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### The *Living* in Art since the 1960s: A Deep Link to Politics

**Abstract:** The use of the *living* as a medium in art increased after the Second World War. During the 1960s, some artworks were related to an ecological consciousness, or to the beginnings of computer science, which was associated with biology at this early stage. Both of these two modes of using the living are now finally together, in what is called biotechnological art. Defining the living is a deeply political issue, as we may see, for instance, in the problematic of animal rights, defended by the environmentalist movement. When does life begin? What is specific to human life? What is the value of life? As Hans Cova has written, “instead of changing the world *at all costs*, it would be better to ensure that it doesn't disappear right before our (in)credulous eyes”<sup>1</sup>. The huge changes effected by the evolution of knowledge in biotechnology and science confirm the human temptation to control life. This type of questions haunt works using living elements. In such works, artists use a problematic type of material and have to deal with its political aspects. Through works by Fujiko Nakaya, Piotr Kowalski, Tissue Culture and Art, and Art Orienté objet, I examine the work of artists engaged in this political discussion on our future life (of plants, animals, and humans).

**Keywords:** bioart, nature, technology, human beings, life control, utopia, transgression

Observing artworks that have used the living as a medium since the 1960s, it seems obvious that the tension between culture and nature has become central, more than ever before. And the issue is no more the opposition between the two. On the contrary, the two concepts have become closer. With the development of technology in society today, it's very difficult to maintain the distinction between nature and culture that, up to now, structured the society. Art historian Paul Ardenne has defined political as follows: “Political art always defines itself as a sort

<sup>1</sup> “Au lieu de changer le monde à tout prix, mieux vaudrait s'assurer qu'il ne disparaisse pas sous nos yeux (in) crédules.” Hans Cova, “L'engagement (artistique) est-il nécessairement critique ?”, in: Eric Van Essche (ed.), *Les formes contemporaines de l'art engagé*, Brussels, La Lettre Volée, 2007, 58.

of expression providing additional support to ordinary activism, enriching it and increasing its efficacy: a continuation of politics (if necessary, beyond civility) by tangible ways compared to common political action, but considered legitimate in that case". We will see that some of the selected works, from the 1960s to the 1990s, are linked to politics by asking questions about the human desire to control life. The works of the four artists and artist collectives listed above, Piotr Kowalski, Fujiko Nakaya, Art Orienté objet (AOo), and Tissue Culture & Art (TC&A), are at the core of this way of thinking. None of them are activists, but their approaches underline the social import of the relations between humans, technology, and nature since the Second World War.

These artists belong to two different generations. Piotr Kowalski (1927–2004) and Fujiko Nakaya (born 1933) began their careers around 1960, whereas Art Orienté objet and TC&A started in the 1990s. The time gap between them allows one to notice the evolution of the material used in their works, but the discourse on the works and the questions they raise reveal similar issues. I will focus on the human desire to control the living, an intention shown by these works, using living material. The political goal of life control seems clear: affirming anthropocentrism. The aim of these artists separated by decades seems to transcend this anthropocentrism by proposing a new vision, a critical vision, of the relationship between different forms of life. I will focus on the artistic forms that these artists' respective approaches take and examine their works through three concepts: the evolution of knowledge, utopia, and transgression. To think differently the relationship between humans and their environment takes different ways; some are more related to the evolution of scientific knowledge, while others relate more to the idea of utopia or to transgressive actions.

## Artworks and the Evolution of Knowledge

During the 1960s, the emergence of important scientific theories was a source of inspiration for artists. They sought to react to scientific discoveries and the social changes those discoveries implied. Artists then offered critical views, positive as well as negative, on what they felt was going to be a huge and strategic issue in future. At that time, the will to make art and science come closer together, to preserve the exchange between these two fields of knowledge, was shared by a number of scientists and artists. One example of this shared interest is the Experiment in Art and Technology association. Responding to the artistic demand to stay connected to scientific progress, a suitable structure was built by a group of artists and engineers called Experiment in Art and Technology (EAT). Two engineers, Billy Klüver and Fred Waldhauer, and two artists, Robert Rauschenberg and Robert Whitman founded this interdisciplinary collective in 1966.

Fujiko Nakaya, a Japanese artist, was in contact with them during the 1970s. In collaboration with them, she created environmental works consisting of fog sculptures. Her interest in technology was related to her desire to reveal the invisible part of nature and create a link between humans and nature, as she said in an interview with Billy Klüver: "I want to provide a situation where people can physically relate to nature. For me, nature is not an object of beauty, but the beauty is in the relationship a person develops with nature. [...] When a person experiences and interacts with the fog or clouds I create, this becomes part of her/his personal system of relating to nature".<sup>2</sup> Technology enables her to create ideal conditions for obtaining

<sup>2</sup> Fujiko Nakaya, *Fog*, Paris, Anarchiv, 2012, 113.

fog, with no chemicals. In her work, technology is a tool for controlling the living medium but her goal is to conserve nature.

Thus, her first fog sculpture project, *Pepsi Pavilion*, at Expo '70 in Osaka, was produced in collaboration with a number of scientists and engineers.<sup>3</sup> The pavilion was a dome 164 feet wide and 75 feet tall. More than 2,000 nozzles were installed on the dome, which produced micro-sized droplets of fog and released them into the air in a very large quantity. The physical conditions at the site were part of the work, which formed a live and constantly changing environment. The nozzles were constructed by cloud physicist Thomas Mee and “are now extensively used in agricultural and industrial applications worldwide”.<sup>4</sup> Here, the artist’s intention took advantage of the evolution of science and, unpredictably, participated in creating knowledge. Still, in this work, technology was engaged in a non-profit way, to create a closer relation with nature. The human relation to nature is essential and the technology disappears: “I want my work to be identified with the natural process of life as closely as possible. If the atmospheric conditions for fog to form were there when we needed them, when people were there, maybe I wouldn’t use the technology”.<sup>5</sup> So, Fujiko Nakaya wanted to control life to create an “abstraction”,<sup>6</sup> however, she didn’t want the technology to be visible. Paradoxically, technology was thereby used to produce something close to real life, but still under human control.

The post-war period was extremely rich in terms of scientific progress, mostly in the United States (for well-known reasons). The progressive emergence of cybernetic theory, the computer, and all sorts of new technologies, confirms the increasingly prominent place that machines and technology have occupied in human daily life since then. Its capacity for development attracted much interest from artists, as noticed by Frank Popper: “What distinguishes [technological artists] from previous generations of artists who also used technological processes (and in some cases, what distinguishes them from previous works) is their awareness of the huge socio-cultural change produced by technological progress”.<sup>7</sup> At this time, artists began using the abundant technological resources, proposing new artistic forms, as Fujiko Nakaya did with her fog sculpture. However, the purpose of their art seems not to have been to praise the new scientific tools but rather to question the evolution implied in the human relation to nature.

## Artworks as Utopia

While the evolution of knowledge could partly explain the scientific renewal in the art of the mid-20<sup>th</sup> century, the utopia of a new world and a new man following two world wars was also important. There are many ways to show that this political utopia, where science, particularly the Internet project, appeared as a sort of guarantee against fascism and dictatorship. In this regard, Piotr Kowalski’s work reveals a preoccupation with the tension between nature and culture. Although this might seem less political in its contemporary context, compared to the

<sup>3</sup> Ibid, 100.

<sup>4</sup> Ibid, 102.

<sup>5</sup> Ibid, 114.

<sup>6</sup> Ibidem.

<sup>7</sup> “Ce qui distinguaient [les artistes de l’art technologique] des précédentes générations d’artistes qui utilisaient également des procédés technologiques (et dans certains cas, ce qui les sépare de leurs propres travaux antérieurs), c’est la prise de conscience de l’immense changement socioculturel lié au progrès technologique.” Frank Popper, *L’art à l’âge électronique*, Paris, Hazan, 1993, 181.

civil rights struggle and the protests against the war in Vietnam, ecological questions were very much part of reflecting on the new man and a new world. Experiences such as hippy communities were likewise important.<sup>8</sup> In the artistic sphere, Joseph Beuys opened an entire field of ecological and political reflections, such as his “Energy Plan for the Western Man.”<sup>9</sup> His work participated in raising an artistic awareness of ecology. We’ll see that TC&A inherited some of this awareness, even if only indirectly, but focusing on the definition of life.

Piotr Kowalski always had a strong interest in technology and its interaction with the environment. In 1967, he created a work titled *Dressage d’un cône*. It was a sculpture comprising five cones: five plates planted with grass, with a yellow triangle painted behind each of them. Grass was planted on a constantly rotating plate, presented side-by-side at different states of growth. Thus, it grew taking shape of a cone, not vertically: “the effect of the centrifugal force added to the gravitational force produced a composed force which was increasingly tilted as you got further away from the middle of the plate. The artwork consisted of different plates in different states of evolution, thus facing the viewer with a form that was literally taking shape before him.”<sup>10</sup> The grass was shown on a pedestal, deliberately raised and cut from its natural environment, and the yellow triangles behind it underscored the tension between nature and culture. These triangles, in the background, suggested what shape should be read. In that sense, science shapes nature: form was here designed by a system that created it without the artist’s intervention. By giving a geometrical shape to the grass, the artist made visible the restraints that humans impose on nature. Using simple tool, Kowalski’s work shows the plasticity of the living and the temptation of humans to shape nature with their desires and utopias.

The TC&A collective reveals the ability of biotechnologies to shape human desires. They are more interested in human intervention on the definition of the living, using biotechnological tools. TC&A use tissue-growing technologies as a medium for questioning the status of the living thereby created. Founded in 1996, the Tissue Culture & Art Project presently comprises Oron Catts and Ionat Zurr. Since 2000, they have pursued their work at SymbioticA Laboratory at the University of Western Australia. Tissue culture is at the core of their project *The Semi-Living Worry Dolls*. These semi-living sculptures are created to explore questions that the use of living cells raises about the hybrid status of the object/being.

*The Semi-Living Worry Dolls*, first displayed at the 2000 Ars Electronica Festival in Linz (Austria), comprise seven semi-living worry dolls, inspired by the Guatemalan legend of the worry dolls. In the legend, children tell the dolls their worries at bedtime and overnight the dolls solve them. It’s difficult to control the dolls’ growth, so the result is a tiny lump of flesh, hardly resembling a doll.<sup>11</sup> Yet, the dolls’ unattractive aspect creates an ambiguous feeling for the audience, invited to confide in a non-defined object/being. At the beginning of the exhibition, the dolls are made of synthetic materials, which are gradually replaced by living cells.

<sup>8</sup> “At the beginning of the 1970s, around 750,000 Americans left to live in communities, exiled in Californian forests and the deserts of New Mexico.” Dominique Cardon, “Préface. Les origines hippies de la révolution digitale”, in: Fred Turner, *Aux sources de l’utopie numériques. De la contre-culture à la cyberculture : Stewart Brand, un homme d’influence*, Caen, C&F éditions, 2012, 17.

<sup>9</sup> “Energy Plan for the Western Man” was a series of conferences organized in 1973 in Chicago, New York, and Minneapolis by Joseph Beuys.

<sup>10</sup> “L’effet de la force centrifuge en s’ajoutant à celui de la force gravitationnelle donnent une force composée de plus en plus inclinée à mesure que l’on s’éloigne du centre du plateau. La pièce consistant dans la présentation de plusieurs plateaux à des stades d’évolution différents, le regardeur se trouve confronté à une forme qui littéralement prend forme sous ses yeux.” Jean-Christophe Bailly, *Piotr Kowalski*, Paris, Editions Hazan, 1988, 54.

<sup>11</sup> The dolls are approximately 10 by 7 by 5 mm in size.

At the end of the show, these entities are killed by the audience, who are invited to touch the semi-living and thereby hasten their death. This final public action raises the question of the responsibility of humans to their own creatures.

TC&A's discourse gestures toward the idea of the semi-living. Their desire to create a utopian body is underlined by this statement: "Shying away from references to the human body was an attempt to establish a reference to a new kind of body – that of the complex organism – a meta-body – THE BODY. In the context of our work once a fragment is taken from A BODY it becomes a part of THE BODY. The living fragment becomes part of a higher order that engulf all living tissues regardless of their current site."<sup>12</sup> TC&A thus argue that every living being participates in a higher order. All living tissues constitute this utopian body without a hierarchy between them. They explain this in their manifesto: "We are investigating our relationships with the different gradients of life through the construction/growth of a new class of object/being – that of the Semi-Living".<sup>13</sup> This utopian collective body evokes the "body without organs" developed by Deleuze and Guattari. They propose a body free from its complete organs, to prefer organs in the making. In TC&A's work, the use of tissue cultures suggests a similar move, enabling humans to decide about the future shape of their life.

Kowalski's work and TC&A's semi-living objects/beings show one of the most important societal concerns following the scientific discoveries of the 20<sup>th</sup> century: the utopia that science makes possible. Human control of nature clearly appears and raises the question of limits. As the French philosopher Luc Ferry wrote in *Homo aestheticus*, humans must solve the question of imposing limits on the power of humans over other human.<sup>14</sup> So, artists' appropriation of scientific knowledge raises the question of limits. The post-war period was full of utopias, but the new world, connected to nature and dreamed up in the 1960s, in the 1990s clearly turned into a new world artificially controlled by humans. As these artists show, the utopias brought about by scientific evolution are also a source of social anxiety.

## Artworks as transgression

Some contemporary artists have engaged in transgressive actions inspired by biotechnologies that allow creating or modifying living elements or beings. Since 2006, the French collective AOO, comprising Marion Laval-Jeantet and Benoît Mangin, has collaborated with various laboratories in the realization of their experimental performance titled *May the Horse Live in Me* (2006–2011). The purpose was to transfuse some horse blood into Marion Laval-Jeantet. She had been made sensitive to equine immunoglobulin in order to make her blood compatible with that of a horse. At the time, no one knew what the real impact of this transfusion might be on a human being. The performance in which Marion Laval-Jeantet was injected with horse blood took place at the Kapelica Gallery in Slovenia.<sup>15</sup> The performance sought to integrate an element of animal origins into a human in order to start a dialogue, a real

<sup>12</sup> Oron Catts and Ionat Zurr, "The Art of the Semi-Living and Partial Life: Extra Ear – ¼ Scale", in: *Art in the Biotech Era*, exhibition catalogue, Adelaide, Adelaide International Arts Festival, 2003, n.p. Available on the artists' website: TC&A, <http://www.tca.uwa.edu.au/publication/TheArtoftheSemi-LivingandPartialLife.pdf>, acc. March 3, 2015.

<sup>13</sup> "Short Manifesto", TC&A, <http://www.tca.uwa.edu.au/atGlance/manifesto.html>, acc. September 6, 2014.

<sup>14</sup> Luc Ferry, *Homo aestheticus. L'invention du goût à l'âge démocratique*, Paris, Livre de Poche, 1991, 16.

<sup>15</sup> Performance held on Tuesday, February 22, 2011, at Kapelica Gallery, Ljubljana, Slovenia.

transgression of natural borders between species. Talking about the project, Marion Laval-Jeantet said: “Art exists in order to extend the limits of consciousness and consequently to understand the Other. An animal is likewise an other. Our work rests on this relation with the animal as an other.”<sup>16</sup>

The artists question the possibility of feeling from the inside of an animal consciousness. Here, the borders between animal and human are temporarily suspended to allow blood communication. The territories between species are gradually redesigned by scientific discoveries. As Marion Laval-Jeantet explains, all beings have a potential that biotechnologies allow us to explore, thus temporising human enhancement: “We are faced now with an interiorised definition of the posthuman; it’s no more a question of enhancing the body with technological upgrades, or an extra-body, but rather, of bodily functions that will evolve by means of internal physiological modification.”<sup>17</sup> After several months of medication, Marion Laval-Jeantet finally receives horse blood through a needle. This needle is the most noticeable element in this human/animal hybridization. The process is too difficult to show, so the needle becomes both a symbol of the transfusion and of transgressing the laws of nature.

Since the 1960s, faced with the evolution of scientific knowledge and the increasingly important position occupied by technology in human daily life, art has proposed another vision of the relationship between humans and life. The technological tools are not necessarily visible, suggesting that the value of scientific processes is in their questioning of their power. The resulting forms are increasingly transgressive and suggestive at the same time. That’s why, even if these artists didn’t present themselves as political, they have an ontological link to politics. They participate in a new vision of future life, of its definition, by questioning the instrumentalization of the living that new scientific tools allow. These works put science before ethics and its practice, which may explain why some scientists agree to collaborate with the artists. In the same way, when exhibited, these works address the public by focusing on their respective personal engagements with the actual process of human control on nature. Finally, they reflect the fear coming from mimetism between humanity and nature. As a matter of fact, nature mirrors the fragility of humanity. Humanity’s desire to control nature betrays its desire to reach immortality. This specific ability of humans to transcend their limits seems endless.

<sup>16</sup> “La question de l’animalité nous travaille. L’art existe pour élargir les limites de la conscience et par conséquent pour chercher à comprendre l’Autre. L’animal, c’est aussi un autre. L’œuvre sur laquelle nous travaillons en ce moment est au cœur de ce rapport à l’animal en tant qu’autre. Cette œuvre qui consistera à m’injecter du sang de cheval est en cours de finalisation.” Cyril Thomas, [interview], “Art Orienté Objet : J’ai ressenti dans mon corps la nature très vive du cheval”, *Poptronics*, <http://www.poptronics.fr/Art-Orienté-Objet-J-ai-ressenti>, acc. May 7, 2015.

<sup>17</sup> Marion Laval-Jeantet, “Self-animalité”, [*plastik*], No. 2, “In vivo, L’artiste en l’œuvre ?”, <http://art-science.univ-paris1.fr/plastik/document.php?id=485>, acc. May 7, 2011.