Nichole Odunsi

Igor Kaplun

CSIT100

09 April 2025

Computing in Art

Have you ever wondered what computing in art is? Well I will tell you just that. Art in computers could be a variety of things like “the creation of aesthetically pleasing images and animations that use computers”. Which can consist of complex 3D models or interactive installations. That is why I am going to talk about the effects of computing arts , which could also be considered as some of the popular styles of computer art, the history of digital art, the forms of subjects of the arts, kinetic art,and finally how generative art differs from the other styles of art.

Starting off with the good about computing art. I feel like it is more accessible or more affordable to do computing in art once you get the many programs you need in order to do this media. “Art, for many people, has long been an activity reserved for the elite. It’s a hobby that you either have to be really good at or really rich in order to indulge in. But now, with the explosion of computer-based art tools and the expansion of their reach into practically every discipline, it has become possible for anyone to create amazing works of art” Over the time art has been getting easier to get into specifically digital art because of the different ways on how to do digital art for example you can easily do it anywhere with just a tablet and a bluetooth pen, because back in the day you would have to have a computer and something like a wacom or something that is similar to it.

There are incredible forms of art which are in computer arts in which I have learned about between 2D and 3D art. With that it consists in digital art “Just like traditional fine art, digital art offers multiple mediums and styles that artists can use to express themselves, from digital photography, computer graphics and pixel art to more experimental mediums”. There are a variety of mediums to explore just like there is to traditional art like watercolor and colored pencil there is 3D modeling and photography which I would classify as something that is computing in art.

With that there is a history on how digital Art is made. “Although the first digital art experiences date back to the 1980s, its roots can be traced back to the 1960s with artists such as Frieder Nake, the group EAT (Experiments in Art and Technology)”. With this newly found information it is interesting that it originated not long ago which is the 1960s but the first ever digital art can be found during the 1980s from the Experiments in Art and Technology but the first person to ever discover digital art was someone named Frieder Nake.

With the history of digital art let’s take a look at the 50s and 60s of digital art “A lot of digital art has an input and an output. For example, the input could be a pseudorandom number and the output could be a geometric drawing, or the input could be music and the output an animation”. The difference between output and input is that input could be on paper and input could be computerized and fed into a system.

There is kinetic art that is incorporated in computer arts. Some may wonder what kinetic art is and it is “a manifestation of the fascination with motion which defines a whole swathe of modern art from Impressionism onwards”. With it having to do with motion there are good examples of how kinetic art is connected to computing and that later they computerized it by using analog computers. “Already back in the 1930s artists started to experiment with mechanical devices and -later- with analog computers: this was just the beginning of what it would have then turned out to be the work of the digital pioneers in the 1960s”. With the usage of computers I believe it has grown more and more popular with modern computers and programs that are using these models especially that is something in 3D printing with pieces you could make.

Many people have been using this method of computer art for decades and how it has improved from today's technology vs from back then. “Computer art doesn't just refer to images created on screen. It also refers to piece of artworks where computer technology was used somewhere in their creative process”. During the 70s computer art there has been improvements from the 50s and that is different types of art we can see in this modern day of art. During the 70s there was creation of kinetic art, contemporary art with applied art and many more that came out of that decade.

Now looking at the 80s and 90s for computing arts with a different focus of the other decades. “In the 1980s and 1990s the term began to encompass interactive environments that placed both viewer and artist at the interface between the real and virtual worlds. Artists concentrated on manipulating imagery with the help of computer software tools”. With the improvement what the 80s to 90s decades focused on was to rely on computers in order to make the mix of virtual and reality.

Now onto the other forms of digital art photography. “Photography is complex, full of variety, and capable of limitless storytelling and emotion. What separates inspiring photographs from ordinary ones, and how can you improve the quality of your own photos”? Basically having to have a variety of photographs that can be storytelling or just doing it as a hobby with just a click of a camera could make a photograph.

There seems to be a variety of ways one can use photos. Looking at how it is we use photography everyday. “Photography is everywhere today, and it can be hard to remember that it wasn’t always that way. Color photography only started to become popular and accessible with the release of Eastman Kodak’s “Kodachrome” film in the 1930s” since forever photography has been a thing until the color film that came out around the 1930s.

Most of the stuff that I am mentioning has something to do with memory because you can save them. Here I am going to talk about the difference between 2D art. With two-dimensional art or some may call it “2D art is, quite simply, art that is produced on a two-dimensional surface of some kind. It is, quite possibly, the most common form of art and it has existed for as long as humans have produced art.” This could be a good example of how digital art comes to place because most digital art seems to be in a two-dimensional aspect and you can view it on computers.

Looking at 3D art it also consists of computer creation and with the definition it means “Digital 3D art is a contemporary artform that arose from the combined creativity and virtuosity of designers working in commercial 3D software, bending the software’s utility to more artistic ends than the usual work-for-hire fare. Just as photographers of yore ran with utilitarian technology toward wildly creative ends, so too have digital 3D artists seized the opportunity to build an expressive medium with new technology”. Many of the 3D art we have today is popular in today's movies like the CGI we see on TV to the 3D models we see on Pixar films.

Now to focus on generative art. The first question you may ask is “what is generative art?” From the name itself it is “Often, generative art draws inspiration from modern art, especially pop art that makes heavy use of orderly geometric patterns”. From the name itself generative art takes a lot of inspiration from modern art we have today and with that generative art is getting better and better everyday.

Many people have mixed feelings about generative art, some think it is good because you can save money from it while the others who are opposed to it believe it is bad for the environment and taking jobs away. “Generative AI threatens the livelihood of artists, pitting their labor against the cheap slop produced by dead machines. The technology only benefits those who wish to produce content as quickly and cheaply as possible, by removing artists from the creative process”. From the ones that are opposed to it, it's threatening the livelihood of how artists make their income while those who are not affected by it are writing down prompts into some kind of machine.

Since there is such a thing as AI art or generative art to me it feels like it will improve in the near future. “But as the technology continues to expand, it seems likely that machines will increasingly push the limits of human creativity and in doing so will come up with entirely new domains of art whose novelty and beauty cannot be foreseen”. Just like some new type of technology. The technology itself is new but as years go by it will improve and improve til humans for work are not needed.

To sum up what I have talked about the effects of computing arts in which I talked about the many popular styles which are 3D and 2D art and how they are apart of computer arts, There are many how digital art has the usage of computers, how kinetic art is making and finally how I thought about how generative art isn’t art. Mostly being talked about was how art is the main focus on computing arts and how it is in our everyday lives today. The importance of computing art and how there is 3D and 2D art while there is kinetic art and to end it with generative art or as some like to call it generative art.

<https://medium.com/@scottkoegler/the-importance-of-computer-based-art-tools-8d892e977822>

<https://magazine.artland.com/digital-art/>

<https://www.lenovo.com/us/en/glossary/computer-art/?orgRef=https%253A%252F%252Fwww.google.com%252F&srsltid=AfmBOorgGkFUbW6zlKdxpl8UJcBFoqC7uWCR2keRqSKEeAks5QmT1Rzy>

<https://magazine.artland.com/digital-art/>

<https://photographylife.com/what-is-photography>

<https://makersplace.com/p/guide-to-digital-3d-art>

<https://www.freecodecamp.org/news/an-introduction-to-generative-art-what-it-is-and-how-you-make-it-b0b363b50a70/>

<https://www.forbes.com/sites/danidiplacido/2023/12/30/ai-generated-art-was-a-mistake-and-heres-why/>

<https://www.amygoodchild.com/blog/computer-art-50s-and-60s>

<http://www.visual-arts-cork.com/computer-art.htm>

<https://pursuit.unimelb.edu.au/articles/when-computers-make-art>

<https://www.theartstory.org/movement/kinetic-art/>

<https://www.katevassgalerie.com/blog/kinetic-art-precursor-digital-art>