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Abstract:

This paper will explore the copyright implications (policy, theory and practice) of scarce digital creative assets transferred and stored on blockchains. Specifically, this paper will examine ERC-721 tokens, defined as non-fungible digital assets created to be consistent with the ERC-721 standard and recorded on the Ethereum blockchain.² The most notable and noteworthy ERC-721 token involves Cryptokitties, the digital collectible gaming platform in which players can buy, sell, trade, and breed digital cats.³ Cryptokitties became all the rage—and virtually crippled the Ethereum Network—at the end of 2017.⁴

Part of the Cryptokitties hysteria, reminiscent of the Beanie Babies craze that began in the late nineties,⁵ reflects the unique mix of preprogrammed, finite characteristics of cryptokitties. Some are rarer and, therefore, more highly coveted, within the crypto gaming community.⁶ Accordingly, certain—perhaps the majority of—cryptokitties have little to no value; while others are valued in the tens of thousand dollars. In fact, one man has reportedly made more money selling his cryptokitties than investing in his IRA.⁷ Each cryptokitty, unlike a dollar, apple, or the proverbial widget, is unique and non-fungible. Fungibility is a characteristic of an asset (whether entirely physical, entirely digital or a physical asset that is tokenized, that is a physical asset that's value is represented as a form of cryptocurrency) that determines whether or not items or quantities of the same or similar type are exchangeable and of equal value when transferred or utilized. Additionally, “[s]imilar to how the value of a commodity is related to its scarcity, the value of a collectible item to a collector is connected to its rareness among other items.”⁸

The meteoric rise in popularity of scarce, unique digital assets in the blockchain ecosystem presents compelling legal and economic questions of ownership, transfer and enforceability, especially when those unique digital assets are literary or artistic creations fixed in a tangible medium. This novel and unique creative asset class raises concerns about copyright ownership, transfer, termination, as well as inheritance issues that, like blockchain's distributed ledger technology, transcend borders and national frameworks for the protection, exploitation and inheritance of digital creative assets.