

NFTs between Art and Design

A Story of Digital Transformation

Lucilla Grossi¹ and Luca Guerrini²

Non-fungible tokens (NFTs) are blockchain-based certificates that attest to the authenticity of the wares during the sales of a virtual item, infinitely reproducible and freely downloadable from websites. Consistently associated with the commerce of digital images, their diffusion has actively touched the art field and its relative market, which underwent a transformation that has provoked a shake in its previous hierarchical balance. The evolution of the language of digital images started from the widespread practice of creators' communities—composed of professionals and amateurs—that frequented the Web before the creation of non-fungible tokens. NFTs made possible a new connection between the digital design community and crypto-investors, setting the base for a new market. The figures in this world have a hybrid multidisciplinary provenance. The consequence is a new questioning of the boundaries of art and its relationship with other creative practices, especially with design. This encounter induced a system that approaches the art market with the rules of allographic works: reproducible items depending on a certificate to assert their authenticity, such as design. NFT works might seem superficial if analyzed in the milieu of contemporary art. Still, they frame their significance in the culture of a close-knit community of people.

At the same time, the NFT world seems to open a field of experimentation in which designers can proficiently operate, thus contaminating the traditional art world. The result is an experience of art that has the connotations of

¹ Department of Architecture and Industrial Design, University of Campania "Luigi Vanvitelli".

² Department of Design, Politecnico di Milano, Italy.

digital technology and design. It is hard to predict whether NFT art will be successful since it is a nascent phenomenon. The first move, however, has already been made.

— *Lucilla Grossi and Luca Guerrini, Italy*

Bits and Prices

Since the invention of Non-fungible-tokens (NFTs) in 2014, bearing the name of the artist Kevin McCoy and the digital entrepreneur Anil Dash,³ the market has become easily accessible for digital creators coming from any background. The core of the new blockchain-based technology is the possibility of making an item that is infinitely reproducible and freely downloadable from the web, unique, and salable.

NFTs are part of a system that allows the marketing of intangible goods by certifying the authenticity of the wares while the blockchain records the currency transactions, ensuring their execution. The NFT and its related virtual items are visible to everyone, but only the buyer can declare the owner's status.⁴ For the fruition of the work, the title of "owner" does not provide specific advantages.⁵ The owner, however, has full economic rights and can therefore resell it on platforms recognizing those rights. The system's focus is economical, and the transaction is similar to the trade of stocks.

The NFT market has developed parallel to art auctions, creating a shortcut to the sales, initially undertaken by creatives who have already dealt with digital design for different reasons. Before NFTs were born, the Web was already brimming with static images, GIFs, and videos created by designers, artists, professionals, and amateurs. There were already communities speaking a common visual language and connecting through social networks, such as Telegram.⁶ The "outcomes" were freely downloadable and exchangeable and

3 Anil Dash, "NFTs Weren't Supposed to End Like This," *The Atlantic*, April 2, 2021, <https://www.theatlantic.com/ideas/archive/2021/04/nfts-werent-supposed-end-like/618488>.

4 Kevin Buist, "Chain Reaction", *Artforum*, March 10, 2021, <https://www.artforum.com/slant/kevin-buist-on-the-nft-boom-85221>.

5 Domenico Quaranta, "Code as Law. Contemporary Art and NFTs," *Kunstlerinnenpreis, NordRhein-Westfalen*, 2022, <https://digitalart.kuenstlerinnenpreis.nrw/blog/code-as-law-contemporary-art-and-nfts>.

6 Massimo Franceschet et al., "Crypto Art: A Decentralized View," Arxiv Database by Cornell University, June 11, 2019, 20, <https://arxiv.org/abs/1906.03263#>.

hardly ever offered any earning opportunity, at least not directly through the Web.

The evolution of this displaced community has existed in parallel to the spread of crypto-currencies since the birth of Bitcoin⁷ in 2009. In this respect, the NFTs formalized the union between two communities that already existed autonomously in the network. They created an advantage for both crypto-investors, who had a new market to tap into, and digital content creators, who could finally get paid for their work.

Towards the Art Market

In 2018, some pioneering galleries, such as SuperRare, started tokenizing digital content and hosting creators on their platform. As usual in any gallery, they began exhibiting, advertising, and selling these contents as artworks.⁸ In this context, the NFT mechanism operated through the oldest capitalist lever, the private ownership of the asset. Specifically, as David Joselit states, “the NFT deploys the category of art to extract private property from freely available information”.⁹ In this respect, it seemed to subvert the cornerstones of the web: to share and freely avail of its content. One might talk about a betrayal.

This “betrayal,” however, is described as a form of “liberation” from the “traditional” art system. Hailed as an instrument of redemption, it allowed designers and artists to promote themselves by skipping bottlenecks and limitations of the past. As Jason Bailey stated, “Unlike the traditional art world, [crypto] artists did not seek permission from gallerists, agents, auction houses, or other gatekeepers to share and sell their work. Instead, leveraging the blockchain, they [...] decided on their own to show their work and make it available”.¹⁰

The process is seen almost exclusively from the market’s perspective as a direct encounter between supply and demand. Creatives of any kind can practice this new way of trading art, and potentially reach high quotations

7 Satoshi Nakamoto, “Bitcoin: A Peer-to-Peer Electronic Cash System,” <https://www.bitcoin.org>, January 3, 2009. <https://bitcoin.org/bitcoin.pdf>.

8 Franceschet et al., “Crypto Art: A Decentralized View.”

9 David Joselit, “NFTs, or The Readymade Reversed,” *October* 175, (Winter 2021), 3–4, https://doi.org/10.1162/octo_a_00419.

10 Jason Bailey is an art and tech blogger (Artname.com), and co-founder and CEO of NFTClub. Quoted in: Franceschet et al., “Crypto Art: A Decentralized View,” 8.

quickly, be they amateurs or professionals. Similarly, on the buyers' side, there are no barriers to art connoisseurs; therefore, investors involved come from very mixed cultural backgrounds. Since NFTs are based on the Ethereum network, they can only be bought by using this new digital money. Consequently, buyers are often investors of these currencies, who see crypto-art works as a new way to diversify their crypto-wallets.

Auction houses have always acted as a filter for the art system, selecting the most valuable works and certifying their authenticity. In the NFTs market, there is no filter relating to the artistic quality of the works. Therefore, the new selling system works as a double-edged sword. On the one hand, it allows more creatives to become well-known and acknowledged as professionals. On the other, it sees a highly variable quality of artworks on sale by setting open access to everybody.

In 2021, the art world assisted in the first encounter of the two leading auction houses with the NFT sale system, and the result was the legitimization of NFTs in the art world.¹¹ Christie's was the first, in March 2021, to sell the piece *Everydays:the First 5000 Days* by Beeple for 69 million dollars.¹² In April 2021, Sotheby's sold *The Switch* by Pak, reaching \$1,444,444.00, and *The Pixel* for \$1,355,555.00.¹³ Considering the novelty of the system, the figures involved were undoubtedly considerable; the sale of Beeple with Christie's made him one of the three most valuable living artists.¹⁴

Christie's auction was one of the most influential triggers of the global propagation of NFT art. Its role in spreading the knowledge of NFTs was so significant that it raised doubts that specific interests drove it. Crypto-investors—as Domenico Quaranta claimed—have demonstrated the safety and potential of acquiring crypto art and have attracted new people to the market, while auction houses have opened their portal to all crypto-investors that had never been able to invest in assets before.¹⁵

¹¹ Nifty Gateway, "Collect NFT Art History," accessed April 8, 2023., <https://niftygateway.com/collections/portraitsofamindoe>.

¹² Scott Reyburn, "The \$69 Million Beeple NFT Was Bought With Cryptocurrency," *The New York Times*, March 12, 2021. <https://www.nytimes.com/2021/03/12/arts/beeples-nft-buyer-ether.html?searchResultPosition=2>.

¹³ "The Fungible Collection," Sotheby's, April 14, 2021, <https://www.sothbys.com/en/digital-catalogues/the-fungible-collection-by-pak>.

¹⁴ Reyburn, "The \$69 Million Beeple NFT Was Bought With Cryptocurrency."

¹⁵ Quaranta, "Code as Law. Contemporary Art and NFTs."

Designers as Artists?

The protagonist in this outbreak of the market, Mike Winkelmann, also known as Beeple, is a peculiar emblem of the American dream. He defines himself as a graphic designer on his website.¹⁶ Before selling his works as NFTs, Beeple was already a name in digital design, working for companies such as Louis Vuitton, SpaceX, Apple, Nike, Samsung, Coca-Cola, and Sony. Moreover, in 2016, he authored the animations used during the convention of the Democratic Party that nominated Hilary Clinton as the presidential candidate.¹⁷

Everydays:the First 5000 Days is a unique collage of different images produced in a single day for 5000 days. The graphics appertain to various styles that the author experimented with through the years, according to the amount of time he had. Most of them were made using 3D graphics programs, such as Cinema 4D, and only a few were hand-drawn. The scenes frequently depicted abstract utopian/dystopian scenarios and acknowledged characters from politics and cartoons.¹⁸

Metakovan, the winner of Christie's auction, declared that the value of *Everydays:the First 5000 Days* was the time devoted to its creation: 13 years. In his words, "Techniques are replicable, and skill is surpassable, but the only thing you can't hack digitally is time. This is the crown jewel, the most valuable piece of art for this generation."¹⁹

The art connoisseur inevitably recalls how conceptual artists delved into the topic of time in the 1960s. In 1966, On Kawara started painting his *Today* series, also called Date Paintings. They consist of a square canvas painted in red, blue, or dark gray with the date it was made written in white. The date was written

16 Mike Winkelmann, "Beeple's Personal Website," personal website, accessed April 8, 2023, <https://www.beeple-crap.com>.

17 Anny Shaw, "Who Is Beeple? The Art World Disruptor at the Heart of the NFT Boom." *The Art Newspaper*, March 5, 2021. <https://www.theartnewspaper.com/2021/03/05/who-is-beeple-the-art-world-disruptor-at-the-heart-of-the-nft-boom>

18 Kyle Chayka, "How Beeple Crashed the Art World," *The New Yorker*, March 22, 2021, <https://www.newyorker.com/tech/annals-of-technology/how-beeple-crashed-the-art-world>.

19 Anna Brady, "Revealed: Metakovan, Pseudonymous Founder of 'Crypto-Exclusive Fund' Metapurse, Is the Buyer of Beeple's \$69.3m NFT," *The Art Newspaper*, March 12, 2021, <https://www.theartnewspaper.com/2021/03/12/revealed-metakovan-pseudonymous-founder-of-crypto-exclusive-fund-metapurse-is-the-buyer-of-beeples-dollar693m-nft>.

according to the language and conventions of the place where Kawara made it. Each painting is provided with a cardboard storage box, sometimes lined with the front page of a local newspaper. He made a Date Painting almost every day for years. The canvas was destroyed if he could not finish the work by midnight.

In 1965, Roman Opalka began painting an infinite series of numbers on canvases. Starting from the left top corner to the right bottom one, he drew lines of numbers, counting where he left off the previous day. The title was always 1965/1-∞. Over the years, the ritual changed in some ways. The color of the background, initially black, from 1968 on, became gray. From 1972, it slowly started turning white by adding 1% more white in each detail, as Opalka planned to reach the moment to paint in white-on-white. In 1968, he introduced a tape recording of himself reading the numbers as he painted them and began taking a self-portrait photo each day after finishing the canvas.²⁰

The names of these artists resound loudly while looking at Beeple's *Everydays: the First 5000 Days*. Neither the author nor the collector seems to have deep knowledge of the history of art, and—all exceptions considered—this is emblematic of the NFT world. Both artists and buyers frequently encounter the art field for the first time and approach it from a different perspective; most likely through the eyes of the business.

During a conversation with the curator Carolyn Christov-Bakargiev, Beeple admitted his negligence towards the “traditional art world,” a formula that he used to describe “everything but digital art,” defining his method as detached from conceptual reasonings about art.²¹ In an interview with the *The New Yorker* in 2021, he declared that he did not have an idea of what “abstract expressionism” was. This was just one of the examples through which Winkelmann has openly admitted his ignorance in the field. Beeple’s move from design to art is not based on a rich curriculum or a critique evaluation. Instead, it stands on the sales: it demonstrates why the NFT market can become a shortcut to the art world.

²⁰ “Opalka 1965/1 – ∞; Détail 993460–1017875,” accessed April 8, 2023, <https://www.metmuseum.org/art/collection/search/666092>.

²¹ Mike Winkelmann and Carolyn Christov-Bakargiev, “Mike Winkelmann alias Beeple in conversation with Carolyn Christov-Bakargiev – Season I, Episode I. Interview by Carolyn Christov-Bakargiev,” May 28, 2021, https://www.youtube.com/watch?v=pOh3Cra2LYw&ab_channel=CastelodiRivoliMuseod%27ArteContemporanea.

The paths of other important figures to the NFT art market similarly started from fields other than art. The following are some examples from the collectible world. The Larva Labs, the authors of the *CryptoPunks* collectible series in 2017, are a duo of creative American engineers.²² Their project pioneered NFT creations and provided the basis for the ERC-721 token standard, now primarily adopted by most crypto artists.²³ The creator of *CryptoKitties*, Dapper Lab, is a company that specializes in video games; in their LinkedIn profile, they describe themselves as "the serious business of fun and games on the blockchain."²⁴ The collectible series *Bored Ape Yacht Club* is also a child of business. The series is signed by Yuga Labs, and the two founders go under the pseudonyms of Gargamel and Gordon Goner. Gargamel, later revealed by *BuzzFeed News* to be Greg Solano,²⁵ was a writer and editor before entering the NFT commercial scene. Gordon Goner (Wylie Aronow) was planning to study in a Master of Fine Arts program, but before starting it, he entered into cryptocurrency trading and founded his business with Gargamel. It was declared in an interview published in *The New Yorker* that they are both "literary nerds."²⁶

For NFT works not included in a collectible series, there are many creators whose backgrounds are outside of the art field. Among well-known NFT creators is Mad Dog Jones, who started his career on Instagram. Mad Dog Jones (Michah Dowbak) has posted digital collages made by modifying pictures and hand drawings of cityscapes. Dowbak's career comes out of a diverse background; he graduated in human kinetics and started working in a care center. Instagram allowed him to develop his creative side. He declared in an

22 Domenico Quaranta, *Surfing with Satoshi. Art, Blockchain and NFTs* (Ljubljana: Aksioma, 2021), 207.

23 Larva Labs, "CryptoPunks," accessed April 8, 2023, <https://www.larvalabs.com/cryptopunks>.

24 Dapper Labs, "Dapper Labs Profile," LinkedIn, accessed April 8 2023, <https://www.linkedin.com/company/dapper-labs/?originalSubdomain=ca>.

25 Katie Notopoulos, "We Found The Real Names of Bored Ape Yacht Club's Pseudonymous Founders," *BuzzFeed News*, February 5, 2022, <https://www.buzzfeednews.com/article/katienotopoulos/bored-ape-nft-founder-identity>. See also Emma Roth, "Florida men revealed to be behind Bored Apes," *The Verge*, February 6, 2022, <https://www.theverge.com/2022/2/5/22919612/bored-apes-yacht-club-florida-men-identities-revealed>.

26 Kyle Chayka, "Why Bored Ape Avatars Are Taking Over Twitter," *The New Yorker*, July 30, 2021, <https://www.newyorker.com/culture/infinite-scroll/why-bored-ape-avatars-are-taking-over-twitter>.

interview, “[...] if I want to do this professionally, what do I need to do? Well, I need to get a bunch of followers on Instagram. I need to get people excited about my art.”²⁷

This emerging generation of NFT creators are often natives of social networks, and frequently use Instagram as a springboard for the market. FEWOCiOUS is another emblem of the phenomenon. FEWOCiOUS (Victor Langlois) is a transgender person and started making works on the topic of transitioning in 2020 when he was 17. By 2021, Christie’s noticed him and organized his first NFTs auction. In a short time, Langlois reached a very high quotation on the market, at 2 million dollars.²⁸

Outside of Gen-Z creators, there are the works by 87-year-old comics drawer José Delbo at the top list of sales, who collaborated with the painter Trevor Jones to produce an oil painting version of one of Delbo’s inked drawings of Batman. Their backgrounds are in figurative work, but expressed differently. Delbo lived an entire career in comics. Jones started his formal career in art at age of 30 when he enrolled at the Edinburgh College of Art. He worked in other fields to support his passion for painting until he entered the NFT world.²⁹ Delbo and Jones’ *Genesis* was valued at \$19,714,400.00 in May 2022 on MakersPlace.

These brief profiles illustrate a cohesive community that has grown up on the Web and has fundamentally forged its aims, methodologies, and operating rules. In the art world, these authors in many ways look like foreigners. Digital design, with its multifaceted complexities, is the field that has shaped them. In this respect, the NFT world seems to open a large field of experimentation in which designers can proficiently operate, arguably contaminating the traditional art world.

27 Nick Narigon, “Mad Dog Jones: At the Forefront of the Art World’s Digital Revolution,” *Tokyo Weekender*, September 26, 2019, <https://www.tokyoweekender.com/2019/09/mad-dog-jones>.

28 Steven Kurutz, “Teens Cash In on the NFT Art Boom,” *The New York Times*, August 14, 2021, <https://www.nytimes.com/2021/08/14/style/teens-nft-art.html>.

29 Silvia Colella, “Disrupting the Art Market? Blockchain, NFTs and the Promise of Inclusion,” *IL CAPITALE CULTURALE, Studies on the Value of Cultural Heritage* n. 26 (2022): 233–55, <https://doi.org/10.13138/2039-2362/2946>.

NFT Artists as Barbarians

We may see NFTs as part of a process Alessandro Baricco calls “barbarism.”³⁰ Baricco, an acknowledged Italian writer deeply involved in cultural and political debate, analyzed how new products and behaviors—frequently coming from the US—have subverted European culture, thus opening it to a new value system. According to his interpretation, these disruptive phenomena are powerful enough to break the established rules of the past. Baricco identified three main characteristics of *barbarism*: a) the advent of a new technology; b) the simplification of an existing system; c) the use of a new language.

An example given by the author is the diffusion of American wine. Baricco explained how before 1966, France and Italy dominated the international wine market. In the 1960s, an American entrepreneur, Robert Mondavi, launched an autochthonous production of wine in California. American climate conditions had never favored the natural process of grape maceration. For this reason, no one had ever produced wine there before. The premise for implementing the new wine business was the introduction of a new technology that could make the process feasible: the invention of cooling systems. Moreover, the new enological product took a transversal way to market compared to the typical European wine: American wine had a new clarity of flavor and smell, differing fundamentally from the complexity of European ones.

The new product was remarkably drinkable. These features paved the way for a new whole American market. These practices were so effective that many other wine producers adopted them worldwide. Even the European winemakers began to produce similar wines to meet the taste of these new customers. Today in China, Mexico, and South Africa, countries with no enological history, wine is also produced. The critical point was that a new product was custom-made for a target audience, who were not used to distinguishing wine complexities, therefore they could better appreciate an easy-to-understand taste.

Baricco’s pattern is easily identifiable in the case of NFTs. The new technology is the NFT certificate, which responded to the necessity of selling a number of digital images on the web. Crypto-art adopts a new approach to the image, which is conceived for screen vision, although it is still printable. Moreover, the images often involve movements, like GIFs and videos, and they

³⁰ Alessandro Baricco, *I Barbari, Saggio sulla mutazione* (Milano: Feltrinelli, 2006).

are frequently also navigable through particular technologies, such as virtual reality. For it to grow into a market, it required a legitimization of the sales of files, no longer prints, which was a complete digitization of the process. NFT technology represented the start of the digital image market, just as cooling systems supported the production of American wine. The blockchain was a predictable destination. Trades were exclusively developed digitally. Cryptocurrencies were also overtly apolitical, so the global expansion of the market was fairly predictable. This new way of buying art pieces spoke to a second characteristic of “barbarism”: the simplification of an existing system.

To buy a digital image, it is enough to access one of the numerous platforms, such as OpenSea, Nifty Gateway, Foundation, and Rarible, and log into a private digital wallet. It is necessary to buy some cryptocurrencies for setting up a wallet for the first time, but once done, the log-in is as easy as accessing any other website. Once entering the platform, the buyer can scroll through many digital images, choose one or more, and process the payment. The blockchain records the owner's status as soon as the token transfer ends. It only takes several clicks to become a collector.

The process is as easy for the seller as it is for the buyer. Speed seems crucial because “having the right idea and using a generative computer-aided process, the author can quickly produce one piece, instantaneously upload and exhibit it [...] and, if lucky, sell it in a matter of minutes.”³¹ The process of minting – that is, creating the code related to the image – has a fee called the “gas fee,” which must be paid in crypto. After these steps, the artwork is on the network, and buyers can directly access it. System usability and speed are at the base of the growing interest of both sellers and buyers. The last characteristic of barbarism is the adoption of a new language. Due to the broadness of the crypto art world and the variety of styles involved, it is hard to define distinct visual categories.

NFT artists share “a territory that is by its nature extremely hybrid.”³² Together, they face issues about the use of technologies that have been central to digital art and to Internet art more recently.³³ NFT art shares a distinction outlined by Christiane Paul. Digital art works using technology as

³¹ Massimo Franceschet, Giovanni Colavizza, Tai Smith, Blake Finucane, Martin Lukas Ostachowski, Sergio Scalet, Jonathan Perkins, James Morgan and Sebastian Hernandez, “Crypto Art: A Decentralized View,” arXiv:1906.03263v1, 2019, 11–12.

³² Christiane Paul, *Digital Art* (London–New York: Thames & Hudson, 2003): 8.

³³ Rachel Greene, *Internet Art* (London–New York: Thames & Hudson, 2004).

a *tool*, independently from the content created, and delves into the expressive potential of technology as a *medium*.³⁴

These categories, however, rest upon a traditional art perspective that does not grasp the very nature of the most successful—at least commercially—NFT works. NFT art was born in a digital context of uncontrolled diffusion of images. The ease of exchanging images online, which has been the basis of digital creators' communities, is the beginning of a process of desacralization of the image.³⁵ The most successful photos on Instagram and the best memes on 4Chan are also the most shared, downloaded, and reinterpreted. This endless flow is a fundamental tool for value creation. Therefore, to go viral, most artworks nod to visual cultures made up of interactive games, comics, fantasy movies, and sticker collections that are familiar and meaningful to the “barbarian” generation.³⁶ This is especially the case for teen crypto artists, who started as amateurs and now reorientate their careers on NFTs as professionals.

In fact, the visual language frequently adopted comes from cartoons, as in the case of *Cryptokitties*, or from comics and memes like *Rare Pepes*. They are literally collectables, like stickers. *Cryptokitties* can be compared to the famed Tamagotchi virtual pet. The 3D style of Japanese anime and hentai, including the works of Hardmetacore which deals with the transformation of the body and Waarp's works based on the role of human beings in the real and virtual space, is also frequently used. The use of 3D is also a common language in utopian renders, like in the works by Annibale Siconolfi. The immersive rooms by Refik Anadol also represent an aesthetic step to test a new kind of interaction with an artwork.

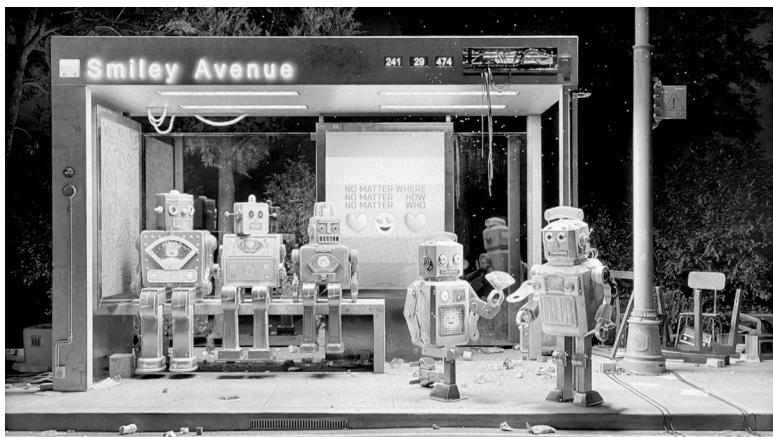
Most significantly, NFT art speaks the multifaceted language of coding, using sophisticated software such as Cinema 4D, OctaneRender, and Blender. The bare beauty of the source code of the World Wide Web is seen in *This Changed Everything* by Tim Berners-Lee, a historical document turned into crypto-art. The dawn of microblogging is captured in the *First Tweet*, 2006 by Jack Dorsey. The challenge of machine learning is also involved. Larva Labs'

34 Paul, *Digital Art*, 8.

35 Valentina Tanni, *Memestetica* (Roma: Nero Edizioni, 2020), 113–117.

36 Dal Dosso, Silvia, “Cats, Frogs and Cryptoartists: What if Auteur .jgps Become a Luxury Good,” *Institute of Network Culture*, March 11, 2021. <https://networkcultures.org/longform/2021/03/11/cats-frogs-and-cryptoartists-what-if-auteur-jgps-become-a-luxury-good>.

CryptoPunks are generated by an algorithm that automatically churned out as many as 10,000 of these images.



Photograph of Vittorio Bonapace's *Love To Bits*, 2021.³⁷

The NFT certificate itself translates the art market contract into the computer language. It is not simply a matter of legal ownership. According to Gary Vaynerchuk, President of the creative and media agency Vaynerx, in the contract users can put “anything you want. An artist can make an NFT and put in the contract that it allows you [...] to get the paint buckets that he used. I’m sure that if NFTs were around when Jackson Pollock was around, and you could get the empty paint buckets, [...] those buckets would be worth just as much as the paintings. This is a game-changing technology because of the contract underneath the ‘collectible’.”³⁸ NFTs subvert the very nature of what an artwork is.

NFTs also speak the language of stock exchanges and finance, and as Massimo Franceschet and Giovanni Colavizza state, “crypto artworks and

³⁷ Luca Guerrini, Photograph of *Love To Bits*, 2021.

³⁸ Gregory Bobillot and Joe Sinclair, “Soaring NFT Sales Redraw the Art Market,” *Financial Times Films*, November 29, 2021, <https://www.ft.com/video/2fcf76ad-5e03-4230-97da-aae12a9681cb>.

crypto coins are made of the same matter.”³⁹ Therefore, figures, diagrams, and quotation graphs become essential to NFT imagery. Galleries such as OpenSea create a bid and an asking price for each artwork displayed on their website.⁴⁰ Crypto venture funds provide potential buyers with an updated analysis of the market.⁴¹ Similar to Robert M. Parker’s 100-point rating system for wines⁴² that opened the wine market to Americans, quotations are now an easy way to compare the value of NFT artwork.

Barbarians do not act randomly. We may criticize their sharp market-oriented approach. However, if we delve a bit more into the issue and look at this community in the light of the “Institutional Theory of Art” by George Dickie,⁴³ we may see that the protagonists of the NFT phenomenon have developed a system of value independent from the art world. Categories of work that are “interesting,” “pleasing,” or “meaningful” are entirely different between the two systems. Paraphrasing Baricco, barbarians find the instructions for using art in places that are NOT in the art world.

Contaminating and Transforming

The NFT art phenomenon is not a blunder, but the way it will develop is not yet precisely predictable. Alessandro Baricco described the evolution of “barbarism” with the metaphor of “the sunny side up fried egg.” The yolk represents the elite art bubble, whereas the egg white is all the rest of the potential users. Both parts constitute the egg, and the first is always the minority compared to the second. When a substantial transformation starts from the egg-white side, the yolk inevitably shakes. The people on the yolk side are usually skeptical about the phenomenon, while those on the egg-white side react enthusiastically.

This is essentially what happened in the case of NFT art. Through galleries and auctions, the connoisseurs who had long ignored digital design creations

39 Franceschet et al., “Crypto Art: A Decentralized View,” 12.

40 “OpenSea,” accessed April 8, 2023, <https://opensea.io>.

41 Richard Chen, “Cryptoart Market Data,” accessed April 8, 2023, <https://cryptoart.io/data>.

42 Wikipedia, “Robert Parker (Wine Critic),” accessed May 2, 2022, [https://en.wikipedia.org/wiki/Robert_Parker_\(wine_critic\)](https://en.wikipedia.org/wiki/Robert_Parker_(wine_critic)).

43 George Dickie, *Art and the Aesthetic* (Ithaca: Cornell University Press, 1974).

immediately looked sideways at the growing reality of new market platforms.⁴⁴ In this respect, Christie's and Sotheby's first move seemed much more like a speculative bet than an inclusive strategy. Paradoxically, opening the most acknowledged temples of art commerce to NFT works fueled the debate about the newcomers. After skyrocketing prices were paid in the auctions of spring 2021, big art world names now reconsidered their initial disregard for NFTs. Many galleries retraced their steps, trying to include some NFT artists, who partly decided to enter traditional systems and partly proceeded with decentralized commerce.⁴⁵ This process is in-progress. Nevertheless, it is hard to say whether the NFT community has entered the art world or is still standing on the threshold.

At the base of the conflict between the traditional art world and the NFT one, there is the hybrid multidisciplinary provenance of the creators who frequently have their background in business studies, engineering, communication, or graphic design. They are the nieces and nephews of a democratizing process and, like the 1960s, "for the first time ever [...] images of art have become ephemeral, ubiquitous, insubstantial, available, valueless, free."⁴⁶ This process helped them learn how to manipulate visual content according to the Avant-Garde strategies without any formal training. Until they shared their creations on social networks for free, the art world largely ignored the phenomenon. Now that they claim a position in the system, their creations have become controversial.

NFT authors are only a tiny segment of a much broader mass of unknown visual creators that, like Avant-Garde artists, steal, paste-up, remix, and use nonsense and irony. Art therefore experiences its own retaliation and "after more than a century of continuous and brazen appropriation of materials, languages, and ideas from other worlds – such as music, cinema, television, advertising, pop culture, but also objects and behaviors of daily life – art itself becomes the object of appropriationist practices."⁴⁷

If we look at NFT works with the eye of the art connoisseur and compare them to the complexity of contemporary art research, they may seem superficial. As claimed by Domenico Quaranta, they have not added a

44 Quaranta, Domenico, Bruno Pitzalis, Serena Tabacchi, Andrea Bonaceto, "NFT e Arte, Bolla o Rivoluzione?" (talk, Volvo Studio, Milano, May 4, 2022).

45 Quaranta et al., "NFT e Arte, Bolla o Rivoluzione?"

46 John Berger, *Ways of Seeing* (New York: Viking Press, 1973).

47 Tanni, *Memestetica*, 96 (translated by the authors).

particular value to the artistic debate.⁴⁸ The best NFT artworks are similar to boards that help us surf the whole experience they embed. These experiences belong to no more than a couple of generations that, if not digital natives, have mostly grown up in the digital world.⁴⁹ They talk about collecting stickers, playing with videogames, coding and using computer applications, tweeting, sharing emotions on social networks, investing in crypto-currencies, and betting on commercial value in a virtual auction. If we think that works of art are “embodied meanings” according to Arthur Danto’s definition,⁵⁰ we must admit that NFT works do not address the questions of human life. Instead, they frame their significance in the culture of a limited, primarily Western community of people. Deliberately or not, these people reshaped their experience of the arts through digital technology and design.

It is essential to acknowledge that both NFT artists and investors are surfing the wave of crypto-currencies from within. Figures in the NFT art market, including investors such as Metakovan and some crypto-artists, were crypto-investors and economic experts before the introduction of art in the crypto-currencies world. Therefore, we are not facing an equal merger of digital art and crypto-commerce; rather, it would be more accurate to define the phenomenon as the insertion of digital design products into the crypto business: players and rules are native to the economic side of the blockchain.

A heated discussion broke out between NFT supporters and detractors from Christie’s and Sotheby’s auctions.⁵¹ The former made unrealistic claims about an age of prosperity for both artists and investors out of the tight control of institutional gatekeepers. The latter complained about crypto-investors’ rapacity and suggested alternative strategies for digital artists to enter the market.⁵² The blockchain, like any technology, is not neutral, and instead, it reflects the ideologies of its creators. Shaping the trade of NFTs on the model of the stock market exacerbated a process of commodification of art that dates back decades. In his widely famous documentary *“The Mona Lisa Curse”* in 2008, Robert Hughes regretfully stated that, “there’s a tendency for people to

48 “Talk: NFT e Arte, Bolla o Rivoluzione?”

49 Marc Prensky, “Digital Natives, Digital Immigrants,” *On the Horizon* 9, no.2 (October 2001): 1–6.

50 Arthur C. Danto, *What Art Is* (New Haven: Yale University Press, 2013).

51 Michael Connor, “Another New World,” *Rhizome*, March 3, 2021, <https://rhizome.org/editorial/2021/mar/03/another-new-world>.

52 Geraldine Juárez, “The Ghostchain. (Or Taking Things for What They Are),” *Paletten* 325 (December 5, 2021), <https://paletten.net/tidskrift/paletten-nr-325>.

say that art is just art and we shouldn't commodify it and treat it as something that isn't an asset. The truth is that, for thousands of years, art *has* been an asset. It's been very tied up with our financial systems.⁵³ Globalization, especially in the 1990s, pushed the phenomenon even further, leading to what Hito Steyerl defined as "duty-free art." It is a kind of art that, in fact, "ought to *have no duty* – no duty to perform, to represent, to teach, to embody value. [...]. It is only tax-free. It has the duty of being an asset. The author stated that it "is made possible by neoliberal capital plus the internet, biennials, art fairs, parallel pop-up histories, growing income inequality."⁵⁴ Therefore, if we agree on this gloomy picture of contemporary art, we must acknowledge that the NFT community embraced a market strategy that the art world had long pursued, triggering a potential transformation process.

Uncertain Forecasts

From the beginning of significant NFT sales, investors started questioning whether NFTs constituted a speculative bubble or a potentially stable market in its earlier evolution. The sharp drop in prices in Spring 2022 corroborated the first interpretation. The NFT of the first tweet by Jack Dorsey was bought in March 2021 by the entrepreneur Sina Estavi for \$2.9 million, in a new auction price reached a new low price of \$14,000 soon after. Something was changing in the market.⁵⁵ Just one month later, not only had NFTs gone through a dramatic meltdown on the market, the whole cryptocurrency system on which their success was built seemed to collapse.⁵⁶

Paul Vigna, a reporter for *The Wall Street Journal*, discussed the crash in the WSJ Podcast on May 4, 2022, asserting that NFTs will evolve into more "tangible" assets with the retreat of speculation. In Vigna's opinion, the buyers will no longer search for NFT artworks for their potentially increasing value

53 Robert Hughes, *The Mona Lisa Curse*, (London: Channel 4, 2008).

54 Hito Steyerl, *Duty Free Art* (London-New York: Verso, 2017).

55 Andrea Nepori, "Are NFTs Really Doomed?", *Domus Web*, May 10, 2022, <https://www.domusweb.it/en/news/2022/05/09/the-nft-market-has-cooled-down-and-thats-good-news.html>

56 David Yaffe-Bellany, Erin Griffith and Ephrat Livni, "Cryptocurrencies Melt Down in a 'Perfect Storm' of Fear and Panic," *The New York Times*, May 12, 2022, <https://www.nytimes.com/2022/05/12/technology/cryptocurrencies-crash-bitcoin.html>.

but for their genuine interest in the products.⁵⁷ In this perspective, the market rules will apply to a selection of artworks, allowing the prices to consistently grow. Similarly, art institutions will play a fundamental role in the process. Museums such as Whitney and MoMA are cautiously opening their door to digital artists who experiment with NFTs,⁵⁸ thus clarifying the nature and posture of these controversial pieces.

NFTs belong to a category of products that the philosopher Nelson Goodman carefully identified in 1968, distinguishing between *autographic*/non-replicable artworks and *allographic*/replicable ones. Goodman stated that we can “speak of a work of art as *autographic* if and only if the distinction between original and forgery is significant; or better, if and only if even the most exact duplication of it does not thereby count as genuine. If a work of art is *autographic*, we may also call that art *autographic*. Painting is *autographic*, and music is non-*autographic*, or *allographic*.⁵⁹ Goodman also puts literature, dance, and architecture within the same category. The field may be expanded to reproducible media like photography, video, product design, and works based on instructions, performance, or software.⁶⁰

Allographic art embraces a great variety of goods within the design sphere. Moreover, the criterion for establishing the identity of allographic works is a notational scheme or system, which allows us to affirm that pieces sharing specific, clearly identifiable characteristics are the same kind of work.⁶¹ If we focus again on design, there are the digital formats and software in visual design, the technical drawings in product design, and the implementation methods and manuals for service design and the NFT market is potentially open to trading all these files.

The allographic work, which is reproducible on a large scale and is typical of an economy of distribution, is worthless without a certificate of authenticity. Therefore, the certificate plays a fundamental role in fixing the number of

57 Luke Vargas, “NFT Sales Are Flatlining. Is This the Beginning of the End?” *Wall Street Journal Podcast*, May 4, 2022, <https://www.wsj.com/podcasts/google-news-update/nft-sales-are-f...-the-beginning-of-the-end/dff5b977-9cae-4b14-8b4a-1b4b3c95e59e>.

58 Zachary Small, “Even as NFTs Plummet, Digital Artists Find Museums Are Calling,” *The New York Times*, October 31, 2022, <https://www.nytimes.com/2022/10/31/arts/design/nfts-moma-refik-anadol-digital.html>.

59 Nelson Goodman, *Languages of Art: An Approach to a Theory of Symbols*, (Indianapolis: The Bobbs-Merril Company, 1968), 113.

60 Quaranta, *Surfing with Satoshi. Art, Blockchain and NFTs*, 144.

61 Goodman, *Languages of Art*, 122.

copies, defining the value, and the price in sales. For a long time, copyright has provided designers with this certificate, which now may be replaced by NFTs. Other allographic arts experienced less formalized and protected protocols.

There is a long history of experimentation with the sale of digital artworks, from *The Thing*, a bulletin-based system (BBS) operating in New York in the early 1990s, to the website *Art.Teleportacia* established by the artist Olia Lialina in 1998 as the “First Real Net Art Gallery.” *Rhizome*, founded by artist Mark Tribe as a listserv in 2003 and affiliated with the New Museum of New York City and the Postmasters Gallery in Tribeca, has traded digital art since 1991 and in NFTs more recently. They all relied on trust, negotiation, and authentication forms that are not substantially different from NFT market ones. However, the NFT market was the first to solve the problem of the secondary market for digital media.⁶²

Similarly, certificates were introduced in performing art, procedural art, and conceptual art. Marcel Duchamp is the forefather of this procedure with his *Tzanz Check*, a fake handwritten check he gave his dentist in 1919. In 1958–62, collectors buying *Zone of Immortal Pictorial Sensibility* by Yves Klein only received a paper receipt, which, however, they had to burn to incorporate the work into its “sensibility.”⁶³ Sol Lewitt’s *Wall Drawings* series (1967–2007) were nothing but careful instructions about how to make the drawings. All these acts asserted the immaterial nature of the artist’s work. In some respects, if we compare them to NFT certificates, they help us to look at the market from another perspective. Conceptual art, in the words of Benjamin Buchloh, “managed to purge artistic production of the aspiration towards an affirmative collaboration with the forces of industrial production and consumption.”⁶⁴

In 1971, the Dutch curator and merchant Seth Siegelaub and the attorney Robert Projansky created an actual contract for the sale of artwork *The Artist’s Reserved Rights Transfer and Sale Agreement*, which was intended to protect the rights of artists, particularly in the case of an artwork’s resale, reproduction, or rental. In contemporary terms, it was an “open-source project which anyone can use.”⁶⁵ Siegelaub and Projansky’s contract framed the context of art

62 Michael Connor, “Before the Boom,” *Rhizome*, March 12, 2021, <https://rhizome.org/editorial/2021/mar/12/before-the-boom>.

63 Tina Rivers Ryan, “Token Gesture,” *Artforum* 59, no. 7 (May 2021): 65–66.

64 Benjamin H. D. Buchloh, “Conceptual Art 1962–1969: From the Aesthetic of Administration to the Critique of Institutions,” *October* 55 (Winter 1990): 142.

65 Quaranta, *Surfing with Satoshi. Art, Blockchain and NFTs*, 165.

negotiation by addressing the anarchical art market of the time. Nevertheless, few artists would adopt it, as the social and economic conditions were not mature yet.⁶⁶

Fifty years later, the NFT certificate and crypto-currencies do not solve, as we have seen, all the issues of artwork authentication. It is even possible that crypto-currency is not the optimal technology for addressing them and potential change “comes much less from the specific capabilities of blockchain than from the way interest in NFTs has galvanized people to radically restructure how the art market could work.”⁶⁷ NFTs are potentially powerful tools for reshaping the author/collector relationship. If we focus on smart contracts as formalized information, designers and artists could negotiate not only legal issues but also social, environmental, and cultural ones. Artist Sara Ludy recently revised the sales split to better support the gallery’s staff. In this respect, new systems can “open up a conceptual space” to encourage a new way of thinking.⁶⁸

As Nadini et al. stated, “NFTs are a new tool that satisfies some of the needs of creators, users, and collectors of a large class of digital and non-digital objects. As such, they are probably here to stay or, at least, they represent a first step towards new tools to deal with property and provenance of such assets.”⁶⁹ Since designers seem deeply involved in the new market, they can play a crucial role in reshaping smart certificates to fit their professional needs.

It took almost forty years for Mondavi’s intuition to become a standard of international wine appreciation, although it was only a matter of macerated grape juice aging in bottles. Art, on the contrary, is an essential part of culture; therefore, it will take long before we see a substantial change. The first move, however, has already been made.

66 Quaranta.

67 Tim Schneider, “Will NFTs Revolutionize the Art Market or Repeat Its Greatest Failures? These 4 Factors Will Determine Their Fate,” *Artnet*, March 11, 2021, <https://news.artnet.com/market/nft-revolution-four-factors-1950645>.

68 Schneider.

69 Matthieu Nadini, Laura Alessandretti, Flavio Di Giacinto, Mauro Martino, Luca Maria Aiello, and Andrea Baronchelli, “Mapping the NFT revolution: market trends, trade networks, and visual features,” *Scientific reports*, 11, 20902, (2021) 10, <https://doi.org/10.1038/s41598-021-00053-8>.

