

What is the relationship between man and machine? Is open source a sustainable way to run a creative society? Can digital creations have the subtlety we know in the natural world? These are the issues addressed by my work.

I create my art by writing software that runs an internet distributed supercomputer consisting of 450,000 computers and people. The first versions of this algorithm date from 1992. Each image is a form of artificial life, with its own genome, thousands of numbers that define how it looks and moves.

I created this collective intelligence---the Electric Sheep---in 1999 and it has been evolving and developing since. The system is based on an open source screensaver that anyone can download and run. All the computers work together to render the animations, or "sheep" (it takes an hour to render each frame, or one day of work per second or animation). All the people contribute their creativity and aesthetics, via open source, crowd source, and by voting. Sheep that gain favorable votes mate with each other and reproduce according to a genetic algorithm. Hence the flock evolves to satisfy its human audience. This popular version makes draft designs that are the basis for my fine art.

I use the screensaver as a design laboratory and factory to realize my museum-quality collectors' edition pieces. I select sheep that satisfy my aesthetics, redo them in high definition and slow motion, and edit and assemble them into final pieces. I pick sheep for how they look, because of their relationship to each other or a theme, or to tell a story. The final creations are like paintings.

Sales of this fine art support the open source code and server network used to create it, making the flock self-sustaining. By applying supercomputer power and the techniques of artificial intelligence to image synthesis I create works beyond geometry, beyond the mechanical, beyond the limitations of a single human creator, all with a fine level of detail rarely seen in digital art. I hope when you see them you will be more open to accepting the machine as part of yourself.

From an interview by Julia Kaganskiy of The Creators Project (published on their website):

You refer to the sheep as living and mating and dying, as if they are actual organisms that you've created. Is there an element of you playing God here?

That's right. I've created a universe and the rules for this universe and then inside it sort of has a population that lives there. So, I guess there's an obvious appeal to ego there, which is fine, but really it comes from an impulse of, how can I get the computer to do something unexpected? And I think that's really the essence of life—unpredictability, and I don't just mean that in the sense of complete randomness, you can roll dice and of course that's very unpredictable, but I'm talking about a difference that makes a difference, that has meaning. And life embodies that ability. So my mission is to create life.

Would you say that's your artistic mission?

My artistic mission is to create life in virtual reality. It's not clear how successful one can be. The answer is up for debate in current society. Can computers think? Can a computer be creative? Are the robots from science fiction in our future, or will it be something that looks different but is in principal the same? Or is humanity the only possible vehicle for what really amounts to a soul? It comes down to a religious question. Some people believe that only people have souls, some people believe that spirituality exists everywhere in the universe, some people believe that all material matter follows the rules of physics, and if you can figure out what physics is, a computer can follow the rules and therefore you can simulate life in a computer. So it really becomes a profound question that we are, as a society, really just starting to struggle with.