

## THE PARADOX OF EVOLUTION : YES, I AM AN OBSOLETE HUMAN BEING

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Technoscience is increasingly present in our daily lives, establishing new social rules and patterns of communication and interaction in a physical space which implements electronic devices and telematic systems in its design. In the race for scientific progress, the goal is making man a God, like Nietzsche's Superman, without determining how the new human morphology will be fitted. This paradigm is treated by artists who warn of the possible fate of humanity while the technoscientific, as if he/she was Prometheus, dares to defy the laws of nature. Art exposes the actual course of science. Some artists complain that the false promises of scientific discourse, which is dominated by male vision, fails to be aware of the impossibility that technology is going to improve the moral dimension of human being. Some artists say the science sermon does not deal with humanity and the building of our future is merely phallogocentric; an excessive anthropocentric vision.

### POST-CORPORAL VISIONS IN THE XIX CENTURY

In *The Craftsman*, Richard Sennett explores the literary figure of Frankenstein drawing on the experimental studies of Luigi Galvani, who utilized electric currents on frogs and various other animals. <sup>i</sup> These works demonstrated the existence of an "electric animal flow" that gave muscles movement. This was a groundbreaking discovery at the time given that the possibilities announced over corporal issues such as energy, life, and death were unusual. Positivism toward a scientific future was a clear symptom of Romanticism, and with said discoveries scientists were considered prophets. Science signaled humanity's progress, this being the largest common feature of the romantic understanding of nature and science through the transgression of the rules hitherto used. <sup>ii</sup>

Years later, in 1803, Giovanni Aldini, Galvani's nephew, published the results of similar experiments using the cadavers of criminals. At the end of the XVIII Century, Erasmus Darwin, grandfather of the theorist of modern evolution, dealt with similar questions in "The Temple of Nature." <sup>iii</sup>

Mary Shelley wrote *Frankenstein* in 1816 at 19 years old. The text was the product of a simple game, a pastime that led her to develop a horror story. The Creature, a being larger and more powerful than any human, was created thanks to doctor Victor Frankenstein. Curiously, this inordinate being longed to be loved by the people, but his appearance terrorized the town. Once rejected, the anguished Creature kills the doctor's younger brother, his best friend, and his woman.

The author's husband, Percy Shelley, became interested in experiments related to electricity and bodies during his university years. In her literary work, Mary Shelley reflects on Galvani's investigations via the figure of Doctor Frankenstein, which lent the story some credibility. There is no doubt that fictional theories about the relationship between life and death that defy natural laws would make readers shudder. In fact, this story's relevance persists in modern science fiction literature as being a precursor of this style.<sup>iv</sup>

Scientific discoveries of the 19th Century, when the understanding of Nature reigned, constitute in Frankenstein the idea of man-machine and man-monster: the man-machine is formed through the union (or the organic assemblage) of diverse bodies which give way to a new being; instead, the monster arises as a result of this corporal collage, an anthropomorphic being that despite being created via a search for power and grandiosity equal to a divine search, results in a replicant lacking acceptance. Artificial life is represented through the human body as canon, an appearance that will supposedly aid in social inclusion, but ends with rejection. A quasi-divine being, similar to a golem. The first 'Adam' of science; an animated created born of inanimate objects.

Mary Shelley's visionary imagination shows the hidden side of scientific progress, contrary to reality where it was greeted with fervor, and where the author reflects about the possible Dantesque scientific future. The work, therefore, poses the devastating consequences of not taking morality into account in scientific work, a question that remains relevant today.<sup>v</sup>

Currently, this divine creation is manifested through androids and cloning. The clone, a modern Creature, was born when scientist Ian Wilmut extracted a cell from an adult female sheep, named Dolly, in 1997. Later, in 2004, the Scottish scientist requested permission to produce an essay on the human therapeutic effects of cloning.<sup>vi</sup>

In 2006, Britain's Department of Science and Innovation published "The Robot's Rights." Henrik Christensen, director of the Center for Robotics and Intelligent Machines at the Georgia Institute of Technology notes, "If we make conscious robots they would want to have rights and they probably should".<sup>vii</sup>

Against this background, the exposure of scientific duality (the politically ethical or not) is found throughout contemporary literature, which is replete with tomes regarding cybernetic organisms (cyborgs) and biotechnology. Donna Haraway's *Cyborg Manifesto* not only contains a valuable thesis about the relationship between technology and feminism, it relates to technophobia and the masculine domain over the scientific world. Women are segregated from the technological sphere by the masculine figure- it contains, moreover, a critical message about scientific institutions: "Manipulations, concepts, organizing principles – the entire range of tools of the science – must be seen to be penetrated by the principle of domination."<sup>viii</sup> Rebellious female voices have been relevant especially in the information age and the "explosion" of technoscience during the twentieth century, as we find in the artist-performer Praba Pilar's work. What follows is a discussion of one of Pilar's most relevant performances.

## FEMINIST TECHNO-ACTIVISM: THE CHURCH OF NANO BIO INFO COGNO

Praba Pilar grew up in Colombia surrounded by electronic components, a consequence of her father's work in the computer industry.<sup>ix</sup> She later moved to New York City with her mother, which allowed her to form part of *Los Cybrids: La Raza Techno-Critica*.<sup>x</sup> During this period, her focus was performative and activist, questioning the control of the human environment via war and surveillance systems. Later, she felt her participation concluded, as she was interested in gender issues not dealt with in the group. Since then, she explores the role of women in the cyber-world and the relationship this has to information technologies. In recent years, Praba Pilar has been especially active in conversations related to techno-scientific innovations, particularly the convergence of nanotechnology, biotechnology, information technology and cognitive science- understood as the relationship subject-body and subject-environment seen from a neurophysiological point of view.<sup>xi</sup> Pilar uses the Nano Bio Info Cogno (NBIC) term, to talk about this relationship.

Before discussing the artist's work further, it is necessary to clarify that the goal of techno-science (contemporary science) is to transform the world, be it through natural, social, or artificial means.<sup>xii</sup> The origin of this union comes on the heels of the four main areas mentioned above, Nano, Bio, Info, Cogno, whose origin in the year 2000 was thanks to the convergence of nano and bio-technologies.<sup>xiii</sup> Praba Pilar argues that technology is strongly linked to the political, military, entrepreneurial, and even religious spheres. She demonstrates this through the creation of numerous performances such as The Church of Nano- Bio- Info- Cogno, which was created in 2006 and remains active.<sup>xiv</sup> The performance is presented as a catholic ceremony celebrating the arrival of the new millennium.<sup>xv</sup> Pilar represents the church's priestess (or guru), and irradiates excessive enthusiasm and positivism regarding



Cross design utilized in The Church of Nano Bio Info Cogno, Praba Pilar, 2006.

technoscientific prophecies, all through a liturgy designed to commune with new technologies.

The artist reflects on obsolete anthropological theories: cultural, social, and biological human relationships are transformed by the arrival of NBIC. Praba Pilar exposes the links (and tensions) between the human and the post-biological human; the cyborg, automaton, and robot; between the macroworld (globalized technology) and the nanobit, incarnation, and informatics.<sup>xvi</sup>

“As I began to look into the NBIC field more deeply, I read Eric Drexler, learned of the Foresight Institute and began to attend their conferences on the convergence, ultimately becoming a member. The sharing of technological advances at these conferences is rapturous: in descriptions of immortality promised by information uploads; in prophecies of the end of material want promised by nano manufacturing; in the promise of the end of illness brought about by nano medicine.”<sup>xvii</sup>

According to Claudia Giannetti, in the biotechnological and digital age the artist assumes the difficult task of constructing new conceptual tools out of materials.<sup>xviii</sup> In Praba Pilar’s case, posthumanism is the representation of a hybrid, electric, and biological morphology that gives way to artificiality. The Cartesian divide between mind and body leads to the ‘dematerialization of the body’ due to scientific and technological progress.<sup>xix</sup> As Vilem Flusser states, “the human mind is incapable of comprehending (much less taking advantage of) the progress it has triggered so lightly.”<sup>xx</sup> Likewise, Roy Ascott exposes the urgent need for a techno-ethic aesthetic as a possible solution to post-biological cultural questions, and for this the artist is vital.<sup>xxi</sup> Globalization not only means being connected, but also that our identities are in constant flux—something analyzed by numerous artists. Ascott goes even further to postulate that the artist will intervene in the construction of a new reality, in the creation of evolution, which he understands as the definition of the human being and its reconstruction. In contrast to Praba Pilar’s thought, he sees technology as a vehicle that brings us closer to nature, in what he calls cyberbotanics<sup>xxii</sup>, sees the possibility of totally eliminating the real world from the virtual, which is quickly disappearing: “Telematic space makes actors of us all. There can be no outside observer.”<sup>xxiii</sup> Ascott assures us that the artificial is already part of nature and that nature is to some degree artificial.

Roy Ascott’s futurist theories, are similar to the general thought of Romanticism: a better future thanks to Science (Technoscience in the 21st Century.) This is antagonistic to Praba Pilar’s artistic trajectory given that she exposes the danger inherent in believing that technology will solve the world’s economic, social, and political problems.<sup>xxiv</sup> Her work is a critique of the way technological discourses are developed.

In The Church of NBIC, the religious institution boasts of being able to perform miracles through the use of technology, thereby addressing these problems. This Church is not opposed to technology, but, through satire, articulates a mythic-religious speech, highlighting the lack of ethics in technological development dominated by Western governments, multinational corporations, military weapons industries, advanced robotics, and universities that promote their laboratories. Praba Pilar’s argument is to question whether the interests of these institutions include addressing the poverty, disease, and hunger related to technological progress. The NBIC Church encourages the implementation of new technologies throughout the world while showing their inconsistencies.

One of the decisive influences in this work was the argument put forward by historian and activist David Noble who says that technology is the product of the Christian impetus because it relies on the divine, which now means the opposite of human welfare since it is a threat despite the promise of immortality.<sup>xxv</sup>

Praba Pilar’s performance begins with praise for the Techno Holy Spirit: Google.<sup>xxvi</sup> Later, she invites parishioners to confess their sins and blasphemy against technology and science while offering penitence and absolution. After the technological sermon, the performance’s conclusion depends on the artist.<sup>xxvii</sup> Sometimes she simulates sexual intercourse with a rudimentary machine rented for the event. The phallic machine is attached to her pelvis. The artist remains standing throughout the performance, evoking a male position attached to a suction machine. Meanwhile, someone sings a live technological version of Amazing Grace. Other performances have ended with Pilar and the audience singing together.

## CONCLUSION

Praba Pilar comments on the technological domain:

“I am deeply interested in appropriate and sustainable technologies and in pointing out the interconnections between technology, the military, and the socio economic and environmental spheres. (...) Rather than reinventing a new world where all of humanity will benefit, as is claimed, only a narrow band of the population that will be ‘uplifted’ in beneficial ways.”<sup>xxix</sup>



Praba Pilar in a performance *The Church of Nano Bio Info Cogno* (left) and installation of the same (right) at the Center for the Arts at Yerba Buena, San Francisco, California. 2006-2008. Photography by Myles Boisen.

The Prometheus myth repeats itself. From Frankenstein or *Modern Prometheus* by Mary Shelley to now, when technoscience governs global hegemonic discourses, the human being works with (excessive) devotion in the search for progress in the hands of NBIC. If in Romanticism the scientist sought truth, the origin of the human race, and the Universe; today those efforts are directed toward the modification of nature in favor of humanity.<sup>xxx</sup> Many Gods scattered across laboratories promise eternal life, a perfect world; benefactors of the human being like Prometheus. Perhaps the Hope contained in Pandora’s box is now represented by artists who construct their works in response (and resistance) to a society under panoptic trans-human control.

## ENDNOTES

<sup>i</sup> Luigi Galvani's experiments were based on the electrical nature of nerve impulses made in 1774. See Richard Sennett, *El Artesano*, Barcelona, Anagrama, 2009, p.253.

<sup>ii</sup> J. Montesinos y J.Ordóñez, *Ciencia y Romanticismo*, S. Toledo, Canarias, 2002.

<sup>iii</sup> Erasmus Darwin declared that various life forms, including humans, began evolving in water and later moved to dry land. *The Temple of Nature* is a relevant text, the product of grand literary imagination that combines poetry and science. It contains extensive prose notes on various topics such as biological evolution and Egyptian hieroglyphics. See Erasmus Darwin, *The Temple of Nature*; or, *The Origin of Society: A Poem With Philosophical Notes*. J. Johnson, London, 1803.

<sup>iv</sup> See Isaac Asimov, *Lo mejor de la ciencia ficción del siglo XIX (I)*, Barcelona, Martínez Roca, 1983, p.5.

<sup>v</sup> "Mary Shelley's goal, therefore, is to consider the consequences of the lack of humanity in scientific progress which coincides... with the first moments of the industrial revolution." in Susana Gala Pellicer, "'Perder un tornillo': una imagen simbólica en el contexto de la Ilustración", *Culturas Populares, Revista Electrónica* 8 (Jan-Jun 2009), p. 21. In <http://www.culturaspopulares.org/textos8/articulos/gala.pdf>, accessed on 31 March 2011.

<sup>vi</sup> In a 2001 interview Wilmut explains how imprecise cloning techniques give rise to "defective" clones, i.e. with serious physical abnormalities.

<sup>vii</sup> Salamander Davoudi, "UK report says robots will have rights", *Financial Times*, London. December 19, 2006, 22:01. In <http://www.ft.com/cms/s/2/5ae9b434-8f8e-11db-9ba3-0000779e2340.html>, accessed on March 29, 2011. Recall that in 1950 Isaac Asimov published *I Robot* which included the three laws of robotics (previously published in 1942 by the author in the story "Runaround").

<sup>viii</sup> Donna Haraway, "Animal Sociology and a Natural Economy of the Body Politic, Part I: A Political Physiology of Dominance", *Signs*, Vol. 4, No. 1, Women, Science, and Society (Autumn, 1978), p. 35.

<sup>ix</sup> Praba Pilar, *Cyber.Labia: Gendered Thoughts & Conversations On Cyberspace*, California, Tela Press, 2005. In <http://www.prabapilar.com/>, accessed on 30 March 2011.

<sup>x</sup> Activist group composed of artists Praba Pilar, John Jota Leañós y René García. 1999-2003.

<sup>xi</sup> "This new perspective on cognitive theory has deeply affected the belief postulated by the philosophy that the subject, or his/her system of perception, is in direct contact with the world." ["Esta nueva perspectiva de la teoría cognitiva toca profundamente a la creencia postulada por la filosofía de que el sujeto, o su sistema de percepción, está en contacto directo con el mundo."] In Claudia Giannetti, "Metaformance – El Sujeto-Proyecto", en: *Luces, cámara, acción (...) ¡Corten! Videoacción: el cuerpo y sus fronteras*. Valencia, IVAM Centre Julio Gonzalez, 1997. In [www.artmetamedia.net/pdf/Giannetti\\_Metaformance.pdf](http://www.artmetamedia.net/pdf/Giannetti_Metaformance.pdf), accessed on 31 March 2011. Recall that neurophysiology is born from Luigi Galvani's studies of the nervous system.

<sup>xii</sup> "Technoscience emerged from WW II and in its initial phases was funded by major research programs funded by the U.S. government, conforming to *Big Science*." In Javier Echeverría, "Interdisciplinariedad y convergencia tecnocientífica nano-bio-info-cogno", *Sociologías*, Porto Alegre, year 11, no. 22, July/Dec. 2009, pp. 22-53. In <http://www.scielo.br/pdf/soc/n22/n22a03.pdf>, accessed on 31 March 2011.

<sup>xiii</sup> "When Lucent & Bell Laboratories and Oxford University created the first DNA engine using the NTS (nanotechnosciences) in 2000, a new possibility of convergence emerged (...) With the previous steps plus the approval of the National Nanotechnology Initiative, conditions were ripe for the National Science Foundation (NSF) to design and make public a macro research proposal named Converging Technologies for Improving Human Performance (CTIHP), and commonly known as NBIC Convergence in 2001." In Javier Echeverría, "Interdisciplinariedad y convergencia tecnocientífica nano-bio-info-cogno", *Sociologías*, Porto Alegre, year 11, no. 22, July/Dec. 2009, pp. 22-53. In <http://www.scielo.br/pdf/soc/n22/n22a03.pdf>, accessed on 31 March 2011.

<sup>xiv</sup> Next shows during 2011: Multispecies Salon, City University of New York Graduate Center and Cosmopolitics Conference, City University of New York Graduate Center, New York. For more information, visit the artist's website <http://www.prabapilar.com/>

<sup>xv</sup> The artist calls this Neotheric Millenium: a new era complete with many changes based on technology. However, this new millennium is named "technoapocalypse" in the documentary trilogy about transhumanism that explores the ethics and metaphysics of technology, *TechnoCalyps*. Directed by Frank Theys and written by philosopher Michel Bauwens in 2006.

<sup>xvi</sup> Ray Kurzweil, added that in the year 2045 humans will live eternally. See Ray Kurzweil, "When man a machine merge.", *Rolling Stone*, February 19, 2009, pp.57-61.

<sup>xvii</sup> Praba Pilar "Praise the Lord & Pass the Critical Theory: An Interview with Praba Pilar of the Church of Nano Bio Info Cogno", *H+ Magazine*, March 15, 2011. In <http://hplumagazine.com/2011/03/15/praise-the-lord-pass-the-critical-theory-an-interview-with-praba-pilar-of-the-church-of-nano-bio-info-cogno>, accessed on 31 March 2011.

<sup>xviii</sup> See Claudia Giannetti, "Metaformance – El Sujeto-Proyecto", en: *Luces, cámara, acción (...) ¡Corten! Videoacción: el cuerpo y sus fronteras*. Valencia, IVAM Centre Julio Gonzalez, 1997. En [www.artmetamedia.net/pdf/Giannetti\\_Metaformance.pdf](http://www.artmetamedia.net/pdf/Giannetti_Metaformance.pdf), accessed on 31 de Marzo de 2011.

<sup>xix</sup> Ibid.

<sup>xx</sup> Flusser, Vilém, "Sobre arte, aparatos y funcionarios", *Arte y Técnica, Artefacto/6 – 2007*, in [http://www.revista-artefacto.com.ar/pdf\\_notas/162.pdf](http://www.revista-artefacto.com.ar/pdf_notas/162.pdf), accessed on 31 March 2011.

<sup>xxi</sup> Ascott understands technoetics as the transformation of consciousness because of technology. See Roy Ascott, "Moistmedia, technoetics and the three VRS", *Acts/ Proceedings ISEA2000 – 07/12/2000 – Auditorium*.

In [www.isea-webarchive.org/mmbase/attachments/36393/01\\_ascott.pdf](http://www.isea-webarchive.org/mmbase/attachments/36393/01_ascott.pdf), accessed on 04 April 2011.

<sup>xxii</sup> According to Ascott, cyberbotanics "will cover a wide spectrum of activity and investigation into artificial life forms within the cyber and nano ecologies, on one hand, and into the technoetic dimensions of consciousness and cognition on the other." Ibid.

<sup>xxiii</sup> Ibid.

<sup>xxiv</sup> Interview with Praba Pilar at the event "Bay Area Now 5" del Center for the Arts at Yerba Buena, San Francisco California, 2008. See <http://www.youtube.com/watch?v=ZofD0xOBfzU&feature=related>, accessed on 04 April 2011.

<sup>xxv</sup> Referring to nuclear arms, space travel, artificial intelligence and genetic engineering.

<sup>xxvi</sup> Other times, Twitter.

<sup>xxvii</sup> A fragment of this sermon states: "Oh my brethren, I warn you, we are coming upon the great Nano Bio Info Cogno rupture of the year 2012. It is the Zero Point of the Singularity. We will enter the multidimensional supra human mind system within time wave zero. We will reach the zenith of mutational super intelligence and surpass the technocalypse. (...) Praise be to Ray Kurzweil the father of spiritual machines!!"

<sup>xxviii</sup> Christian hymn.

<sup>xxix</sup> Interview with Praba Pilar at the event "Bay Area Now 5" del Center for the Arts at Yerba Buena, San Francisco California, 2008. In <http://hplumagazine.com/2011/03/15/praise-the-lord-pass-the-critical-theory-an-interview-with-praba-pilar-of-the-church-of-nano-bio-info-cogno>, accessed on 31 March 2011.

<sup>xxx</sup> "Nietzsche posits for the future the "struggle between small farmers and large farmers of man- one could also say- between humanists and superhumanists, friends of man, and friends of the superman." In Adolfo Vásquez Rocca, "Sloterdijk, Agamben y Nietzsche: Biopolítica, Posthumanismo y Biopoder", *Nómadas. Revista Crítica de Ciencias Sociales y Jurídicas* 1 23 (2009.3). In <http://www.ucm.es/info/nomadas/23/avrocca.pdf>, accessed on 04 April 2011.