From White Cube to Blockchain Ledger: The Decentralization of Curation and Art Markets

Zuzanna Kowalska*

Karlsruhe Institute of Technology, Karlsruhe, Germany

*Corresponding author: Zuzanna Kowalska, zuzannaalberto13@yahoo.com

Abstract

The contemporary art world is undergoing a foundational shift, driven by the emergence of blockchain technology and its most culturally salient application: Non-Fungible Tokens (NFTs). This transition marks a move from the physical, gatekept spaces of the "White Cube" gallery to the distributed, code-governed networks of the blockchain ledger. This article argues that this is not merely a change in the medium of art's financialization, but a profound process of decentralization reshaping the core pillars of the art ecosystem-curation, valuation, ownership, and access. We analyze how blockchain disrupts traditional, centralized art market models by enabling peer-to-peer transactions, immutable provenance tracking, and fractional ownership through smart contracts. Crucially, we examine the rise of algorithmic and community-driven curation, where platforms like SuperRare or DAOs (Decentralized Autonomous Organizations) challenge the authority of the traditional curator-institution. A conceptual framework (Figure 1) maps this new ecosystem, while a comparative table (Table 1) delineates the paradigm shifts across key domains. Through case studies of NFT platforms, crypto-art movements, and artist collectives, we demonstrate both the emancipatory potential and the critical tensions within this decentralization. We conclude that while blockchain introduces new forms of transparency, accessibility, and artist empowerment, it simultaneously engenders novel hierarchies, environmental concerns, and questions about the nature of cultural value in a digitally native era. The future of visual culture will be negotiated in the space between the aesthetic aura and the verifiable hash.

Keywords

Blockchain, NFTs Art Market, Decentralization, Curation, Digital Art, Crypto Art, DAOs, Smart Contracts

1. Introduction

The Crisis of the Cube and the Promise of the Ledger

For decades, the "White Cube"-the pristine, neutral gallery space-has been the dominant paradigm for the display, validation, and commodification of contemporary art. It functions as more than an architectural form; it is a sociocultural apparatus that confers value through exclusion, expert mediation, and controlled context. This centralized model, governed by galleries, auction houses, museums, and a coterie of influential critics and curators, has long been criticized for its opacity, gatekeeping, and inequitable economic structures that often marginalize artists [1]. The advent of blockchain technology, particularly through the proliferation of NFTs since the early 2020s, presents a radical alternative. The blockchain ledger offers a decentralized, transparent, and programmable infrastructure that fundamentally reconfigures how art is created, owned, traded, and curated.

This article investigates the paradigm shift from the physical, institution-centric "White Cube" to the digital, network-centric "Blockchain Ledger." We posit that decentralization operates on multiple, interconnected levels: financial decentralization (disintermediation of sales), curatorial decentralization (democratization of taste-making), and archival decentralization (distributed preservation of provenance and the artwork itself). Our analysis moves beyond the speculative frenzy often associated with NFTs to critically examine the structural implications for visual culture. We ask: How do smart contracts redistribute agency and revenue? How do platform algorithms and DAOs perform curatorial functions? What new forms of artistic practice and community does this enable? And what are the persistent or new forms of centralization, exclusion, and environmental impact that emerge?

The significance of this transition extends beyond market mechanics; it touches upon the very ontology of the artwork and the social relations that constitute the art world. Blockchain does not merely digitize existing practices; it introduces a new “computational layer” to cultural production, where relationships between creators, objects, and audiences are mediated by code, consensus mechanisms, and network effects. This article therefore situates the NFT phenomenon within a longer history of technological disruptions in art-from photography and reproduction to the internet-while arguing that blockchain’s capacity for verifiable scarcity, automated governance, and global coordination represents a qualitative leap.

The article is structured as follows: First, we deconstruct the centralized model of the traditional art market. Second, we unpack the core technological affordances of blockchain relevant to art. Third, we analyze the decentralization of curation through platforms and DAOs. Fourth, we examine the transformation of ownership, provenance, and the art market's economic model. Fifth, we present a conceptual framework and comparative analysis of the value chain shift. Sixth, we provide a critical synthesis of persistent centralizations and emerging paradoxes. Finally, we conclude with reflections on the hybrid future of art ecosystems and the implications for cultural value in a digital age [2].

2. The Centralized Citadel: Anatomy of the Traditional Art Market

To understand the disruptive force of blockchain, one must first appreciate the highly centralized and opaque system it challenges. The traditional art market is built on layers of asymmetric information and trusted intermediaries.

•Gatekeepers of Value: Commercial galleries and elite auction houses (e.g., Gagosian, Christie's) act as primary gatekeepers. Their power lies in selecting artists, setting prices, and controlling access to collectors. An artist's career often hinges on inclusion in this exclusive network. These institutions not only dictate market trends but also shape artistic discourse through curated exhibitions and catalogues, reinforcing a cycle of cultural capital that remains inaccessible to many [3]. The gallery system operates on a consignment model where artists cede significant control and often a large portion of sales (typically 50%) to their representatives, creating a relationship of dependency that can last decades.

•The Curatorial Authority: Museums and biennials, along with their curators, serve as the legitimizing institutions. Their stamp of approval-through acquisitions or exhibitions-consecrates artistic value for the market and art history. This authority is centralized in the hands of a professional elite, often educated in a limited set of Western institutions, thereby perpetuating geographic and cultural biases [4]. This process of "canonization" is slow, often retrospective, and tends to favor art that fits established narratives or institutional collecting priorities, leaving experimental or socially engaged practices struggling for recognition.

•Opacity and Provenance: The secondary market is notoriously opaque. Provenance (the history of ownership) is often fragmented, documented in paper trails prone to loss, forgery, or obfuscation. This lack of transparency facilitates money laundering, forgery, and disputes, undermining trust and complicating the authentication of works, especially those with complex histories or originating from conflict regions. The 2011 Knoedler Gallery forgery scandal, involving tens of millions of dollars in fake Abstract Expressionist works, is a stark testament to the systemic vulnerabilities of paper-based provenance and expert authentication.

•The Artist's Dilemma: Artists typically retain a minority share of secondary market sales (via resale rights in some jurisdictions, but rarely enforced globally). They are often financially vulnerable, dependent on gallery representation, and disconnected from the future economic life of their work. This economic precarity is exacerbated for emerging and non-Western artists, who may struggle to access established networks. Furthermore, the traditional model separates the act of creation from the long-term stewardship and financial upside of an artwork's circulation, creating a fundamental misalignment of incentives between artists and the market that trades their work.

This system, while culturally powerful, is ripe for disruption by a technology that promises disintermediation, transparency, and direct creator-to-audience relationships.

3. Foundational Stones: Blockchain, NFTs, and Smart Contracts as Artistic Infrastructure

Blockchain is a distributed digital ledger that records transactions across a network of computers in a way that is immutable and transparent. For the art world, three key features are transformative [5].

•Non-Fungible Tokens (NFTs): An NFT is a unique cryptographic token on a blockchain that certifies ownership and authenticity of a specific digital (or digitally linked physical) asset. It does not necessarily "contain" the artwork file (which may be stored elsewhere, e.g., on IPFS) but points to it with an unforgeable link, functioning as a digital certificate of authenticity and ownership. This mechanism decouples the artwork's representation from its physical or digital instantiation, enabling new forms of collection and display. Crucially, NFTs solve the "digital scarcity" problem that long plagued digital art, allowing for the creation of collectible, tradable digital originals in a way that was previously impossible.

•Immutable Provenance: Every transaction-from the initial "minting" by the artist to all subsequent sales-is permanently and publicly recorded on the blockchain. This creates a complete, tamper-proof provenance trail, solving a centuries-old problem in the art market. This transparency not only deters fraud but also enriches the artwork's narrative by embedding its social and economic history directly into its identity. This "on-chain history" can include not just sales, but also exhibition history, loans, conservation records, and critical commentary, creating a living, verifiable dossier for the artwork.

•Smart Contracts: These are self-executing programs stored on the blockchain that automatically enforce the terms of an agreement. In art, they enable programmable royalties: an artist can encode a royalty percentage (e.g., 10%) that is automatically paid to them upon every future resale, in perpetuity. This feature alone represents a seismic shift in artist equity, potentially redistributing economic power back to creators [6]. Smart contracts can also govern complex rights

management, such as licensing terms for commercial use, revenue sharing in collaborative works, or time-locked access to certain features of an artwork.

Beyond these core features, blockchain introduces interoperability across platforms and composability-the ability to build new applications atop existing tokens-which fosters innovation in art display, licensing, and interactive experiences. For instance, an NFT artwork can be programmed to change its appearance when held in a specific wallet (like a museum's), or to grant its owner voting rights in an artist's DAO, creating dynamic relationships between the object, its owner, and the creator's community.

It is essential to note that the decentralization afforded by blockchain exists on a spectrum. Public, permissionless blockchains like Ethereum offer the highest degree of decentralization but face challenges like scalability and energy consumption. Private or consortium blockchains, sometimes adopted by traditional institutions for digitizing provenance, offer more control and efficiency but replicate some centralization. The choice of infrastructure itself is a political and economic decision with implications for the art ecosystem's resilience and openness.

4. The Decentralization of Curation: Algorithms, Communities, and DAOs

One of the most significant cultural shifts is the redistribution of curatorial authority.

•Platform Curation and Algorithmic Discovery: NFT marketplaces (OpenSea, Foundation, SuperRare) employ hybrid curation models. While some have invite-only artist onboarding, the primary discovery mechanism is often algorithmic, based on sales volume, social metrics, and trending data. This creates a "crowd-sourced" form of valuation that bypasses traditional expert judgment, for better or worse. Algorithms can amplify viral trends but may also reinforce market bubbles and overlook nuanced artistic practices [7]. The logic of these algorithms is often opaque and subject to change, creating a new form of "black box" authority where visibility is determined by engagement metrics rather than critical discourse, potentially homogenizing aesthetic trends around what is immediately attention-grabbing.

•Decentralized Autonomous Organizations (DAOs) as Curatorial Collectives: Art-focused DAOs like *PleasrDAO* or *Flamingo* represent a radical new model. Pooling funds and governed by member votes, DAOs can collectively purchase art, commission new works, and fund exhibitions. They act as patron-collector-curator hybrids, making curatorial decisions through decentralized governance rather than individual vision. Examples like *The SquiggleDAO*, which focuses on generative art, demonstrate curation driven by specialized community knowledge. These entities challenge the notion of the singular curator-genius, replacing it with distributed expertise and collective intentionality. However, DAO governance also introduces new challenges: voter apathy, the influence of large token holders ("whales"), and the difficulty of coordinating nuanced aesthetic decisions through proposal-and-vote mechanisms. The 2022 purchase of a rare copy of the U.S. Constitution by ConstitutionDAO, while ultimately unsuccessful, demonstrated both the fundraising power and the logistical/political fragility of large-scale cultural DAOs.

•The Artist as Insta-Curator: Social media, especially platforms like Twitter and Discord, have become essential curatorial spaces for crypto art. Artists, collectors, and critics build audiences and validate work through community engagement, memes, and threaded discussions, further flattening traditional hierarchies. This social curation leverages network effects to generate cultural significance, often at speeds unmatchable by traditional institutions. Platforms like Clubhouse and Twitter Spaces have hosted real-time crit sessions and artist talks, creating a global, participatory salon culture. This environment rewards artists who are skilled communicators and community builders, shifting the required skillset beyond the studio.

The decentralization of curation also raises questions about quality control, the role of criticism, and the potential for echo chambers where community consensus overrides critical dissent. Furthermore, the sheer volume of work minted daily on open platforms creates a "discovery paradox": while technically anyone can participate, gaining visibility requires navigating complex social and algorithmic landscapes that can be just as exclusionary as traditional gatekeeping, albeit in different ways.

5. The New Art Market: Ownership, Value, and Liquid Aesthetics

The blockchain redefines the very concepts of ownership and economic flow in art.

•Fractional Ownership: NFTs can be "fractionalized" into smaller tokens, allowing collective ownership of high-value artworks. This democratizes investment but also commodifies art into pure financial instruments, raising questions about the relationship between aesthetic experience and shared equity. Platforms like *Fractional.art* enable users to own a piece of a Blue-Chip NFT, blurring the lines between collecting, investing, and speculating [8]. This model can also enable novel forms of community patronage, where a group funds the acquisition of an important work for public display or donates fractional shares to museums, though it also risks reducing art to a purely asset-class logic.

•Dynamic and Programmable Art: Some NFT artworks are generative (created by an algorithm at minting) or responsive (changing based on external data or owner interaction). This introduces a new category of "live" art where the token is not just a deed but an access key to an evolving aesthetic experience. Artists like *Tyler Hobbs* and *Dmitri Cherniak* have pioneered generative systems where each mint yields a unique output, challenging notions of originality and editioning [9]. Projects like *Autoglyphs* or *Archetype* by Kjetil Golid are artworks where the code itself-deployed

on-chain-is the primary artwork, and the visual outputs are ephemeral manifestations. This prioritizes the conceptual system over any single visual instance, a radical shift from traditional art objects.

•The Meme Economy and Cultural Value: Value in the crypto art market is heavily influenced by internet culture, memes, and community narratives. Projects like *CryptoPunks* derive value not from traditional aesthetics but from their status as historic digital artifacts and status symbols within the crypto community. This represents a fundamental rethinking of cultural capital, where value is co-created through participatory storytelling and network affiliation rather than connoisseurship. The rise of "profile picture" (PFP) projects exemplifies this: ownership functions as a social signal within digital communities, with value tied to the strength and cultural cachet of the in-group. This inverts the traditional art market model where value precedes and enables social signaling; here, social signaling and community participation are the primary drivers of value.

This new market also fosters global liquidity, enabling 24/7 trading across borders with reduced friction, but simultaneously exposes artists and collectors to cryptocurrency volatility and regulatory uncertainty. The "always-on" market and price transparency can lead to the constant quantification of an artist's "market performance," potentially imposing a new kind of pressure and distorting creative decisions towards what sells. This mirrors the financialization seen in other creative industries but at an accelerated, publicly visible pace.

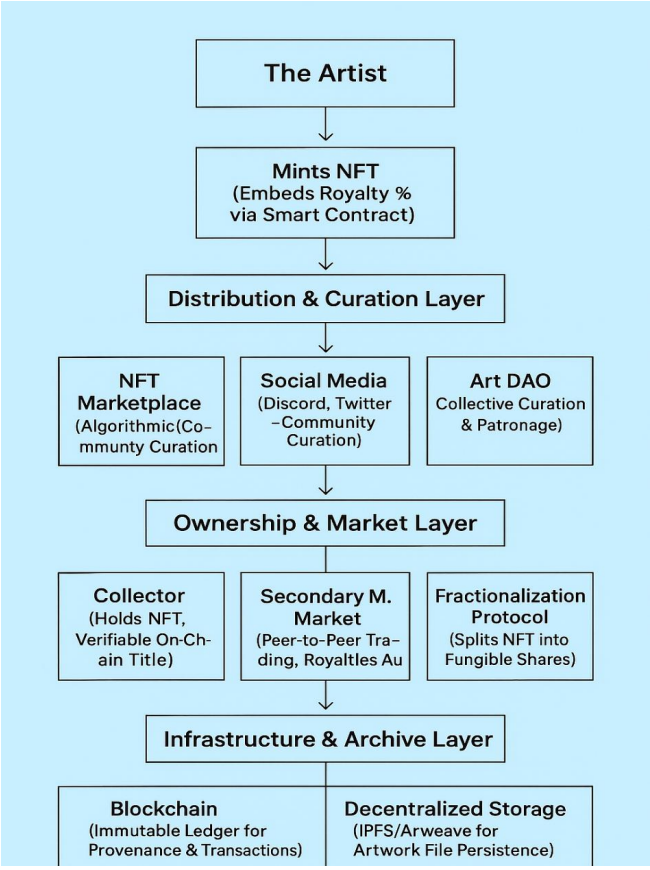

Figure 1. The decentralized art ecosystem: a conceptual framework.

Figure 1 illustrates the full ecosystem and workflow of NFT-based digital art, showing how an artwork moves from creation to circulation, ownership, and long-term preservation within a decentralized system. At the top, the artist mints an NFT, embedding royalty percentages directly into a smart contract. This ensures that the creator automatically receives royalties from all future secondary sales.

The next stage is the distribution and curation layer, where NFTs gain visibility and cultural value. This layer includes NFT marketplaces that rely on algorithmic and community-based curation, social media platforms such as Discord and Twitter that enable community engagement and informal curation, and art DAOs that perform collective curation and patronage through token-based governance.

The diagram then highlights the ownership and market layer, where collectors hold NFTs with verifiable on-chain ownership. Secondary markets enable peer-to-peer trading while enforcing automated royalty payments. Additionally, fractionalization protocols allow a single NFT to be divided into fungible shares, expanding access and liquidity.

At the foundation is the infrastructure and archive layer, which provides technical stability and trust. Blockchain technology ensures an immutable ledger for provenance and transactions, while decentralized storage systems such as IPFS or Arweave guarantee long-term persistence of the artwork files. Together, these layers demonstrate how NFTs reconfigure artistic production, circulation, and ownership in a decentralized digital economy.

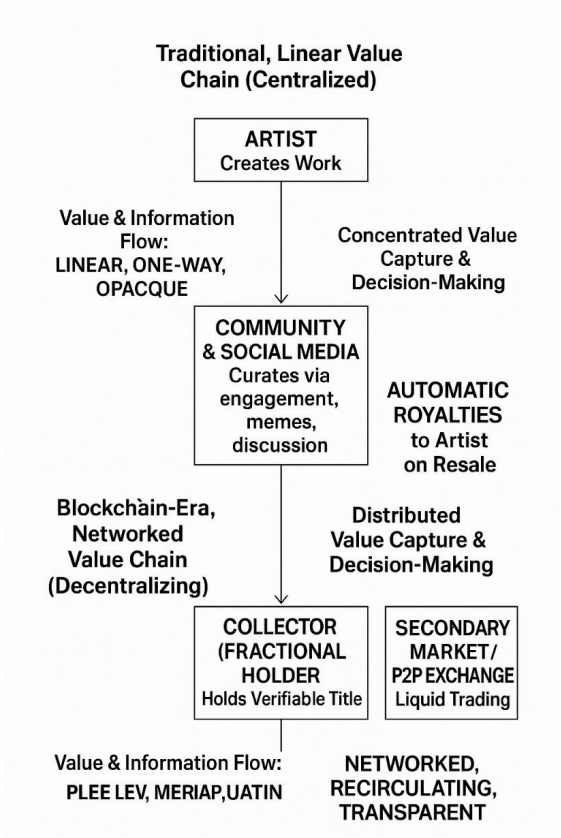

Figure 2. The evolution of the art value chain: from linear gatekeeping to networked participation.

Figure 2 compares the traditional, centralized art market value chain with the blockchain-era, decentralized value chain, highlighting how value creation, information flow, and decision-making are transformed by NFT technology.

In the traditional linear value chain, the artist creates the work, but value and legitimacy are controlled by centralized intermediaries. Galleries, dealers, critics, and auction houses determine pricing, visibility, and resale, often excluding the artist from future profits. Value and information flow in a one-way, opaque, and hierarchical manner, resulting in concentrated value capture and decision-making power.

By contrast, the blockchain-era networked value chain reorganizes this structure into a decentralized system. The artist mints an NFT using a smart contract, embedding automatic royalty payments into the asset. Community and social media platforms participate directly in curation through engagement, discussion, and cultural signaling, while NFT marketplaces and DAOs surface works using algorithms and collective governance. Collectors-sometimes fractional holders-own verifiable on-chain titles, and secondary peer-to-peer markets enable liquid trading while ensuring that royalties are automatically returned to the artist on resale.

Overall, the diagram illustrates a shift from a closed, intermediary-driven art economy to a transparent, networked, and recirculating system, where value capture and cultural authority are distributed across artists, communities, and collectors rather than centralized institutions.

Table 1. Paradigm shifts in key domains of the art ecosystem.

Domain	Traditional Model (White Cube)	Blockchain Model (Ledger)
Curation	Centralized, expert-driven, institutional	Decentralized, algorithmic, community-driven, DAO-based
Provenance	Fragmented, paper-based, opaque	Immutable, transparent, on-chain
Ownership	Singular, physical, difficult to transfer	Flexible, digital, easily transferable, fractionalisable
Artist Revenue	Limited to primary sale; rare and inconsistent secondary royalties	Programmable royalties auto-enforced via smart contracts
Market Access	Restricted by geography, network, and institutional gatekeeping	Global, permissionless, peer-to-peer
Value Determination	Connoisseurship, critic reviews, institutional validation	Market signals, social metrics, community narrative, rarity
Artwork Nature	Static, physical or fixed digital	Dynamic, generative, programmable, often digital-native
Preservation	Physical conservation, institutional archives	Decentralized storage, redundant across nodes

Table 1 compares the traditional “white cube” art ecosystem with the blockchain-based “ledger” model, highlighting how blockchain technology reshapes fundamental aspects of art production, circulation, and value creation.

In the traditional model, curation is centralized and controlled by institutions and experts, while the blockchain model relies on decentralized, algorithmic, and community-driven processes, often coordinated through DAOs. Provenance shifts from fragmented, paper-based, and opaque records to immutable, transparent, on-chain documentation. Ownership also changes significantly: instead of singular, physical, and difficult-to-transfer ownership, blockchain enables flexible, digital, easily transferable, and fractionalized ownership.

The table further shows how artist revenue is transformed. Traditionally, artists earn mainly from primary sales and rarely benefit from secondary market transactions. In contrast, blockchain introduces programmable royalties that are automatically enforced via smart contracts, ensuring continuous compensation. Market access expands from geographically and institutionally restricted systems to global, permissionless, peer-to-peer participation.

Additional rows highlight deeper conceptual shifts. Value determination moves away from connoisseurship and institutional validation toward market signals, social metrics, community narratives, and perceived scarcity. Artwork nature evolves from static physical or fixed digital objects to dynamic, generative, and programmable digital-native works. Finally, preservation transitions from centralized institutional archives to decentralized, redundant storage across distributed networks.

The table illustrates a paradigmatic transformation in the art ecosystem, where blockchain technology decentralizes authority, increases transparency, and reconfigures artistic value and agency.

6. Critical Synthesis: Persistent Centralizations and Emerging Paradoxes

Despite the rhetoric of decentralization, new power structures and contradictions emerge.

- The Re-Centralization of Platforms: While the protocol may be decentralized, user activity clusters on a few dominant marketplaces (OpenSea). These platforms wield significant power through their interface design, fees, and ranking algorithms-becoming the new gatekeepers. Their terms of service and moderation policies can effectively censor or promote certain artists, echoing the selective practices of traditional galleries [10]. The 2022 decision by several platforms to delist NFTs affiliated with certain contentious figures or to comply with government sanctions highlighted the tension between decentralized ideals and the centralized control exercised by corporate platform entities.

- The Environmental Debate: The energy consumption of Proof-of-Work blockchains (like early Ethereum) sparked intense criticism, forcing a reckoning with the ecological footprint of digital art. The shift to more efficient consensus mechanisms (Proof-of-Stake) mitigates but does not erase these concerns, as the overall infrastructure still relies on energy-intensive data centers and consumer hardware. A more nuanced critique must also consider the comparative environmental impact: the production, shipping, insurance, and climate-controlled storage of physical art have significant carbon costs that are often less quantified. The challenge is to foster a culture of sustainability across both physical and digital art practices, rather than viewing them in simple opposition.

- Speculation vs. Cultural Practice: The market is plagued by extreme volatility and speculation, often overshadowing artistic discourse. The question remains whether this ecosystem supports sustainable artistic careers or is primarily a vehicle for financial gambling. The rapid boom-and-bust cycles can disillusion artists and devalue artistic labor. The “rug pull” phenomenon, where project creators abandon a community after fundraising, and the prevalence of “wash trading” (selling to oneself to inflate volume) further erode trust and highlight the need for better consumer protection and ethical standards.

- Digital Divide and Accessibility: Participation requires technical knowledge, cryptocurrency, and digital literacy, creating new barriers that may exclude artists and audiences from less technologically privileged backgrounds. The cost of transaction fees ("gas") can also prohibit small-scale creators and collectors [11]. While blockchain is global in theory, in practice its adoption is skewed towards wealthy, tech-savvy demographics and specific geographic regions, potentially replicating-or even exacerbating-the geographic biases of the traditional art world.

- Legal and Regulatory Uncertainty: The legal status of NFTs-as property, securities, or something else-remains ambiguous across jurisdictions. Issues of copyright infringement, smart contract vulnerabilities, and dispute resolution in a decentralized context pose significant challenges that the current legal framework is ill-equipped to handle.

These paradoxes highlight that decentralization is not a panacea but a complex reorganization of power, with its own inclusions and exclusions.

The Hybrid Future: Convergence and Coexistence

The transition from White Cube to Blockchain Ledger is neither complete nor absolute. Instead, a hybrid ecosystem is coalescing, where traditional institutions experiment with NFTs and crypto natives seek physical gallery representation. Museums like the British Museum and UCCA Center for Contemporary Art have launched NFT initiatives, while NFT artists are featured in major biennials. This convergence suggests a future of multimodal art economies where physical and digital, centralized and decentralized models interact and influence each other.

The ledger's most enduring contribution may be its infrastructural imposition of new rules: transparent provenance, enforced artist royalties, and the technical capacity for unprecedented forms of collaborative ownership and dynamic art.

These features challenge the art world to imagine fairer, more open systems. However, the adoption of these tools within traditional frameworks may also lead to their assimilation and neutralization, where blockchain becomes just another sales channel rather than a catalyst for systemic change.

7. Conclusion

The decentralization of curation and art markets through blockchain is a profound, yet incomplete, transformation. It redistributes agency from institutions to networks, from experts to algorithms and communities, and from singular owners to collective holders. This shift offers tangible benefits: greater transparency, economic equity for artists, and global access. However, it also introduces new risks: platform dominance, environmental costs, speculative excess, and technological barriers.

The future of visual culture will be shaped by the ongoing tension between the curated, contemplative space of the Cube and the transactional, communal, and programmable space of the Ledger. Navigating this future requires not just technological adoption, but a deep critical engagement with the economic, social, and aesthetic values we choose to encode-in our institutions and in our smart contracts alike. As the ecosystem matures, stakeholders must collaboratively address the paradoxes of decentralization to ensure that the promise of a more inclusive and equitable art world does not succumb to new forms of centralization and exclusion.

Ultimately, the journey from White Cube to Blockchain Ledger is not a simple replacement, but a complex, ongoing reconfiguration. It invites us to fundamentally rethink what art is in a networked age (is it the file, the token, the experience, or the community?), who it is for (connoisseurs, investors, or online communities?), and how it holds and creates value (aesthetic, financial, social, or computational?). The most significant outcome may not be the triumph of one model over the other, but the emergence of a more pluralistic, self-aware, and technologically literate art ecosystem that can critically harness the tools of decentralization while preserving space for slow looking, critical dissent, and artistic practices that resist easy commodification. The ledger provides a new set of brushes and canvases; the art that will be made with them-and the worlds they will help build-remains to be seen.

References

[1] Dowling, M. (2022). Is Non-fungible token pricing driven by cryptocurrencies? Finance Research Letters, 44, 102097. https://doi.org/10.1016/j.frl.2021.102097

[2] Finck, M., & Moscon, V. (2019). Copyright law on blockchains: between new forms of rights administration and digital rights management 2.0. International Review of Intellectual Property and Competition Law, 50, 77–108. https://doi.org/10.1007/s40319-018-00776-8

[3] Kugler, L. (2021). Non-fungible tokens and the future of art. Communications of the ACM, 64(9), 19–20. https://doi.org/10.1145/3474355

[4] Nadini, M., Alessandretti, L., Di Giacinto, F., Martino, M., Aiello, L. M., & Baronchelli, A. (2021). Mapping the NFT revolution: market trends, trade networks, and visual features. Scientific Reports, 11(1), 20902. https://doi.org/10.1038/s41598-021-00053-8

[5] O'Dwyer, R. (2020). Limited edition: Producing artificial scarcity for digital art on the blockchain and its implications for the cultural industries. Convergence, 26(4), 874–894. https://doi.org/10.1177/1354856518795097

[6] Wang, Q., Li, R., Wang, Q., & Chen, S. (2021). Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges. arXiv preprint arXiv:2105.07447. https://doi.org/10.48550/arXiv.2105.07447

[7] Whitaker, A. (2019). Art and Blockchain: A Primer, History, and Taxonomy of Blockchain Use Cases in the Arts. Artivate, 8(2), 21-46. https://doi.org/10.34053/artivate.8.2.2

[8] Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, Technology, and Governance. Journal of Economic Perspectives, 29(2), 213–238. https://doi.org/10.1257/jep.29.2.213

[9] A. Appadurai (1986). The Social Life of Things: Commodities in Cultural Perspective. Cambridge University Press. https://doi.org/10.1017/CBO9780511819582

[10] T. Gillespie (2018). Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media. Yale University Press. https://doi.org/10.12987/9780300235029

[11] J. Parikka (2015). A Geology of Media. University of Minnesota Press. https://doi.org/10.5749/minnesota/9780816695515.001.0001