

## Collecting Digital Art, from the Floppy Disk to the NFT

\_\_\_\_\_ In early 2021, the NFT (Non-Fungible Token) boom gave rise amongst the general public to the false impression that digital art was impossible to collect, leading to the advent of the magic formula whereby an infinitely replicable file could be rendered unique. In reality, art created in file form has always been collected, and the spectacular prices achieved by certain NFTs should be calculated net of the investment necessary to affirm the legitimacy of this new form of the art market.

\_\_\_\_\_ Since the 1960s, the art produced digitally has had recourse to various strategies to make itself available on the art market. The most obvious road has been that of the materialisation and translation into acceptable idioms or formats: print, video, sculpture, installation, sold as one-offs or in limited editions. Recording onto physical media (floppy disk, CD-ROM, hard disk) has been the more arduous path taken by works of a collaborative or process-based nature.

\_\_\_\_\_ The digital art market became consolidated in the late 1990s and early 2000s, thanks to dedicated areas at trade fairs and to the efforts of private galleries, museum curators and passionate collectors prepared to take risks. In the second decade of the new millennium,

the commercial success of the Post-Internet art movement – which has translated into physical forms the exploration of the aesthetics, processes and themes of the information age – has further reinforced the presence of “natively digital” art in the world of contemporary art.

\_\_\_\_\_ Created to certify the ownership of any digital asset – from trading cards, through virtual spaces, all the way to sporting memorabilia – and to enable its exchange, NFTs link the digital asset to a cryptographic blockchain token and to the volatile economy of cryptocurrencies. As such, NFTs have received the unconditional support of a category of collectors-investors unaccustomed to traditional collecting and keen to assert and bolster the value of decentralised finance.

\_\_\_\_\_ NFTs offer a solution to the problem of the applicability of concepts such as scarcity and ownership to the digital field, and give rise to an art world that is apparently horizontal, in which the exchange between artist and collector occurs immediately and safely on platforms that are replacing the traditional figures of the gallery owner and the dealer. If the phenomenon has produced a rapid step change in the collecting of digital art, what consequences is this having in terms of quality?

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*Domenico Quaranta, Carrara Academy of Fine Arts*

## The Collecting of Digital Art

In my library, there is a small but precious book. It is titled *Confessions of a Poor Collector*, and it was written in 1970 by Eugene M. Schwartz, one of the greatest American collectors of the 20th century. I bought it years ago at Art Basel, before promptly devouring it on the train back home and then lending it to a travelling companion, only to never see it again. I bought myself another copy recently, which I find myself often leafing through.

Schwartz has been a fixture within the elite band of my personal heroes ever since, in the mid-1990s, he acquired for his own collection *The World's First Collaborative Sentence* (1994), one of the first works of net-based art. The work consists of a phrase, initiated by the artist and carried forward by whoever wants to contribute through an online form: a work of collaborative literature, a textual (and, in later years, multimedia) *cadavre exquis* publicly accessible from every part of the world, being continuously developed thanks to the input of visitors. When Schwartz died, in September 1995, his wife Barbara donated this and other works to the collection of the Whitney Museum in New York, making it one of the first works of digital art to enter a museum collection. In 2005, the site stopped working, but then, in 2012, the Whitney launched a restoration project that, as well as making the artwork once again accessible and active, gave rise to one of the first case studies of the reinstatement of an online collaborative work, well documented on the museum's website.<sup>1</sup>

*The World's First Collaborative Sentence* is a digital work, publicly accessible to all, that is continually evolving thanks to the creative contribution of users. How does one collect a work of this kind? In 1995, there were no precedents, so Schwartz and Douglas Davis had to come up with a way to somehow connect to the idea of ownership of a work that seemed to challenge all presuppositions of that very idea. According to the statements made by Davis, Schwartz acquired both the concept of the work and the site, and as a "symbol of ownership" he obtained, alongside the inevitable authentication, a floppy disk that archived the early days of the life of the work.

Having got a handle on the how, the crucial question of the why remains: why collect a work of this kind? Schwartz states: "The only important thing about [contemporary] art, as any art, is the art itself. Not its monetary value, not its social prestige, not its public relations leverage, not the artists themselves, and not that fact that you collected them first".<sup>2</sup> In 1995, the World Wide Web had existed for a couple of years. While a number of artists had immediately begun to experiment with its idioms, for the vast majority of people, the Internet was above all a means of communication and a medium for the circulation of works of art. Its aesthetic potential was still very limited indeed: the first

<sup>1</sup> See <https://whitney.org/artport/douglas-davis>.

<sup>2</sup> Eugene M. Schwartz, *Confessions of a Poor Collector, 1970* (Munich-Zürich: Edition Taube, 2016), p. 1.

few pages of the *Sentence* are a continuous flow of badly formatted black text against the grey backdrop of the browser. That art could be created with the web was, then, an assertion being made by only a few artists as they awaited an acknowledgement from the world of art. It was precisely this that made the *Sentence* interesting for Schwartz, who recognised in it the characteristics of those works that trigger a new style, a new line of research: works that appear, at first sight, “rather unpleasant”, which “violate what you think good art is”.<sup>3</sup> Their quality is measured “by the negative intensity of your reaction”, by the way in which they shock you and challenge your expectations. But if the idiom was new, the artist provided – to a well-informed collector like Schwartz (who recommended studying “like mad” before purchasing a new work) – a series of guarantees. One of the pioneers of video art in America, Davis had been experimenting with satellite transmission since the 1970s; as such, there was a good chance that the work Schwartz was buying – made using a new medium with a future that, in 1995, could not be banked on – would go down in history.

History proved him right. Schwartz was not perhaps the first collector of digital art, but he certainly contributed to inventing the forms of this type of collecting. Artists had begun experimenting with digital media from their emergence in the late 1950s, tracing and at times conditioning their development. For decades, this art seemed to be out of synch with any sort of collecting, aside from the conventional forms of its materialisation: the printing in limited editions of images generated by computer, video, installation. But over and above the complications involved in tying digital art to a stable, marketable form, the history of media art from the 1960s to the 1990s was weighed down first and foremost by the difficulty experienced by large swathes of the art world in understanding its themes and idioms, and in recognising its cultural value.<sup>4</sup> Until the dawn of the new millennium, the collecting of digital art was limited to a few high-profile institutions, such as ZKM | Center for Art and Media in Karlsruhe, and a small number of private collectors capable of taking Schwartz’s rules on board.

The situation began to change at the turn of the millennium, due to a series of intersecting factors. The disruptive impact of the digital revolution started to be recognised by curators and by the more attentive institutions, which made it the theme of exhibitions such as *Mediascape* (Guggenheim, New York 1996), *Net\_Condition* (ZKM, Karlsruhe 1999), *Bitstreams* (Whitney Museum, New York 2001) and *010101: Art in Technological Times* (SFMOMA, San Francisco 2001), to name but a few. Various museums recruited curators of media art and launched digital programmes, while certain commercial galleries set

<sup>3</sup> Ibid., p. 36.

<sup>4</sup> On this question, see Domenico Quaranta, *Media, new media, postmedia*, 2010 (Milan: Postmedia Books, 2018).

about focusing on (Bitforms, New York; DAM Gallery, Berlin), or boldly supporting (Postmasters, New York; Fabio Paris Art Gallery, Brescia) the new idioms.

The first decade of the 21st century certainly did not see the collecting of digital art explode as a significant phenomenon, but it was during this time that the foundations were laid for a potential market. Urged on and assisted by the galleries, the artists themselves – accustomed to the unconstrained circulation of content on the Internet and to the “spectacular” economy of electronic art festivals and media centres, based on fees and ticket sales more than on the sale of works – developed ways to translate their art into “stable” artefacts, often physical, either one-offs or in editions, and therefore suited to the needs of a courageous but still nascent form of collecting: digital prints, videos, multimedia installations, digital editions on physical media (floppy disks, CD-ROMs, DVDs, USB flash drives, hard disks). This process was also facilitated by the advent of customisable hardware and screens “for artists”, and by the development of the techniques of digital printing and 3D printing, which made it possible to become acquainted with the materialisation of what was created digitally.

Thanks to all of this, at the end of the decade, media art could declare itself to be a solid, albeit still niche, presence on the main art market. The number of galleries that concerned themselves partially or exclusively with these emerging languages was no longer in single figures but now into the dozens. A number of art fairs – in particular Arco Madrid, with its Expanded Box – supported digital idioms with dedicated sections, side events, conferences and debates. Collecting was on the rise, even though it remained “after the manner of Schwartz”, guided more by passion, interest and daring, than by the prospect of making a profit.

The 2010s saw a significant change in the state of affairs, thanks to the convergence of various phenomena. While the awareness of living in an epoch strongly conditioned by digital technology became mainstream, there was also an increase – in the world of contemporary art, as elsewhere – in the need to find within art a response to this change, as well as some support on its decodification and comprehension. At the market level, the most visible outcome of this requirement was the rise of Post-Internet art, which turbo-charged the art public’s familiarity with the aesthetics, themes and formal solutions of digital art. While its flame may have burned only briefly, the Post-Internet movement helped to consolidate the market presence of those artists who had emerged in the context of the digital arts, also enabling their entry into the secondary market, thanks to pioneering initiatives such

as *Paddles On!* (2013), the first auction given over entirely to new media works. Arising out of a collaboration between Tumblr and Phillips, the auction featured both physical and exclusively digital works, and can be credited with having weakened the defences of the secondary market and rendering transparent the prices achieved by the artists, thus laying the groundwork for a potential recognition of digital art as a valid form of financial investment.<sup>5</sup>

An initial indication of how much the situation was changing came in October 2018, when Christie's New York sold the *Portrait of Edmond de Belamy*, by the French collective Obvious, for 432,500 dollars, presenting itself in the process as "the first auction house to offer a work of art created by an algorithm".<sup>6</sup> Precisely 20 years on, Christie's, the very auction house that in 1998 had refused to estimate the value of äda'web (one of the first sites to commission and exhibit art on the Internet), jumped on the bandwagon of a form of high-tech hype – that of artificial intelligence – with a view to engendering a new market.

In March 2021, Christie's notched up another victory by selling – for the eye-watering sum of 69 million dollars – *Everydays: The First 5000 Days*, a digital image in .jpg format that gathers together in a single piece a full 5,000 works by the American artist Mike Winkelmann, better known as Beeple. How could an easily replicable and downloadable file, produced by a US artist largely unknown to the art world, achieve such an astronomical price? The answer is simpler and more banal than it may seem at first glance: first, by associating the file with something that claims to certify – unalterably, for all eternity – the provenance, uniqueness and authenticity of that file; and second, by finding someone who is prepared to invest 69 million dollars in the claim made by that "something".

That something is called an NFT (Non-Fungible Token), and it is a solution for the construction of scarcity that emerged out of the world of cryptocurrencies and the infrastructure on which they are founded: the blockchain. A blockchain is a public, decentralised, encrypted register, created to enable the coining and circulation of digital currencies such as Bitcoin and Ethereum. In short, this technology has shown itself over time to be capable of enabling the safe exchange of value, and of doing so without the interference of third parties, such as institutions or central banks. The trust that the blockchain has succeeded in garnering over the years is demonstrated by the value reached by certain cryptocurrencies: at the time of writing, 1 bitcoin (a single unit of a currency established in 2008 with a value of next to nothing) is worth 40,955.44 euros; and 1 ether is worth 2,857.36 euros. While the currencies are fungible – i.e. interchangeable – tokens, each NFT is

<sup>5</sup> After the first auction in New York (5–12 October 2013), Phillips staged another at its premises in London (3 July 2014). For more information, see <https://paddleson.tumblr.com/>.

<sup>6</sup> "Is artificial intelligence set to become art's next medium?", *Christie's*, 12 December 2018, [www.christies.com/features/A-collaboration-between-two-artists-one-human-one-a-machine-9332-1.aspx](http://www.christies.com/features/A-collaboration-between-two-artists-one-human-one-a-machine-9332-1.aspx).

unique, in the sense that it cannot be exchanged for another token of equal value. In itself, an NFT is nothing but a programme, a digital code recorded on a blockchain that can easily be associated with an asset or a property (digital or otherwise). This association creates a sort of mutual relationship between the NFT and the linked asset: the NFT makes the linked asset unique, and its transactions thus become traceable in the public blockchain ledger; the digital asset allows us to view the NFT and transfers to it in turn a number of its characteristics.

In practice, since 2017 NFTs have enabled the development of a market of collectable digital assets: videogame assets, such as weapons, skins, clothes and game objects; virtual lands (server space in an online videogame); domain names, trading cards, memetic images, digital gadgets; and digital works of art. Having established itself on a number of online platforms, by February 2021 this market had already surpassed the 100 million dollars mark. Beeple, a designer and animator beloved by users of social media, was one of its darlings, and he succeeded in selling a single work in the NFT marketplace for more than 6 million dollars.

Given this backstory, the spectacular sale at Christie's begins to seem more predictable. Competing over *Everydays* were two crypto "giants", major investors with portfolios worth billions of dollars in cryptocurrency. Over subsequent months, the trailblazing consequences of this investment were clear for all to see: the main auction houses opened up not only to NFTs, but also to payments in cryptocurrency for traditional works of art, winning over a portion of very well-off collectors who until that time had shown no interest in collecting traditional art. The world of art became aware of NFTs, and thousands of artists from across the planet started to flood the main marketplaces in the hope of making easy profits, feeding into and bringing to life a market that today, according to the estimates of the Cryptoart.io website, has reached the impressive value of 1 billion dollars (generated by the sale of just under two million works, and taking account solely of the markets based on Ethereum).<sup>7</sup>

Can it be said, then, that NFTs resolved the problem of collecting digital art? At a time in which a .jpg file reached the third-highest sale price for a work by a living artist, after a painting and a sculpture, and in which hundreds of thousands of digital artworks are collected, with numerous artists who had been struggling to survive on small sales and alternative jobs going on to make a handsome living, it may seem that NFTs have done exactly that. But there are several problems that have to be borne in mind. As we have seen, those who purchase an NFT are not simply buying a "certified" digital work of art; they are

<sup>7</sup> See <https://cryptoart.io/data>.

buying a techno-financial asset, the economic value of which depends on the presumed value of the digital work associated with it, but which at the same time is the only guarantor of this value. And they are investing, with every purchase they make, in the entire techno-social framework that allows this asset to exist, to be traded, to have value: the blockchain, the marketplace, the other parties – for the most part collectors – which have led that artist and that work to achieve their market value. Once linked to an NFT, the digital work of art no longer exists purely as a work: it also exists as a traded commodity incorporated in a system that must demonstrate constantly – in part, through that work – its legitimacy and its very existence. This, I would maintain, is the first thing that an art collector should be aware of when purchasing an NFT: they are not merely purchasing an artwork. On the contrary, first and foremost, they are investing in cryptocurrency, even if paying in fiat money by credit card, and even if they have not the slightest idea how to open or use a digital wallet.

The Beeple case is also emblematic of another aspect of the peculiar form taken on by the digital art market with the emergence of NFTs. It was not the art world which decided that one of his works would be worth millions of dollars; not Christie's, which obligingly supplied the artist and the collectors with the appropriate platform for their performance; not the world of mainstream art, which had never heard of him; not that portion of the contemporary art world that we have described above, and which deals with supporting, commenting on, curating, selling and collecting digital art, to which he was equally unknown. Highly popular on social media as an illustrator and reporter on current affairs, until his entrance into the NFT markets Beeple had succeeded in translating this popularity solely into the odd commission for major brands – not into exhibitions, not into articles in trade publications or even into sales on the primary market.

The market value of Beeple – and of Pak, xcopy, maddogjones and the other leading lights of the NFT market – has been constructed by the collectors of NFTs. The crypto art scene has inherited from the world of cryptocurrencies the rejection of all forms of intermediation: in the world of NFTs, the key players are the artists, the trading platform and the collectors. While recent months have seen an increasing integration with the world of art, and the entry into the NFT world of authoritative critics, curators, gallerists and artists, the desire to collect remains fundamental, and the quantity of cryptocurrency that one has in one's wallet is what ensures greater independence and freedom of action. This attributes an extraordinary level of power to a new class of crypto investors/collectors, whose culture and agenda have determined in large part what has happened thus far and what will happen in the future.

The digital art market is the result of cultured, experimental and courageous collecting. Schwartz believed in the world of art, in its potential and in the input of the dealers, critics and curators. In his little book, he states that an art collection starts with collecting not works themselves but books and catalogues. Schwartz studied continually, looking for pointers in the museum exhibitions, in the essays by the critics that he loved and by those that he hated, in an awareness that, at times, instinctive refusal and denial hide, behind good taste, an inability to understand the new. The advent of NFTs brought this market, and the art world in general, face-to-face with a sudden, radical change of scale, but also with the risk – generated by the rejection of intermediation and by the prevalence of speculative dynamics – of a qualitative collapse. Whether or not this risk will go on to condition the market's evolution permanently depends very much on the adaptation of the new infrastructure introduced by the NFTs and on the willingness of the collectors of the present and the future to follow the advice of a poor collector.

# NFT Glossary

by Eikonos Arte

## ◆ NFT

Non-Fungible Token. This is a digital certificate of authenticity, non-exchangeable with another of the same value, and unique in its individuality. It is stored on a blockchain. An NFT is a form of encrypted information, associated with any type of media (music, video, texts, art works, photos, animated GIFs, memes), but it is not the work itself. Once the work has been acquired, the NFT continues to circulate freely on the Internet, but ownership of the artwork lies with the purchaser who cannot, however, claim the intellectual property rights. NFTs make any associated digital asset rare, and therefore collectable, but not all of them are works of art.

## ◆ Blockchain

This is a digital register. It is a system for the registration of information that makes it very difficult to hack or cheat the system. Blockchains are essential for confirming the authenticity of NFTs. In practice, it is a network of interlinked computers on which data are recorded in blocks; these blocks cannot be modified retroactively without all of the subsequent blocks being modified. On a blockchain, which uses the Bitcoin cryptocurrency technology, NFTs cannot be traded directly amongst themselves, but may be traded for currency.

## ◆ There are two distinct standards for NFTs

The first, known as ERC-721, is more widely used and is marked out by uniqueness. This means that every single contract equates to one token: a work sold through this standard thus corresponds to a single element.

The second standard, known as ERC-1155, is characterised by the fact that a contract may equate to several tokens. In this way, it is as if ownership were split between several parties, as in the case of limited-edition prints.

## ◆ The characteristics of NFTs

They are indivisible: they cannot be divided into smaller denominations and exist, therefore, solely as whole entities. They are verifiable: digital artworks, for example, can be traced back to their creator and duly authenticated without any requirement for verification by third parties. They are not very sustainable: since they require the use of a blockchain – a system that is generally wasteful in energy terms – non-fungible tokens automatically have a low level of sustainability.

## ◆ What NFTs offer

They authenticate the transaction and verify the authenticity of a digital asset within a digital ecosystem. They introduce officially, for the first time, a “digital object” into the circuit of traditional art, while also ushering in the concepts of exclusivity and rarity into the online world.

## Where NFTs are traded

There are several NFT marketplaces, *bona fide* platforms for the exchange of non-fungible tokens, including: Nifty Gateway, OpenSea, Known Origin, SuperRare, Makersplace, Rarible, Foundation, Artblocks and Palm.

## ◆ Crypto wallet

This wallet contains the cryptocurrency required to purchase an NFT. In reality, it is an application or a hardware device that enables individuals to store and transfer digital goods such as cryptocurrencies (of which there are in excess of 2,000 and the number keeps rising) and NFTs. There are various providers of wallets, for desktop and mobile use.

## ◆ Gas fees

These are blockchain transaction fees, calculated on the basis of the work of the miners.

## ◆ Miners

Miners are computers scattered around the world which carry out all of the calculations associated with the blockchain, thousands of transactions completed every day by users. Miners safeguard the network against attacks by hackers, track trades and deal with the creation of new currencies to be released onto the market.

## ◆ Minting

Coining. NFTs are tokens that are “coined” once created.

## ◆ Burning

Deleting an NFT, destroying the token and removing it entirely from the Ethereum blockchain. The transaction is irreversible, but a trace of it will, however, remain.

## Bibliography

Rosa G. (2021). “NFT: cosa sono i token non fungibili di cui tutti parlano”, HDBlog.it, 27 March  
Moro M. (2021), “Speciale NFT. La galassia arte ha una nebulosa aliena: è Metaverse”, *Il Giornale dell'Arte*, no. 418, June  
Bossio S., Flora M., Maggi L. (2021), *Guida pratica agli NFT: Arte e Diritto al tempo dei Non Fungible Token* (Milan: 42LF)