

# Brazilian Pioneers in Art and Technology: Waldemar Cordeiro, Abraham Palatnik and Otávio Donasci

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### Abstract

The pioneering ideas and artworks of three major Brazilian artists – Waldemar Cordeiro, Abraham Palatnik and Otávio Donasci - are discussed in this paper. Waldemar Cordeiro started working with computers in the late 60s and produced some of the most important artworks of the initial phase of computer art. Although his career was interrupted by his premature death in 1973, Cordeiro left an incredibly vast visual *oeuvre*, and a great number of reviews and theoretical articles – including “Arteônica”, a *manifesto* on Electronic Art. Over the last 65 years Palatnik has explored the fusion of art, science and technology in creative, dynamic and kinetic ways. Now in his late 80s, Palatnik is still actively working on the conception of new art forms with different media. Otávio Donasci has artistically explored the combination of human bodies and electronic devices since the 1980s. His pioneering works explored the psychological dimensions of interpersonal relationships, encompassing a great variety of media to create innovative theatrical performances and interactive installations. In conclusion, we argue that these Brazilian pioneers brought extremely important contributions to the field of Electronic Art, and deserve greater international exposure.

### Keywords

Electronic Art, Pioneers, Brazilian Art, Digital Media.

### Introduction

In a paper we presented at the ISEA 1993 conference - “*Qualitative, dialectical, and experiential domains of Electronic Art*” - we argued that artistic, scientific and technological areas of knowledge should merge into one single process of cognition, since they are complementary parts of the holistic human experience. “Electronic artists are gradually discovering combinations of the expressive potential of human natural languages - which extend over aesthetic, metaphoric, artistic, affective and moral domains - and the objective, quantitative and procedural characteristics of computer technology.” (Spitz, 1993).

By that time – over 20 years ago – electronic

artists around the world were already fully exploring, criticizing, interfering in and expanding the creative potential of the fusion of art, science and computers. In fact, they were giving con- inuation to a movement which had been initiated a few decades earlier by some pioneering artists, whose theories and works - developed during the very embryonic phase of our digital era - inspired us all.

In the Brazilian scenario, pioneering artists such as Waldemar Cordeiro and Abraham Palatnik started to explore - as early as in the 60s - the unlimited number of possible combinations of art, science and computer technologies. In the early 80s, Otávio Donasci started to create new expressive languages by combining human actors with digital media, giving birth to his amazing “*videocreations*”.

Although each one of these professionals has contributed to the artistic field in a different way, their pioneering ideas and artworks – which will be discussed in the next sections of this paper – all pointed to the intersection of art, science and technology, and paved the way for the development of Electronic Art, in Brazil and abroad.

### Waldemar Cordeiro: Rupture and Arteônica

In a time when Brazil was barely entering the age of electronics, Waldemar Cordeiro was already creating art with computer technologies. He worked systematically with “computer-aided art” from 1968-1973, in São Paulo, and is considered to be the precursor in the use of computer in the arts in Brazil (Cordeiro, 2014a).

Cordeiro was born in Rome in 1925, but was registered as a Brazilian citizen. In 1946 he moved from Rome to São Paulo, and settled down. The effervescence of his ideas led him to work in various different fronts – as a journalist, painter, illustrator, artist, landscape designer, urban planner, art critic and theoretician (Anagnost, 2010). “Cordeiro’s *oeuvre* was a work in

progress, a constant evolution.” (Cordeiro, 2014b). He studied figurative art, produced Cubist works, Concrete art, ‘intuitive geometric painting’ and ‘Popcrete’ art, and “turned to kinetic and *opera aperta* works, in 1967-1968, which preceded an investigation on computer art that the artist named *Arteônica*, from 1969-1973.” (Cordeiro, 2014b). In “*Arteônica*”, Cordeiro highlighted the need for new paradigms and goals for the creative use of electronic media in the Arts, raising innovative, critical social and aesthetic issues which are still of great significance today (Cordeiro, 1972).

Cordeiro’s utopian and revolutionary worldview “introduced a critical vein and participative character into the somewhat aseptic and Cartesian environment of the Concrete and electronic arts, enlarging their reach and lending them a new meaning.” (Machado, 2014). By means of their capacity “to translate reality into digital form” and their ability “to offer developmental alternatives through simulation processes”, Cordeiro believed computers had the potential for changing society (Fabris, 1997).

Although his career was interrupted by his premature death in 1973, in his short period of practice Waldemar Cordeiro left a vast *oeuvre* (Cordeiro, 2014a), a visionary legacy of writings and artworks, which testifies he was an artist much ahead of his time.

### Abraham Palatnik: Forms & Dynamics

One of the precursors of kinetic art, Abraham Palatnik is well-known for his artistic sculptures in which color pieces move beautifully as parts of a complex system of motors and gears.

Born in the North of Brazil, Palatnik spent his childhood in Israel, but in 1947 - at age 20 - he returned permanently to Brazil. In Rio de Janeiro, Palatnik began visiting the Dom Pedro II Psychiatric Hospital, coordinated by Dr. Nise da Silveira, where he saw works by schizophrenic patients who had exceptional production, without prior art training. Palatnik then “abandoned his brushes and began to establish a freer relationship between form and color, since he realized that his own production was impotent in the light of the work of those artists” (Jornal do Brasil, 2017).

This research led to his first “Kinechromatic Device” - “Blue and purple in first movement” - a motorized light sculpture that created a play of light and shadow in space – which was awarded an Honorable Mention by the international jury of the First International Biennial

of São Paulo, in 1951 (MAM, 2014). Worth mentioning that his work was initially refused by the jury, because it did not fit into the traditional categories of painting or sculpture, but ended up in the show only because one of the international delegations could not participate in it (MAM, 2014).

In addition to creating kinetic objects, mobiles and drawings, Palatnik worked on many other fronts, including furniture design, cardboard and wood compositions and painting on glass (Spitz, 2005). Along different decades, he also worked with three new materials in succession: “in the 70s, polyester resin, in the 80s, strings on canvases, in the 90s, a plaster-and-glue compound.” (Morais, 1999).

Self-taught, the artist considers intuition to be his “initial impulse.” He describes it as the feeling that something artistic can be done with a non-artistic situation: “In my case, this path goes through intuition, then through thought and reasoning along with intense experimentation, and finally through a careful and careful process of construction.” (Revista Museu, 2017).

Palatnik – who is now 88 years old - still actively works on the conception and production of new art forms which involve different media. In his atelier in Rio de Janeiro, you will find him surrounded by nuts, bolts and tools built by him, always researching into new materials, forms, media and ideas.

### Otávio Donasci: Video Creatures & Theatrical Performances

Otávio Donasci - also a pioneer in the field of Electronic Art in Brazil - is internationally known for his theatrical performances, or “VideoTheatre”.

Born in 1952, Donasci started mixing arts and technology in the 70’s, by experimenting with forms of video art. He has been exploring the combination of human bodies and electronic devices since the beginning of the 80s.

In 1983 he created his first “*videocriatura*” - a hybrid being, resulting from the creative merging of visual arts, theater, video technology and performance. In his fantastic performances, actors use video monitors (attached to a cable video recorder or wireless transmission) covering their heads (or other parts of their bodies), which are then substituted for the parts of the bodies of off-stage actors, captured live by a video camera or pre- recorded. A *videocreature* is “half human, half machine”. The monitor screen may show a

pre-recorded video of a face singing songs, or reciting monologues, or talking live with the audience, or in some cases, talking to other “*videocriaturas*”.

With his *videocreations*, Donasci expands the expressive capabilities of actors by incorporating a myriad of resources and possibilities of the audiovisual media to their performances. The resulting effects are intriguing, surprising, and absolutely convincing and effective, in spite of being made with domestic video equipment and handcrafted resources, in most of the cases. “It is not only five the senses called for the exploration of a new field of technological art. [...] Indeed, what is at stake in electronic art is not the use of high technology techniques, but the formulation of new languages. When I explore holography to write the holopoems in space, or when Otávio Donasci uses electronics to dramatically perform his videotheater, we are faced with “poetry” or “theater” that are inscribed in the irreducible possibilities of each interdisciplinary process, or of each “hybridism”, as Donasci prefers to call.” (Kac, 2004).

Donasci’s pioneering works explored the psychological dimensions of interpersonal relationships, encompassing a great variety of media and techniques to create performances and interactive installations. He also created and produced theatrical performances, such as “Viagem ao Centro da Terra” and “Merlin” (in partnership with Ricardo Karman) – a performance which lasted five hours, in which spectators were being physically transported (inside a truck) from São Paulo to another town. In spite of its great repercussion in the international press, the very high cost of the project “Merlin” unfortunately allowed only three performances.

During his more than 30 years of career, Donasci has developed more than 20 types of *videocreations*, and has performed all around the world, winning several awards.

### Final Considerations

As foreseen by Cordeiro in his “Premises for artistic development in Brazil”, which he wrote in 1969, “Brazil is the world’s greatest experimental laboratory. Large-scale demand and an innovation-friendly mind set are key factors characterizing the general state of art in Brazil.” (Cordeiro, 1969).

In fact, electronic art has found here a fertile ground to grow and flourish: Brazil has today a significant number of artists, publications, academic conferences and exhibitions dedicated to the field of Electronic Art, as well

as a great number of internationally awarded artworks.

The great expansion of the field of Electronic Art in Brazil, over these 50 years, has much to thank to pioneers such as Waldemar Cordeiro, Abraham Palatnik and Otávio Donasci, who envisioned the enormous potential of the merging of art, science and digital technologies. We believe that their original ideas and artworks - which inspired us all along all these years – deserve greater international exposure.

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Rejane Spitz is a Full Professor at the Department of Art & Design at PUC-Rio, Brazil, where she teaches at both graduate and undergraduate programs. She was a Pos-Doctoral researcher at CADRE-Laboratory for New Media /San Jose State University (California, USA) in 2003, and a Visiting Scholar at the University of California at Berkeley's Space Sciences Lab in 2002. She has a Ph.D. in Education from PUC-RIO (1993), a M. Arts in Graphic Design (1983) from the Central School of Art & Design (London, UK), a B. Arts in Industrial Design (1979) and a B. Arts in Visual Communication (1979) from PUC-RIO. Spitz coordinates the Electronic Art Lab (Laboratório de Arte Eletrônica), an experimental research laboratory working with art and technology at PUC-Rio. She has been working with computers in the Arts since 1983, and her works have been exhibited around the world. Rejane has also written extensively on social and cultural issues related to the use of technology in developing nations.