Non-fungible tokens – or NFTs, as they are better known – have taken the world by storm. The popular idea behind an NFT is that by owning a certain thing (specifically, a digital token that exists as an entry on a blockchain ledger), one can hold property rights in something else (either a real or intangible asset). Setting the popular idea aside, however, what does it really mean to tokenize something under the law? What does the owner of, for example, a token of an original oil painting, or a digital work of art, actually get? The answers to these questions have tremendous implications for just how revolutionary tokenization can really be.

Because the market for NFTs appears to be growing at an impressive rate (sales of NFTs have risen from a mere $13.7 million in the first part of 2020 to 2.5 billion), the rights a token holder actually acquires in the underlying thing will inevitably drive tokenization and property rights cases when they come before courts.

This review takes a look at the tokenization phenomenon and delineates what it means when it comes to property rights through the following key findings.

1. Owning an NFT alone grants no property rights in the underlying asset or creative work. First, despite marketing statements made by NFT minting companies to the general public, the terms of service in the actual contracts either say nothing on the matter, directly disclaim any such tethering, or at least confuse the reader as to whether a connection exists. Second, there is no actual law that would give an NFT such a tethering effect—consider other words, a connection between owning the NFT and owning the underlying thing. The only property right to protect is in the token itself, not the underlying asset. This cuts against one of the major claims made by NFT proponents.

2. Prospectively, the argument for giving NFTs tethering effects is inherently weak under the two major schools of thought in property theory. First, the NFT transaction is in clear tension with the Exclusionary Rights theory—specifically, that the right holder in the NFT has the ability to exclude others from the underlying asset—as the contractual terms of service of all reviewed companies clearly disclaim this. NFTs are also not consistent with the Progressive Property Theory—that property law rests on relationships, rather than on the connection between a person and a thing against the backdrop of a human flourishing goal. Progressive property theory is about the balancing and recalibration of authority between the property concepts of autonomy and control and those of the “plural and incommensurable values” of “human freedom” and “a free and democratic society in which human beings are treated with equal dignity and respect.” The underpinnings of NFTs are not consistent with progressive property theory because the most prominent blockchains, the mechanisms by which NFTs are created and transacted, consume tremendous amounts of electricity. The bigger a given blockchain network gets, the more harmful to the environment it becomes. Additionally, the cost associated with minting and transactions in NFTs, including the purchase of cryptocurrencies to facilitate these transactions, undercuts the claim that NFTs and the larger crypto movement will materially democratize finance.

3. NFT offerings raise important legal implications for consumer protection and access to justice. The nebulous and contradictory language around ownership in all of the NFT contracts reviewed compared to the public-facing representations that these firms make raise issues of deceptive marketing practices. In addition, the mandatory arbitration and class action waiver clauses, which commonly appeared in the NFT terms of service reviewed, create financial and logistical barriers to consumers pursuing claims.

While this review provides a normative critique of NFTs, it is also meant to assist courts and private parties as they deal with the legal implications of transactions involving NFTs in the current marketplace. We also offer a broader policy suggestion about how NFT promotion and the activities it generates should be better policed by consumer protection regulators.

**NOTES FROM THE FIELD**

What is tokenization? Perhaps surprising to most, there already is law around the idea of tokenization. A wide range of tokens are described at length in this review, and historically, tokens have risen from commercial need; among others, the review identifies a) Negotiable Instruments; b) Securities; c) Deeds of Real Property; d) Bills of Lading; and; e) Miscellaneous others (including certificates of title, bailment tickets, etc.). Likewise, internet use in commercial transactions has created a need for property rights around digital uniqueness because works of authorship protected by copyright law can be copied perfectly online. This is the problem that many crypto advocates say NFTs solve.

To investigate current practices around the tokenization of digital media, the authors set up a prototypical NFT transaction by creating a digital rendering of a physical oil painting and minting it through the token platform company Mintable. This involved also establishing a digital wallet (so that payment for a Mintable NFT could be made using a cryptocurrency, specifically
ether on the Ethereum block chain). They then reviewed the terms of service documents of eight major companies to which creators of NFTs must agree in order to create and transact in NFTs.

- The authors found that these company websites display broad statements about what the minting platform companies do. All of the sites studied disclaim control over the assets whose creation they enable, although the authors found that they can, in fact, deny the owners access to those assets by closing down the user account.

- The authors also explained how and why NFTs are not tethering. In other words, NFTs do not embody property rights in a reference thing. The idea behind NFTs minted on sites like Mintable is that the person who purchases the NFT acquires two things: (i) the NFT itself and (ii) the reference asset. To understand the issue, consider the following: Seller creates an NFT of a physical item (as many of the minting platforms claim one can do). The Seller then sells the NFT via an online platform to Buyer 1, promising that the Buyer 1 now owns not only the NFT but, by virtue of owning the NFT, also owns the physical item. However, before Buyer 1 can take possession of the physical item, Seller double-deals and sells the physical item to Buyer 2, who immediately takes possession of it. If NFTs were truly tethering, Buyer 1 would be able to get the item back from Buyer 2 because Buyer 1 would have the better claim. However, because current law does not give NFTs tethering effect, Buyer 2 gets to keep the item. The best Buyer 1 has is a breach of contract claim against Seller. Moreover, disparities in language about ownership of "digital artwork," "tokens," "content," etc., pervade these terms of service, making the answer to what exactly is promised by the seller to the buyer (and also by the minting platform) all the more opaque.

- NFTs do nothing to address the intellectual property rights of artists of tokenized digital artwork. For instance, a physical painting is comprised of two sets of property elements: the intellectual property rights embodied in the work, which is protected by copyright, and traditional property rights represented by the physical manifestation of the piece. A purchaser of a painting obtains the latter rights, while the creator retains the former unless they are otherwise conveyed. However, with digital artwork, it is possible to make a perfect copy. There is no such thing as a unique copy of a digital file. Thus, because the visual art market thrives on scarcity, and there is no scarcity when the art is digital, there is a concern that visual artists who work only in a digital format will be hindered in monetizing their works. NFTs do not solve this problem (despite the claims of their proponents).

### POLICY IMPLICATIONS

### RECOMMENDATIONS

**Access to Justice and Consumer Protection**

Mandatory arbitration and class action waiver clauses commonly appeared in the NFT terms of service reviewed. These create financial and logistical barriers to pursuing legal claims. This is because the combination of class action waivers and mandatory arbitration clauses prevent consumers from ever bringing claims in the court.

In light of this, and while not trying to stifle future useful innovation regarding NFTs, we advocate for a precautionary approach to NFT consumer protection by public enforcement officials. Specifically, the authors advocate that state attorneys general and the Federal Trade Commission (FTC) should issue enforcement and compliance bulletins warning minting platforms and related NFT transactional companies about the illegality of making false statements to the public about the nature of NFTs and what they provide their holders. By signaling to the market now that false promises and misleading statements about the nature of NFTs constitutes illegal acts, consumers – from collectors to retail investors and beyond – can better avoid future disputes.

### LEARN MORE

- [christopher-odinet@uiowa.edu](mailto:christopher-odinet@uiowa.edu)
- [www.ppc.uiowa.edu](http://www.ppc.uiowa.edu)
- [319-335-6800](tel:319-335-6800) • [310 S. Grand Ave, Iowa City, IA 52242](http://310 S. Grand Ave, Iowa City, IA 52242)
- [uippe](https://www.facebook.com/uippe) • [@uippe](https://twitter.com/uippe) • [@uippe](https://www.instagram.com/uippe)

The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy, disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, associational preferences, or any other classification that deprives the person of consideration as an individual. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the Director, Office of Equal Opportunity and Diversity, the University of Iowa, 202 Jessup Hall, Iowa City, IA, 52242-1316, 319-335-0703 (voice), 319-335-6697 (TDD), diversity@uiowa.edu.
REFERENCES


2. The Art of NFTs, The Association of American Law Schools (June 25, 2021), https://www.aals.org/sections/list/art-law/the-art-of-nfts/ [hereinafter AALS, NFTs] (with quotes from crypto/NFT industry lawyers Emilio Cazares, Chief Legal Officer for the crypto company SuperRare, and Pamela M. Deese, a partner with the law firm of Arent Fox).


8. Lovett, supra note 241 (citing Singer, Democratic Estates).


12. See UCC § 3–104 (providing form requirements)

13. UCC § 8–102(4).


16. See Larry T. Bates, Certificates of Title in Texas Under Revised Article 9, Vol. 53 Baylor Law Review 735, 736 (2001) (explaining that certificate of title laws were intended to prevent the theft of personal property).

17. See Fisher v. Pickwick Hotel, Inc., 108 P. 2d 1001, 1002 (Cal. App. 1940) (explaining that the bailment contract between a parking garage and a car owner stated that the garage would deliver the car only upon presentation of the claim check).


19. Laurent et al., supra note 12 at 2; Burne, supra note 11, at 2.


22. Restatement (second) of Contracts §§ 317, 324 cmt a (1981); UCC § 1–206; California Civil Code § 1624.5 (West); N.Y. U.C.C. Law § 1-207 (McKinney);

23. Joshua Fairfield, Tokenized, supra note 35. Fairfield argues that they should be treated as property and that the rules on the sale of goods should apply. See id. See also UCC § 2–105(l); UCC § 9-109(a)(3).

24. UCC § 1-201 (b)(35).

25. See UCC § 9–109 (a)(I) (“this article applies to a transaction, regardless of its form, that creates a security interest in personal property”).