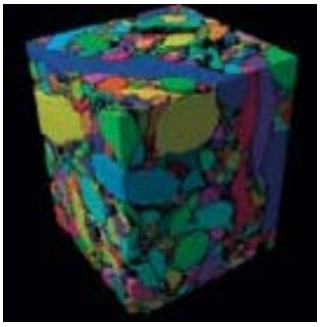
The Brain with David Eagleman

Episode 6: Who Will We Be?

1) Beyond the scientific challenges to optimizing cryogenic preservation, what are some of the *social* challenges? For example, do we know that people 200 years from now will *want* to thaw us out? What if they're cannibals? Name some other problematic scenarios.

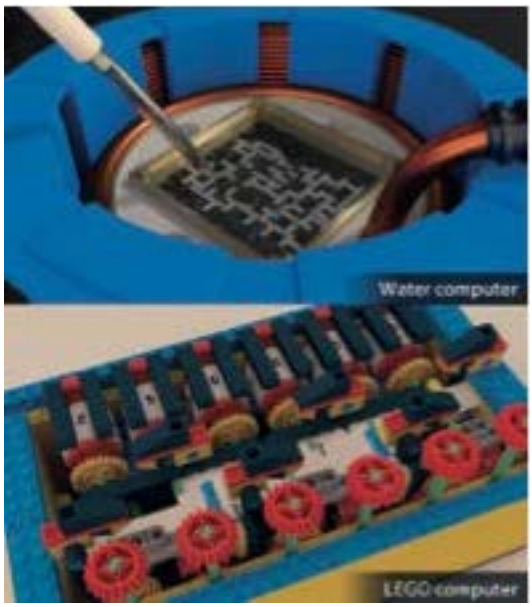
2) In what ways do we have more in common with our stone-age ancestors than our near-future descendants?

3) This tiny chunk of brain tissue from a mouse contains about 300 connections (synapses). A chunk this size represents one 2,000,000,000th of a mouse brain, and about one 5,000,000,000,000th of a human brain. Discuss the implications for the complexity of capturing data of this magnitude. What does this tell you about the project to map the human connectome?



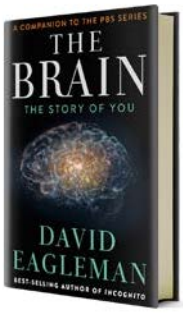
4) If you reproduced a brain in a computer, what would you need to do to make sure the simulation wasn't frozen in time?

5) Computational devices don't have to be made out of silicon – they can also be made of, say, Lego or moving water droplets. What matters is not what a computer is made of, but how its parts interact. Discuss the implications of this for the computational hypothesis of brain function.



6) What does the Chinese Room thought experiment tell us about the intelligence of, say, Google Translate?

7) What did Renee Descartes mean when he said, "I think, therefore I am"?



More depth on the issues in this episode can be found in the companion book, *The Brain: The Story of You*