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Keywords

This essay will define, explore and go into detail on three keywords to outline areas of research for investigation, which will lead to a proposed question for the third year independent project. To achieve this, different forms of research will be used alongside critical analysis and evaluation to create a scope around these three keywords. It will also look at artists and theorists like Vera Molnar, Mike Tyka, David Hockney, Marina Abramovic, Ray Kurzweil and Andy Warhol to expand and clarify ideas. These three chosen keywords are AI (Artificial Intelligence), evolution and future. This essay will conclude with a contextualisation and synthesis of these three keywords to illustrate the relationship that can be formed between all three through their differences and through linking together their similarities to form the proposed question for the independent project.

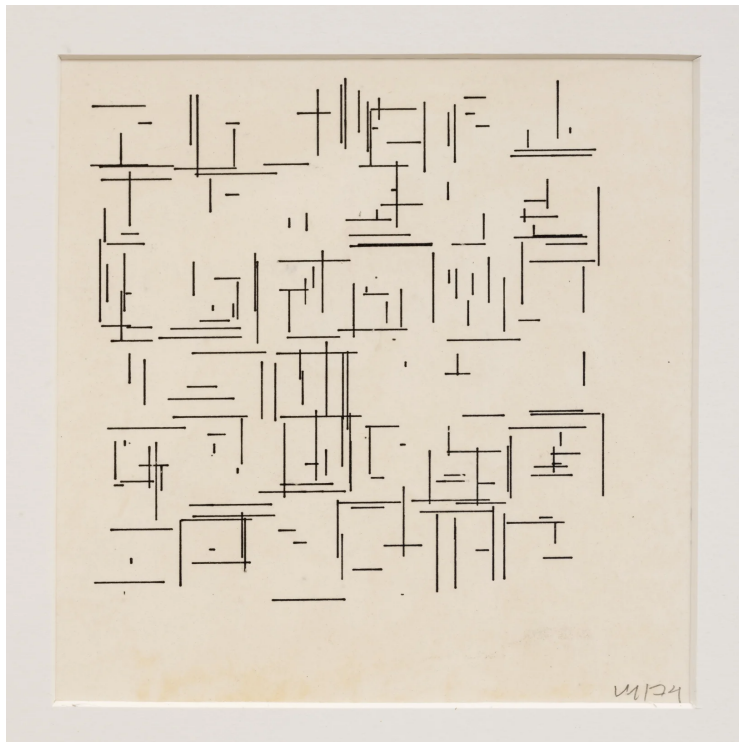
AI

AI stands for artificial intelligence, which is the replication of human intelligence functions by machines, particularly computer systems. Expert systems, natural language processing, speech recognition, machine vision and image generation are some examples of specific AI applications. For the creation and training of machine learning algorithms so it can improve, AI requires a foundation of specialised hardware and software. An extensive quantity of designated training data is typically taken in by AI systems, which then examine the data for correlations and patterns so it can attempt

to forecast future outcomes. This is done by the AI examining millions of examples. An image recognition tool can gain the ability to identify and describe objects in photographs and a chatbot that is given examples of text can learn to produce lifelike dialogues with people the more it is used because of machine learning. Generative AI technologies have been advancing rapidly to the point where they can now produce realistic text, graphics, music and images, etc [1].

This research will focus on AI generated images, specifically what is known as AI generated artwork, and the possible future implications and uses within the fine art world that it will have. AI systems and artists work together to create AI art, although the degree of autonomy can differ greatly and the final product is highly dependent on the calibre of the material the AI is trained on. In order to produce AI-generated artwork, artists implement AI as a tool for creativity and use algorithms to establish precise guidelines which enables the AI to analyse countless images to identify a certain creation process, such as a particular aesthetic or art style. Then, with the intention to create new original images, the algorithms generate shapes, forms, figures, and arrangements. In addition to machines, AI artists work with innovative programmers, statisticians, computer scientists, and neuroscientists to help try to create and improve machines that will further push the limits of human creativity [2]. Does this really count towards the idea of pushing forward human creativity because it's being used as a tool/aid for the imagination, or is it doing the opposite by getting AI to do the imagining for the artist, possibly taking away the human emotion behind the end result?

This is not the first time artists have been collaborating with new innovative technology, it has been occurring since the 1950s through experimenting with early computers. Early pioneers of computer generated art, artists like Manfred Mohr and Vera Molnar, investigated scientifically-driven artistic concepts and produced powerful works of art that were thought to be the result of the humanity involved in the creative process. Some of the technology used in AI has been around since the 1950s, so it could be argued that this is just the advancement of this art form and the creative process [2].



Vera Molnar, *Molndrian, 74,066/13.30.37*, 1974 [3].

AI generated art, for the most part, is a collaboration between the artist and the AI, for example most AI image generators require prompts from the user to generate the artwork they want to produce. The more prompts provided the more specific of a result you will get as the end result from the AI. This means you can create something vague

to inspire your own art practice or produce something specific that is its own stand alone artwork. Furthermore, because these AI image generators use multiple machine learning algorithms for different aspects of the AI, such as one for interpreting text prompts and one for actually generating the image, then the developers can create a neural network between them so that they can learn from each other and improve itself meaning it creates an original and unique image every time [2].

One popular AI art tool/generator is Google's DeepDream, which the company debuted in 2015. It was originally created to aid scientists and engineers in visualising patterns identified by a neural network, a machine learning system. The algorithm has evolved since then and is now used to produce any kind of imagery you could think of. At the time, in 2016, you could produce abstract artworks by heavily processing the images it generated to create surreal psychedelic artworks as seen below [2].



Mike Tyka, *Here Was The Final Blind Hour*, Neural net, 2016 [2].

Evolution

Evolution is defined as the gradual development over time of something [4]. Art itself has obviously evolved drastically since the earliest forms of art in cave drawings to now having different technologies shaping how art will evolve in the near future. Art and art history have gone through a massive evolution during the last 150 years. Art historians switched their emphasis from analysing the formal beauty of art to interpreting its cultural significance when artists shifted elsewhere from the traditional classic approach to art, to adopting new mediums, aesthetic standards and technologies. Art continues to be predominantly visual but beauty, as a traditional requirement for art, is no longer essential because art has evolved and we now understand beauty to be subjective in the modern world we live in [5].

Only three decades ago, the internet revolution had only just begun getting started, which has had a massive impact on the evolution of art and the way we interact, produce, buy and sell it. Video art was widely regarded as the most technologically advanced form of art at the time, so the introduction of technology like smartphones, social media, AI generated artwork, VR (virtual reality), 3D printing, etc, has undoubtedly been an unprecedented time in history for the evolution of different art forms and will result in innovations in the future fine art world. Conventional mediums like drawing, painting, sculpture and graphics are clearly still fundamentals [6], but with newer generations becoming more and more engrossed in technology how will the art world evolve in the future?

For example, will there be a dematerialisation of art in its evolution as the technology improves to where an artist can create artworks that deliver a visual and fully sensory experience for the viewer through VR with no need for any actual materiality. The same goes for actually experiencing art galleries, which you can already do through virtual online tours on your PC, laptop, etc, but through VR it would become a more lifelike experience [6]. AI generated artwork, as explained for the previous keyword, is also a huge evolution in art with its ability to be utilised as a tool or medium itself. AI art has provided access to the artworld for people who may not have had the resources to get traditional mediums, which are an expensive privilege to most [7]. On the other hand, another example could be art evolving in a future that is overloaded with technology resulting in more materiality being utilised through more accessible means like upcycling rather than traditional mediums like paint, sculpture and graphics, which not everyone has the privilege to access easily, as mentioned before. Upcycling artworks would be inspired by the explosive growth of waste in the world to try and become more sustainable and relay the message of more sustainable evolution of art[6].

There are many examples of artists that use traditional mediums that are beginning to evolve their own art practices by introducing new technologies into their art. For instance, David Hockney is an artist who started off using mainly acrylic paint, then began using cameras, specifically polaroid cameras, he experimented with fax machines and now paints a lot of his artworks using an Ipad as his primary medium. This has helped him gain recognition from multiple generations over his long spanning career since the 1960s and kept him relevant in the fine art world because of his willingness to evolve his art practice [8] [9].



David Hockney, *A Year in Normandy*, 2020 [9].

Marina Abramovic is traditionally a performance artist who has created various installations, videos and photos. She started to evolve her art practice in 2019 with new and improving technologies like VR (virtual reality) which she used to create an installation open to the public. In this installation was an empty room where you had to wear a VR headset to be able to view the 3D model performing a performance piece [9].



Marina Abramovic, *The Life*, 2019 [9].

Future

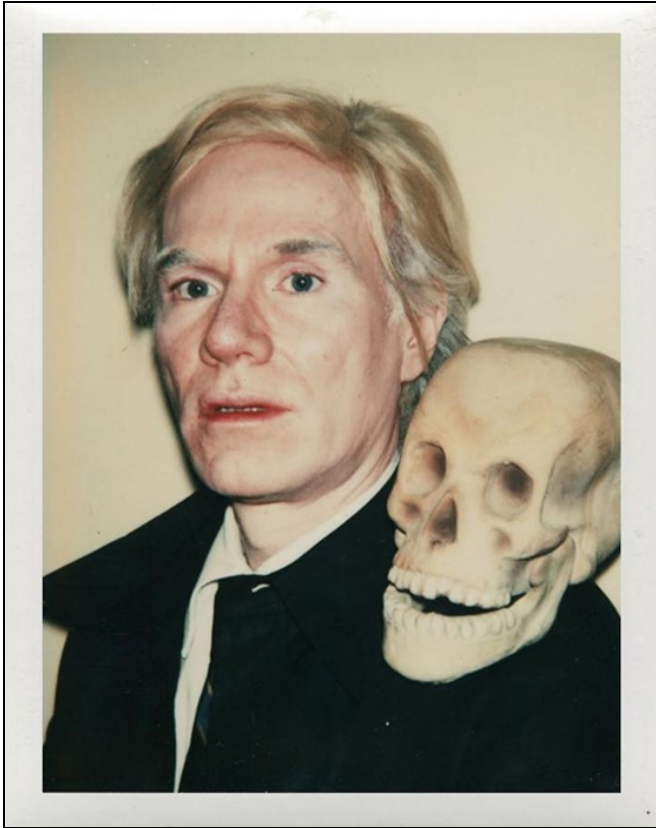
Future is defined as “a period of time following the moment of speaking or writing; time regarded as still to come” and “at a later time; going or likely to happen or exist” [10]. Is it possible to predict the future to a degree of certainty? Most art is embedded in reality, so art can be heavily affected by such things as the current social, economic and political circumstances of the world and evolving technology, as explored through the investigation of the keyword evolution [6].

Predictions can be made through extensive quantitative and qualitative research into these areas just mentioned [6]. Quantitative research meaning “how many, how much, or how often” using calculations and qualitative research “can help us understand why, how or what happened behind certain behaviours” through language, description and interpretation of data [11]. These predictions can use research tools like the Gartner Hype Cycle for things like technology which predict upcoming trends in our established society. The Gartner Hype Cycle uses a graph to show the life cycle points a specific type of new technology will go through. This is from the earliest development, to its marketable availability and adoption, through to its terminal decline. Each point through its lifecycle will have its own dangers and opportunities [12]. Needless to say these predictions of upcoming trends in society, technology, politics and the economy will affect the future art world [6]. Individuals like Ray Kurzweil, who is a writer, inventor, computer scientist and futurist, was able to make somewhat accurate predictions for the future, mainly regarding technology and its evolution. He still makes predictions today for the future which we will have to wait to see if they are correct [13].

On the contrary, other methods of predicting the future are through art itself and not by looking at quantitative and qualitative data. Art can attempt to predict “what the future will retain” because it can act as a passage for the past, present and future to connect to each other. It could also be argued that art can not predict the future, but instead “offer a vision of how things might become” [14].

Andy Warhol was a huge name in popular culture during his career and in that time he was able to predict how the future would evolve both in pop culture and within the art world. This can be illustrated perfectly through his prediction in 1968 where he said, “In the future, everyone will be world-famous for 15 minutes.” This showed his ability to foresee how in the future technology would evolve to allow for more reachable and far spreading pathways to fame like social media, some for good and some for bad, which has resulted in today's almost nauseating form of postmodern celebrity culture [15].

Furthermore, in 1977 Warhol created the series of works titled *Self-Portrait with Skull* which can be seen below. The imagery reflects ideas of self image, death, impermanence and future mortality. He also went onto produce *Self-Portrait Strangulation* which holds a strong relationship with the ideas just mentioned. It can be argued that Warhol was either intentionally or accidentally predicting the future of selfie culture, linked with social media and mental health issues surrounding these topics [15].



Andy Warhol, *Self-Portrait with Skull*, 1977 [15].

Contextualisation of Keywords and Proposed Question for Independent Project

Bibliography

- <https://lit.libguides.com/Write-it-Right/reference-list#:~:text=All%20in%2Dtext%20references%20must,not%20necessarily%20cited%2Fpreferred%20to.>

- <https://www.scribbr.com/academic-essay/essay-outline/#:~:text=Within%20each%20paragraph%2C%20you'll,when%20more%20detail%20is%20needed>.
- https://cs.stanford.edu/~merrie/papers/persistent_search_wkshop_paper.pdf
- <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
[1]
- <https://magazine.artland.com/ai-art/#:~:text=To%20create%20AI%2Dgenerated%20art,a%20specific%20style%20or%20aesthetic>. [2]
- <https://ropac.net/artists/231-vera-molnar/works/12819-vera-molnar-molndrian-74-066-13.30.37-1974/> [3]
- https://www.google.com/search?q=evolution+meaning&rlz=1C1CHBF_en-GBGB886GB887&oq=evolution+meaning&aqs=chrome..69i57j0i512l9.3790j1j7&sourceid=chrome&ie=UTF-8#bsht=Cgdic2h3Y2hwEgQIBDAB [4]
- <https://smarthistory.org/what-is-art-history/#:~:text=Over%20the%20past%20century%20and,art%20history%20have%20evolved%20radically.&text=Artists%20turned%20away%20from%20the,interpretation%20of%20its%20cultural%20meaning>. [5]
- <https://contemporarylynx.co.uk/predicting-the-future-visual-arts-in-2050> [6]
Evolution (a little bit of future)
- <https://medium.com/gptalk/from-imagination-to-reality-how-ai-is-making-art-accessible-to-everyone-2405b3d67d05#:~:text=AI%20has%20the%20power%20to%20generate%20images%20based%20on%20a,%2C%20experience%2C%20and%20appreciate%20art>. [7]
- <https://studycorgi.com/david-hockney-art-medium-technologies-usage/> [8]

- <https://blog.artsper.com/en/lifestyle/how-famous-artists-adapt-to-digital-art/amp/>
[9]
- https://www.google.com/search?q=future+meaning&rlz=1C1CHBF_en-GBGB886GB887&oq=future+&aqs=chrome.0.69i59l2j69i64j0i67i131i433i650j0i67i650j69i60l3.2758j1j7&sourceid=chrome&ie=UTF-8#bsht=Cgdic2h3Y2hwEgQIBDAB [10]
- <https://www.fullstory.com/blog/qualitative-vs-quantitative-data/#:~:text=Quantitative%20data%20is%20numbers%2Dbased,what%20happened%20behind%20certain%20behaviors.> [11]
- <https://www.techtarget.com/whatis/definition/Gartner-hype-cycle#:~:text=The%20Gartner%20Hype%20Cycle%20is,by%20the%20research%20company%20Gartner.> [12]
- <https://www.cmpile.com/learn/ray-kurzweils-most-notable-predictions-hits-and-misses#:~:text=Wearable%20computers%20and%20devices%20would,would%20largely%20replace%20physical%20media> [13]
- <https://www.philosophybypostcard.com/99-2/#:~:text=Art%20is%20a%20channel%20for,hear%20your%20ideas%20in%20response.> [14]
- <https://www.dazeddigital.com/art-photography/article/39915/1/artworks-predicted-the-future-of-the-world-warhol-yayoi-caravaggio-beuys> Future [15]