Eduardo Kac

Neither antibiotech activist nor Dr. Frankenstein, Eduardo Kac is a writer and artist whose theme is that in biotech, as in all science and technology, nothing is as good or as bad as it seems.

Is Chicago artist-writer-philosopher Eduardo Kac ahead of his time or just nuts? In the foreword of his new book[1], Art Institute of Chicago art historian James Elkins makes the case for the former. Elkins acknowledges, however, that not everybody agrees on this point and cites the negative critiques of Kac's 1999 *Genesis* exhibition—where the artist created a gene capable of encoding a passage from the Bible. Critic Peter Schjeldahl, for example, said the genetic mutations in Genesis, which were triggered at random by internet participants, were not interesting, much less improvements. *Genesis* is child's play compared with the rest of Kac's work.

In a 1997 exhibition called *A-positive*, Kac—Kac is pronounced like 'cats'—hooked himself up intravenously to a robot to raise questions about the increasingly symbiotic relationship between man and machine. In another exhibit in 1997, *Time Capsule*, Kac injected into his own leg a microchip designed for pet identification to explore the ethical prospect of artificial and implanted memory. In his 2000 work entitled GFP Bunny—GFP for green fluorescent protein—he genetically altered the zygote of a rabbit with "a gene from the Pacific Northwest jellyfish" to produce a pet bunny that glows when exposed to "certain light waves." Another project of creating a glowing dog is in preparation.

Provocative stuff. But is it art? And is there really a point to all of this? To some, Kac's 'art' feels more like creepy amateur science masquerading as art for its own sake. And it does not come across as something that might stimulate, much less illuminate, the elusive 'discussion' or 'dialog' between scientists and the public about the frontiers of biotech. Philosopher, Eleonore Stump of St. Louis University in Missouri was particularly outraged by Kac's plan—the "vulgarity and tastelessness" of it all—to insert a jellyfish gene into a dog embryo to create a dog that glows. To others, Kac and bio art are the wrong messenger and stand a greater chance of trivializing these frontiers than illuminating them for a public increasingly befuddled by biotech.

Kac helped form the bio-art movement in the 1990s back home in Chicago—he is a professor and chair at the School of the Art Institute of Chicago—because he believes there most certainly is a point to it. Other notable bio artists include Hunter O'Reilly of the University of Wisconsin, the Massachusetts Institute of Technology's Joe Davis, Heather Acroyd and Dan Harvey of Dorking, Surrey, UK, and Gunther Von Hagens, director of the Plastination Center at the State Medical Academy in Bishkek, Kyrgyzstan.

"I am not philosophically opposed to biotechnology, *per se*," he says. "Nor am I trying to create art that will stimulate negative public sentiments about it. I am simply exploring—and I hope raising questions about—what is increasingly becoming possible through genetic engineering, nanotechnology, computers and robots. I don't pretend to have the answers, but I do think I'm asking the right questions."

But herein lies the problem for not just Kac, but also—whether they will admit it or not—for those in the field of biotech: at this point, nearly 30 years into the biotech revolution, the public wants answers not just more questions. Specifically, the public wants to know if biotech is good or evil?

As the precautionary principle theorist Ortwin Renn, professor and chair of environmental sociology at the State University in Stuttgart, Germany, puts it, the public has reached the point where the questions about things like the long-term ramifications of stem cell research and genetic engineering have outpaced the answers by such a vast number that "Many have made a decision about how to deal with the growing uncertainty about science," Renn says. "They've decided it's better to err on the safe side until their fears have proven beyond doubt to be unfounded."

Yet, ever since it burst onto the global art scene in the 1990s, the 'bio-art' movement has struggled to stimulate the kind of broad and meaningful public dialog about biotech that brings points like Renn's to the fore. For whatever reason, scientists aren't paying attention to the movement. Nor apparently is the target audience for most bio art artists, the general public, save for those who follow progressive art. Precious few outside of art critics and post-modern art aficionados even know bio art exists.

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There are those, however, who say that if scientists aren't paying attention to bio art, or to the big issues that practitioners like Kac are attempting to ponder, it is not because they don't get it.

They do, says Jim Cortada of the IBM Institute for Business Value in Madison, Wisconsin. "The scientists get it. They are just now starting to realize that the world is about to fundamentally change around them because of biotech. The public, on the other hand, kind of knows that something big and important is happening; they're just not sure how it's going to affect them in the future."

But, the point that Kac is trying to make, at least with his transgenic art, is that our world is not about to change because of computers and biotech—it already has changed in profound and demonstrable ways that society needs to fully grasp. "This is where art can fit in," Kac says. "Art can open up new ways of looking at the world and ourselves. I do not seek to comment upon things like how a machine came to beat Kasparov in chess or how genetic engineering allows scientists to create life-forms that don't exist in nature."

He concludes: "Rather, I work with the same media that shape contemporary culture, creating in a poetic and philosophical context, new life-forms that don't exist in nature, myself. It's an intervention to participate in the process of reshaping culture, not a detached comment on it. All of this is to make the point that the future is now."

Stephan Herrera, New York

1. Kac, E. *Telepresence & Bio Art: Networking Humans, Rabbits & Robots* (University of Michigan Press, Ann Arbor, MI, 2005).