Eduardo Kac – interview: 'There is nothing on paper. All the works are experienced dynamically, with the glowing quality of functional displays'

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Known for naming the domain of 'bio-art' and for his creation of a 'green glowing bunny', Kac is also a substantial pioneer of digital art. Here, he talks about his current 'mini retrospective' in New York

Eduardo Kac: From Minitel to NFT. Exhibition view. Photo: Arturo Sanchez.

by BRONAĊ FERRAN

Eduardo Kac's show From Minitel to NFT, at Henrique Faria, New York, highlights the breadth and depth of what the artist has been doing in the domain of digital art over the past 40 years. The exhibition reveals Kac's poetic, phenomenological and protean approach to text and visual language, often combined with scientific and technological processes.

Visitors to the gallery can see six works from the 1980s, three from the 1990s and four from the 21st century, in what Kac (b1962) has observed is "like a mini-retrospective" that stretches from the pre-web period in the 80s to Web 3.0 of the present. On display are two

works using vintage Apple computers, one of which is also hyper-textual and interactive, a slow-scan television installation, four Minitel-based works, four videos using Google Earth Pro satellite technology and two digital videos from 1996. Of the 13 works on display, Kac regards seven as digital poems and six as digital art. Exceptionally, several works are being shown complete with their vintage apparatus, having been restored by the artist over the past decades.

Kac spoke to Studio International shortly after the exhibition's opening.

Bronać Ferran: Congratulations on this new exhibition. It is a rare opportunity to see your works from various decades brought together. How did you make this selection?

Eduardo Kac: The idea of it, as expressed in the title, was to specifically focus on my digital body of work. Actually, it is the first time that this body of work has been shown in this manner together. There haven't been many other opportunities to showcase this material. So, it functions in a sense like a mini-retrospective. I've previously had two retrospective exhibitions. The first was curated by Ángel Kalenberg at IVAM (Institut Valencià d'Art Modern), in Valencia, Spain, in 2007. There's a catalogue. The second was curated by Frédéric Acquaviva in 2016 and took place at the art centre La Plaque Tournante, in Berlin. On that occasion Éditions AcquAvivA published my book Biopoetry.

What makes this show in New York unique is the precise focus on my digital practice. Many of these works have taken me a very long time to restore and it's extremely rewarding to be able to share them with contemporary audiences.

In terms of the selection, I wanted to convey different moments in my art in this area from the early 80s to the present, which also covers a spectrum from pre-web to web 3.0 developments. Everything is running – everything is functional – the "slow-scan TV" work, called Conversation (1987), for example, is running on its native CRT [cathode ray tube]; the earliest piece, Geometry of Ecstasy [a looped digital animation] is running on an Apple III. You also get to see an interactive work from 1993 called Storms, where you have a vintage 1993 machine running a vintage 1993 operating system with a vintage 1993 file and people get to interact with it exactly as they did in 1993. There is no simulation, there is no representation. There is nothing on paper, all the works are being experienced exactly as they were meant to be experienced, dynamically, with the glowing quality of the functional displays. It is a very difficult thing to do, to create conditions for the audience to experience this type of work directly, not through any other means. I have been thinking about a show like this for a while. It was a real joy to see it coming into being.

BF: Clearly you were a visionary in making works of art in digital formats. The Geometry of Ecstasy work you are showing on an Apple III computer [made when Kac was living in Rio de Janeiro] looks symbolic of much that you did later. Did you program it yourself?

EK: In 1982, it was pretty tough in Brazil, with inflation at 100%. I didn't have my own personal computer and was working in very poor financial conditions, but I basically tried things everywhere I could. Some of my friends had personal computers at home, so I would try things out when I visited. I also knew people who worked in stores trying to sell computers and they let me spend time on the machines as they needed something to show on them. Yes, I taught myself the Basic programming language so as to make works in ASCII. At that time, you had to do it yourself.

Eduardo Kac, Geometry of Ecstasy, 1982. Basic program and Apple III computer. Photo: Arturo Sanchez.

It was similar in the early 90s; before the graphic browser was introduced, the only way to be online was with the command line, so I put together a little self-teaching Unix manual so I could be online. I also put together a telephone-hacking kit to use when I was travelling, as hotels and other institutions didn't have the internet like we have today as part of the landscape. I would use the kit to undo the phone and use alligator clips to make connections. In fact, I recently came across my early 90s Unix command-line manual and my hacking kit in my basement at home.

BF: Did you think about showing this kind of additional material in the exhibition?

EK: The gallery does have vitrines and did ask me if I had surviving traces. I said yes, but realised that the gallery space wasn't big enough to show that material as well as the work. So, I opted to let the work speak for itself. But, hopefully, that will happen somewhere in future. There are many more works to be seen.

BF: Do you think there is a different receptivity now to this material?

EK: I do, but also since I started in 1982, my term of comparison is four decades. It has been a journey, from virtually everyone ignoring it, saying that it is not poetry, that it is not art, to a point when newer generations started to work with the medium and younger curators at different institutions becoming interested, so the change is in sensibility. I think there is still a long way to go, in terms of complete integration into the larger landscape of contemporary art and poetry, because this type of work still represents a very small percentage of what gets shown, even though it has been produced worldwide for many decades.

BF: What difference do you think developments with non-fungible tokens [NFTs] are making to this scenario? I know you have already had some involvement in this arena. How did you decide to approach this?

EK: There are many ways in which one can engage with NFTs and one is no more valid than the other. Given that I have a number of works that did not see the light of day, because there was no environment, no mode of display, no context for works conceived digitally, produced digitally and meant to be experienced digitally, what has made sense for me is to make those works accessible and visible, in some cases for the first time.

My first approach was to showcase a certain number of pieces from 1994 that haven't really circulated. I have shown these primarily through a partnership with Galeria Leme in São Paulo, which has established a branch of its basic programme dedicated to NFTs. I like this idea because the gallery is handling these works in the same way that it might handle a print or sculpture or hologram, so the ontological condition of the digital work is not really any different from any other work. What is exciting is exactly that dimension.

I feel that lack of interest in such practices in the past was partially justified by the idea that digital can be very easily reproduced and therefore it couldn't really have the same standing as, say, painting and sculpture. Well, with NFTs that disappears as the digital work has a very clear provenance, a very clear identity whether it is unique or in an edition of 1,000; ownership is very clear, the movement of the work (say if somebody sells it to another person) is very clear, so those claims that were used in the past are no longer applicable. Now, one doesn't have to like digital art, but one can no longer use those claims in order not to engage with it, as they are no longer technically applicable.

**BF: Do you think a new aesthetic is arising within the NFT "space"?**

EK: No, I don't see that. I think it is something else at work that gives a false impression perhaps. Even though, theoretically, you have infinite storage space, in reality, the marketplaces impose very specific constrictions: videos, for example, may not exceed 30MB, JPEGs may not exceed what it is that a marketplace is going to ask, five or eight MB, so everybody is having to meet the same parameters. It is just about the marketplace and vendor setting the conditions. You have to make a compromise to fit within these parameters. I think it is going to change in the future, however, when there will be different storage media or a different capacity, like having an option to show videos that are two hours long, for example. Of course, now it's already possible to offer anything, including physical objects, with blockchain authentication.

Eduardo Kac: From Minitel to NFT. Exhibition view. Photo: Arturo Sanchez.

BF: You are also showing four Minitel works from 1985-1986, that you have restored to working order. [Minitel was a French state-run precursor to the internet.] Can you tell us a bit more about these works and what lies behind their gorgeous surfaces?

EK: I made four different works for the Minitel system. Users could log on with a remote terminal and access sequences of pages through regular phone lines. But I used them to make animated poems, all of which were shown in 1986 in Rio de Janeiro at an exhibition entitled Brazil High-Tech, which I helped to organise. One of the works had already been shown in 1985, at a São Paulo online gallery. They all push the limits of what the Minitel could do, but they also explore unique poetic possibilities. Individual pieces from the set have had a strong circulation in the last few years, being acquired by the Tate and other leading international museums and, indeed, private collectors. There is also one in MoMA's collection, in New York (on the second floor). Entitled Reabracadabra it's been on display there since 2019 and will remain until 1 November this year.
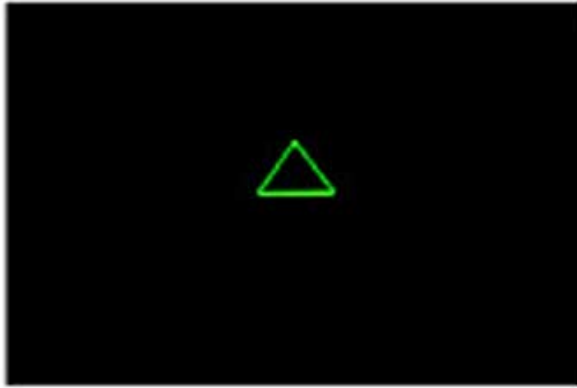
Frames from Eduardo Kac, Reabracadabra, 1985. Minitel artwork, 9.64 x 9.8 x 9.64 in (24.5 x 25 x 24.5 cm). Read first the left column from top to bottom; then, the second column from top to bottom.

BF: Can you also describe the work Conversation, and how it was created? I have read that it used analogue telephone lines as the transmission vehicle for video. How did that work?

EK: It was based on a proprietary system called slow-scan television. We had to use two of the same devices, in order to decode the transmission at the other end. It implies capturing a video frame that you generate electronically, which is then transmitted line by line to the other device as audio, which is then reconstructed as a picture. It took from eight to 12 seconds to transmit each image.

And then it is displayed on a CRT. I did it in real-time, sometimes with an audience. In the case of Conversation, you see me at the end of the video coming into the shot and appearing in front of the display (a bit like an early selfie). I created several works using the slow-scan TV medium. This is the very first one I made and also the first that I have been able to restore and now to exhibit. It's quite a significant effort to get these pieces working again, hence my only having time to do one so far.

Eduardo Kac, Conversation, 1987, slow-scan television (video transmission through analogue phone lines), exhibition installation view. 34.5 (W) x 42 (D) x 47 (H) cm [13.5 x 16.5 x 18.5 in]. Edition of three. Image credit: Arturo Sanchez.

BF: There is also a gif animation on display from 1996 entitled Self-Portrait II. Was there a Self-Portrait I? Can you say a bit more about how and why you made it at the time?

EK: Self-Portrait I is a single image, a static digital composition that I created in 1994 using the slit-scan technique. It is a fiery self-portrait in which you see me on the left covering my eyes with my hands, only to turn around and see my bird-like hands fly away. To make this work, I initially produced discrete images in real time using the slit-scan process; I then combined all elements manually.
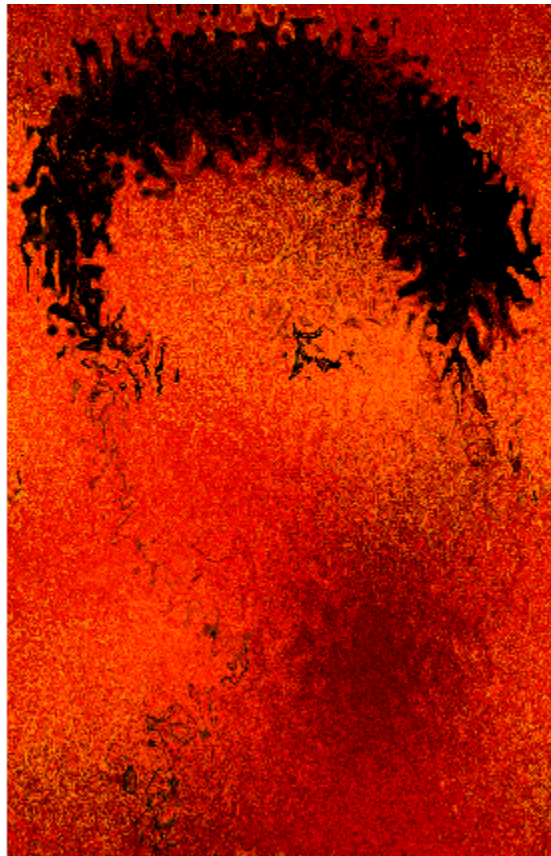

Eduardo Kac, Self-Portrait II, 1996. Gif animation. Courtesy Eduardo Kac.

Made two years later with a similar palette, Self-Portrait II is a gif animation. In it, I look straight at the camera. As a counterpoint to the pensive look, the rhythm of the animation suggests dynamic activity taking place internally, externally or possibly both.

BF: Can you please also say a little about the digital poem Letter, also from 1996. What do you think you can do differently in digital poetry than in digital art?

EK: In Letter, a three-dimensional spiralling cone made of words can be interpreted as both converging to, or diverging from, a two-dimensional spiral. Together, they may evoke the creation or destruction of a star. All texts are created as if they were fragments of letters written to the same person. However, to convey a particular emotional sphere, I conflated the subject positions of grandmother, mother and daughter into one addressee. It is not possible to distinguish to whom each fragment is addressed.
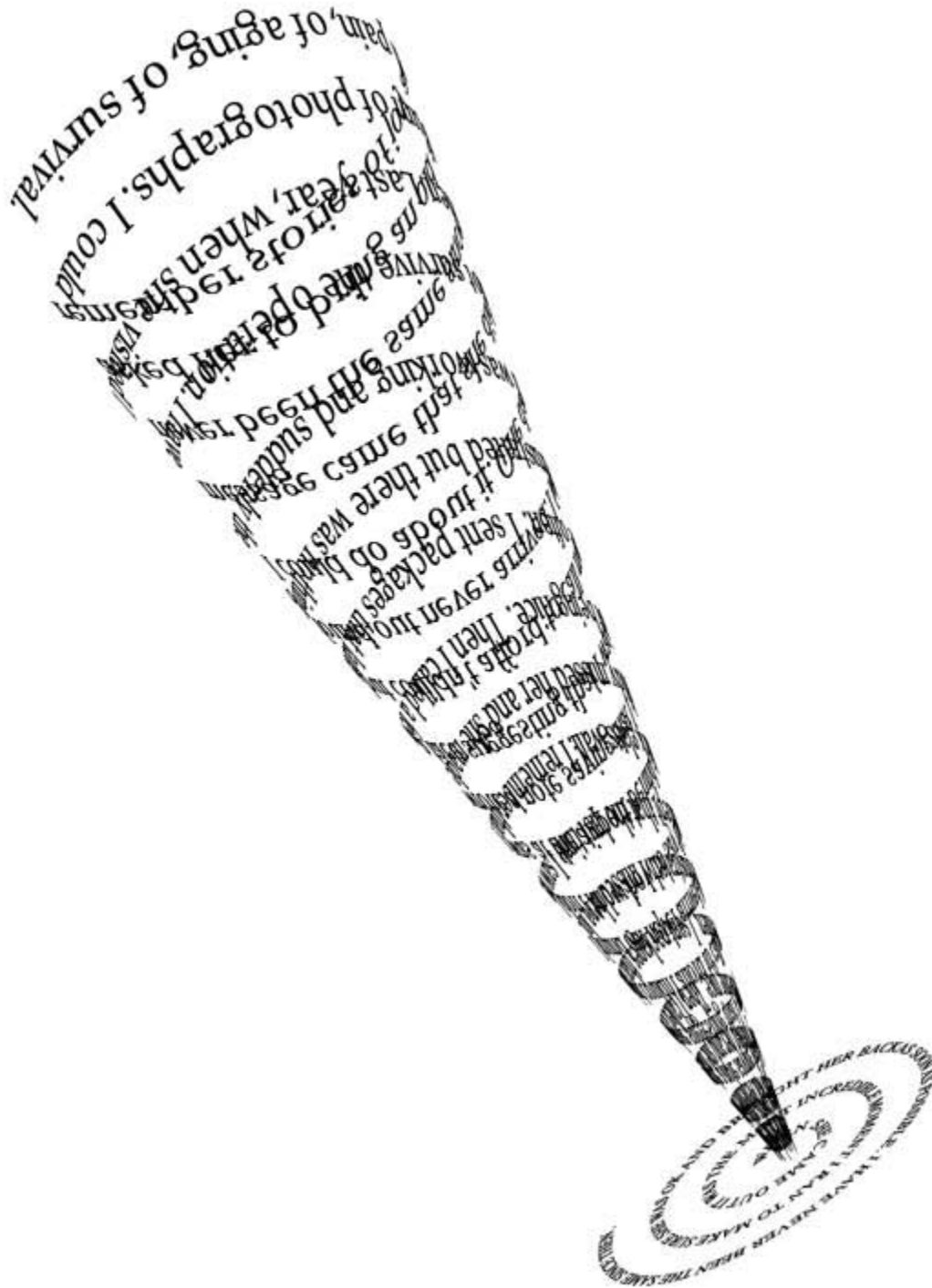
Eduardo Kac, Letter, Still from Digital Video, 1996. Also available as an NFT via Galeria Leme.

Concerning the difference between digital poetry and digital art: in my digital art, words are not often employed. Instead, I work mostly with images, form, colour and texture. Fundamentally, in my digital poems, I explore the unique expressive possibilities of the word in conditions of instability, namely, movement, disappearance, and transformation. This is an extremely brief way of characterising the distinction between the two but, clearly, there are zones of overlap. Interactivity is one of them, for example.

Eduardo Kac, Lagoogleglyph III, 2018. Photo: Pau Ros, courtesy Eduardo Kac.

BF: Finally, I know that the Lagoogleglyph works are being shown in New York and in Venice simultaneously. Especially for those who did not see the London manifestation in Finsbury Park in 2018, please can you describe what these involved.

EK: The Lagoogleglyph series is created to be seen via satellites and to be fully and freely accessible online, through computers and mobile devices. The images have a green, black and white palette and are always pixelated renditions of my GFP-Bunny artwork from 2000. First, a large composition is made on the ground or on the roof of a building. Once it is captured by satellite and made visible online, I make videos that move between earthed and cosmic perspectives, using images captured by Google Earth Pro. A series of four videos resulting from the first four installations, in Rio de Janeiro (2009), Majorca (2015), London and Strasbourg (2018) are being shown at present in New York and in a NFT-focused exhibition entitled The Time of the Chimeras at the Venice Biennale in the [Republic of] Cameroon Pavilion. A fifth iteration is now planned for later this year in the Cimetière des Rois in Geneva, where I have discovered Jorge Luis Borges is buried.[1] The installation of

Lagoogleglyph V will happen in September, on the roof of a building in the cemetery. It is the latest example of how the green glowing bunny I made using transgenic processes more than 22 years ago continues to find new life in extraordinary places.

Reference
1. Borges died in Geneva in 1986. The Cimetière des Rois was established in 1482 to bury citizens who died of the plague.

• *Eduardo Kac: From Minitel to NFT is at Henrique Faria, New York until 18 June 2022.*