On Blockchain and Art: an interview with Ruth Catlow

David Serra-Navarro[1]

Introduction

When Satoshi Nakamoto released Bitcoin in 2009, the world became aware of blockchain technology, but cryptocurrency is just one of the applications that can be powered by blockchain technology. Blockchain technology[2] is a distributed database where many copies of the data are replicated and synchronized. Don Tapscott (2016) describes the blockchain as "an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value. […] Blockchain differs from traditional ledgers of transactions in that it is decentralized, public and encrypted."[3]

Technology is becoming an integral part of creating, displaying, signing, and selling art. How is blockchain involved in the cycle of a work of art?

In the following interview with Ruth Catlow (London, 1968), artist-theorist, curator, and co-founder and Artistic Director of Furtherfield[4] and DECAL[5] (Decentralised Arts Lab), reflects on blockchain's[6] place in the art world and the importance of decentralized structures in art and economics. Focussing on critical investigations of digital and networked technologies and their emancipatory potential, she offers interesting insights into new economies, and suggests concepts for alternative ways to create new art practices.

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[1] ESDAP Catalunya (Escola Superior de Disseny i Arts Plàstiques) / UdG Universitat de Girona (Departament Filologia i Comunicació) (España)
     E-mail: dserra8@xtec.cat

[2] Retrieved from https://bitsonblocks.net/2015/09/09/gentle-introduction-blockchain-technology/ [2018, May 1].

[3] D. Tapscott and A. Tapscott. (2016). *Blockchain Revolution: How the technology behind Bitcoin is changing money, business, and the world*. NY: Penguin.

[4] Furtherfield gallery, commons space, and online arts-writing platform based out of London, which Ruth Catlow and Marc Garrett founded in 1997: disrupts and democratises art and technology through exhibitions, labs & debate, for deep exploration, open tools & free thinking. Retrieved from furtherfield.org [2019, February 4].

[5] DECAL: Decentralised Arts Lab is an arts, blockchain & web 3.0 technologies research hub for fairer, more dynamic & connected cultural ecologies & economies now. Retrieved from decal.is [2019, February 4].

[6] "Artists Re:thinking the Blockchain" Edited by Ruth Catlow, Marc Garret, Nathan Jones & Sam Skinner, 2017,. Retrieved from http://torquetorque.net/wp-content/uploads/ArtistsReThinkingTheBlockchain.pdf [2019, February 4].

David Serra Navarro in conversation with Ruth Catlow

DS: When did you first get interested in blockchain?

RC: Around 2014-15. There were two main motivations for my interest in Blockchain. The first was a longstanding collaboration with an artist, theorist and developer named Rob Myers. We had been publishing some of his writing in the Furtherfield blog and in 2015 he wrote a paper called Decentralized Autonomous Organizations With Others (DAOWO)[7]. His paper set out the political range of ideas at play in blockchain cultures and it examined some of the philosophical and artistic potential of the technology as medium. The second motivation was that funding for art practice is becoming increasingly problematic especially when it is not for commodification, so we were interested to look at blockchain and big data to see whether they could offer opportunities to sustain our artistic activities economically.

DS: As George Gilder, the peerless visionary of technology and culture, notes in his book, *Life After Google: The Fall of Big Data and the Rise of the Blockchain Economy* (2018), the Age of Google, built on big data and machine intelligence, has been an awesome era. But it's coming to an end. Gilder explains why Silicon Valley is suffering a nervous breakdown and what to expect as the post-Google age dawns. Jaron Lanier[8], the Web guru and the father of virtual reality, said: The internet was not meant for distribution of value, it was meant for sharing of information. Unlike the internet, the blockchain is an inclusive system. Do you think that blockchain technology is the way to generate new governance that is free from corporate monopolies, as Lanier has so often described?

RC: This was the promise of blockchain, and was the libertarian rhetoric surrounding it, but we know after 20 years of working with the web that new technologies serve the interest of those who develop them. We see now that a lot of serious blockchain infrastructure is being developed by corporations like IBM, and governments are moving in and using it. So yes, Blockchain may be the way forward, and we're interested in using it for experiments in governance, but whether it fulfills its promise depends on who gives their energy to it.

DS: The work of Marcel Duchamp marked a rupture with traditional plastic genres of art and was a sign of expansion of modern life. There's a famous phrase that helps me visualize the beginning of conceptual art: *Se servir d'un Rembrandt comme planche à repasser !* (Use a Rembrandt as an ironing board!). Duchamp is questioning the market value of art, the factors of production and consumption. What´s the difference between the art market in Duchamp´s time and ours? Do you think that Duchamp would be a blockchain artist if he lived today?

RC: I think there's a question about whether Duchamp was really rebelling against the market. I'm not sure I believe he was driven mostly by a desire to critique capitalism or the role of the art market. He certainly wanted subvert the politeness

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7   https://www.furtherfield.org/artdatamoney/includes/files/daowo.pdf [2019, February 4].
8   Lanier, J. (2013). *Who Owns the Future?*. London: Simon & Schuster.

of the art world, but as artists often do, he created a different thing to commodify, which was maybe a reputation or a brand. In conceptual art the idea or concept is the most important aspect of the work. As Sol Lewitt said "The idea is the machine that makes the work." I think there's much more play with the relationship between values and esthetics and concepts in conceptual art that relate strongly with the most interesting work being done in the blockchain space. There's also another area of work I find interesting, being done by Rob Meyers and Martin Zellinger, that looks at the relationship between blockchain technical network systems and natural systems. It thinks of natural systems as machines, which can get pretty creepy. The artists there are Primavera De Filippi, who made Plantoid, and the guys from terra0[9] who conceived of a forest that would come to own itself and then would hire humans to service it. The idea, in essence, is a reversal of power between machines and humans, which is one connection with Marcel Duchamp.

Figure 1. Shareable Readymades. Urinal, 2011, 3D printable digital model. Model by Chris Webber, commissioned by Rob Myers. Retrieved from https://www.thingiverse.com/thing:6261 [2019, February 15].

DS: Throughout history, art and technology have always been interdependent - videoart, net-art, mobile applications. In the latest edition of Ars Electronica the project *Bitsoil Popup Tax & Hack*[10] by LarbitsSisters won the Golden Nica award in the Interactive Art section. Is the emergence of artistic work related to the Blockchain just a trend, or will it develop into maturity?

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[9]   "To understand the origin of terra0 it's important to discuss the relationship between (nonhuman) actors and capital, via decentralized technologies" (2017: 64). See also: https://paulkolling.de/projects/terra0 [2019, February 4].
[10] https://bitsoil.tax/campaign [2019, January 17].

RC: We might consider that blockchain art is in the same stage that net art was in the early 1990's, but the context is different politically and globally. Because Blockchain culture can appear to be very greedy, very corporate and white-male, there's a natural distaste among most artists for this space, which I think is sad. I think the most fascinating opportunities for this work, where there's the most value to be gained, are in the areas where artists are thinking about money as a medium. Shulea Cheang talks about early net-art as a period in which artists thought that they could live off of air, that there was never any economy in what they were doing. There was an idea of infinite abundance, and now, with climate change and environmental pressures, it's interesting that Blockchain is a space in which you actually need to account for everything, and where you're called to think about the economics of every transaction. It's a form of conservation.

DS: In this decade, blockchain technology has opened new horizons and cryptocurrency has been a disruptive influence. Blockchains have the potential to enable and stimulate new forms of social organization, resource distribution and collaboration in the arts. But will cryptocurrency technology ever be easy enough to use in the day to day lives of ordinary people?

RC: Blockchain is the underlying protocol, so perhaps we don't need everyone to understand its technical make up in detail. And we're seeing that at the moment something like 25 million Americans are holding cryptocurrency – which is pretty amazing. Speculation in cryptocurrencies is becoming centralized through exchanges, which goes against the early political motivations, but currency trading is becoming more accessible, more democratized, on mobiles, etc., for better or for worse.

DS: I remember Lawrence Lessig advised a startup creating a then-unknown virtual world called Second Life (Linden lab, 2003). His guidance helped make it a cause celebre for a time, attracting academics, theorists, and politicians curious to learn about the real world through an online simulation. One of the oddities of Second Life is that the avatars use the virtual currency Linden dollars (L$), which are exchangeable for real money. Fifteen years later the company is still active, and according to Ebbe Altberg, CEO of Linden Labs, in 2015 the gross domestic product of its virtual world was 500 million dollars. Currently, the SL community has 750,000 monthly active users. Throughout its evolution this virtual scenario of virtual islands has been a laboratory for different artistic proposals. Recently at DAOWO[11], the blockchain laboratory and debate series for reinventing the arts, a question was raised: "What Will It Be Like When We Buy An Island (on the blockchain)?"[12] Do you think blockchain and virtual worlds are destined to join?

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[11]   http://www.daowo.org [2019, February 1].
[12]   This workshop was devised by Ed Fornieles with Ben Vickers and Ruth Catlow.

Figure 2. Live Action Role Play workshop with Ed Fornieles: *What Will It Be Like When We Buy An Island (on the blockchain)?* Goethe Institut London. Photos courtesy of Rory Gibson. March 29, 2018.
http://www.daowo.org/#what-will-it-be-like-when-we-buy-an-island-on-the-blockchain

RC: Definitely! Blockchain and the virtual worlds are destined to join. An obvious application is trading game assets using cryptocurrency. Decentraland[13] is a virtual world where they're selling real estate using cryptocurrency. It is the first virtual decentralized platform owned and created by its users.
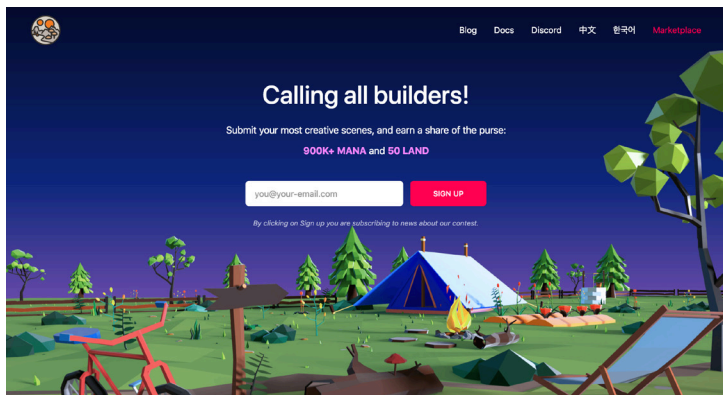

Figure 3. Screenshot intro interface Decentraland. [2019, February 9].

DS: The DAOWO website is presented as a lab series that:
"invites artists, engineers, thinkers and practitioners to reflect on how blockchains might be used to enable a critical, sustainable and empowered culture, and to

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13   https://decentraland.org/ [2019, February 8].

transcend the emerging hazards and limitations of pure market speculation within crypto-economics." Intended as an iterative temporary laboratory for the eventual creation of a living laboratory and generative space for new knowledge production, DAOWO takes the following conditions as a starting position:

The Arts Have Got A Problem:

– The growing inability of existing arts economies to support younger artists.
– The increasing centralization and homogeneity in arts production and engagement.
– The arts as vehicle for speculation and money laundering.

The Blockchain and Arts Together:

– New Funding Models - Renegotiation by fire of the economic and social value of art.
– Lowering the Cost for Organizing - DAOs could remodel and diversify collaboration.
– Automated solidarity for artists and new kinds of audiences, patrons and participants.
– Unanticipated Futures - New imaginings for how we act in the world.
– Redefine "Authorship" - Incentives for fractional, progressive ownership, and collective production of art and livelihoods.
– Opening up black box technologies in order to diversify engagement."

Are you afraid there is a knowledge gap between technology and artists? How can we introduce these ideas into the curriculum of art schools?

RC: This is a tricky area. In the early days of the web, artists could teach themselves in a day how to build a simple HTML web page and upload it to a server. The Blockchain space is much harder than that, and I don't think it will offer us access to that kind of building. Some artists, like Sarah Friend[14], are also engineers, but there are still very few of them because the technical ecosystem is so hard to understand. At the moment the thing to do is for design students and artists to get into the space conceptually and learn how markets and networks work. One of the things we're working on now is a set of conceptual toolkits and workshops,[15] that includes activities and games to provide people with different ways into this.

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[14] Sarah Friend and David Wolever introduce the basics of how blockchains work, and then expand on them with a facilitated session of *Scrabits*, a modified version of scrabble based on the bitcoin blockchain. Retrieved from https://ournetworks.ca/conference/program/ [2019, February 8].

[15] In 1996 artists Ruth Catlow and Marc Garrett initiated an online platform for collaboration and experimentation, informed by community arts, pirate radio, activism and street art. Inspired by free and open software development they challenged notions of the individual genius artist. A grassroots network and programme emerged which continues to thrive and to engage diverse people with arts, technology and social change.

Figure 4. Furtherfield workshop. Retrieved from https://www.furtherfield.org/about-us/ [2018, December 11].

DS: One of the great criticisms of cryptocurrencies is the energy required for their maintenance. Do you fear that this could stop the development of the blockchain movement? Should blockchain users be more self-critical in this area?

RC: *Harvest*[16], by Julian Oliver, used a wind turbine to power a cryptomining rig, that would then fund climate change research. It was a symbolic act that has a material impact and raises the question of energy use. However some of the journalism criticizing the high energy use is rather exasperating, as it doesn't pay the same attention to energy consumption in other financial technologies or areas of cloud computing and streaming media, which are just as bad if not worse. There is also a concerted effort to correct the energy problem. On the other hand, the Ethereum community wants to move over to Proof of Stake (PoS)[17] platform, which would reduce their current energy use by 99 %, so they're really taking it on seriously.

DS: Can you imagine the future of art without Blockchain?

RC: Yes! Art's much more important than Blockchain (laugh). Simple question.

DS: What would you recommend to young artists?

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16   https://julianoliver.com/output/harvest
17   Proof of Stake (PoS) is a type of algorithm by which a cryptocurrency blockchain network aims to achieve distributed consensus. The system was initially suggested in 2011 and the first cryptocurrency to implement it was Peercoin in 2012. The main advantages of PoS are energy efficiency and security.

RC: I think the most interesting way to approach Blockchain is to think about money as a medium, and think of governance as a medium. Look at the history of decentralization in art practices and where it has encouraged or enabled new distributions of power and resources.

Interview[18] conducted on 6 February 2019

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