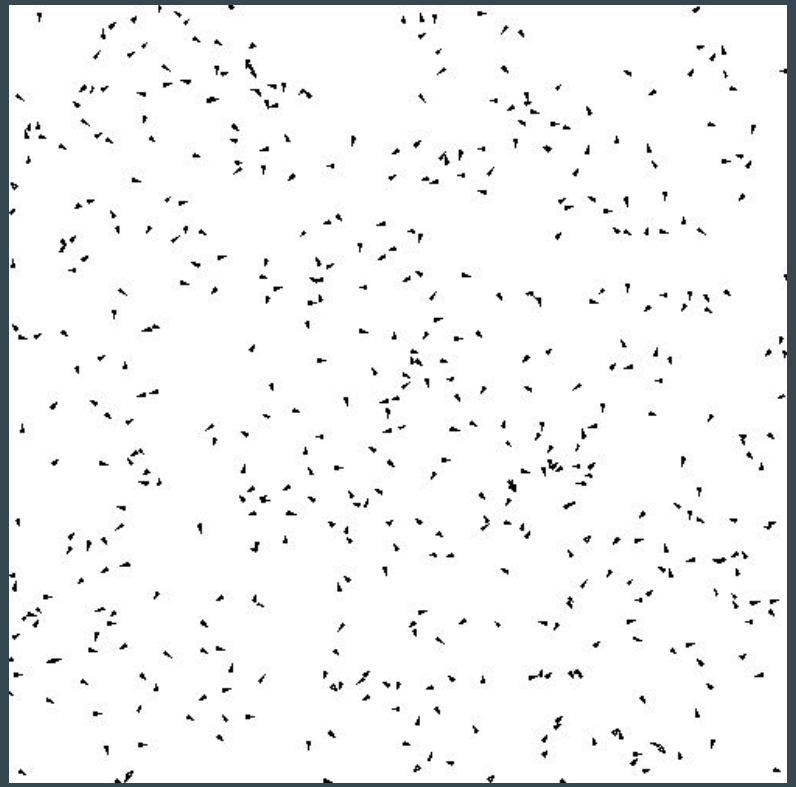
Chinese Room

1. Simple I/O
2. Morgan's Canon



Algorithms

1. BOIDS
2. Bee Foraging
3. Ant Exploration



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Conclusion

We can model these animals using algorithms

Applying Morgan's Canon suggests they are automata

Falls in line with Descartes' idea of NHA's

One of two conclusions to make

- Since automata, no subjective experience => not conscious
- Still create subjective experiences => consciousness in non-living beings in the future

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