EARTHWORKS AND BIOART, ETHICS AND COSMOLOGY\textsuperscript{1}

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While bioart has been historicised alongside performance, new media and land art, this essay compares it with earthworks both contemporary and archaic. It argues that through the contrary ideas of earthworks and land art, it is possible to think about the distinction between biotech art and bioart, as well as the ethics of this new idea in art. The essay focuses on two sites of bioart to make this argument: the SymbioticA laboratories in Australia, and the Parco d’Arte Vivente in Italy. These places offer different modes of bioart practice, and through this difference it is possible to think through the tensions that inform the ethical arguments around bioart. These tensions, between the body and its obsolescence, biotechnology and ecology, give way to more cosmogonic considerations about the relationship between nature and life, creation and simulation.

In 1960s and early 1970s Robert Smithson planned the wholesale terraforming of mines and other abandoned landscapes, turning the planet into a medium for artistic creation. He would become known as the leading earthworks artist, recognising in the destruction of the earth an opportunity to recreate it anew. Bioart also works out of the ruins of nature, combining the idea of its destruction with ideas of renewal. These art movements have both been caught up in ethical debates over their wilful creations, as they assume the place of nature itself. Over the course of the 1970s, earthworks was eclipsed by a land art that offered a harmless alternative to terraforming, being less interested in technology than in gesturing to a pre-existent nature. Richard Long stands at the origins of this kind of harmless, wilderness work, walking lines into grass and snow. When land art came to include earthworks, monographs making little distinction between the two, the specific interest of earthworks in reclamation and terraforming was quickly overwritten. A similar shift has been taking place in the emerging distinction between bioart and biotech art, proposed by Pier Luigi Capucci, after George Gessert, in which bioart encompasses biotech art, assimilating laboratory work into a greater category that includes land art.\textsuperscript{2} Thus it is that the fate of earthworks offers something of a precedent for a shift in transforming bioart into something that is no longer tied to biotechnology, with its dialectic of destruction and recreation.

It is possible to trace this transformation from one set of terms and practices, earthworks/land art to biotech art/bioart, through two curatorial and research projects, located in nearly opposite places on the planet. The first are the SymbioticA laboratories in Western Australia, which negotiate working relationships between artists and scientists in order to develop projects that mediate the two. Theirs is
a scientific model of bioart, fitting more precisely into the idea of a biotech art. The second site lies in the suburbs of Turin, in Italy. The Parco d’Arte Vivente (PAV), or Living Art Park, wants to develop similarities between land art and bioart by hosting both kinds of projects in a specially designed art park. At first glance, the distinction between these places would appear to be between the scientific and ecological, the laboratory and the park, but the projects they host are more ambivalent than that. The SymbioticA laboratory often stages ecologically sensitive projects, such as The Tissue Culture and Art Project, run by the co-ordinators of SymbioticA, Oron Catts and Ionat Zurr. These resident artists want to develop alternatives to the consumption of animals. Their *Victimless Leather* and *Disembodied Cuisine* are fabulations for a future free of animal suffering. Catts and Zurr are also intensely interested in ethics, their daily work involving the kind of ethical approvals that are usual practice in university research centres.³

The Parco d’Arte Vivente, while hosting many ecologically sensitive and land art works, are also interested in biotechnological productions, hosting for example Jun Takita’s bioluminescent brain, *Light only Light*. It is to this second site of art practice that we can turn for the closest lineage to that argued for in this paper, between earthworks and bioart. PAV is more interested in land art than earthworks, simultaneously exhibiting land art and bioart in order to mediate between living systems that are both inside its building and outside. The irony here is that the park is itself a kind of earthwork, built atop the ruins of an old automobile factory, as its ecologically minded installations taking place on a site whose ecology has long been built over. Yet the PAV’s definition of nature is much broader than the kind of wilderness idealised by such land art founders as Richard Long, whose work first defined land art as that which leaves nature largely untouched. Instead, PAV defines this nature as a set of relationships between human bodies and their ecologies, an open system understood in its multiplicity. As Ivana Mulatero, a curator working at the park describes:

> The aim of the PAV Art Programme is to build up a broad artistic practice around the contents of living art, transforming the central concept—recreating life with art—into a period of experience whose end might be that of no longer simply seeing nature in phenomenological terms, nor as a simulated version with algorithmic calculations, but of going to rummage in the most intimate operative methods of nature itself.⁴

After earthworks anticipated and designed for the end of nature, PAV proposes a new beginning for nature, its processes the stuff of creativity and experimentation. In this context, bioart occupies the place of a greater and relational nature, a nature on the scale of the planet’s terrain, to become this nature itself.

The way in which the different aspects of bioart fold into each other, the scientific and ecological, the laboratory and landscape, can be considered a series of tensions that animate its idea. Here I want to turn to the semiotic square, developed by A.J. Greimas and F. Rastier, to think through this mobility, and to think through the contraries within which bioart is immersed.⁵ It is the advantage of this square to map out the differences between contraries and oppositions, as terms that are mutually determining and mutually exclusive. So that while earthworks and land art imply each other because they share some idea of nature, the ideas of nature and life are instead in opposition, as they describe unliving and living systems:
In the square, the contradiction between engineering and ethics is that maps a historical continuity between land art and bioart, earthworks and biotech art. For the possibilities of engineering offer conundrums to ethics, which want to moderate it with concerns about the human good.

The most significant of transformations that has taken place between the contraries of earthworks-land art and biotech art-bioart lies in that between nature and life. While the former finds in nature its model, the latter takes life as its subject. Crucial to their contrary interpretations of these terms is the threat and opportunity that engineering poses to their existence. Simulating their methods, engineering comes to represent them as simulation. Yet this simulation of the natural and living orders is not new. For earthworks describes not only contemporary attempts to transform the landscape but the monuments of ancient peoples whose standing stones, artificial hillocks and mounds work to alter the perception of the world, as they put into play symmetries between the natural and created environment. The leaning stones of the Sun Dagger of Fajada Butte in New Mexico were long considered natural, but were later demonstrated to have been put there by ancient people, who in fact used them to calculate the rotation of the planets. Bioart also has its precedents in pre-history, in such ancient pursuits as the domestication of animals and plants. The dingo is a species of dog that evolved through domestication, but that returned to the wild on the continent of Australia to become nature once more. These terraformed and biosculpted modes of re-creating the world recreate nature. As the Sun Dagger and the Dingo have become naturalised they stand for the forms of this world, whether stone or animal, belonging to the terrestrial biosphere. The dingo and Sun Dagger stand for the potential of both earthworks and bioart to assume a naturalised life that is undifferentiated from this world, after passing through so many human generations to transcend the human. In both cases, in a hunter-gatherer society’s conception of a sacred Earth and in the domestication of plants and animals, human beings enter into a relationship with an other that preceded them, that then alters their relationship with the nature that surrounds them.

While there is a plethora of discourse around the ethics of bioart, its works are at their best when they transcend those distinctions between nature and culture that allow us to make ethical judgements in the first place. The best bioart plays with the lines of force that reproduce forms through time, producing works in which life appears to question its own form, and in which the simulation of life comes to occupy that liminal zone between nature and engineering. In staging a transcendental relationship with nature, bioart comes to appear theological, having the cosmogonic qualities of life’s own mysteries. For example, Verena Kaminarz’s Ich Vergleiche Mich Zu Dir (2007), or I Compare Myself with You, produced in SymbioticA’s laboratories, is a video that shows an engineered two-headed worm

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swimming in fluid. The worm’s heads compete with each other, attempting to go this way and that, producing an eclectic and difficult portrait of existence. The very ontology of the worm is at stake, the ontological being of a creature whose life has been put into motion by a cellular engineer. The work has the monumental quality of a neolithic monument, that collapses the natural and artificial, and assumes the place of an unprecedented creation. **Ich Vergleiche Mich Zu Dir** reveals nature to us at the point of nature’s own creation, opening up ontological and cosmogonic questions about the relationship of life to its own origins.

From this point of view, a discussion over the ethics of bioart might be informed by the art historical debates over the ethics of earthworks and neolithic monuments. Yet such debates are also absurd. After all, what are the ethics of entering into a relationship with the Sun and the Earth, with becoming a part of nature by becoming one’s own natural event? In simulating God, these artists placed themselves beyond the human sphere of regulatory, ethical behaviour. Debates over the preservation and restoration of Robert Smithson’s famous *Spiral Jetty* (1970) have little to do with the cosmic relationships it aspired to establish, yet the nature of their disputes do echo through the controversies over bioart. The argument to preserve the *Spiral Jetty* or let nature take its course is after all a variation on the debate over the biosphere itself. In the face of global warming, is it better to attempt to restore the natural order that human beings have already disrupted, or to engineer a new biosphere that would better cope with its dominant species? Another set of debates over neolithic monuments may also inform discussions over bioart. These debates have to do with ownership. Since the restrictions placed on travellers gathering for the solstices at Stonehenge, debate and activism has raged in the UK over the ownership of the place, mirroring debates over the ownership over genetic materials, that like Stonehenge, can be thought of as a kind of public commons rather than the stuff of corporate ownership. Again, however, there lies a terminological gulf between the cosmological and public significance of Stonehenge. The gulf lies between its place in developing a consciousness of seasonal and solar ideas and its place as a simple public monument, regulated after a secular ethics. That debates around bioart focus on a secular ethics is at the price of the theological, that the most interesting of its works imply. The tensions that constitute bioart give way to greater questions upon which its creations rest, questions about the relationship of life to nature, technology to ecology.

Thus is that we can return to other ways of thinking about bioart and re-read them in terms of this planetary context. To take one example, the curator and art theorist Jens Hauser creates a case for the lineage between performance and bioart by pointing to the performative nature of both genres, that show off transformational processes, thus bringing together the wetwork of actually sculptured living tissue and animals, for instance, with the uncanny wetness of the human body in performance. It is Hauser’s point that in thinking the biological body as bioart’s precedent, the idea of bioart is able to exclude:

> . . . bio-fictional manifestations such as chimera-sculptures, DNA-portraits, chromosome paintings or mutant-depicting digital photo-tricks [that] are no more examples of Bio Art than Claude Monet’s impressionistic paintings could be classed as ‘Water Lilies Art’ or ‘Cathedral Art’.
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Hauser critiques the professionalisation of bioart by curators who put everything and anything into a bioart show, while being largely frightened of actual living materials. The argument describes bioart as a kind of avant-garde that wants to deliver a shock to the idea of a stable, biological body, and which resists its institutionalisation in watered down versions of this shock. Performance art itself began as precisely this kind of confrontation, that wanted to unsettle bodies and institutions that had become too comfortable in experiencing art. The experience of wet, living tissue is Hauser’s guarantee of such discomfort, marking true bioart out from the rest, and its imitators are only too
easily to be found in the dead forms of a professionalised artworld. Hauser’s argument can be read as a way of getting more unsettling, living matter into galleries, but it is also one that recreates the professionalism that he wants to critique. For this hard and fast distinction between living and dead art serves to stratify bioart, to tie down its possibilities, much as the idea of French impressionism has stratified Monet’s paintings.

One of Hauser’s examples of a performative bioartist, Stelarc, offers a way of rethinking bioart as a meditation upon the planet rather than upon the human body. Stelarc’s earliest works, the suspension events, have as much to do with the environments within which they were held as with the body itself. Whether on the Japanese coastline, in elevator shafts or hanging across a street, Stelarc constructs a relationship between the body and its environment. I think we should take Stelarc seriously when he describes the potential for an obsolete body, for a body not confined by the skin, as he maps a terrain beyond the human artefact and into a consciousness of that which comes after it.9 The content of Stelarc’s body performances in both cases has less to do with the living body itself than a semiotics of a post-embodied state, of what happens when the body is exposed to shifting regimes of social and technological change. So that his more contemporary bioart, such as the third ear grown on his arm at the SymbioticA laboratories, is less concerned with the human vessel than assemblages that do not differentiate between the human form and those made possible by biological engineering. Inside this third ear Stelarc wants to plant a microphone that would broadcast live to the internet, creating a kind of autonomous listening device that has a different set of relationships to those of his other ears, and indeed the rest of his body. His work is devolutionary rather than evolutionary, as he dismantles the body’s privileged place within the human arena.

To think of Stelarc as working not with his bodies but with planetary forms, we need to take the idea of the posthuman and Stelarc’s injunction that the body is obsolete seriously, to take the contemporary rhetoric around his innovative art practices at its word. For if the body no longer makes sense in an age in which it is completely mutable and changeable, in which it develops multifarious interfaces and organs, or at least rearrange and multiplies those it already has, then the place of the body need to be thought less in terms of a humanistic modernism that wants to stretch and strain it, but in terms of its relationship to the larger systems of the world. In this sense performance can be deconstructed into the relationship it has to this world, as it is dismantled into an interface of environment and technology, coming to resemble those earthworks and land arts that also aim to transform the relationships that constitute the planet. In an era in which engineering has accelerated its capacity to transform the classical structures of nature, the body is but one ideal destined to disappear into its relationship to other systems.

Such relationality recalls another genre of contemporary art, that of relational aesthetics, and it is possible to rethink Nicolas Bourriaud’s ideas in order to emphasise cosmological rather than social systems. Speaking at PAV, Bourriaud describes those non-human beings who might have a right to speak in a democracy to come. Bourriaud declares his interest “in the forms produced by the living”, which differentiates our era from that of a modernism that drew its power from the combustion of inert matter.10 Drawing energy from matter rather than life, modernism entailed a logic of death. Thus Bourriaud turns to living relations, as Hauser also wants to define bioart from the unliving, which he equates with a professional artworld of objects and careers. Bioart is implied in a politics of life, a politics that is exclusive of an earthworks more interested in rock and dirt. Yet life will always be haunted by the unliving. As Fredric Jameson has argued in another context, “nature poses a problem only in so far as it raises a question about its own coming into existence in the first place, about the very why of its happening.”11 As long as bioart is defined as living it represses its unliving origins, the animation of matter holding within itself the question of engineering’s own cosmogology, its implication in greater systems of renewal and recreation.
Endnotes

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8 Hauser, 221.


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