

# Blockchain art: New frontiers for the art market

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The art market, as we know it, is a game for the rich. Opportunities accrue to few artists and collectors. The high-end segment of the market is dominated by high-value sales. According to the [Global Art Market Report](#) of Art Basel and UBS in 2019 “works of art selling at prices in excess of \$1 million accounted for 61% of total sales value in the fine art auction market in just 1% of lots”.

Such inequalities are by far not unique to the art market. This phenomenon is referred to variably as “*the rich get richer*”, “*preferential attachment*”, “*cumulative advantage*” or even “*Matthew effect*” (with reference to the parable of the talents from the New Testament). The names vary, while the mechanism is invariably similar: success leads to more success, spiralling into superlinear growth. In the art market, a well-oiled ecosystem plays a crucial role in shaping an artist’s future trajectory.

[Research](#) has shown that success in the art market is strongly influenced by early access to opportunities including exhibiting in prestigious museums, being supported by well-known galleries and exhibited at fairs, or attracting the attention of famous collectors. Such an ecosystem is in place to deal with another key trait of traditional art markets: [information asymmetries](#). Despite the existence of art price databases (e.g., [artnet](#)), the art market is known for its lack of transparency, in particular as regards pricing. The presence of strong information asymmetries in this respect, which might be considered a feature of the system by some, reinforces the role of the ecosystem in determining an artist’s success or, much more frequently, failure.

For all these reasons, the traditional art market seemed so far untouched by any significant digital disruption, despite the many initiatives in the ArtTech world. Until now. In the year of COVID, a turning point seems incumbent: *blockchain art*.

## Art and blockchain

*Combined with emerging information markets, crypto anarchy will create a liquid market for any and all material which can be put into words and pictures (Timothy C. May, [Crypto Anarchist Manifesto](#), 1988).*

Blockchain technology, while commonly associated with cryptocurrencies, has the potential to bring radical structural change to the arts and creative industries. The blockchain has core use cases in the arts including provenance, fractional ownership and digital scarcity. There

are already several notable use cases of blockchain technology in the arts, including the following:

- In 2018, the amount collected from the sale of the Barney A. Ebsworth collection at Christie's was 318M\$; the auction was held in partnership with the technology provider [Artory](#) using a [blockchain](#) solution to record information about the auction.
- In 2018, the company [Maecenas](#) bought Andy Warhol's *14 Electric Chairs* and divided it up into shares sold as so-called ART tokens. The company raised 1.7M\$ for 31.5% of the artwork at a valuation of 5.6M\$.
- Robert Alice's [Block 21](#) has been the first non-fungible token sold at Christie's in October 2020. Starting from an estimated valuation of 12,000\$ - 18,000\$, the artwork realised a price of 131,250\$.

[Blockchain art](#), also called crypto art, is a rising art movement that associates digital artworks with *non-fungible tokens* (NFTs or nifties). These asset tokens certify the provenance and ownership of the artwork. Transferring a token is akin to transferring the certificate of ownership of any property. Ownership rights currently do not include intellectual property rights such as copyright claims and rights for any commercial re-use. Intellectual property remains the possession of the creator. The subtle difference with respect to traditional art is that in crypto art the *corpus mysticum* – the intellectual and immaterial creation of the work – and the *corpus mechanicum* – its perceivable manifestation – are both immaterial.

Crypto art draws its origins from *conceptual art*, sharing the immaterial and distributive nature of artworks, and the rejection of conventional art markets and institutions. Early examples of crypto art include [CryptoKitties](#), [CryptoPunks](#), [Autoglyphs](#), and [Rare Pepe](#), while the most popular crypto art galleries today are [SuperRare](#), [KnownOrigin](#), [MakersPlace](#), [Async Art](#), and [Nifty Gateway](#).

The typical workflow of crypto art can be illustrated with respect to the digital gallery [SuperRare](#):

1. an artist creates a digital artwork (an image or animation) and uploads it to the gallery;
2. the *smart contract* of the gallery creates a non-fungible token on the Ethereum blockchain associated with the artwork and transfers the token to the artist's wallet;
3. also, the gallery distributes the artwork file over the [IPFS](#) peer-to-peer network; hence neither the token nor the artwork are on any central server;
4. collectors can place valued bids on the artwork by transferring a bidden amount to the smart contract of the gallery (the collector can withdraw bids at any time);

5. eventually, the artist accepts one of the bids: the smart contract of the gallery transfers the artwork's token to the collector's wallet and the agreed cryptocurrency to the artist's wallet. There is a gallery fee of 15% of the paid price;
6. the artwork remains tradable on the market. If the artwork is sold on the secondary market, the original artist receives a royalty of 10% of the paid price.

## A parallel: Traditional vs blockchain art

It is instructive to cast a parallel between the traditional and crypto art markets. First of all, the inequality of opportunity and success seems to be very similar. As soon as the crypto art market went into exponential growth, cumulative advantages also went into play. The [result](#) is quite sobering, especially given the expectations: as in the traditional art market, few artists and collectors dominate. Is this surprising? We argue: not so much, at least for now.

Crypto art differs markedly from the traditional art market on two other dimensions of crucial importance: the lack of an ecosystem mediating access to opportunities, and the full availability/transparency of market data. Yet, this former trait is only a potential one since presently, despite notable [recent efforts](#), crypto art price data are also less than well-integrated and easily available.

Let us proceed in order. In traditional art markets, most of the market data is not available. This, we argue, is a factor in determining the existence and importance of an ecosystem to broker opportunities, which would be less influential given price transparency. In crypto art, all market data are stored on blockchains, typically Ethereum, and thus are fully available. Nevertheless, different crypto art galleries and marketplaces still use a variety of standards to register their data, therefore inter-gallery price transparency, not to mention interoperability, are still limited.

In our view, crypto art could go either way in the future: it could keep its potential for data transparency untapped, and develop a mediating ecosystem of galleries, museums, fairs to, if not determine, at least strongly influence access to opportunities; or it could create a transparent data infrastructure more akin to stock exchanges, where the source of uncertainty comes from the future trends and not from the history of past transactions. Going into this latter direction, we argue, would open up interesting opportunities for a different kind of art market, which we discuss next.

## Opportunities

What might happen to the crypto art market, if a transparent and interoperable infrastructure is gradually developed and adopted? We suggest that this would create an opportunity to develop at least three key services that are difficult or impossible to offer in the traditional art market:

- Open ratings conveying information on *all* actors in the market. For example, the detection of emerging artists could be informed by their early market successes.
- Accurate price predictions, moving beyond the wide uncertainties which characterise the traditional art market.
- Personalised art recommendations, a service currently mediated by experts which could instead become more (or fully) data-driven, similarly to Netflix and Spotify for video and music.

The combination of these three services could make the crypto art market not only more accessible and, in a sense, democratic, but also much more varied. Instead of using [the only measure of previous success](#) to guide decisions, and fetishise the higher-end of the market, elements such as individual taste, the quality and variety of contents, the behaviour of other users as well as the history of the market could all contribute to decision making at all price-segment levels. Such elements can underpin art research and education too, and a virtuous example of this approach may be found in the exhibition [Art for Space](#), curated by the Museum of Contemporary Digital Art ([MoCDA](#)) and launched online in October 2020. The show combines evaluations by art experts with market data collected through SuperRare, presenting an interesting take on the intersection of prestige and success in crypto art. Despite seemingly at odds with the crypto community decentralised spirit, art institutions can actually play a crucial role in making blockchain and art more accessible to the general public too, benefitting the whole system. Data transparency could help art experts face the challenges that crypto art poses in terms of volume, velocity and variety of the transactions, artworks, techniques and styles constantly produced, providing the traditional art world with a new, more impartial model.

## The future is open

Crypto art is a fast-forward into a multiverse of possible futures for the broader art market. Blockchain technology and digital culture are bringing about experimentations which will influence the way we create, trade and experience art for the years to come. We argue that the full transparency of market data in crypto art opens up opportunities to equip future art markets with data-driven services including open ratings, accurate price predictions and art discovery. Such services could bring about a change in the mechanics of traditional art markets, in particular in empowering broader participation. Will this happen? Stay tuned!