

## **An Aesthetics of Disorganization as Contestational Strategy**

Autor: Laura Benítez Valero

In recent years, the transdisciplinary relationships between Art, Science and New Technologies have led to the generation of hybrid contexts that, not only have provided new conceptual framework for theory and art criticism, but have also led to paradigm shifts affecting other areas of knowledge. Therefore, my proposal focuses on taking these transdisciplinary relationships as a starting point for the research and development of critical theoretical models of contemporary art and culture.

This proposal of research starts from the findings of my doctoral research, presented as a doctoral dissertation entitled *Bioart. An Aesthetics of Disorganization*. The primary goal of this doctoral research was to explain why the artistic practices included under the term Bioart not only provide a place for philosophical thought, but have become a philosophical exercise and, therefore, an exercise of critical thinking. The first objective to demonstrate this, has been to show how the so-called Bioart offers a substantial change in the relationship between art, science and new technologies, especially between art and biology. This type of artistic practices represent a paradigm shift in the relationship between art and life, because life is not represented but presented, and amended by means of biotechnologies. Hence, this artistic proposals invite us to forget the contemplative relationship persisting in the context of contemporary biology, achieving an interactive relationship instead.

This project also provides an introduction to the debate on artistic research. There has been a heated controversy on the question about what they refer to as artistic research. Due to the different lines of discussion around the issue of research in the context of the arts, I feel obliged to clarify the meaning of artistic research I am referring to. This clarification intends to avoid falling into relativism. Therefore, when I refer to artistic research I am taking the artistic research concept of what Henk Borgdorff called *research in the arts*<sup>1</sup>, a type of research that does not establish a separation between object and subject, and consequently, does not consider a distance between the researcher and the artistic practice. In the contemporary context, art or artistic practices, no longer play the role of an object of study. In fact, many contemporary artistic practices are potentially philosophical, namely, the artistic practices have become a philosophical exercise. Thus, I propose to define Bioart practices as *art-practices-as-*

---

<sup>1</sup> Henk Borgdorff "The debate on research in the arts" (paper based on readings and presentations on research in the arts held in Ghent, Amsterdam, Berlin and Gothenburg, fall 2005)

*research*, inasmuch as I understand that the main purpose of these art practices is to provide new knowledge out of original research, both from artistic objects as from creative processes. Bioart includes, mostly, artistic projects in which research is a set of inclusive processes, transverse rather than homogenizers. These practices build spaces for participation where the binary division between art and science is disrupted, revealing, through the use of biotechnology as means of art, that this two areas are complementary and in what concerns knowledge development their relationship is symbiotic. While science informs about life, Bioart projects expose the problems of this information. These projects become a tangible example of how scientific research may be relevant to the artistic research and viceversa, both one and the other are necessary to develop critical theoretical models of contemporary art and culture.

These practices offer new perspectives to rethink the body in the contemporary context. When rising the question “What’s the contribution of these artistic practices to the concept of body from contemporary aesthetics?” the response comes from the possibility of re-designing the body using biotechnologies. This places us before a change in the perception of the body, especially visible through the use of green fluorescent protein in pieces like *GFP Bunny* and *GFPixel*<sup>2</sup>, works in which genetically modified organisms become devices for the creation of images, a possibility that make us aware of the impact of a biotechnology context full of GMO’s. The use of genetically modified material opens the door to body design from unparalleled parameters. This re-design of the body using biological materials for artistic purposes brings the possibility of conceiving life as an active form of re-signification. Also, note that the possibility of genetically modified biological materials causes cracks in the foundations of what we understand by body and life so far. Therefore, these projects fulfill the function of creating participatory forums for experimentation, building a critical discourse that let us re-think our context(s) and the basis of our knowledge. The new techniques on synthetic biology offer the possibility of altering our physical properties, those properties that have served to articulate the body narrative.

---

<sup>2</sup> Gerfried Stocker and molecular Reinhard Nestelbacher grew bacteria in 4,000 Petri-dishes, some of the bacteria expressed GFP and some didn't. By carefully arranging the plates a portrait became visible when the dishes were irradiated with UV light. Check: <http://newmediafix.net/aminima/GFpixel.pdf>

Stelarc's<sup>3</sup> works address the possibility of an implementation of the potential of body through a symbiotic relationship between body and technology, understanding this relationship as the key enabler to present the body as evolutionary architecture and as communicative interface. This is why the use of prosthetics in Stelarc projects offers the possibility of conceiving the human being qua hybrid. Thus, Stelarc artistic proposals, allow a symbiotic relationship between body and artifact, building communicative environments that have the potential to experience alien bodies, the possibility of being a host for the other. This way of becoming void through the experience of the other, impelled me to rescue the reading of Artaud's body without organs made by Deleuze and Guattari in *A Thousand Plateaus*<sup>4</sup>, understanding this as a site of exchange, of connectivity, of interface, a body without organs that becomes the experience of strangeness. Through the possibility of experiencing a body without organs, these artistic practices fight the standardization of body while becoming a place for resistance, given the symbolic capacity of the artistic body. They are a place from which rethinking established hierarchies, a place where you can find the cracks in those structures intended to shape the body as a whole. These artistic practices challenge us to non-organization, to the possibility of fragmentation, of conceiving the parts left out of the whole. These practices means the opening to possibility, the possibility of a conception of a body not ruled by biological hierarchy, the raising of awareness to the fragmentary taken through the micro-fragments that form part of a *new body* not yet defined as an individual being. They create new readings out of the existing narrative of the body and become spaces of interaction for all potential micro-narratives. They set out a necessary revision of the taxonomies used in the classification systems related to the body.

In order to highlight how those artistic projects working with biological materials show the ethical-political potentials of the question for life I proposed a reformulation of

---

<sup>3</sup> Stelarc is a performance artist who has visually probed and acoustically amplified his body, He has made 3 films of the inside of his body. Between 1976-1988 he completed 25 body suspension performances with hooks into the skin. He has used medical instruments, prosthetics, robotics, Virtual Reality systems, the Internet and biotechnology to explore alternate, intimate and involuntary interfaces with the body. He has performed with a THIRD HAND, a VIRTUAL ARM, a STOMACH SCULPTURE and EXOSKELETON, a 6-legged walking robot. His FRACTAL FLESH, PING BODY and PARASITE performances explored involuntary, remote and internet choreography of the body with electrical stimulation of the muscles. Check more information about his works on artist's website: [http://stelarc.org/\\_swf](http://stelarc.org/_swf)

<sup>4</sup> Gilles Deleuze and Felix Guattari, *A Thousand Plateaus*, (London: Continuum, 2003)  
A Thousand Plateaus is the second part of Deleuze and Guattari's landmark philosophical project, Capitalism and Schizophrenia - a project that still sets the terms of contemporary philosophical debate. Written over a seven year period, A Thousand Plateaus provides a compelling analysis of social phenomena and offers fresh alternatives for thinking about philosophy and culture

such question from the following approach: What's the contribution of these artistic forms to the debate on the essence of the organic, and therefore, to the revision of the concept of life? It is worth to point out that this research project does not intend the search of answers to questions like *What is life?* but to underline that the potentiality of «the life question» lies in the way you articulate it. The conception of life as a hybrid between organic and technological with the category of intangible information, as well as the different uses of biotechnology, have become very powerful tools for the contemporary biopower, and this potential is a reminder of the need to generate spaces of resistance(s). The promise to decipher the riddle of life, or the intention of reducing life to a code makes obvious the necessity of a critical approach, the construction of a collective critical narrative that allows us to evaluate our cultural contexts. Bioart, by the means of playing, of the spontaneous relationship with the other, through the disruption of speeches and usefulness, provides a space to reflect on these issues from an artistic praxis unconditioned by scientific discourse, maintaining a horizontal dialogue while not conditioned by the hegemonic thinking. In this way, Bioart projects means a tribune from which to evaluate, from a critical position, the power and responsibility involved in the possibility of altering the so-called *code of life*, as well as the appropriation of the scientific apparatus to disrupt their codes, an aesthetic experience of destabilization. In sum, Bioart projects use the fissures of biotechnology to transform artistic practices in resistance phenomena. Being this resistance, not only ethical-political, but a resistance to the introduction of vertical, and therefore hegemonic, narratives. Understanding this resistance as learning, as the spatiality where knowledge is built.

Projects such as *The Anarchy Cell Line*<sup>5</sup> highlight how problematic are reductionisms in its attempt to generate an essentialist response to the question of life when the context is hybrid and polysemous. They enable an aesthetic of disorganization that opens the door to philosophical vertigo and reveals the fear to the unknowable in a paradoxical context. These artistic practices become translation devices, devices that facilitate the re-understanding of the human as a perpetual state of hybridity, projects that challenge

---

<sup>5</sup> Artistic project by Cynthia Verspaget, 2004. Historically, the HeLa cell line has always been surrounded by a great deal of controversy. The cells were acquired from Henrietta Lacks- an African American woman in the 1950's who was diagnosed with cervical cancer and housed in a segregated ward where her cells were taken without her permission and cultured to produce a cell line. Check: <http://cynthiav71.wix.com/artsite>  
<http://www.symbiotica.uwa.edu.au/residents/verspaget>

indeed the idea of the transcendent essence, the essential order. Proposals like *NoArk*<sup>6</sup>, fight this essentialist claim presenting entities that do not fit in any of the usual taxonomies for the classification of living things, underlining, in turn, the potential of the hybrid in empirical and metaphorical terms. They stress the potential of hybridity as a counter-concept, as a disorganization opposed to the organic order of reality, adopting the hybrid and understanding it as an essential part of our identity.

Awareness of our hybrid condition is the first step to manage responsibly the possible consequences of hybridity in our own context. Hence, through the aesthetic experience of nameless beings of sorts, we see life beyond the submission of the substantialisation and homogenisation. These artistic practices entitle us to experience how «living things» extend, but not as an extension related to the Cartesian extensive living being, but as a multiplicity of extended fragments that fills a multiplicity of spatialities and results in resistant spaces(s).

Artistic projects like Eduardo Kac's *Genesis*, which place us in a sort of simultaneity of *not-being-yet-in* and *not-being-still-in*, create the conditions for a discourse. These relational projects show us the possibility of not thinking about life as a biochemical reductionism with an essentialist character. They offer an extended and deployable framework from which to think the multiplicity of narratives about life, understanding it as something abnormal. Projects that warn us of the risks involved in the instrumental conception of life, of life as an invention. Practices that enable new insights in «the question of life».

Bioart propose a direct interaction with the artifacts and speeches of the scientific realm but experimenting with them and evaluating them from an artistic praxis. Artifacts and hybrid discourses that demonstrate the social impact of both (art and science). These projects provide the possibility of interacting in the presentation of contemporary ethical

---

<sup>6</sup> Artistic project developed by Tissue Culture & Art in collaboration with Marcus Canning, 2007. NoArk is a research project exploring the taxonomical crisis induced by life forms created through biotechnology. NoArk takes the form of an experimental vessel designed to maintain and grow a mass of living cells and tissues that originated from different organisms. This vessel serves as a surrogate body for a collection of living fragments; it can be seen as a tangible and symbolic 'craft' for observing and understanding a biology that combines the familiar with the other. As opposed to classical methodologies of collection, categorization and display that are seen in Natural History museums, contemporary biological research is focused upon manipulation and hybridisation, and rarely takes a public form. NoArk uses cellular stock taken from tissue banks, laboratories, museums and other collections. It contains a chemical 'blob' made out of modified living fragments of different organisms, which are living together in a techno-scientific body. Like the cabinets of curiosity that preceded the Natural History museums' refined taxonomy NoArk's unified collection of unclassifiable sub-organisms acts as a symbolic precursor to a new way of approaching a made nature. Check: <http://www.stilliving.symbiotica.uwa.edu.au/pages/artists/tcanda.htm>

problematic through the challenge of pressing the audience to face the need of an ethical positioning in the artistic context. In this way, the transfiguration of scientific technologies to the artistic field disrupting common uses and hegemonic narratives, build spaces of participation where the potential ethical-political issues derived from the use of these technologies are discussed, becoming a learning process. Accordingly, when we are confronted with artistic practices that means learning from the aesthetic experience, a space where we can *learn us*, art becomes a place for knowledge. This knowledge is transversal, which means we are digging in the present problematic concerning art and culture thanks to the commitment to a collective critical discourse. These pieces subvert truth building, standardisation and normalisation processes. This does not mean the banishment of all standards, but the possibility of evidence the dynamic character of the norm through the aesthetic experience.

I have addressed particularly the relationship between biotechnology, bioethics and biopolitics through the work of the collective Critical Art Ensemble. *Free Range Grain*, as much as the texts of the mentioned collective, represent a commitment to biology as a contestational weapon to denounce political misuses and abuses concerning the possibilities of biotechnology and its applications in everyday context.

Critical Art Ensemble is critically positioned towards the political and economic uses of biotechnology. Their proposals are strategical and forms of protest, and claiming the need for spaces of resistance(s) in the neoliberal context is one of the hallmarks of the group, that outline their works adopting the cultural practices of resistance, through installations and participatory performances, challenging representations, products and policies related to biotechnology. However, this critical positioning, must be performed from both the access to biotechnology techniques and through the narratives that accompany them. Their participatory performances rely on the possibility of a public debate about biotechnology where there is room for both specialists and non-experts or amateurs. Although CAE, in his book *Molecular Invasion*<sup>7</sup>, proposed a contestational biology, I refer to it like biotechnology as rebellious weapon, taking a look at the control of societies of Deleuze, understanding the need for new weapons, and the conception of biotechnologies as a series of practices pertaining to contemporary biology used for all kind of artistic practices, not just those made by CAE.

---

<sup>7</sup> All Critical Art Ensemble papers have *Creative Commons License*, download them from their website: <http://www.critical-art.net/books/>

In *Molecular Invasion*, the group proposes a theoretical and tactical route to perform an appropriation of the Biology as vehicle of rebellious strategies and transgenics are one of the great protagonists. Although, unlike the vast majority, CAE do not approach the issue of GMOs biopolitical realm of representation, but opt for a direct interaction with them that allows to evaluate the mechanisms of production and its social reception. An interaction that provides spaces to counteract the information that corporations producers and research institutions present about this type of genetically modified organisms.

On the other hand, because GMOs represent a highly controversial and complex issue, which as of today is still full of gaps and conflicted positions, CAE also committed to demystification of the fear of monsters, hybrids, modified, or impures, and warns of the danger this fear contains: to fall into the re-affirmation of life-sacralising narratives. Therefore, and despite they have been constantly asked about their positioning, CAE recognizes they do not have the tools to position themselves in absolute terms as in favour or contrary to GM, for there are issues rendering them as abominable, with serious consequences for the environment, while regarding others their properties seem desirable and with no apparent drastic consequences for the environment.

One of the reasons why CAE devotes a large part of their work to the issue of GM is the interest of the collective in analysing representations of GM and the great contradictions they are exposed to. In a similar way the collective refers to *the spectacles of fear*, and connected to it, CAE refers to this world of representations as *the spectacles of transgenics*, which encompasses a market that, being a market, try to get the maximum benefit, claiming that promoting genetically modified organisms the free market works for the good of public interests, such as environment or health. This almost utopian representation of the benefits of GM clashes with the radical opponents to these products, since they consider this genetic intervention in nature a recklessness that could lead to very high, or even catastrophic, costs. In spite of divergences, the absence of long-term studies and the good publicity of GM, considering genetic modification as something that could only provide benefits does not seem to be very effective as society is concerned, as the majority of the population is reluctant to this type of production. In fact, almost every country in the European Union have completely banned the cultivation of GMOs in their territory, although not his import.

This will to generate a critical public discourse about GM also comes from the suspicion that the results and applications of research projects on genetically modified

organisms will rarely be publicly available. This suspicion, as a statement of the collective, comes from the belief that the pan-capitalist policies, where the boundaries between development and underdevelopment are blurred and coexist, only want to increase the benefits of the machine, *the meat machine*. The market of biotechnologies belongs to it as is subjected to the political uses of neoliberal market and could only be designed to produce new consumer goods, new commercial spaces seeking the maximum financial return, meaning serving the public would be a matter of last resort. It is because of this political-commercial use of biotechnologies that CAE refers to this state of the expansion of modified organisms as the molecular invasion, an invasion where these exploitations transform control in new forms of endocolonization and colonization. But it is in alimentation where the issue of genetically modified organisms has more impact, from farming to processed foods:

The focus seems to be on consolidating the food chain from molecular structure to product packaging. With the ability to better control species expression, corporations have a better chance than ever to intensify developing nations' dependency on western corporate economy. Food must either be purchased from corporate food suppliers, or the necessary organic and chemical materials must be purchased. Either way, resource management is controlled by western capital. Farmers can be leveraged either to grow cash crops like cotton or any combination that is most advantageous to the colonizer. This plan has existed since the inception of industrial farming, so food resource hegemonies have simply been given another powerful tool that fits perfectly into the current structure of domination.<sup>8</sup>

Biotechnology becomes essential for this domain of the food industry where productions can be privatized, since biological materials based works and the genetic modification of them for economic purposes means the processes and outcomes are likely to be patented. The resources of biotechnologies provide an opportunity to intervene a seed, for example, creating a modification that lends to it some specific properties by which it can be patented. This is undoubtedly one of the more controversial lines in the transgenics debate, the possibility of dividing different micro-properties of a plant, so that each of them bears a patent and its use without payment of property rights can result in a substantial penalty.

---

<sup>8</sup> Critical Art Ensemble, *The Molecular Invasion* en <http://www.critical-art.net/books/molecular/>



Accordingly, CAE proposes that an issue that affects us all in the short or long term, and from which we are kept in a constant state of disinformation due to corporate interests and political manipulation, deserves an answer. This answer lies in the development of a specific attack aiming directly to cause struggle in the benefits generated by the neoliberal management of genetically modified organisms, a response through interaction, an attack from a contestational biology:

The answer is as singular as the pancapitalism machine itself- disturb the profit flows. Certainly, the use of traditional and electronic methods of contestation will be useful, but how can the new molecular/ biochemical front be directly engaged as a means to disrupt profits? Two immediate hurdles that must be cleared are the connection of bioresistance to violence and the tendency of resistance to be urban-based. Given that living organisms are of concern, it is quite likely that introducing inertia into the profit system will be damage genetically modified life. Industrial culture has had the environment under fire for decades (and in some areas for as long as two centuries), so CAE is only proposing returning fire. Further, the rules of engagement are pretty well established. If one assumes that bioresistance should use violent methods only as a last resort, and only as to the extent necessary to be effective, a number of possibilities that will not lead to jail time present themselves. Corporate culture has long maintained that violence through secondary consequences is not the fault of an individual agent of institution. For example, if a manufacturing process causes acid rain, the manufacturers are not responsible for any ill effects on flora, fauna, or other environmental elements, nor are they responsible for any type of clean-up. If the resistance can locate itself in the same fuzzy field, legal counter fire is possible that would be disturbing and effective.<sup>9</sup>

The group seeks the spaces of resistance (s) that occur within the frameworks of power of the biotechnology industry, seizing the resources of it to deconstruct their corporatist precepts. A performative resistance that seeks to unveil the role played by the relations of power in these political uses of biotechnology, with the intention of revealing the power that lies behind them. But this performative proposal does not reside in improvisation, but in the configuration of a tactic and effective cultural bioresistance. In order to develop such resistance the group propose strategies to carry out seven key points: demystifying transgenic products and production, neutralizing the public fear, encouraging critical thinking, undermine and attack the utopian rhetoric, open the halls

---

<sup>9</sup> Critical Art Ensemble, *The Molecular Invasion* en <http://www.critical-art.net/books/molecular/>

of science, dissolve the cultural boundaries of specialisation and build respect towards amateurism.

The contestational artistic practices of the group intends the demystification of GM in order to open spaces for critical reflection, neutralising in this way the fear generated by different biopolitical constructs that result in collective bioparanoia. The key to neutralize fear is having access to information, but this is an arduous task in a realm dominated by patents. To accomplish this demystification of GM processes and production, the rebellious practices built spaces of accessible information about the nature of biotechnology initiatives, hidden behind a screen of the rhetoric of benevolence and demonstrate the need to know thoroughly the origin, the context and purpose of biotechnological processes so they can also offset positions that are categorically opposed to any use of biotechnologies, as in some hard lines of the so-called «deep ecology», which could lead to moralistic and reactionary approaches. Since society does not normally have access to laboratories, the relational experience with GM beings is denied and thus they can not interact. Not knowing what we are facing, and what kind of research is being carried out, means maintaining the non-scientific population in a sort of ignorance that breeds insecurity, a feeling that can only be confronted by his contrary, safety, since the other, the hidden one, genetically modified, can be a threat, or serve to perpetuate the attack of an invisible enemy, as the abused body construct rightly advise, and could even be used for terrorist purposes.

This ignorance of the population about the possibilities of biotechnology and especially on the political uses of it, serves as a guarantee for the system, since if the whole society has a limited knowledge of GMOs, for instance, the expertise provided by tactics that only underline their benevolence, then the control task is considerably easier, a more comfortable management of restrained bodies. Such an ignorance creates biopolitical narratives of security, through which the message that the State is the only one who will make good use of biotechnological applications is sent. But precisely because of the potential of these techniques we must remain vigilant and not let them fall into groups of dubious moral intentions. This need to stay alert leaving the State to care for us and keep us safe, has led to the adoption of all types of biosafety laws that influence and regulate life itself. Through modulation, we face an indeterminacy of anxiety produced by the biological domain in its technical ground, but also an existential question, that is, the alleged factuality of life itself. Regarding this indeterminacy of anxiety, Eugene Tacker emphasizes, returning to Heidegger, the difference between this anguish and the

fear to a specific entity, claiming the anxiety we feel for life itself as a result of the modulations of the logics of biodefence, take us to an existential biology of sorts:

Except—and this is the crucial difference—Heidegger’s distinction revolved around the question of *Dasein*, and not the question of biological “life itself”. In fact, for Heidegger, the question of “life” was not a question at all, for the sciences of biology and psychology, in their asking of the question “what is life?” mistakenly presume to have already answered the more fundamental question “what is Being?”. However, while Heidegger dismisses the question of biological “life itself”, what we are witnessing in the ontology of biodefence is a certain conceptual displacement. Whereas Heidegger contrasted the question of Being (in terms of *Angst*) with the question of life (as “fear”), today we have a reformulation of the latter in terms of the former—an *Angst* that is about biological “life itself”. In biodefence, *Angst* is correlated to biological “life itself”. That about which one has *Angst* is the pervasiveness of the biological as threat, as what is threatened, and as response. “The fact that what is threatening is nowhere characterizes what *Angst* is about.” The logic of biodefence—that “life itself” is an indefinite and indeterminate threat—culminates in a social, cultural and political *Angst*, a biological *Angst*, an *Angst* of “life itself”. Here the problematic of “life itself” is how to articulate, within the domain of the living, that which is threatening versus that which is threatened, resulting in a peculiar type of “existential biology”.<sup>10</sup>

But the interesting thing about this reformulation of a fear haunted by life itself, by the omnipresent biological character, is that the thread we can pull at from Heidegger is the impossibility of *Dasein* to understand-itself from a quotidian interpretation of the world once the anguish befalls him. And although in the biotechnology context this «being-there» would become something like a «being-there-extended», the ontological reminiscent of *Dasein* remembers us that the anguish opens the realm of possibilities, and give us back the chance to act differently, and this possibility make us face the need of choosing, of positioning oneself, of going back to the quotidian or follow the proper path. Instead, fear from Heidegger's perspective is an improper affective disposition as not only is related to something in the future but there is a *Wovon* fear, there is an ontical cause, so this fear to the empirical implies a block of the self, in which *Dasein* is not able to distinguish the possible from the impossible. The anguish, on the contrary, is proper, since there is no *Wovon* in it, but comes upon us instead. But getting anxious does not mean to be waiting for something to happen, it always means our existence is at stake, and the *Dasein* insofar is the ontological *Wovon* of anxiety. This binary division

---

<sup>10</sup> Eugene Tacker, “Criptobiologies”, *Artnodes*. E-Journal on Art, Science and Technologie 6 (2006) : 24-30

that provides Heidegger between being and biological life, between anguish and fear, dilutes in the biotechnology context where life is the issuer of threats and its receptor, is threatening and threatened, so the anguished fear, or fearful anguish, becomes a kind of common place where, despite the confusion, the (a) life submitted to the processes of contemporary biology escapes, at the same time, to the homogenizing processes of political devices. Life itself extended and modulated is the control center and the gate to possibility. The awareness of what is happening, that this fear anxious about life itself, is due to the managing implied by the dilution of borders and the political uses of biotechnology, is the starting point, and opens the possibility of its neutralization. CAE encourages us to neutralize it both from individual action and from the collective practices. They promote the need of a well informed being, but not as a dualist approach in terms of opposition between education and spectacle, but as something that occurs in the very neutralization. The tension lies in the exact moment of this neutralization. From the perspective of this collective, the neutralization of the fear occurs when people in society have enough doubts to generate their own questions, which means that once these questions begin to arise, they initiate the intertwining of a resistance as a contestational speech, something the artists predict to be weak, but steady.

CAE's proposal is to replace the Edenic rhetorical by a critique of political systems and applications that allow us to demonstrate the relations between individuals and biopolitics authority(ies); thus identifying education and the access to information as fundamental pillars of the practices of liberty versus security as repression. The keypoint of the bioresistance cultural practices proposed by Critical Art Ensemble is the creation of public spaces for exchange between education and all kinds of inter-sub-cultural practices, a space to dissolve the barriers of specialization. This dissolution involves the commitment to interaction and also the refusal to grant such power to scientific authority, that is, a non hierarchical relation between all different areas of knowledge. But this hierarchies breakup not only affects the areas of knowledge, but also the opposition between experts and amateurs in the context of artistic practices, which does not involve detracting the preparation and knowledge of an expert, but the empowering of the amateur to interact and give way to its proposals and concerns. It is a cooperative work in which cultural practices offer a flexible framework for this type of exchange, not only in art centers, also in those areas where the potential dialogics can be exploited, places of public exchange, like the market.

One of his most famous projects, *Free Range Grain*, developed between the years 2003 and 2004, with Beatriz da Costa and Shyh-shiun Shyu, resulted in the exchange between the products acquired on the market and the possibility of providing information about them. The proposal consisted of a portable laboratory for testing food to find out if they had been genetically modified, that is, offering the public the information the State refused to show on the product purchased. This process was conducted through a DNA test, with the helping interaction of *Serratia marcescens*, a common bacterium in the field of biotechnology research, as they are used even in educational activities.

*Free Range Grain* consisted of a participatory performance in constant movement that was held in various public spaces. Also in art centers, where citizens with the suspicion that their food contained transgenic elements could bring it over in order to test it, and were given the result of the test 72 hours later. Then, once revealed these results, they could dismiss or confirm their suspicions. This relational experience around the claim of having access to information about something so basic, yet so important, as food, sought to build a space for critical thinking about those food policies designed to benefit producing corporations to the detriment of consumers. CAE wanted to aim at the ignorance of part of the society towards the functioning of biotechnologies, or more properly towards its political use, and its role in building myths, fantasies and speculation. In sum, they wanted to evidence, through a simple test, the denial of choice, while trying to demystify biotechnologies encryption showing the way this processes are performed and that some of them can be carried out with no special training in biotechnology, or science. This means pursuing the dilution of the hierarchical dialogue between scientific and amateur, escaping the vertical dialogue to reach a horizontal approach.

These projects become interactive spaces to fight the monopoly of knowledge and banish the ignorance to which citizens are subjected. The co-existence of different organisms articulating an *espectacle of fear* as a control mechanism, taking biotechnologies as one of the key elements to life management, and the modulation of their performances in an open and extended space, make us aware of the need for critical and political positioning, of the need for spaces of residence, and artistic practices, especially those closely related to contemporary biology in any context, can help us to unveil the power relations. Artistic practices working with biomaterials and biotechnology, have the potential to give these issues a social dimension. They invite us to think and discuss the political uses of these tools when building dogmas that serve to

depoliticize and depotentiate a critical discourse on the contemporary uses of biology. Therefore, Bioart projects give us the chance of appropriating those tools serving political powers to create alternative spaces for critical discourse, taking over biotechnologies as contestational weapons, weapons that can be used to generate cutting-in strategies, to disrupt and create bio-resistance phenomena.

Thinking Bioart as a place for an aesthetic of disorganization does not mean falling into radical relativism. An aesthetic of disorganization intends to take the potential of these artistic practices to disrupt the body, distorting codes, narratives and taxonomies. It involves the composition of a fragmented landscape, a collage that allows for new constructions out of the estrangement, new questions about body, life, art, ethics and politics. A disruption that allows to re-think-oneself in an extended plane, an aesthetic that allows us to escape from an unifying and hierarchal organization. A space of resistance, a place for perpetual displacement.

## LITERATUR

Borgdorff, Henk. *The Conflict of the Faculties: Perspectives on Artistic Research and Academia*. Leiden: Leiden University Press, 2012.

--. "The debate on research in the arts" (paper based on readings and presentations on research in the arts held in Ghent, Amsterdam, Berlin and Gothenburg, fall 2005)

Critical Art Ensemble. *The Molecular Invasion*. New York: Autonomedia, 2002.  
<http://www.critical-art.net/books/molecular/>

---. *Marching Plague*. New York: Autonomedia, 2006.  
<http://www.critical-art.net/books/mp/>

---. "Bioparanoia and the Culture of Control" en *Tactical Biopolitics. Art, Activism and Technoscience*. ed Beatriz da Costa, Kavita Philip. Massachusetts: MIT Press, 2008.

---. *Disturbances*. London: Four Corner Books, 2012.

Da Costa, Beatriz; Kavita, Philip (de). *Tactical Biopolitics. Art, Activism and Technoscience*. Cambridge: MIT PRESS, 2010.

Gilles Deleuze, *Postscript on the Societies of Control*, October, Vol. 59, (Winter, 1992), pp. 3-7, [The MIT Press](http://www.mitpress.com). Article URL: <http://www.jstor.org/stable/778828>

Deleuze, Gilles; Guattari, Felix. *A Thousand Plateaus*, London: Continuum, 2003.

Heidegger, Martin. *Ser y Tiempo* (1927). Traducción de Jorge Eduardo Rivera C. Madrid: Editorial Trotta, 2003.

Hayles, Katherine. How we became Posthuman. Virtual bodies in Cybernetics, Literature and Informatics. Chicago: University of Chicago Press, 1999.

Kac, Eduardo (ed) Signs of Life. Bio Art and beyond. Cambridge: MIT Press, 2007.

Latour, Bruno y Serres, Michel. Conversations on Science, Culture and Time. Ann Arbor: University of Michigan Press, 1995.

Mitchell, Robert. Bioart and the vitality of the media. Seattle: University of Washington Press, 2010.

Smith, Marquard y Morra, Joana ed. The Prosthetic impulse. From a posthuman present to a biocultural future. Cambridge: MIT Press, 2006.

Stelarc y Smith, Marquard “Animating bodies, mobilizing technologies: Stelarc in conversation” in Stelarc, The Monograph, ed. Marquard Smith. Massachusetts: MIT Press, 2007.

Eugene Tacker, “Criptobiologies”, Artnodes. E-Journal on Art, Science and Technologie 6 (2006).

Zylinska, Joana. Bioethics in the Age of New Media. Cambridge: MIT Press, 2009.