Vladimir Popov

Faculty of Media and Communication, Singidunum University, Belgrade, Serbia

Contemporary Aesthetics of NFTs: The Biocentric Experience of Origin and Originality of an NFT

Abstract: This paper explores the contemporary aesthetics of one of the latest forms of digital art known as non-fungible tokens, aka *NFTs*, and how and why they are affecting and shaping today's society. Using Manovich's theory of metamedium, Lanza's theory of biocentrism, blockchain technology, and NFTs can be theorized as a form of medium which represents many other media while augmenting them with many new properties. The main theoretical problem with NFTs in the domain of art theory is the question of their originality. When put to use through various digital art collections and online tech platforms, the backend section of the blockchain smart contract code also becomes part of art, hence it can sometimes be difficult to define NFTs' originality of the art itself. Due to the repetitive nature of NFTs, it can be argued that the most unique component of the NFT *metamedium* is not art, or blockchain smart contract, but the owner of the digital art piece. With the collection of 10,000 similar pieces of art, the originality of art is evolving through the ideology of cultural groups associated with desired collections. It is shifting from the art itself to the owner. Throughout the unification of technology, software, and art, artists have a new way to extend their creations, while actively participating in the shaping of the cultural landscape. This gives both creators and collectors of the NFT metamedium a brand-new transcending meta experience beyond the art itself that gives a unique point to the originality of the art piece.

Keywords: NFT; metamedium; biocentrism; digital art; blockchain; aesthetics.

"It's such a lovely Jackson Pollock, isn't it?"[1]

Technology and infrastructure of NFTs

The change and evolution of art and technology is like that of humankind – constant. Like Dragana Stojanović said,[2] one follows the other and most of the time one influences the other. In other words, separating art from technology in the age of postmodernism is almost thing of the past nowadays.

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[1] Woody Allen, director, *Play it Again, Sam* (Los Angeles, CA: Paramount Pictures), 1972, https://youtube.com/clip/UgkxvqW1PdYr2u-LyHYjz3kKcfLhHidYoQ8o, acc. on May 31, 2022.

[2] Dragana Stojanović, "Cryptoart and Digital Humanities: Transtechnological Perspectives and the Challenge of Tactical Positions," *AM Journal of Art and Media Studies* 27 (April 2022): 115–26.

*Author contact information: mr.popow@gmail.com

With the arrival of blockchain framework as one of the latest technology trends, art followed, and hence, NFTs were born. A new kind of multidisciplinary metamedium was built to accommodate everything the audience requested of it. But what exactly is an NFT? By definition, non-fungible tokens, or NFTs are, in the words of Matt Fortnow:

> unique items verified and secured by a blockchain, the same technology used for cryptocurrencies. An NFT provides authenticity of origin, ownership, uniqueness (scarcity), and permanence for any particular item.[3]

Part technology, part art, an NFT uses a specifically designed smart contract ERC-721 token standard[4] to define its technical uniqueness and originality. In other words, this standard is the physical proof of the originality of the digital art piece that is wrapped inside its medium. But it is not necessarily proof of the originality of art itself. By combining all these properties, we can see how NFTs can fit in the metamedium category. But what is a metamedium? In Manovich's words:

> Approached from the point of view of media history, the computer metamedium contains two different types of media. The first type is simulations of prior physical media extended with new properties, such as "electronic paper." The second type is a number of new computational media that have no physical precedents.[5]

Reflecting on both Manovich's metamedium and Fortnow's NFT definitions, we can conclude that the ERC-721 standard is defining properties of "electronic paper" through code, while images, videos, GIFs, audio, 3d models, books and prose, collectibles, digital real estate, in-game items, etc.[6] are defining the artistic content of NFTs.

Next, there is the question of ownership as well. Name, main content, preview, descriptions, traits,[7] and other perks of NFT metadata are responsible for determining ownership of the art, medium, and its aesthetics.

There is also minting or in other words crafting and physical deployment of the electronic art file on the desired trading platform, and blockchain mainnet grid. This one is quite interesting because it questions the very fabricating of NFT art since minting can be done by both artist and buyer.

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[3] Matt Fortnow and QuHarrison Terry, *The NFT Handbook: How to Create, Sell and Buy Non- Fungible Tokens* (Hoboken, New Jersey: Wiley & Sons, Inc., 2022), 10.

[4] ERC-721 non-fungible token standard, https://ethereum.org/en/developers/docs/standards/tokens/erc-721/, acc. on May 29, 2022.

[5] Lev Manovich, *Software Takes Control* (New York, NY.: Bloomsbury Academic), 2013.

[6] Fortnow and Terry, *The NFT Handbook: How to Create, Sell and Buy Non- Fungible Tokens*, 18.

[7] Ibid., 33

NFTs as part of Digital Humanities

It is not always easy to distinguish art from technology, and vice versa, in today's age of smartphones, social networks, and other mobile and on-the-go devices. As Mathew K. Gold says, pinpointing the exact context of what the term "digital work" is in general, and it's meaning in today's humanities, can be quite difficult at times.[8] With that in mind, it can be argued that when artist uses all available technology, they are able to produce digital art which is a product of digital work.

On several conventions in 2007–2008 there were discussions about whether the software had the ability to be a theory as well as if digital work had the ability to convey knowledge. In 2007, Lev Manovich said that prototypes are a theory. Depending on the context, theory can explain and give a deeper meaning and understanding of a researched subject. So, if a software prototype is a theory, then the digital work that it produces can be considered knowledge.[9] In other words, these digital artefacts can be used as theories because they are showing us our surroundings in a new way. Applying this understanding with a combination of Manovich's definition of metamedium, we can come to the conclusion that blockchain technology and NFT's are at the same time both digital art, digital work, and theories.

The ability to produce a theoretical multidisciplinary discourse gives NFTs a unique original and important standpoint in the scientific arena and digital humanities, besides other qualities they possess.

Apparatus of NFT

Designed with the new age technology for the new age humanities, through technological and theoretical analysis, we see that NFTs can be quite a complex form. In other words, the body of NFT metamedium can be considered to be a transdisciplinary apparatus. So how best to describe this versatile system? By using a definition of the term transdisciplinarity. In the words of Aleksa Milanović:

> Transdisciplinarity relates to disciplinary nomadism, or free-floating directionality through the historical heritage and contemporaneity of different disciplines. Contrary to the disciplinary approach that requires clear and respected rules and borderlines of the discipline(s), a unitary methodology, and universal goals, transdisciplinary approach transgresses and erases those limitations. Transdisciplinarity, at the same time, differs from interdisciplinarity, which relates to connecting and combining different disciplines and their methodologies in order to produce new knowledge.[10]

[8] Matthew K. Gold ed., *Debates in the Digital Humanities* (Minneapolis, MN: University of Minnesota Press, 2012), 75.

[9] Ibid., 77.

[10] Aleksa Milanović, "The Impact of Social Changes on the Methodological Development of Transdisciplinary Body Studies," *AM Journal of Art and Media Studies* 27 (April 2022): 13–23.

In terms of NFTs, this transdiciplinarity spreads beyond theories and technology. As a medium, as we saw earlier, it can embody all artistic techniques. As a media, it is part of the internet of things, electronic media, electronic paper, mobile phones, etc., and it embodies all elements of Manovich's metamedium. It can be a theory, a knowledge, or a prototype. But it can also be a currency. Since blockchain technology is in its essence a digital currency, its main purpose is the same as that of every currency, and that is trade. This means that NFTs have an additional layer of complexity, one that is not internal, but rather external. An economical value of the traded good.

Although NFTs are art, they are also a product that, based on their uniqueness and originality, can be considered intellectual property. As mentioned earlier, this additional perk enables artists and buyers a transference of ownership of both art and intellectual property. This means that the buyer now has all the rights to do what they please with the art. They can replicate it on a print, or make a t-shirt with the art on it, a mug, a pillow, etc. In other words, the buyer is becoming an artist by purchasing NFT digital art and its rights. This performing action opens up more questions. Is the artwork still original since it is multiplied in different mediums across media? Is the original artist still the credited artist of the piece, or is it the buyer the original artist after the purchase?

The ontology of NFT origins and originality

As we saw, the origins and originality of one NFT art piece can be quite trans-disciplinary. But what happens when an artist publishes a collection of 10,000 unique NFT art pieces online for example? In order to work as one coherent unity, every individual piece must have something that will make it part of a collection, while at the same time it must be able to stand alone as an original piece for itself. This is done through aggregating the reproduction of several individual elements of art inside the art piece.

In Figure 1 we can see a clear example of collection reproduction. In this particular collection, we can see that the most shared, common, and representative element is a body of a dragon. If we strip down all other aesthetic elements of the picture, we come to the conclusion that all the images in the collection are the same. A mere reproduction and nothing more. But since NFT is also a prototype, and prototypes can be theory, it can be argued that this most common, basic, and repetitive shape of a dragon is in fact a theme of the theory of the software collection of this art piece. It can furthermore be argued that this theme is the most memorable element of the whole compilation, something that the collection will be remembered for. And hence, it can be said that it is in a way a meta-original since it was the first collection of this sort. Every other NFT collection that would have the body of a dragon in it would be considered a reproduction and a copy of the original.

Figure 1: Larry the Dragon NFT Collection, (Illustration by Vladimir Popov, August 27, 2022).

Although we are closer to determinizing the origins of originality, there is still the question of individual art pieces. What makes one piece of art original compared to the other if they share the same body? The other elements. The dragon can have different mouths, ears, eyes, backgrounds, clothes, etc. The artist creates all these elements separately as digital images. As Manovich puts it, in humanities a process of examination of these kinds of images is called 'annotation'. Regarding NFTs, this is done through metadata of the image files. The names, descriptions, and other information can easily be sorted based on these settings.[11] Then through the desired software and programming, the artist generates a specific number of unique images that each has a variety of elements on it. The software makes sure that no art piece has the same elements in the collection.

This poses the question: if the software is generating images through code, who is the true creator of the pieces – the artist or the software? The artist is responsible for creating the elements and for determinizing programming values of randomization of those same elements. But software then executes the image generating from an assemblage of the art elements. The artist has no control over which element will go on which image, and in what combination. The algorithm does, through random mathematical calculations. It can be argued that this is a joint endeavor where the human is leading the artist, and the machine a following. In a way, the true origin of

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[11] David M. Berry ed., *Understanding Digital Humanities* (New York, NY: Palgrave Macmillan 2012), 258.

one NFT art piece is a merged experience of human and machine, or in other words a transdisciplinary origin.

So how original is each original art piece within a collection? If, for example, an NFT art piece has 10 different elements per image, and nine are the same as the next image, while only one is different from both, how original are either of those two images? In other words, if everything on the two images is the same except the background color, is it possible to declare that both images are originals? Or one is *almost* an exact reproduction of the other? And if so, which one is the original and which one is reproduction? Here we face a potential empirical problem. What do we see when looking at the picture? As David M. Berry says, we see colorful patterns and shapes. Everything else beyond that is an interpretation of a subjective mind, based on personal aesthetical preferences, experience, and general knowledge of the individual.[12] It can be argued that although almost identical, both of the images are originals since they are not the same.

Another question is one of publishing. To be verified and confirmed that it is indeed a unique original art piece, an NFT must be deployed on a blockchain platform. Deployment happens through a process called minting, where the artist follows the official technological procedure for publishing the file on the mainnet grid of a desired cryptocurrency blockchain. After the NFT is minted, it is published online for the general audience, and anyone with a crypto wallet can buy it. If the artist is doing this through an official trading platform, he is the creator of the NFT. But if he is for example selling it from his or her website, that means that whoever buys the art file gets to mint and publish it on an official trading platform. And since art is not art without its audience, the question here is who is the real creator of the art when it is published? The ownership transfer happens before the NFT is minted and online, and the buyer has all the rights of intellectual property rights after purchasing, which makes him or her part artist as well.

Biocentrism and NFTs

As known and experienced, we live in a material three-dimensional reality, where time and space are constants. Everything is measured through an apparatus of text and pictures, which further conveys measurements and rules of science and non-science needed for contemporary life in the present civilization. Our physical biological body perceives the immediate surroundings of our temporal space-time continuum reality with our five senses. Our mind and consciousness further manage this information and form memories. Through our bodies, we experience life around us.

So how do we experience originality then? Through text, pictures, technology, and memory. Since NFT is such a versatile metamedium that involves an artist, software, and a customer, its originality becomes a form of experience, as opposed to just

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[12] Gregory Currie, *An Ontology of Art* (London, UK: Palgrave Macmillan, 1989), 19.

being formal evidence of creation. It breaks the standard set of rules when it comes to defining its preferences, as it overrides the meaning of the time of origin.

Since time is measured by the clock it appears that we move around it. We can be either early, late, or just on time. If we move around it. But what if time, since it is a constant, moves around us? Physicists focus on measuring time, but Robert Lanza argues that the focus should instead be on us, human observers of the time. These observations lead to the conclusion that if we stop measuring time, it ceases to exist.[13] And we stop paying attention to it afterward. When we observe time, we can conclude further that we don't have a past, and we certainly don't have a future. And it can be argued, do we even have the present? And if we do, are present and future perhaps one of the same? One thing we can be sure of is that we have a perception of time, through our memories and experiences.

So again, in a way, if we shift our perspective of looking at the time, when applied to an art piece, the evaluation of originality through the lens of time becomes irrelevant. Originality becomes fluid as time. This means that both artist, software, and buyer can be original creators of an NFT at the same time, through the shared experience. And the next buyer after the first, and so on.

Further on, through various experiments in the field of subatomic particles, it has been proven that the observer itself alters and regulates what they see, and the electron becomes both a particle and a wave.[14]Analyzing this from a biocentric perspective, Lanza says that the mind perceives the world as a film projector motor through the lens of still image frames. He argues further through Werner Heisenberg's principle of uncertainty, saying that the position in space is part of the outer world, while momentum is part of the inner.[15] Although this approach could be considered in a way to be even solipsistic, Lanza argues further that when it comes to consciousness, it is not an individual, but rather a collective experience. In other words, our consciousness is partially connected to a nearby insect, for example, that is not in our immediate surroundings, but the main focus is on internal experience, rather than external, as we experience our memories and thoughts one by one through our body.[16] And based on quantum theory content that our mind produces is the ultimate reality of our consciousness. This means that each living being generates its small bubble universe of existence.[17]

Now if we apply Lanza's rather interesting theory of biocentrism to NFTs we get interesting results. From a biocentric perspective, all we get to see is what our eyes manage to generate in front of us. There are no time stamps, there is no other reality in front of us, except the one that is in the range of our eyes. That means that every piece of art we get to see in front of us, at any desired moment, is the only piece of art

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[13] Robert Lanza, "A New Theory of the Universe," *The American Scholar* 76, 2 (2007), 25.

[14] Ibid., 26

[15] Ibid., 26.

[16] Ibid., 29.

[17] Ibid., 30.

that exists in that moment of space and time, which make that piece rather unique and original. Which makes any work of NFT an original art piece.

But what happens when we print the same NFT to 100 similar-looking mugs? Based on Lanza's biocentrism theory it can be argued that each derivative piece of art such as a mug, pillow, etc. in this case becomes the real art instead an NFT digital art file from which it was created.

In other words, the role of the meaning of an art piece would be transferred from NFT to the mug. The mug would then become an art piece, and NFT would become a tool for its creation. The semantic switch from art to mug, it can further be argued, happens when we reach for one mug. By reaching out to grab the desired mug we act as a medium, a tool that enhances that art piece, the same as an NFT, and therefore that mug becomes the unique art piece among the remaining 99.

In other words, an NFT file can be an original art piece while standing on its own, but the moment it is applied to another element its meaning and purpose change. This defines the term of originality and origin of an art piece rather as an experience instead of a moment in time. In other words, a transference from human to software, to human, to the physical element, and again to human, etc. makes it a transdisciplinary *De Re* modal experience with its own life cycle.

As Miško Šuvaković said the usage of *De Re* media is based on the usage of any kind of media and medium interactions, and therefore the experience of transference of origins and originality can be further interpreted in the widest philosophically ontological meaning as a *De Re* medial being.[18]

As a biocentric De Re being, each NFT is an experience that is an event with its parameters and life cycle, lived through the memories and thoughts within a human body, and as such, it cannot be replicated in time-space continuum, which makes it unique and one-of-a-kind phenomenon.

Conclusion

> Aesthetics as a philosophical discipline is a multitude of philosophical-theoretical successful or unsuccessful attempts establishing systemic and fragmentary discourses within open and closed philosophical teachings.[19]

In today's transdisciplinary world and humanities, new art forms such NFTs are inevitably changing the scopes of our realities. And with new theories like biocentrism, for example, we can have a new pair of glasses to look through old theories and beliefs in the art fields. In this paper, I argued about the positions of originality and origins

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[18] Miško Šuvaković, *3E. Estetika, epistemologija, etika spekulativnih i de re medija* (Beograd: Fakultet za medije i komunikacije, 2020), 529.

[19] Miško Šuvaković, *Diskurzivna analiza. Pristupi i/ili prestupi diskurzivne analize savremenoj filozofiji, poetici, estetici, teoriji i studijama umetnosti i kulture* (Beograd: Univerzitet umetnosti u Beogradu, 2006), 69.

of art, as I questioned their positions in the world of theory. My conclusion is that in the such transdisciplinary world some theories may transcend empirical experiences, and their apparatuses as they evolve. In other words, new theoretical paradigms are already here, and while some are discovered, some still wait to be.

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