Bio(techno)logical Art

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"Why is it that dogs aren't yet blue with red spots, and that horses don't yet radiate phosphorescent colors over the nocturnal shadows of the land? [...] We have learned techniques that ultimately make conceivable the creation of plant and animal species according to our own programs. [...] we can now make artificial living beings, living artworks." Vilém Flusser, "Curie's Children", (published in Octobre 1988 in *Art Forum*, reprinted in *Ars Electronica, Life Science*, 1999)

Genetic manipulation, cloning, GMO —these are some of the new words and realities to have become part of our everyday life and of the life of art. They have given rise to a multitude of new art exhibitions and events¹ where photographs may, for example, neighbor cloned trees. All this points to the key distinction between artistic practices that take biology as their subject, and practices for which it is the actual medium. While the former sit within the usual framework of art, both in terms of support, forms and conception, the latter, by production "living artworks", suggest a new paradigm that needs to be defined, analyzed and evaluated.

To borrow Dominique Lestel's very apposite distinction, biological art is not based on life forms themselves so much as upon their processes. It is not a set of metaphors or a commentary on reality, but a practice *in vivo*. Artistic practices in this sphere are both more varied and older than is usually believed (see the article by George Gessert and the "Gallery"). Here we offer a basic map of this territory.

¹ Ars Electronica (aec.at); Paradise Now (geneart.org/pn-home.htm); Gene(sis), Contemporary Art Explores Human Genomics (henryart.org/gne-sis/home.html)

The Ethics and Aesthetics of Biological Art

Annick Bureaud

Biological art generates two main types of discourse. The first is *technical*. Going from the most general to the most specific, this gives us: biological art (Edward Steichen, George Gessert), which is based on the processes of life forms in the broad sense of that word; biotechnological art which uses contemporary technologies (SymbioticA); genetic art, founded on knowledge and manipulation of genes and DNA (Joe Davis, Brandon Ballengée); and transgenic art, which, to borrow the definition given by Eduardo Kac, consists in transferring synthetic genes to an organism or transferring natural genetic material from one species into another (Davis, Kac). This technical approach categorizes works according to the process of their production and gives rise to countless sub-classiffications such as paintings with bacteria (David Kremers) or cloning (Natalie Jeremijenko).

The second and more frequent type of commentary is *social, political* and *ethical*. All these works question our value system and take up a position, either implicitly or on the basis of an explicit discourse (Heith Bunting, Jeremijenko).

If these two approaches are essential to any apprehension and evaluation of the works, analysis often fails to get as far as their artistic or aesthetic aspects. With a body of work that is still being articulated, it would be presumptuous to claim to propose definitive tendencies and forms. Even so, it is possible to sketch out shared orientations and characteristics. I have observed seven of them. They raise new questions for both art and society.

First, most of the works belong to an art of the *invisible*, but one that is not spiritual, religious or conceptual. It is an art of the not-directly-perceptible and yet it is material; an art which

requires an explanation, a complementary text, in order to be totally intelligible.

The second characteristic arises from the first. This is an art of *belief*. The only way of "verifying" what the artists say is to use the same scientific methods in identical laboratories, and with the same scientific knowledge. Since this is impossible, we have to "believe" that it is what they say it is —or in some cases, have our "doubts", given what we know to be "possible". Grasping these works takes knowledge, but then shouldn't a citizen be informed?

Three: many of these artists (SymbioticA, Gessert, Kac, Paul Perry, Marta de Menezes) focus on the nature and the status of the differents elements of the living, as well as on the human in its *relation to technology*, or to the changes that it might undego as an effect of biotechnology. Their approach emphasizes the permeability of the frontiers between species, the continuity that goes from the non-living to the different degrees of complexity in life forms. This *anti-anthropocentric art of the continuum* extends to a new class of objects (semi-living objects in the case of SymbioticA and beings (transgenic organisms), thus raising the question of differentiation, of the status accorded to these living forms and to the established hierarchies. It is symptomatic in this respect that there have been no reactions to creations made using genetically engineered bacteria.

Fourth point: like other practices before it, biological art calls into question the classic distinction between nature and culture. Art traditionally belongs to the symbolic sphere, in which nature is distanced by a "frame", transcended by human thought and action. The artwork does not belongs to nature but to culture. Here, it belongs to both: Marta de Menezes's butterflies are artworks, but they are also part of nature.

At the same time —the fith point— we see certain aspects that contemporary art has very much brushed aside cropping up here and there in unexpected places. Representation, for example. Writing about *Touch*, a human skin culture, Natalie Jeremijenko says that "in many ways it dis not count as human. It was a representation of humanness [...] Biology can be representational rather than life itself.².

A sixth aspect of this art is, as David Kremers says of his *lchthys+pisces* that "*it takes time to* 'grow'". An *art of duration*, biological art can, paradoxically, be both mortal and immortal at the same time: the delphinium dies, but its seed will grow again; sealed and frozen, the bacteria wait for a better time to express and artistic gene or continue a painting; Paul Perry's *hybridoma* exists in a tension between life and death.

Finally, as Oron Catts and Ionat Zurr of SymbioticA put it, biological art is founded on an "aesthetics of caring", an esthetics of attention and responsability.

Translation, C. Penwarden

² From the artists's website, November 2001