

Bioart or Blasphemy?

An Intellectual Dissection of Kac's Bunny

The term “bioart” is a relatively new term. Coined by Joe Davis, widely acknowledged as the father of the bioart movement¹, it encompasses many new forms of art, from biotelematic art to transgenic art. The creators of bioart call themselves “a new breed of creative visualists who utilize molecular biology as their medium for instigating a new form of ‘interactive art’”². These pieces of art range from the interesting but quirky Caddis Worm Sculpture by Hubert Duprat³ to Eduardo Kac’s infamous GFP Bunny. An almost complete bibliography of bioart and related articles, compiled by George Gessert, can be found at <http://mitpress2.mit.edu/e-journals/Leonardo/isast/spec.projects/art+biobiblio.html>. However, it is the latter piece of bioart, perhaps referred to more accurately as transgenic art, which I would like to draw your attention to.

Eduardo Kac has been a pioneer of transgenic art with his many creations like *The Eighth Day*, *Genesis* and of course, the GFP Bunny⁴. Fusing genetic engineering with art, Kac hopes to “reveal the cultural implications of the (genetic) revolution underway and offer different ways of thinking about and with biotechnology”⁵. Using an enhanced version of the green fluorescent protein (or EGFP) from the jellyfish *Aequorea victoria* injected into the embryo of an albino rabbit, Kac created a rabbit, Alba, that glowed green when exposed to blue or ultra-violet light. Reactions from the scientific as well as the artistic community ranged from the positive “He's pushing the boundaries between art and life, where art is life” by Staci Boris, a curator at Chicago's Museum of Contemporary Art, to the negative “I think it steps over a line. I don't think we should be manipulating complex organisms in the name of art” by Arthur Newman, a member of the U.S. Council for Responsible Genetics⁶. Being a trained biologist, I tend to agree with Newman.

Biology, especially genetic engineering and medical science, is being advanced on two fronts. One on the purely intellectual, conceptual and theological front, and two, on the problem-solving (i.e. disease curing, pest curbing, etc) frontier. In recent decades, the focus has been

slowly shifting from the first to the second. The current uproar about genetic engineered foods, biological weapons and embryo research is a culmination of the fears of what high-tech biological science could achieve, and a testament to the perceived omni-potency of this science. In creating the GFP Bunny, Kac has opened a Pandora's box. Genetics, formally a domain that only scientists with the "pure" intent of improving the quality of human life ventured into, has now turned into a circus, in which anyone can play out their whims and fancies. This so-called "pure" intent was the only reason that humanity allowed scientist to wield this sort of power. The power to change and even improve an organism is no small matter. In the wrong hands, a strain of infective super-bacteria could be created that is immune to all sorts of antibiotics known to mankind. This, unlike the computer viruses perpetuated by attention-seeking adolescents, will doom humanity if its spread is not contained.

This power must thus be used selectively and carefully. Personally, a direction of research in biology that does not benefit humanity's knowledge in any way is a waste of resources as well as time and creative energy. In my opinion, transgenic art projects like the GFP Bunny should be put to better use, for example testing out a new variant of the EGFP gene, or even creating a new colour that glows. These would be at least slightly beneficial to scientific pursuit, whilst achieving the same desired artistic message. Doing so "just for the sake of art" constitutes a sort of blasphemy, as most people agree that humanity should not manipulate complex organisms for the sole goal of creating a pretty creature. Kac defends against this by contending that humans have selectively bred the albino rabbit for more than a thousand years⁷. Whilst I do not dispute this, I would like to point out that inbreeding pales in comparison with the introduction of a completely novel gene into a species from another of a completely different phylum!

So what makes scientists the only group of people the worthy inheritors of this power? I believe that it is responsibility. The responsibility to use this new found ability to mould nature for the benefit of humanity and thus for the perpetuation of mankind. Interestingly, one of Kac's intentions was to use Alba to oppose a ban on all genetic research, commenting that this "would prevent the development of much needed cures for the many devastating diseases that now ravage human and non-humankind"⁸. In his creation of the GFP Bunny, Kac sought to shock the

world into realising that the spectre of genetic engineering is not one that the public, honed on science fiction's clones and more, is familiar with. Rather, it comes in a form of a cute bunny, which is "like any other rabbit... sociable and in need of interaction through communication signals, voice, and physical contact"⁹. However, this adorable creation carries the same question: Is genetic engineering ethical?

In using Alba to try to provoke a response, and hopefully a logical answer to the question above, Kac seems to have handled the issue very responsibly. However, it is one thing to draw up a protest poster from crayon and paper, and quite another to use a live organism to trumpet your viewpoint. Human sensitivity has always revolved around live objects (especially ourselves) which possess a soul and a mind of its own. The ability to create a "custom" organism, then, increases this sensitivity many-fold. Parading it to the world as an art piece definitely creates more controversy and animosity towards it than, for example, Dolly the sheep. The line, therefore, to thread between science and art, is very thin.

Artists attempting to use biological science as a platform for ethical issues as well as shock value to evoke certain responses should consider the precariousness of this option as it has shown to be one of the most volatile of the new art forms. Granted, Kac has approached this art form with great sensitivity. However, I suspect that even he cannot phantom how far reaching his creations will be. Will we awake tomorrow, bombarded with bioartforms championing a cause? Or will we be responsible human beings and treat life as the precious commodity that it is? Only the bioartists have the answer to that, for to exploit the power of genetics simply to address certain concerns and elicit reactions seem too trivial when compared to the science's goal of improving humanity's foothold on life.

References

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