ADA Artist Interview with Suzanne Anker

Archive of Digital Art, September 2021
Full text and interview by Carla Zamora on ADA:
https://www.digitalartarchive.at/features/featured-artists/featured-artist-suzanne-anker.html

You are considered being a pioneer in Bio Art – How did you "*grow up*" in the Bio Art scene and what can Bio Art offer today?

In 1989, I turned my attention to researching genetics. My interest was in the chromosome, a microscopic particle not associated with disease, but instead a storehouse of history, a bio-archive. While the chromosome in Greek means "colored body" it is also metaphorically the way the body writes itself. Every living species has its own set and style of chromosomes, revealing whether the specimen is a bat, a fish or a petunia. While a Visiting Artist at the University of North Carolina at Chapel Hill in 1993, I attended sixty lectures on genetics as a way to picture this hereditary molecule. The result was an installation, "Zoosemiotics" composed of hand-made chromosomes arranged in karyotype configurations. This installation went on to be exhibited in Barbara Maria Stafford's and Frances Terpak's exhibition at the J.P.Getty Museum. A glass vessel, filled with water, occupied the center of the installation and acted as a primitive lens, greatly reducing the size of the chromosomes. As spectators moved around the gallery, the visions of chromosomes changed accordingly, highlighting the flux in subject/object perception in space.

In 1994, I curated the first exhibition entirely devoted to genetics at the Plaza Gallery, Fordham University, in New York City. Entitled "Geneculture: Molecular Metaphor in Visual Art", this exhibition brought an awareness to the public of the ways in which art and the biological sciences continued to form future trajectories. Bio Art today is a thriving international practice, along with Bio Design and Bio Architecture. These disciplines bring to the fore ethical questions concerning altering nature through genetic engineering, IVF reproductive technologies and instrumentalized apparatuses denoting "unseen" characteristics, even in human actions. Biology has become an umbrella under which societies create new life forms, medicines and remediation processes for healing. Through the use of bio-materials, sustainable practices in manufacturing and energy sources are being explored. Bio Art continues to expand worldwide through community laboratories and DIY participants.

In an interview you once said: What computer hacking was some years ago is now bio hacking. In what sense is your art connected to Media Art?

While computer hacking was pursued in the 1990's, as a way to engage with the ubiquitous technologies of home and business computers and the opening of the world-wide web, a parallel movement began concerning DYI biology. Public labs were opened for community use, not connected to traditional institutions, but as alternative spaces. In these labs, such as Genspace, in New York, courses and workshops in genetics, plant tissue culturing and the development of bio-materials were open to the public and continue to this day. The time had come for science to spill out of scientific laboratories and into our lives. The first draft of

the decipherment of the human genome in 2000 brought a public awareness of the workings of the four nucleotide bases, AGTC that design life. Like zeros and ones, life itself became computational. My work spans a range of technologies from video animation to computer driven sculpture to large scale digital photography to plants grown by LED lights. In each case the resultant forms are the result of the programs employed. While the artworks may be media driven, the iconography is rooted in biology: botanical specimens, embryonic forms, genetic structures and references to MRI scanning devices comprise many of my prints, sculptures and moving images.

What interests you in combining organic, inorganic material and technology?
In the 21st century the organic and inorganic reside on a continuum. As prosthetic devices proliferate and algae is turned into energy and food sources, the bionic and synthetic are ever present. From computer driven sensors, artificial hearts and limbs, designer mice and tissue cultured plants, the unity of substances is being surpassed by other means. As tobacco plants that contain firefly genes or tomatoes that incorporate flounder genes show, the mix and match of living matter has produced hybrid species. Synthetic biology and engineering as well are upon us, creating organic-inorganic hybrid and innovative materials. While manufacturing employs the colors of nature to produce its goods as a "second nature" bio-printing is on the rise to use cells to fabricate human organs for transplantation. Technology coupled with bio-chemistry has been a method uncovering the mysteries of nature and does so at this time in extraordinary ways.

In which works did you make use of technological methods like CRISPR or Machine Learning and what were your learnings? What new possibilities does the technology open up for your work?
While Machine Learning is on the rise and offers insight into perception and cognitive meaning, it is still being developed and expanded. What a delight it was to discover a new aesthetic technique offered up by a computer driven rapid prototype machine. In my "Remote Sensing" works, the 3-D printer created an edge on my sculpture that I hadn't thought of producing. In printing the object, the machine's interpretation of the data, fabricated a jagged colored circumference, as opposed to a one in a single hue. The white and green alternating band created a rhythmic flow of "ups and downs" giving the perimeter a nuanced uniqueness. Here the machine has taught a human, as opposed to the other way around. As machine learning becomes more accurate and sophisticated, complex solutions of innovative practices lie ahead. I am now in the process of repeating this design pattern in other works that require a translation of two-dimensional images into three dimensions. As in all translations, there is no exact match, even in machines. This has been a very fortunate and unexpected occurrence.

What are you currently working on?
My new work, which has been produced during the COVID-19 pandemic is entitled "After Eden". It is a series of digital photographs and collages documenting the changes of botanical species throughout the seasons in my garden. Since March 2020, I have resided in the countryside, not far from my home in New York City. The images employ "in and out of

focus" lens work, in which the plants appear in both strict hard-edge contours and mist-like color. Some of the images seem to disappear as a reference to fading away, or to put it in less desirable terms, move towards extinction. As photography is "writing with light" its importance cannot be overstated in image-making. However, the use of the lens is of equal value to the image and goes beyond scientific exactitude. These works speak to the spirit of nature which is at once visible, while at the same time hidden.

Transience of life, i.e. Vanitas is a central topic in your work - How do you archive your own works? And how do you think Media Art should be preserved?

Yes, transience is a part of the cycles of the natural world as it moves through the processes of birth and decay, death and rebirth. However, transience in Media art is problematic. As new technologies advance, sometimes it is not possible to play a video or print a sculpture because the newer technologies create different and varying results. Sometimes prints and videotapes fade or are not archival over long periods of time. My "Remote Sensing" work is an example. The colored inks employed by the three-dimensional printer are not color fast and lose their color vibrancy over short periods of time, even when the pieces are not exposed to light. In order to combat this complication, I have turned to hand-painting them in archival acrylic paints and inks and spraying them with a UV coating. Perhaps in the future, machine pigments can be made to be light fast. Because these sculptures cannot be made by hand, this hybrid practice between digital production and painting can be employed for the time being. In general, my work is archived through photography and preserved in storage boxes as needed. We all await what the new technologies will bring and how we will translate what we have now into future incarnations so that it may be viewed at a later time.